REPORT TO THE NATIONS

2018 GLOBAL STUDY ON OCCUPATIONAL FRAUD AND ABUSE

ACFE
Association of Certified Fraud Examiners

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FOREWORD

With the publication of the 2018 *Report to the Nations*, I am struck by how this study, like the Association of Certified Fraud Examiners itself, is in many ways a tribute to the vision and dedication of our founder and chairman, Dr. Joseph T. Wells, CFE, CPA. When Dr. Wells created the ACFE, he did so because he recognized there was a fundamental flaw in how organizations were attempting to prevent, detect, and investigate fraud. His goal in founding our association was to establish a body of knowledge and training that would help anti-fraud professionals reduce the incidence of fraud and white-collar crime.

One thing Dr. Wells came to recognize in the early days of the ACFE was that the anti-fraud profession suffered from a glaring weakness: we simply did not know enough about the crimes we were trying to fight. So, with the aid of ACFE researchers John Warren and Andi McNeal, he set out to address the problem by commissioning the first *Report to the Nation* in 1996.

The 2018 report is the 10th edition of Dr. Wells' study, and the *Report to the Nations* remains the most comprehensive and widely quoted source of occupational fraud data in the world. Based on information from real fraud cases as reported by CFEs from around the globe, the report continues to be a tremendous resource for those interested in how occupational fraud is committed, how it is detected, who commits it, and how organizations can protect themselves from it.

On behalf of the ACFE, I am proud to present the 2018 edition of the *Report to the Nations*.

Bruce Dorris, J.D., CFE, CPA
President and CEO,
Association of Certified Fraud Examiners

CONTENTS

KEY FINDINGS

2,690
real cases of occupational fraud

from

125 countries

in

23 industry categories

$7 BILLION+
IN TOTAL LOSSES

$130,000
MEDIAN LOSS PER CASE

22%
OF CASES CAUSED LOSSES OF
$1 MILLION+

Median duration of a fraud scheme

16
MONTHS

CORRUPTION
was the most common scheme in every global region

ASSET MISAPPROPRIATION SCHEMES
are the most common and least costly

$114,000
median loss

89%
of cases

FINANCIAL STATEMENT FRAUD SCHEMES
are the least common and most costly

10%
of cases

$800,000
median loss

TIPS are by far the most common initial detection method

TIPS 40%

INTERNAL AUDIT 15%

MANAGEMENT REVIEW 13%

EMPLOYEES
provide over half of tips, and nearly 1/3 come from
OUTSIDE PARTIES

ORGANIZATIONS WITH HOTLINES
detect fraud by tips more often

46%
OF CASES DETECTED BY TIP
HOTLINES

30%
OF CASES DETECTED BY TIP
NO HOTLINES

SMALL BUSINESSES LOST ALMOST TWICE AS MUCH PER SCHEME TO FRAUD

$104,000
MEDIAN LOSS
100+ EMPLOYEES

$200,000
MEDIAN LOSS
<100 EMPLOYEES

INTERNAL CONTROL WEAKNESSES WERE RESPONSIBLE FOR NEARLY HALF OF FRAUDS

ALL 18 ANTI-FRAUD CONTROLS ANALYZED WERE ASSOCIATED WITH LOWER FRAUD LOSSES AND QUICKER DETECTION

Owners/executives accounted for a small percentage of cases

19% OF CASES

but caused a median loss of

$850,000

LOSSES CAUSED BY MEN WERE 75% LARGER

than losses caused by women

MEDIAN LOSSES ARE FAR GREATER

when fraudsters collude

1 — $74,000

2 — $150,000

3+ — $339,000

DATA MONITORING/ANALYSIS and **SURPRISE AUDITS** were correlated with the largest reductions in fraud loss and duration

52% LOWER LOSSES	Data monitoring/analysis	58% FASTER DETECTION
51% LOWER LOSSES	Surprise audits	54% FASTER DETECTION

Yet only 37% of victim organizations implemented these controls

85% OF FRAUDSTERS DISPLAYED AT LEAST ONE BEHAVIORAL **RED FLAG OF FRAUD**

FRAUDSTERS WHO HAD BEEN WITH THEIR COMPANY LONGER STOLE TWICE AS MUCH

MORE THAN 5 YEARS' TENURE — **$200,000** MEDIAN LOSS

LESS THAN 5 YEARS' TENURE — **$100,000** MEDIAN LOSS

OVER THE PAST 10 YEARS, OCCUPATIONAL FRAUD REFERRALS TO PROSECUTION DECLINED 16%

TOP REASON FOR NON-REFERRALS WAS **FEAR OF BAD PUBLICITY**

-16%

2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018

ONLY 4% OF PERPETRATORS HAD A PRIOR **FRAUD CONVICTION**

A MAJORITY OF THE VICTIMS **RECOVERED NOTHING**

INTRODUCTION

Fraud in general poses a tremendous threat to organizations of all types and sizes, in all parts of the world.

Among the various kinds of fraud that organizations might be faced with, occupational fraud is likely the largest and most prevalent threat. Occupational fraud[1]—fraud committed against the organization by its own officers, directors, or employees—constitutes an attack against the organization from within, by the very people who were entrusted to protect its assets and resources. Since we began tracking data on occupational fraud cases in 1996, we have reviewed thousands of cases in which insiders collectively stole billions of dollars from their employers, and those cases were merely a drop in the bucket. There are millions of business and government organizations operating throughout the world and every one of them, in some way, is vulnerable or potentially vulnerable to fraud committed by their employees. Most of those employees will never steal or abuse the trust that has been placed in them, but the ones who do can cause enormous damage. It is because of this risk that we continue to study these frauds and publish the *Report to the Nations*.

The goal of the *Report to the Nations* is to compile detailed information about occupational fraud cases in five critical areas:

- **The methods** by which occupational fraud is committed
- **The means** by which occupational frauds are detected
- **The characteristics of the organizations** that are victimized by occupational fraud
- **The characteristics of the people** who commit occupational fraud
- **The results of the cases** after the frauds have been detected and the perpetrators identified

This study contains an analysis of 2,690 cases of occupational fraud that were investigated between January 2016 and October 2017. The data presented herein is based on information provided by the Certified Fraud Examiners who investigated those cases. Their firsthand experience with these frauds provides an invaluable resource for helping us understand occupational fraud and the impact it has on organizations.

The data we have gathered provides a broad and deeply representative picture of occupational fraud's impact. The cases in this study include frauds committed against organizations in 23 major industry categories. Victim organizations range from small local businesses to multinational corporations with thousands of employees. These frauds were committed by

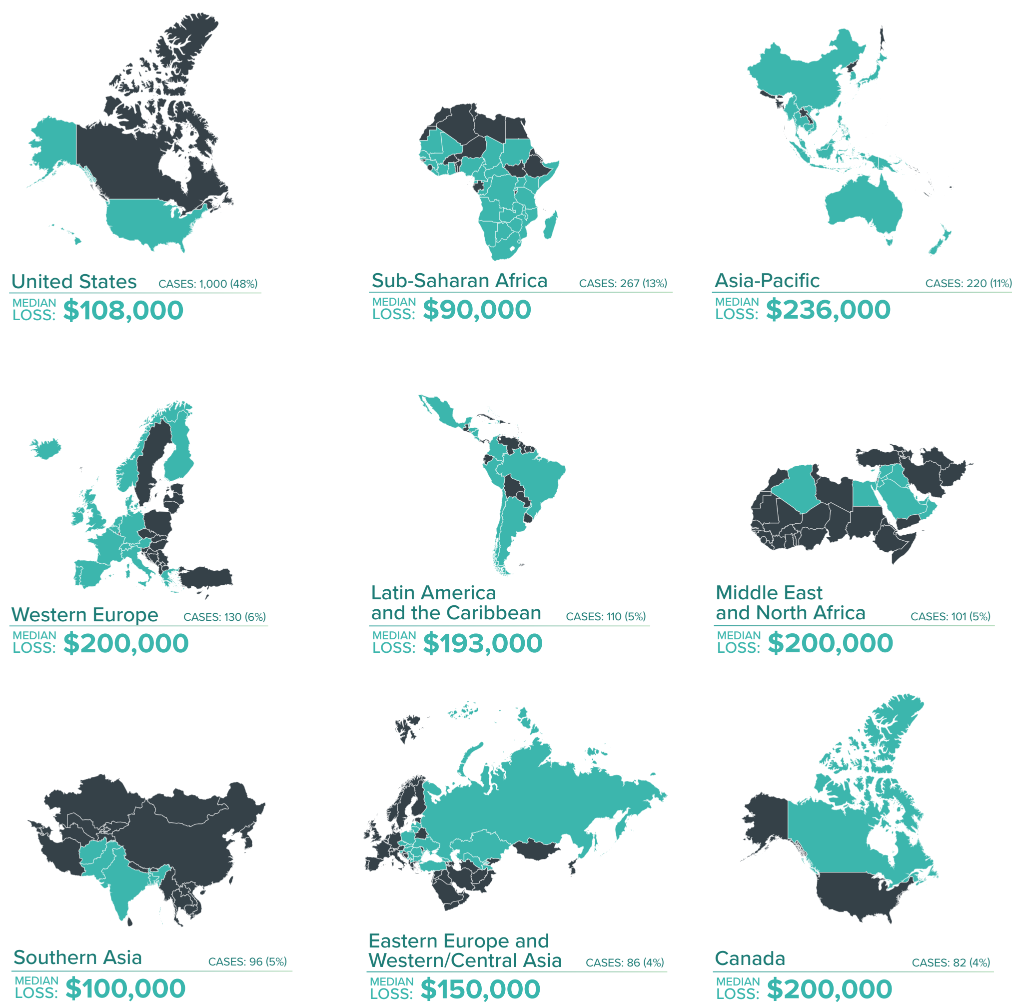
[1] *Occupational fraud* is defined as the use of one's occupation for personal enrichment through the deliberate misuse or misapplication of the employing organization's resources or assets.

individuals who worked in virtually every part of the organization, from entry-level employees to C-suite executives.

The cases we studied occurred in 125 countries throughout the world, which helps us develop a global view of the costs, methods, victims, and perpetrators of these crimes. Figure 1 shows the number of cases from nine key geographical regions, along with the median loss per fraud in each of those regions. (Readers should note that the number of cases per region largely reflects the geographical distribution of ACFE membership, so this data should not be taken to mean that fraud is more or less likely in any particular region.)

Our hope is that the findings in this report will be of value to anti-fraud professionals, organizational managers, researchers, and the public at large. Readers will find a wealth of information about the methods, causes, costs, and indicators of occupational fraud, as well as important information on how to prevent and detect it. This study is the 10th edition of the *Report to the Nations*, and occupational fraud remains an enormous threat to the global economy, just as it was when we published the first edition in 1996. But in the time since that first report, we have seen organizations make tremendous strides in terms of awareness, along with significant advancements in their ability to combat these crimes. Such advances are only possible when there is a true understanding of the nature and extent of the threat that must be dealt with. We publish this 2018 *Report to the Nations* hoping it will advance the collective understanding and awareness of occupational fraud risk for all those concerned.

FIG. 1 **Countries with reported cases and median loss for each region**[2]



[2] Geographical information was provided in 2,092 of the cases submitted. See pgs. 56–73 for lists of cases submitted by country.

THE COST OF OCCUPATIONAL FRAUD

How much money do organizations lose as a result of fraud?

Anti-fraud professionals know just how devastating a fraud can be to its victims. But they are not the only ones who benefit from insight into the amount of damage that fraud causes organizations and their stakeholders. Business leaders need to understand how much is at stake as they assess their risks and make resource-allocation decisions. Regulators need to determine where to focus their enforcement efforts. Investors and customers need to make informed decisions about where to direct their own money. And the media desires context and direction for helping to raise awareness of the issue to the general public.

Accordingly, providing a measure of the cost of fraud is an incredibly important endeavor. It is also an incredibly difficult one, given the number of unknown factors required to make such an estimate. No one knows the amount of frauds that go undetected or unreported, and even for those frauds that do come to light, the full amount of loss might never be calculated. Such limitations mean that any attempts to quantify the global amount of fraud will be imperfect.

Projecting Total Fraud Losses Based on Imperfect Data

Even with these limitations on projecting the total amounts lost to fraud, however, we know that such a projection has an important place in the fight against fraud. Consequently, we asked survey participants, based on their professional experience, what percentage of revenues they believe a typical organization loses to fraud each year. The median response provided by these CFEs is that organizations lose 5% of their annual revenues to fraud. While this number is only a general estimate based on the opinions of the CFEs who took part in our study, it represents the collective observations of more than 2,000 anti-fraud experts who together have investigated hundreds of thousands of fraud cases. To place their estimate in context, if the 5% loss estimate were applied to the 2017 estimated Gross World Product of USD 79.6 trillion, it would result in a projected total global fraud loss of nearly USD 4 trillion.[3] To be clear, this number is only an estimate and, given the limitations described above, it is unlikely we will ever be able to calculate the true cost of fraud on a global scale. But we can be certain that the amount of damage is incredibly large, and this estimate, provided by anti-fraud professionals who work to prevent and detect fraud on a daily basis, helps give us some insight into just how big the problem may be.

The Fraud Costs We Know

Determining total fraud losses—whether globally, regionally, by industry, or even within a specific organization—is outside the primary scope of our study. Instead, we focus on analyzing known data to better under-

[3] See https://www.cia.gov/library/publications/the-world-factbook/geos/xx.html (retrieved March 22, 2018).

stand the risks posed by occupational fraud. To that end, we examined the losses incurred in the actual cases of fraud reported to us to learn about how fraud affects its victims.

The total loss caused by the cases in our study exceeded USD 7.1 billion.[4] While we do not know the total number of cases of fraud that occurred globally during our study period, it is safe to assume that the 2,690 cases included in our study represent only a tiny fraction of the frauds committed against organizations worldwide during that time. Thus, the USD 7.1 billion in known losses—while staggering on its own—does not come close to representing the total amount lost to fraud. The true global cost of fraud is likely magnitudes higher, especially when factoring in the indirect costs, such as reputational harm and loss of business during the aftermath of a scandal.

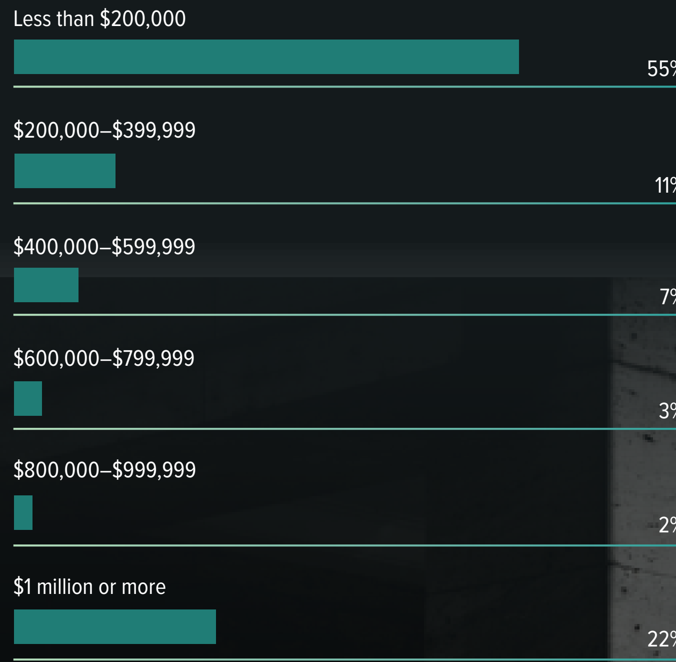
The mean, or average, loss due to the frauds in our study was USD 2.75 million,[5] which is also an enormous amount when considering how much damage such a loss represents to most organizations. However, due to the presence of several very large frauds in our data, this amount likely does not illustrate the typical fraud case. Consequently, throughout this report we use median loss calculations, rather than mean, to provide a more accurate representation of how fraud typically affects organizations.

The median loss for all cases in our study was USD 130,000. Figure 2 shows the loss distribution of the cases. While 55% caused less than USD 200,000 in financial damage, more than one-fifth resulted in a loss of at least USD 1 million.

[4] The total losses represented in our study were actually significantly higher than USD 7.1 billion. However, our survey results included a few cases with losses so large that including them in the total loss figure may have enabled them to be identified. To avoid compromising the confidentiality of our survey participants, we winsorized the top and bottom 1% of the data used in this total loss calculation (i.e., assigned all cases in the top 1% and bottom 1% the same value as the 99th percentile and 1st percentile, respectively). While including those cases would increase the total loss amount figure substantially, we believe it prudent to both ensure those cases remain unidentified and conservatively report loss amounts.

[5] As with the total loss figure, the top and bottom 1% of the data were winsorized for purposes of the average loss calculation.

FIG. 2 **How much does an occupational fraud cost the victim organization?**



Throughout this report, we further examine these losses through different lenses, based on the specific schemes, victim organizations, perpetrators involved, and other factors.

We hope that our research into and analysis of these cases helps shed additional light on the way that fraud impacts the global business community and its stakeholders.

HOW OCCUPATIONAL FRAUD IS COMMITTED

What methods do fraudsters use to commit their schemes?

One of the goals of the first *Report to the Nation* was to examine the methods by which fraudsters commit their schemes, and we have continued this line of study in every subsequent report. Over the last two decades, even with tremendous technological development and numerous changes in the global business and regulatory environments, our research shows that occupational fraud falls into several time-tested categories. The taxonomy of these categories is illustrated in the *Occupational Fraud and Abuse Classification System*, also known as the *Fraud Tree*, as depicted in Figure 4.

Categories of Occupational Fraud

Of the three primary categories of occupational fraud, asset misappropriations are by far the most common, occurring in 89% of the cases in our study. However, they are also the least costly, causing a median loss of USD 114,000. Corruption schemes are the next most common form of occupational fraud; 38% of the cases in our study involved some form of corrupt act. These schemes resulted in a median loss to the victim organizations of USD 250,000. The least common and most costly form of occupational fraud is financial statement fraud, which occurred in 10% of the cases and caused a median loss of USD 800,000.

FIG. 3 **How is occupational fraud committed?**

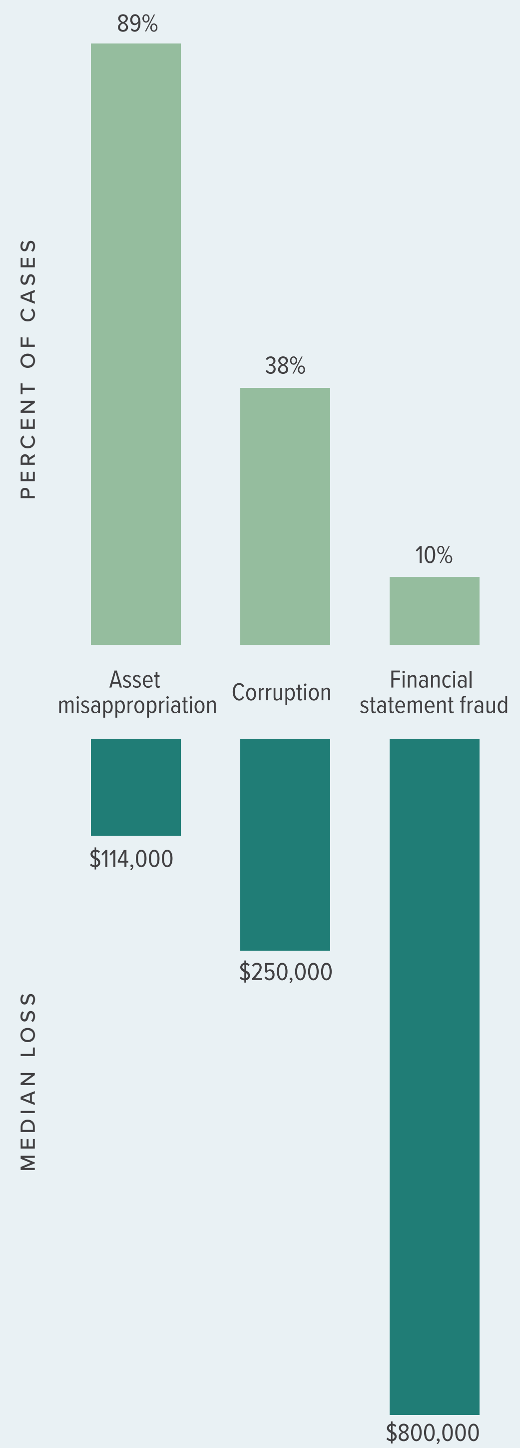
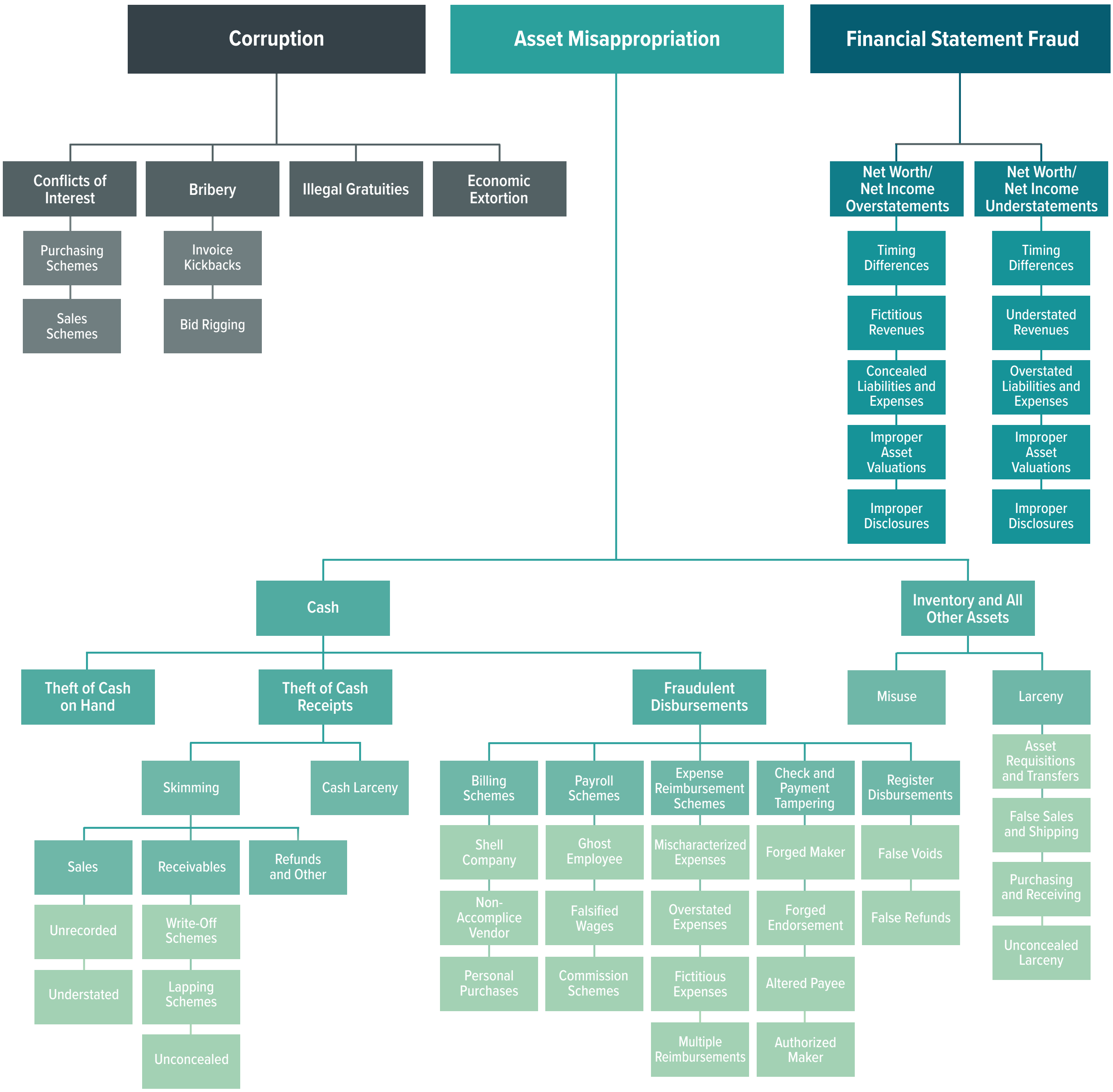


FIG. 4 **Occupational Fraud and Abuse Classification System (the Fraud Tree)**[6]



[6] The definitions for many of the categories of fraud schemes in the *Fraud Tree* are found in the Glossary of Terminology on pg. 78. In previous reports, the category *check and payment tampering* was referred to simply as *check tampering*. However, to better reflect the increasing shift toward electronic payment methods, we have changed the category title.

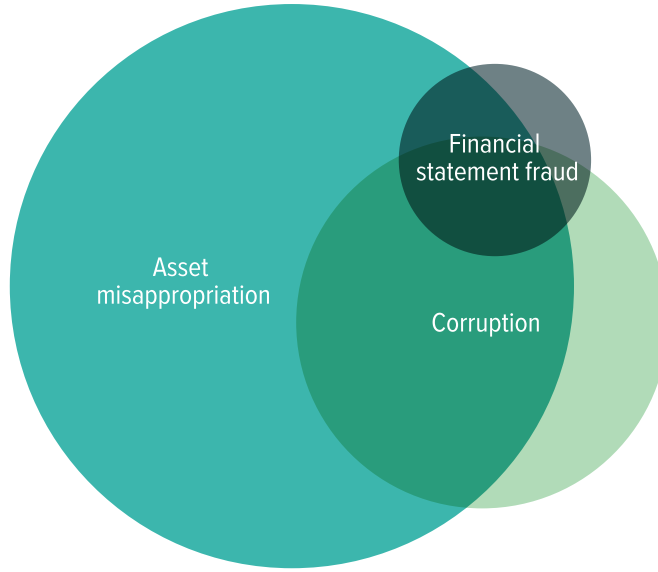
When assessing an organization's fraud risks and designing anti-fraud controls, it is important to remember that fraudsters typically seize whatever opportunity arises when committing their schemes. Thus, many frauds—including nearly one-third of the cases in our study, as illustrated in Figure 5—involve more than one form of occupational fraud.

Asset Misappropriation Sub-Schemes

Within the category of asset misappropriation, our research shows that there are several distinct sub-categories of schemes. The heat map in Figure 6 illustrates the relative frequency and cost of each of these scheme types. The schemes falling in the darkest area of the heat map—check and payment tampering,[7] billing, and theft of noncash assets—rank among the most common and the costliest scheme types and thus typically pose the greatest risk to organizations.

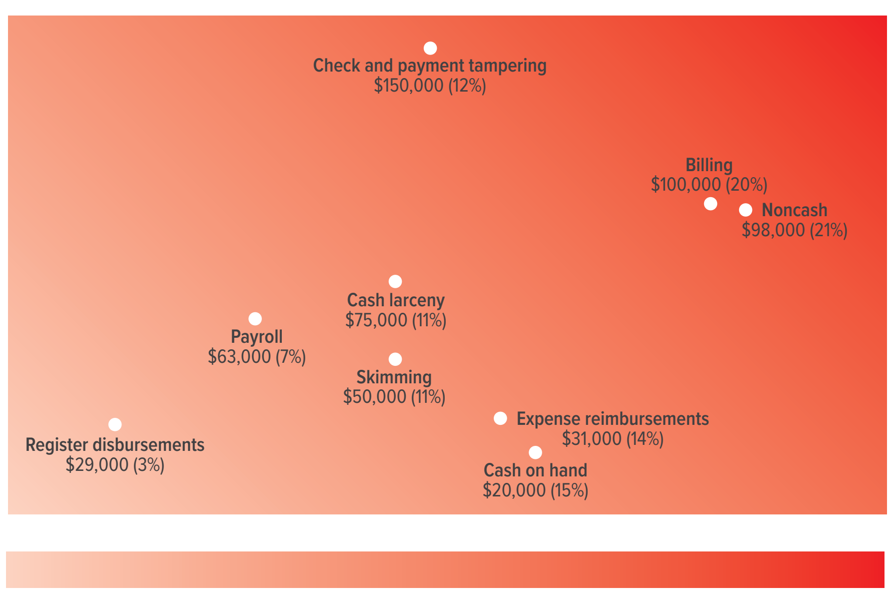
[7] In previous reports, this category was referred to simply as *check tampering*. However, to better reflect the increasing shift toward electronic payment methods, we have changed the category title to *check and payment tampering*.

FIG. 5 **How often do fraudsters commit more than one type of occupational fraud?**



Asset misappropriation only	57%
Asset misappropriation and corruption	23%
Corruption only	9%
Corruption, asset misappropriation, and financial statement fraud	4%
Asset misappropriation and financial statement fraud	3%
Financial statement fraud only	1%
Corruption and financial statement fraud	1%

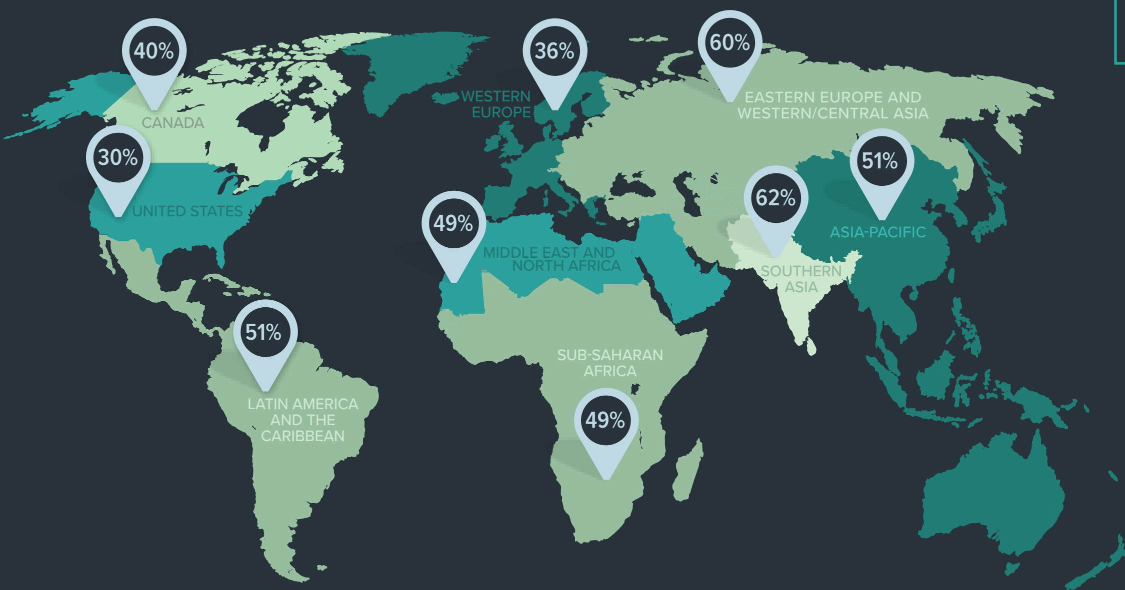
FIG. 6 **What asset misappropriation schemes present the greatest risk?**



CORRUPTION

Corruption represents one of the most significant fraud risks for organizations in many industries and regions. Understanding the specific factors involved in corruption schemes can help organizations effectively prevent, detect, and investigate them.

PERCENT OF CASES INVOLVING CORRUPTION



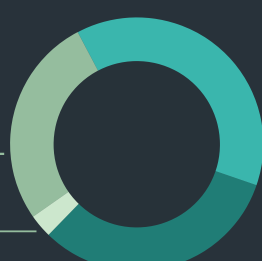
Industries with highest proportion of **CORRUPTION CASES:**

53% ENERGY

51% MANUFACTURING

50% GOVERNMENT AND PUBLIC ADMINISTRATION

70% of corruption cases were perpetrated by someone in a **POSITION OF AUTHORITY**



82% of corruption cases were committed by **males**

WHILE ONLY

18% of corruption cases were committed by **females**

50% OF CORRUPTION CASES were detected by a tip

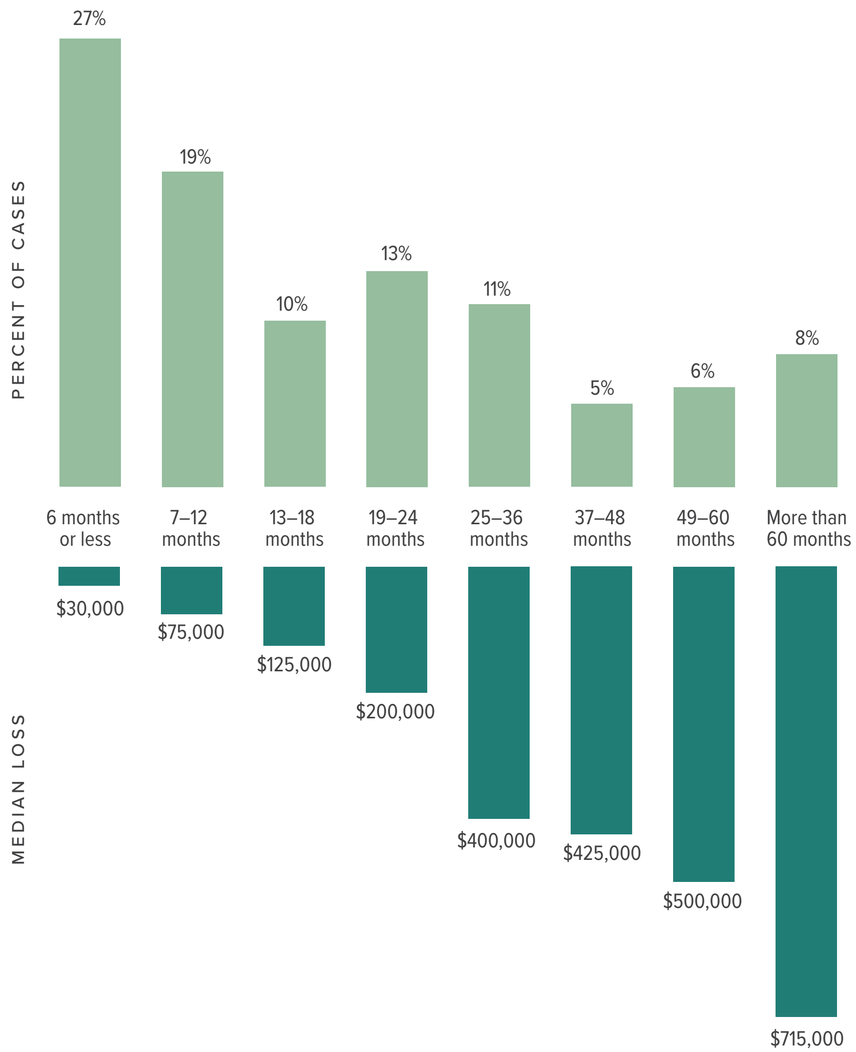
TOP RED FLAGS IN CORRUPTION CASES

43%	Living beyond means
34%	Unusually close association with vendor/customer
23%	Financial difficulties
21%	“Wheeler-dealer” attitude

Duration of Fraud Schemes

Examining how long frauds tend to last can also provide insight into how they affect their victims. The median duration for all of the fraud cases in our study was 16 months. However, it stands to reason that the longer a fraud goes undetected, the larger the scheme will grow. Figure 7 shows that frauds that last over 60 months are more than 20 times as costly as those that are caught in the first six months. Our data also indicates that fraudsters tend to start small and increase their frauds rapidly over the first three years. Thus, it is incredibly important for organizations to implement proactive fraud detection mechanisms to catch frauds quickly and minimize their damage (see pg. 18).

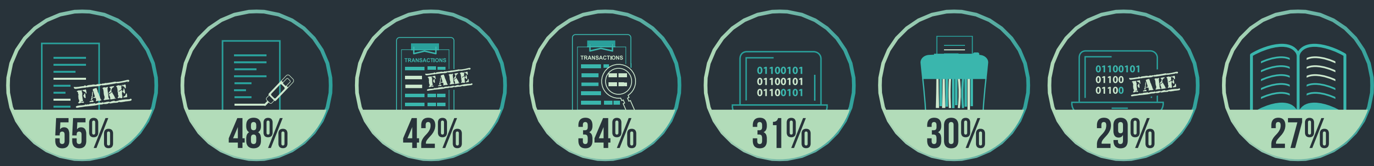
FIG. 7 **How does the duration of a fraud relate to median loss?**



CONCEALING FRAUD

An act of fraud typically involves not only the commission of the scheme itself, but also efforts to conceal the misdeeds. Understanding the methods fraudsters use to cover their crimes can help organizations better design prevention mechanisms and detect the warning signs of fraud.

TOP 8 CONCEALMENT METHODS USED BY FRAUDSTERS



Created fraudulent physical documents

Altered physical documents

Created fraudulent transactions in the accounting system

Altered transactions in the accounting system

Altered electronic documents or files

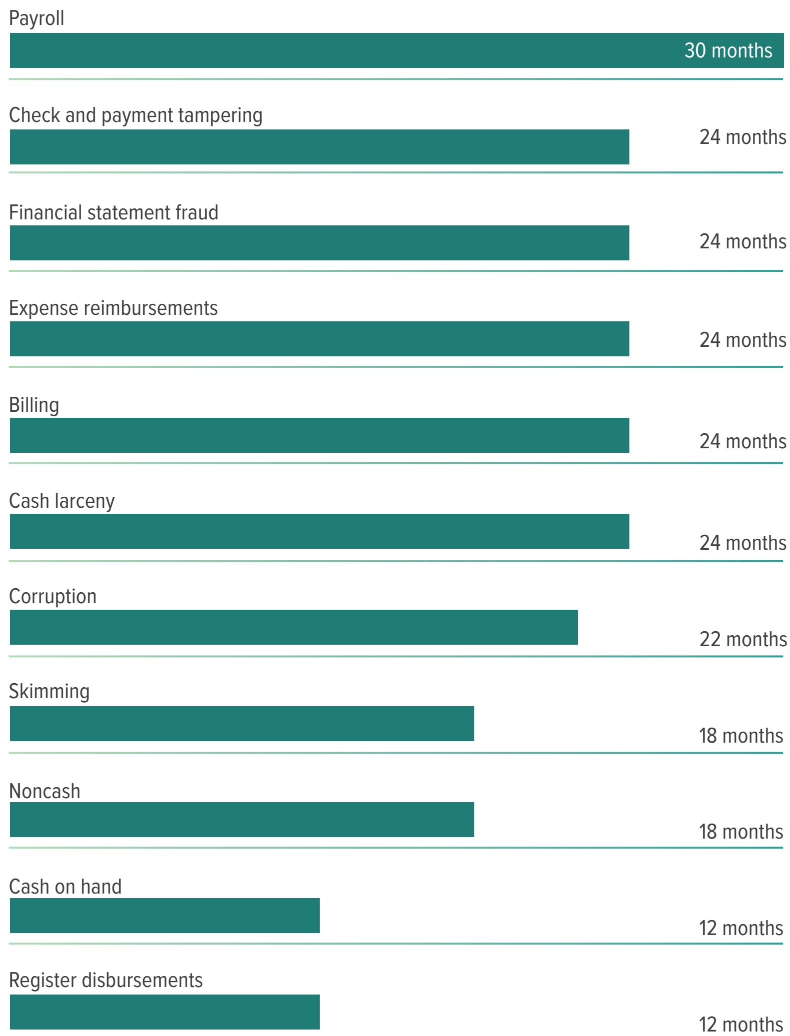
Destroyed physical documents

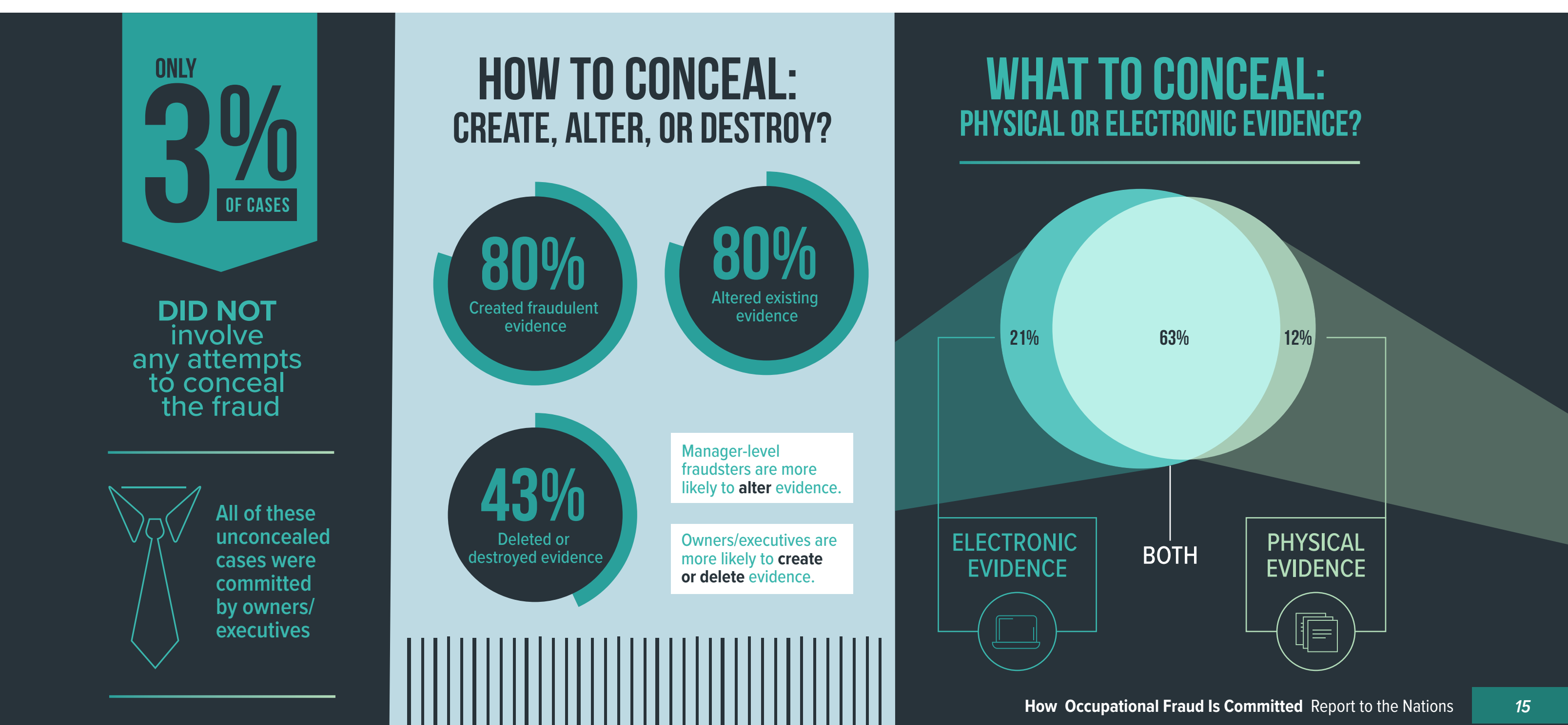
Created fraudulent electronic documents or files

Created fraudulent journal entries

We also examined the duration of the cases reported to us based on the type of scheme involved. Figure 8 shows the result of this analysis. The payroll schemes in our study tended to last the longest, with a median duration of 30 months, while schemes involving cash on hand and register disbursements were both typically uncovered one year after they began.

FIG. 8 **How long do different occupational fraud schemes last?**





DETECTION

How are fraud schemes initially detected?

Understanding the methods by which occupational frauds are detected is critical for both investigating schemes and implementing effective prevention strategies. We asked survey participants to tell us how the frauds they investigated were initially detected, which helps us understand how organizations are most likely to discover frauds in the future. This data also shows how organizations can take steps to detect fraud proactively, rather than passively.

Initial Detection of Occupational Frauds

Figure 9 shows that the leading detection methods are tips, internal audit, and management review. This finding is not surprising, as these have been the three most common means of detecting occupational fraud in every edition of the report since 2010. Collectively, these three detection methods were cited in 68% of the cases in our current study. Tips were by far the most common means of detection at 40% of cases—more than internal audit (15%) and management review (13%) combined.

Tip Sources

Since tips are the most common detection method, it is important to understand where those tips come from. Figure 10 shows that slightly more than half of all tips (53%) were provided by employees of the victim organizations. Meanwhile, nearly one-third (32%) of the tips that led to fraud detection came from people outside the organization: customers, vendors, and competitors. Active cultivation of tips and complaints, such as the promotion of fraud hotlines, is often geared primarily toward employees, but this data suggests organizations should also consider promoting reporting mechanisms to outside parties, especially customers and vendors. Additionally, 14% of tips came from an anonymous source, demonstrating that a significant portion of those who reported fraud did not want their identities known. Whistleblowers often have a fear of being identified or retaliated against, which is why it is important that they be able to make reports anonymously where such practice is legally permissible.

FIG. 9 **How is occupational fraud initially detected?**

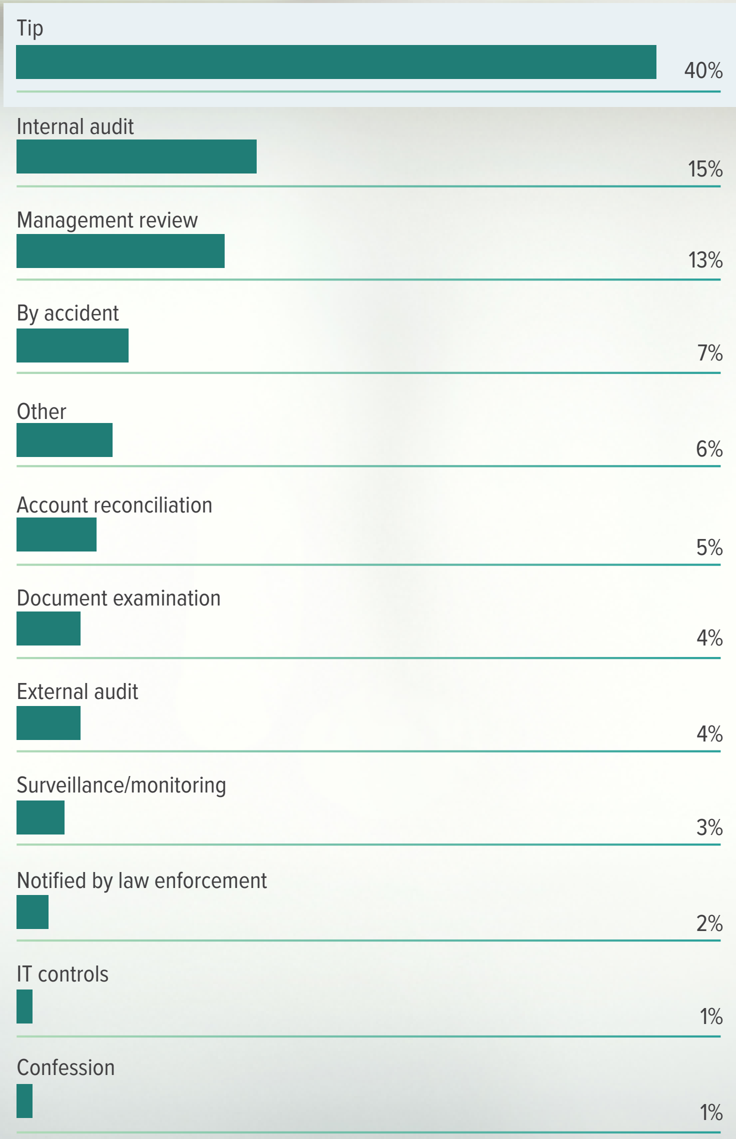
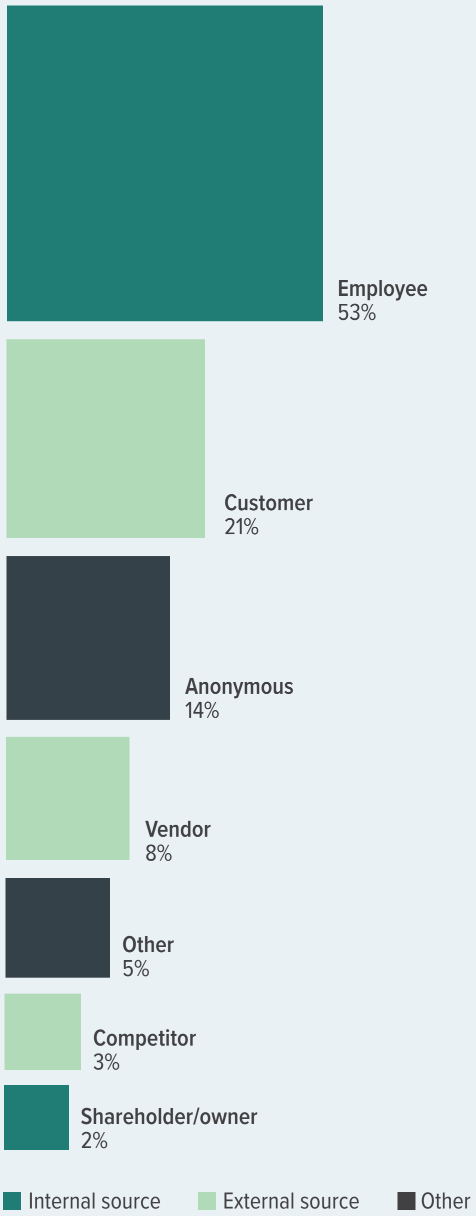


FIG. 10 **Who reports occupational fraud?**



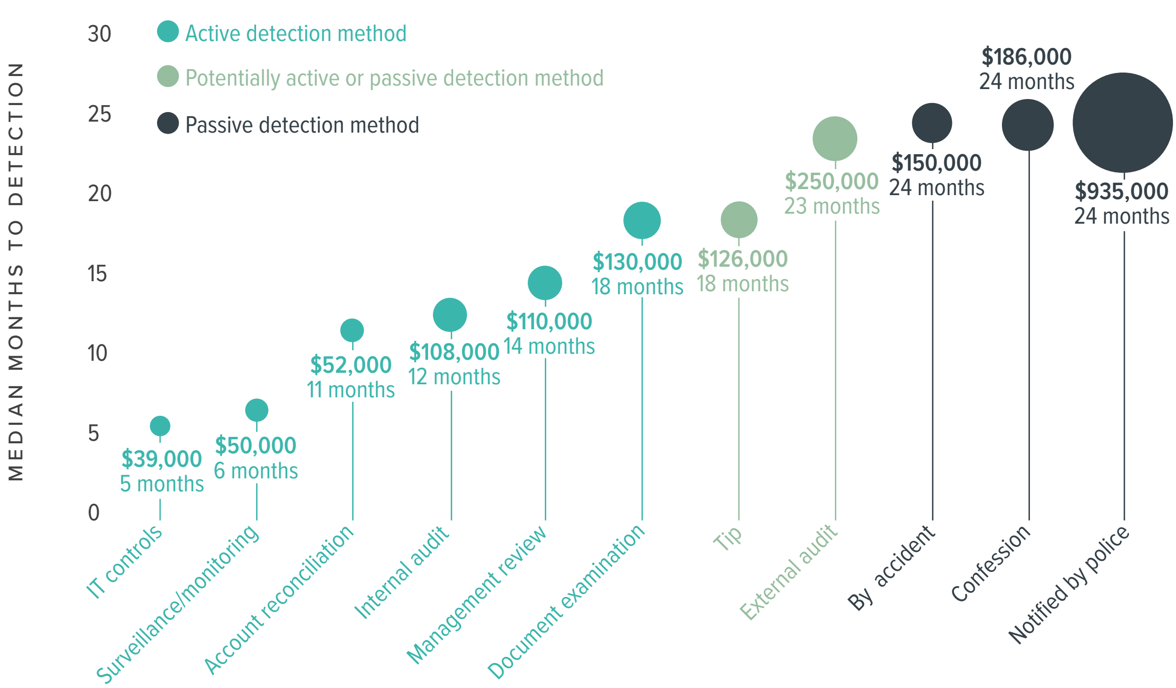
Median Loss and Duration by Detection Method

In addition to determining the most common methods of detection, we also analyzed the median loss and duration of fraud schemes based on how they were uncovered. Our results indicate that there is a correlation between the way in which occupational fraud schemes are detected and the severity of the fraud. More importantly, the data points to steps organizations can take to detect fraud proactively and, in doing so, mitigate losses.

Figure 11 portrays the median loss and median duration for all cases, based on the method by which they were detected. We grouped each of these detection methods into three categories: active, passive, or potentially active or passive. Active detection methods (shaded teal) involve a deliberate search for misconduct from someone within the organization or an internal control designed to detect fraud. Passive detection methods (shaded black) refer to cases in which the organization discovers the fraud by accident, confession, or unsolicited notification by another party. We classified tips and external audit as potentially active or passive detection methods because those mechanisms might or might not involve proactive efforts specifically to identify fraud, depending on the circumstances.

Our findings show that median duration and median loss were relatively low in frauds that were detected by active methods. Frauds detected passively tended to last much longer and have larger median losses. For instance, frauds detected actively by IT controls tended to last five months and cause a median loss of USD 39,000, compared to schemes detected passively through notification from law enforcement, which tended to last two years and cause a median loss of almost USD 1 million. The key takeaway from this data is that organizations can reduce the impact of fraud by pursuing internal controls and policies that actively detect fraud, such as thorough management review, account reconciliation, and surveillance/monitoring. Organizations that do not actively seek out fraud are likely to experience schemes that continue for much longer and at a higher cost.

FIG. 11 **How does detection method relate to fraud duration and loss?**



HOTLINES AND REPORTING MECHANISMS

The presence of a hotline or other reporting mechanism affects how organizations detect fraud and the outcome of the case.

63% of victim organizations had hotlines

46% OF CASES DETECTED BY TIP — HOTLINES

30% OF CASES DETECTED BY TIP — NO HOTLINES

ORGANIZATIONS WITH HOTLINES detected fraud by **tip** more often

Fraud losses were **50% SMALLER** at organizations **with hotlines** than **those without**

$100,000

$200,000

Organizations **without hotlines** were more than **TWICE AS LIKELY** to detect fraud by accident or by external audit

CORRUPTION IS PARTICULARLY LIKELY TO BE DETECTED BY TIP

Corruption	Asset Misappropriation	Financial Statement Fraud
50% DETECTED BY TIP	38% DETECTED BY TIP	38% DETECTED BY TIP

Telephone hotlines are most popular, but whistleblowers use various reporting mechanisms

Telephone hotline	42%
Email	26%
Web-based/ online form	23%
Mailed letter/form	16%
Other	9%
Fax	1%

NOT ALL TIPS COME THROUGH HOTLINES

When a reporting mechanism is not used, whistleblowers are most likely to report to:

DIRECT SUPERVISOR **32%**

EXECUTIVE **15%**

FRAUD INVESTIGATION TEAM **13%**

COWORKER **12%**

INTERNAL AUDIT **10%**

VICTIM ORGANIZATIONS

How are different kinds of organizations affected by occupational fraud?

To better understand the victim organizations in our study, we asked participants to provide information about the organizations' type, size, and industry, as well as the mechanisms that the organizations had in place to prevent and detect fraud at the time the scheme occurred.

Type of Organization

As shown in Figure 12, more than 70% of the frauds in our study occurred at for-profit organizations, with 42% of the victim organizations being private companies and 29% being public companies. The private companies in our study suffered the greatest median loss, at USD 164,000. Not-for-profit organizations were the victim in only 9% of frauds and had the smallest median loss of USD 75,000; however, for many not-for-profit entities, financial resources are extremely limited and a loss of USD 75,000 can be particularly devastating.

Level of Government Organization

Resources and operations vary greatly by level of government, meaning that fraud can affect these organizations differently. Consequently, we broke down the government fraud cases in our study based on the level of government agency involved. While there was not a large variation in the percentage of schemes that occurred at local, state/provincial, and national levels, the frauds at national-level agencies tended to be much larger, causing a median loss approximately twice as large as the losses experienced by local and state/provincial governments (see Figure 13).

FIG. 12 **What types of organizations are victimized by occupational fraud?**

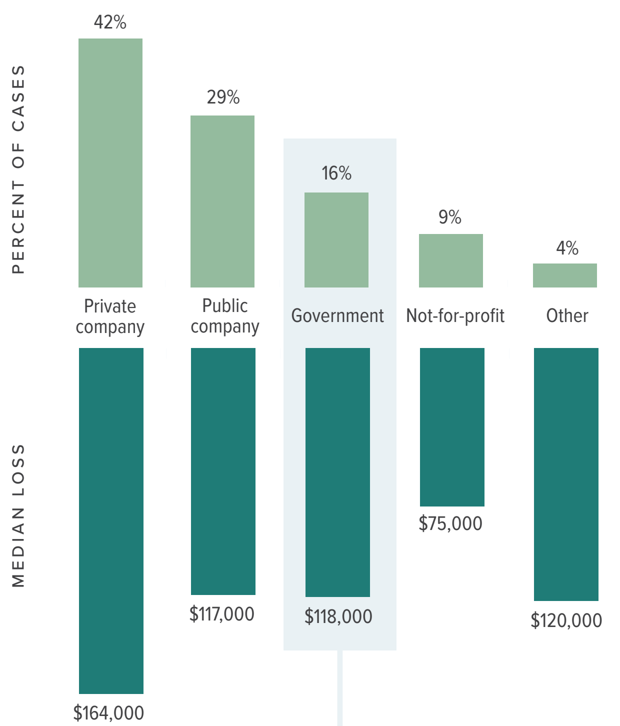
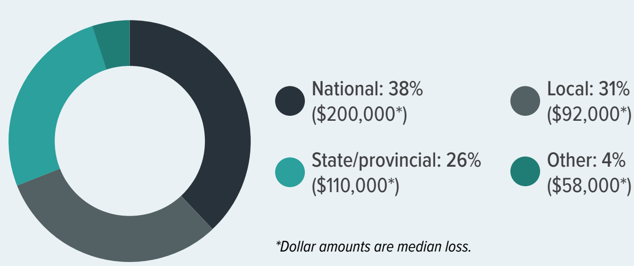


FIG. 13 **What levels of government are victimized by occupational fraud?**

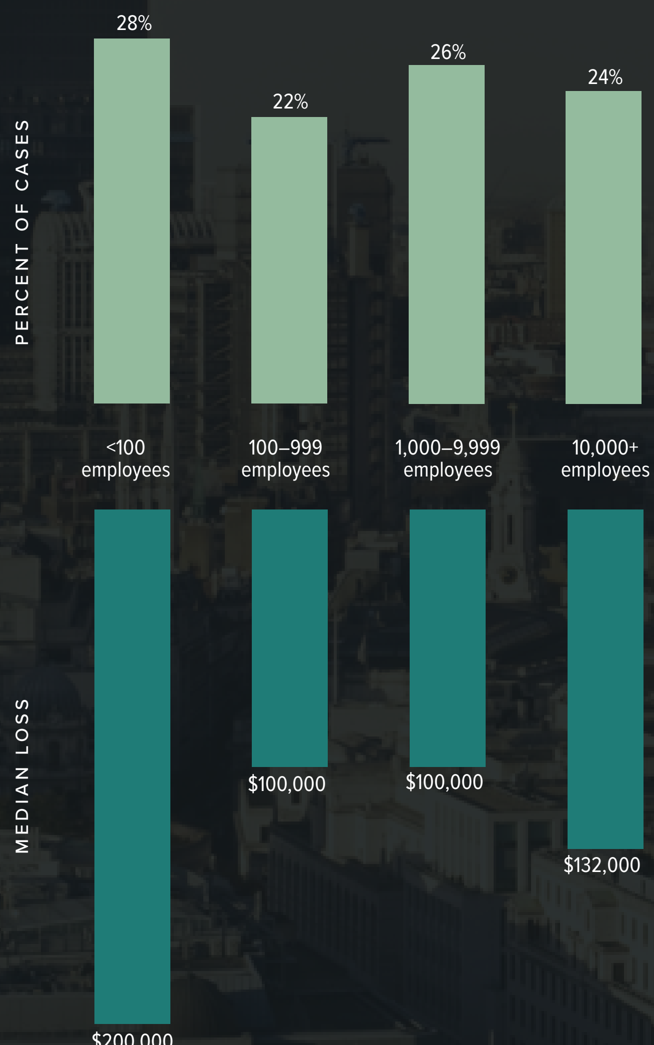


Size of Organization

The size of an organization's staff can directly affect both the opportunity for fraud and the ability to enact certain anti-fraud mechanisms. Larger entities typically have more resources to invest in their anti-fraud programs, as well as a greater ability to separate duties among staff members to help prevent fraud; however, the large staff size can also mean more potentially dishonest employees who might attempt schemes and more complex processes and transactions, which can increase the risk of fraud.

To provide some insight into the relative risks of fraud for organizations of various sizes, we analyzed the cases reported to us based on the number of employees at the victim organization. Figure 14 shows that small organizations (those with fewer than 100 employees) both experienced the greatest percentage of cases in our study (28%) and suffered the largest median loss (USD 200,000). See "Fraud in Small Businesses" on pgs. 22–23 for more information about how fraud affects these organizations.

FIG. 14 **How does an organization's size relate to its occupational fraud risk?**

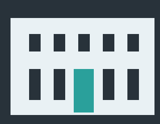


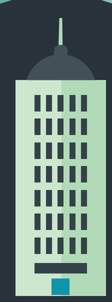
FRAUD IN SMALL BUSINESSES

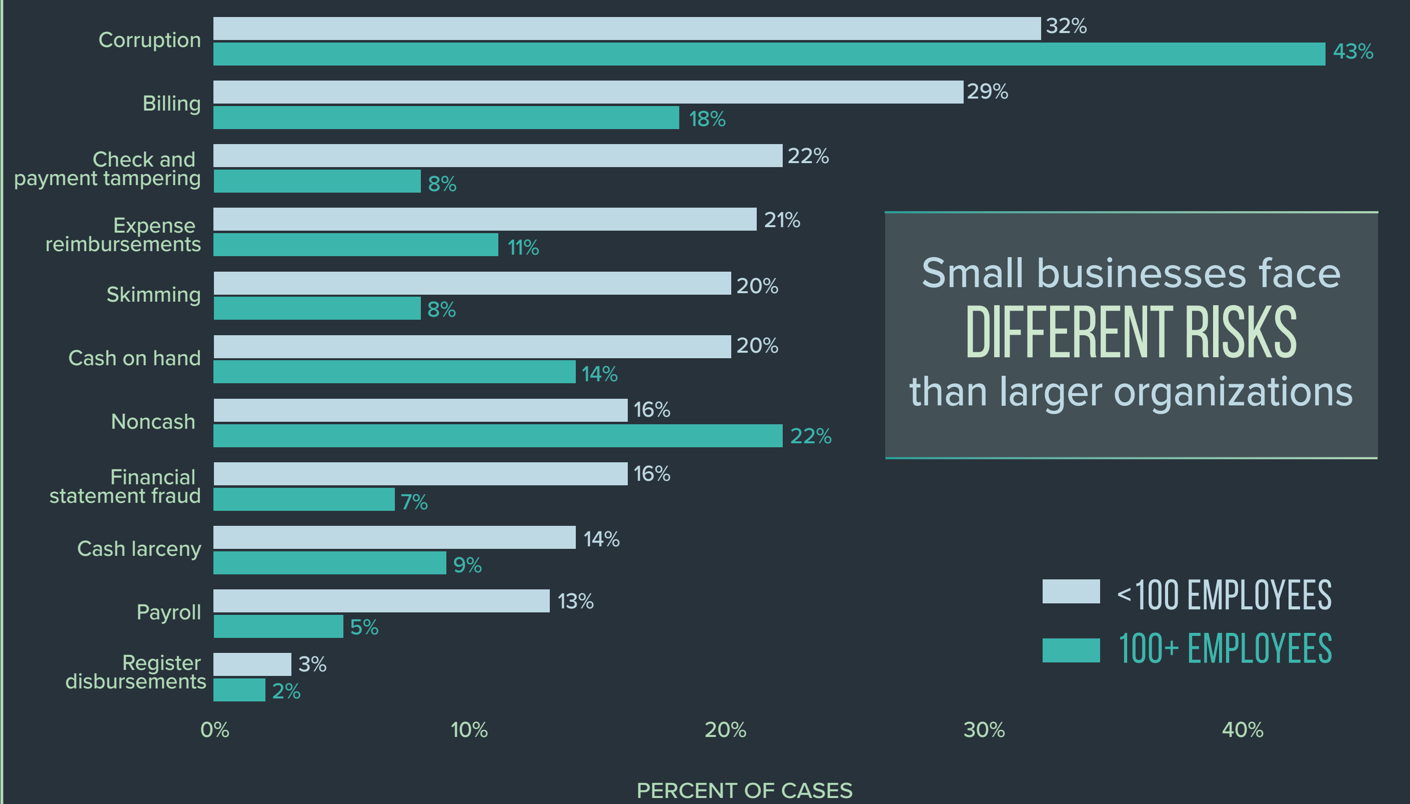
Fraud can be especially devastating to small businesses. These organizations typically have fewer resources to both prevent and recover from a fraud, and they often require an increased level of trust in employees due to a lower ability to implement robust anti-fraud controls.

SMALL BUSINESSES LOSE ALMOST TWICE AS MUCH PER SCHEME TO OCCUPATIONAL FRAUD

	<100 EMPLOYEES	100+ EMPLOYEES
Median loss:	$200,000	$104,000
Frauds detected by tip:	29%	44%
Frauds caused by lack of internal controls:	42%	25%
Frauds perpetrated by an owner/executive:	29%	16%

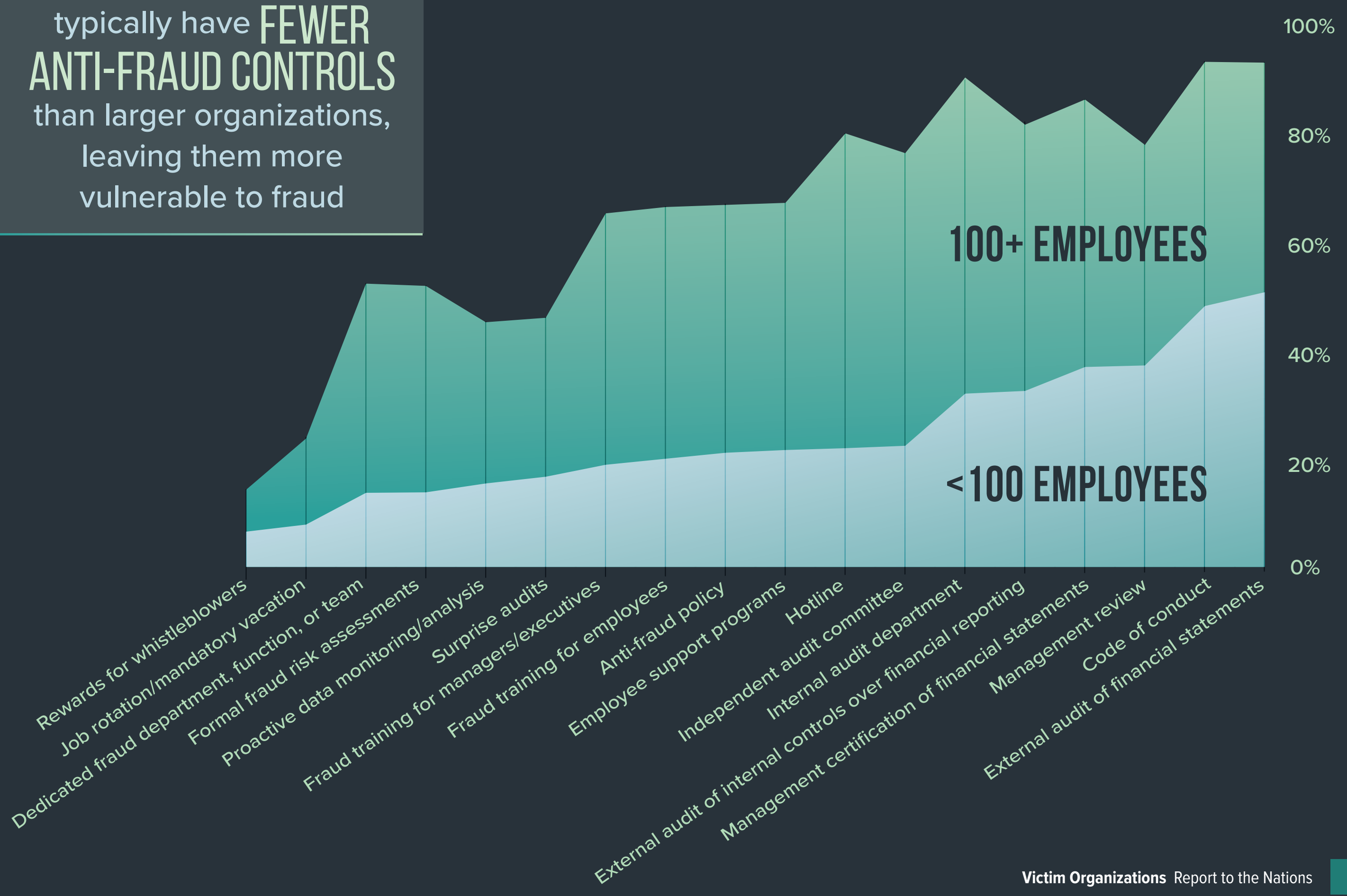






Small businesses face **DIFFERENT RISKS** than larger organizations

Small businesses typically have **FEWER ANTI-FRAUD CONTROLS** than larger organizations, leaving them more vulnerable to fraud



Industry of Organization

In addition, we examined the cases reported to us based on the industry of the victim organization. The greatest number of cases in our study occurred in the banking and financial services, manufacturing, and government and public administration sectors. Readers should note that this data likely represents the industries that most often employ CFEs, rather than the industries that are most susceptible to fraud. However, information about occupational fraud in various industries can be useful for benchmarking purposes.

FIG. 15 **How does occupational fraud affect organizations in different industries?**

Most Common Schemes by Industry

Understanding the frequency of specific fraud schemes within different industries can help organizations assess and design controls to guard against the schemes that pose the most significant threats. Figure 16 provides a heat map showing the relevant risk for each category of occupational fraud in every industry that had at least 50 reported cases in our study. Boxes are shaded from light to dark red based on the respective level of occurrence, with darker boxes indicating higher-frequency schemes.

FIG. 16 **What are the most common occupational fraud schemes in various industries?**

INDUSTRY	Cases	Billing	Cash larceny	Cash on hand	Check and payment tampering	Corruption	Expense reimbursements	Financial statement fraud	Noncash	Payroll	Register disbursements	Skimming
Banking and financial services	338	11%	14%	23%	12%	36%	7%	8%	11%	2%	3%	9%
Manufacturing	201	27%	8%	15%	12%	51%	18%	10%	28%	5%	3%	7%
Government and public administration	184	15%	11%	11%	9%	50%	11%	5%	22%	7%	2%	11%
Health care	149	26%	7%	13%	13%	36%	16%	11%	19%	17%	1%	12%
Retail	104	20%	10%	19%	9%	28%	8%	12%	34%	5%	13%	13%
Education	96	23%	19%	19%	6%	38%	18%	6%	19%	6%	0%	14%
Insurance	87	20%	9%	3%	18%	45%	8%	7%	11%	3%	1%	11%
Energy	86	20%	2%	10%	12%	53%	10%	3%	27%	7%	2%	10%
Construction	83	37%	12%	8%	19%	42%	23%	16%	23%	14%	1%	13%
Transportation and warehousing	79	25%	8%	8%	9%	46%	15%	8%	28%	3%	3%	13%
Food service and hospitality	75	17%	16%	20%	11%	29%	12%	12%	24%	7%	0%	23%
Technology	62	26%	5%	10%	8%	42%	21%	16%	32%	8%	0%	6%
Religious, charitable, or social services	58	40%	9%	22%	19%	34%	29%	10%	19%	22%	3%	17%
Services (professional)	54	26%	17%	15%	26%	17%	30%	13%	13%	15%	0%	15%
Arts, entertainment, and recreation	50	14%	20%	36%	6%	32%	12%	8%	18%	4%	8%	28%

LESS RISK — MORE RISK

As noted in Figure 16 on pg. 25, corruption poses a significant risk to several industries, with the most common occurrence of corruption schemes in the energy, manufacturing, and government and public administration sectors. Skimming schemes were also notably more common in the arts, entertainment, and recreation and the food service and hospitality industries than elsewhere, while payroll schemes occurred more frequently in the religious, charitable, or social services and the health care sectors. Interestingly, the cases that occurred in religious, charitable, or social services organizations also tended to involve the most crossover between scheme types, meaning the perpetrators in these cases used many different schemes to defraud the victims, rather than limiting their frauds to one specific area.

Anti-Fraud Controls at the Victim Organization

The presence of a robust system of anti-fraud controls can be a powerful deterrent, as well as a proactive prevention and detection mechanism, in the fight against fraud. Thus, organizations can benefit from knowing which anti-fraud controls are commonly used by their peers, as well as which tend to be the most effective. To help explore this information, we provided survey respondents with a list of 18 entity-level, anti-fraud controls and asked which, if any, were present at the victim organization at the time the fraud occurred. As noted in Figure 17, 80% of the organizations had a code of conduct and underwent external financial statement audits, while 73% had internal audit departments, and 72% had company management certify the financial statements. On the other end of the spectrum, 19% of organizations had policies requiring job rotation or mandatory vacation, and only 12% provided rewards for whistleblowers.

Effectiveness of Anti-Fraud Controls

Demonstrating the return on investment in anti-fraud initiatives can be a difficult task, as it is nearly impossible to measure the amount of fraud prevented by a specific control. However, many anti-fraud professionals find themselves needing to make a business case to justify additional fraud prevention and detection initiatives. To provide some visibility into the relative effectiveness of various anti-fraud controls, we compared the losses experienced by the victim organizations that had specific controls in place against the losses experienced by those that had not implemented each control. The results of this analysis are provided in Figure 18 on pg. 28. Interestingly, the presence of every control we analyzed was correlated with lower fraud losses. For example, the use of proactive data monitoring and analysis and surprise audits was associated with a more than 50% reduction in fraud losses.

We similarly analyzed the duration of fraud schemes based on the presence or absence of each anti-fraud control (see Figure 19 on pg. 29). Data monitoring and analysis and surprise audits were correlated with the most significant reductions in fraud duration; as these two controls were also associated with some of the largest loss reductions, our data indicates that they are among the most useful tools in the fight against fraud.

FIG. 17 **What anti-fraud controls are most common?**

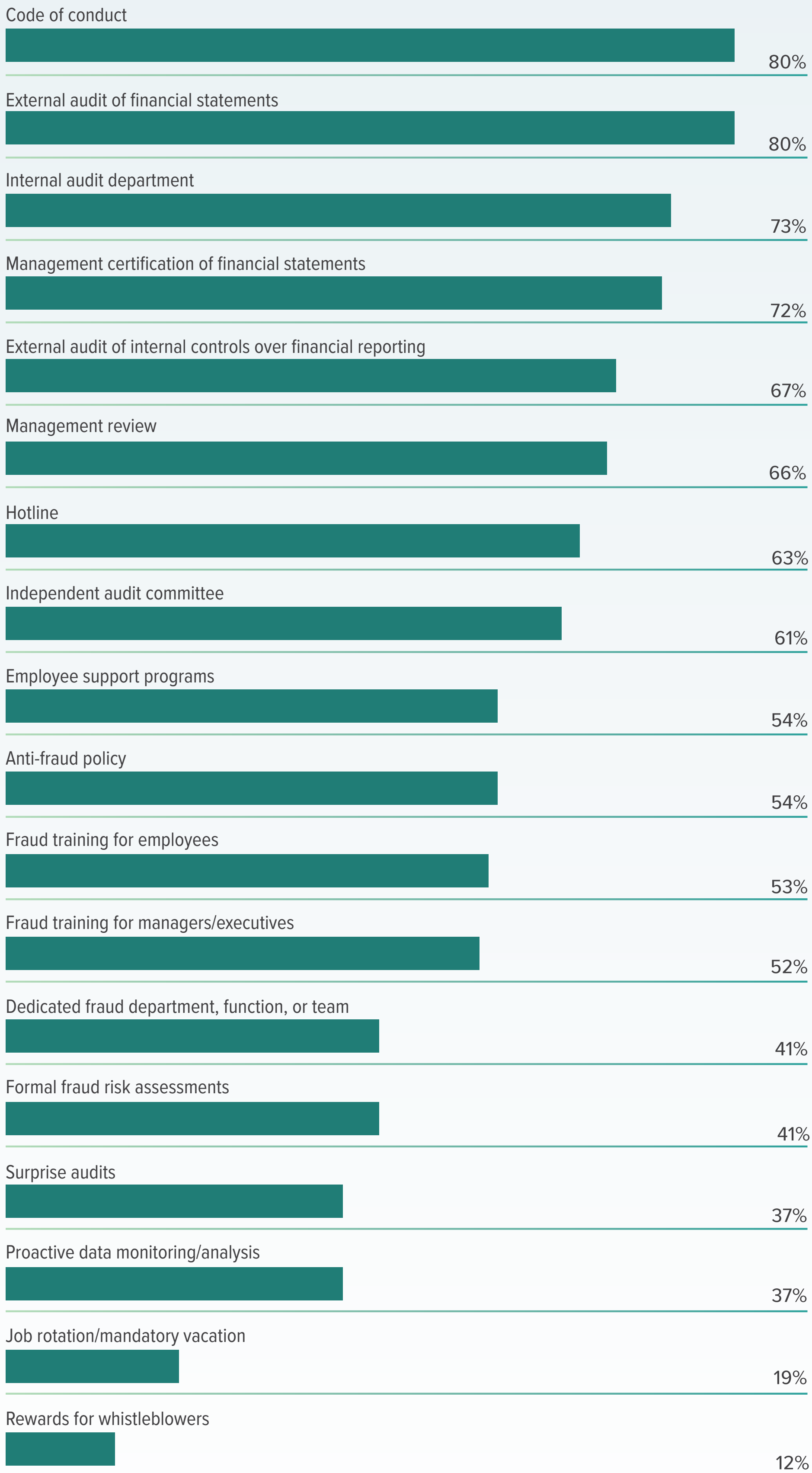
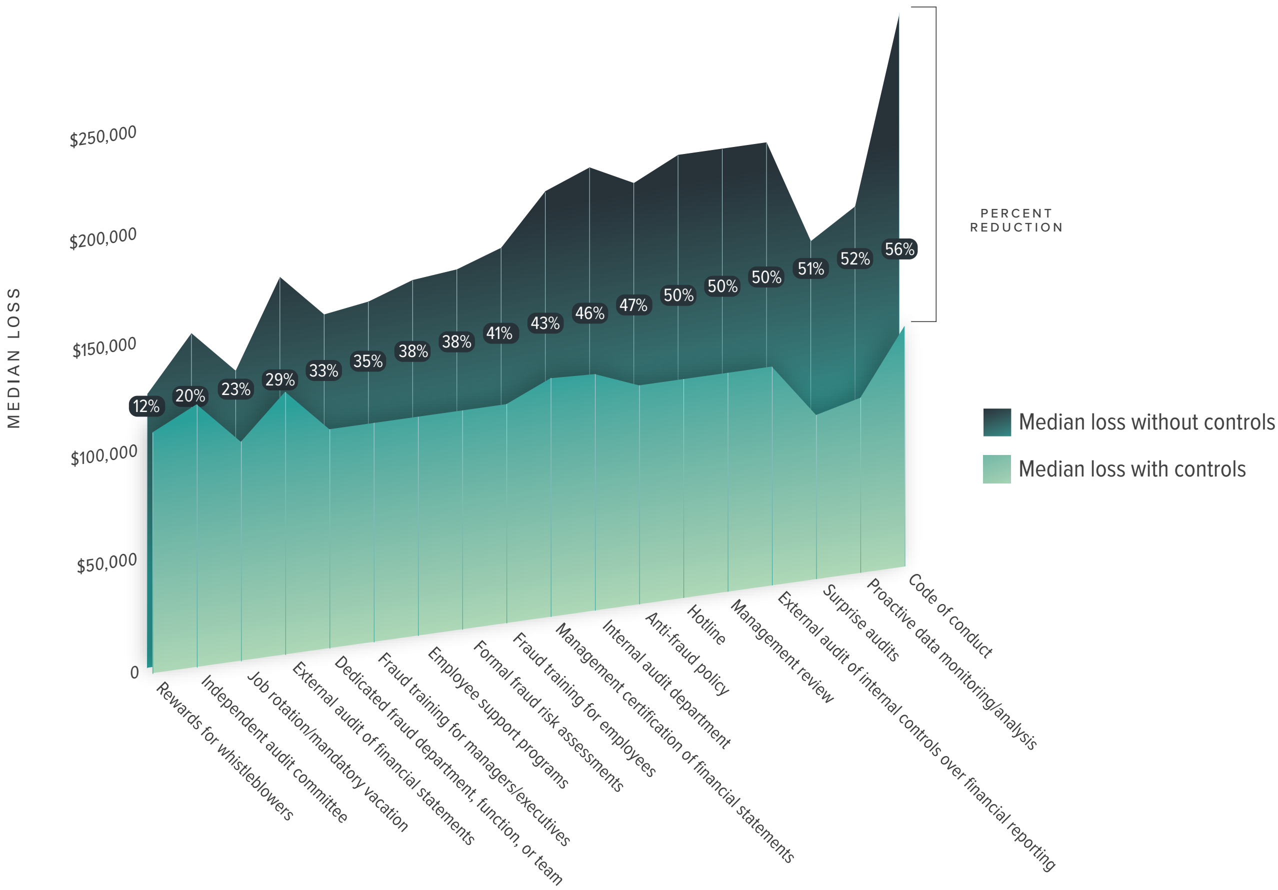
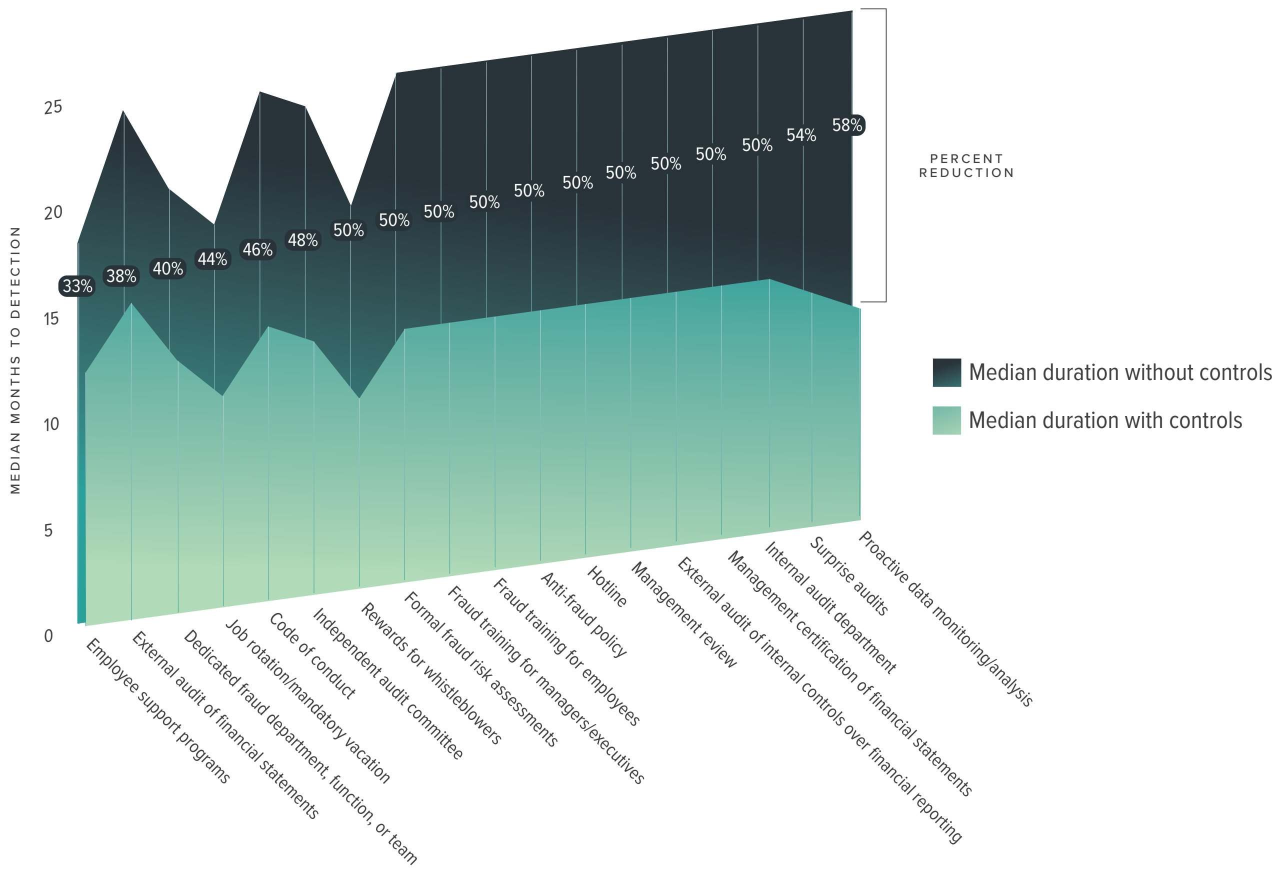


FIG. 18 **How does the presence of anti-fraud controls relate to median loss?**



Control	Percent of cases	Control in place	Control not in place	Percent reduction
Code of conduct	80%	$ 110,000	$250,000	56%
Proactive data monitoring/analysis	37%	$ 80,000	$ 165,000	52%
Surprise audits	37%	$ 75,000	$ 152,000	51%
External audit of internal controls over financial reporting	67%	$100,000	$200,000	50%
Management review	66%	$100,000	$200,000	50%
Hotline	63%	$100,000	$200,000	50%
Anti-fraud policy	54%	$100,000	$ 190,000	47%
Internal audit department	73%	$108,000	$200,000	46%
Management certification of financial statements	72%	$109,000	$ 192,000	43%
Fraud training for employees	53%	$100,000	$ 169,000	41%
Formal fraud risk assessments	41%	$100,000	$ 162,000	38%
Employee support programs	54%	$100,000	$ 160,000	38%
Fraud training for managers/executives	52%	$100,000	$ 153,000	35%
Dedicated fraud department, function, or team	41%	$100,000	$ 150,000	33%
External audit of financial statements	80%	$120,000	$ 170,000	29%
Job rotation/mandatory vacation	19%	$100,000	$ 130,000	23%
Independent audit committee	61%	$120,000	$ 150,000	20%
Rewards for whistleblowers	12%	$ 110,000	$ 125,000	12%

FIG. 19 **How does the presence of anti-fraud controls relate to the duration of fraud?**



Control	Percent of cases	Control in place	Control not in place	Percent reduction
Proactive data monitoring/analysis	37%	10 months	24 months	58%
Surprise audits	37%	11 months	24 months	54%
Internal audit department	73%	12 months	24 months	50%
Management certification of financial statements	72%	12 months	24 months	50%
External audit of internal controls over financial reporting	67%	12 months	24 months	50%
Management review	66%	12 months	24 months	50%
Hotline	63%	12 months	24 months	50%
Anti-fraud policy	54%	12 months	24 months	50%
Fraud training for employees	53%	12 months	24 months	50%
Fraud training for managers/executives	52%	12 months	24 months	50%
Formal fraud risk assessments	41%	12 months	24 months	50%
Rewards for whistleblowers	12%	9 months	18 months	50%
Independent audit committee	61%	12 months	23 months	48%
Code of conduct	80%	13 months	24 months	46%
Job rotation/mandatory vacation	19%	10 months	18 months	44%
Dedicated fraud department, function, or team	41%	12 months	20 months	40%
External audit of financial statements	80%	15 months	24 months	38%
Employee support programs	54%	12 months	18 months	33%

Background Checks

Effectively preventing fraud begins with ensuring that the organization hires ethical employees. As part of our study, we examined whether the victim organizations ran a background check on the perpetrator prior to hiring him or her, as well as whether the background check revealed any potential indicators of the employee's dishonesty. As noted in Figure 20, 52% of the organizations ran background checks, while 48% did not. Of the organizations that did run a check before hiring the perpetrator, 10% were alerted to a red flag regarding the perpetrator but chose to hire the person anyway.

We also asked about the types of background checks used by the victim organizations in our study. Figure 21 shows that these organizations were most likely to look into the individual's employment and criminal history, with three-quarters or more of the background checks covering these areas.

FIG. 20 **Was a background check run on the perpetrator prior to hiring?**

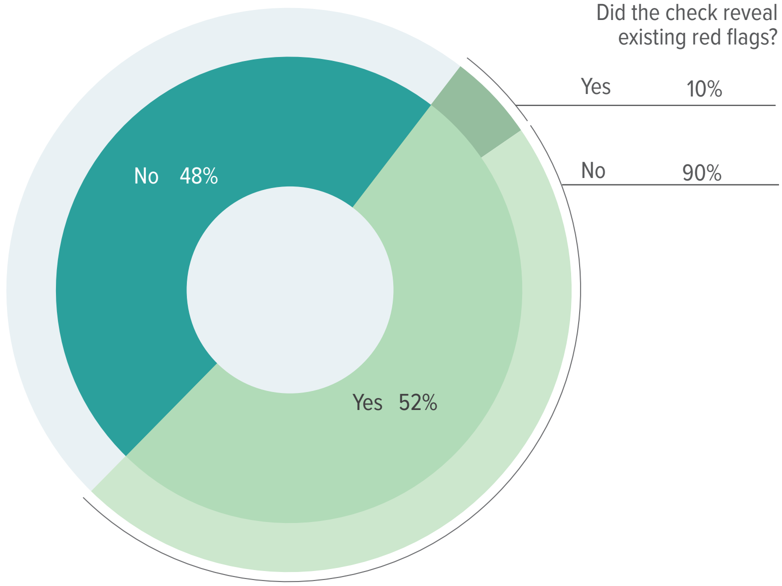
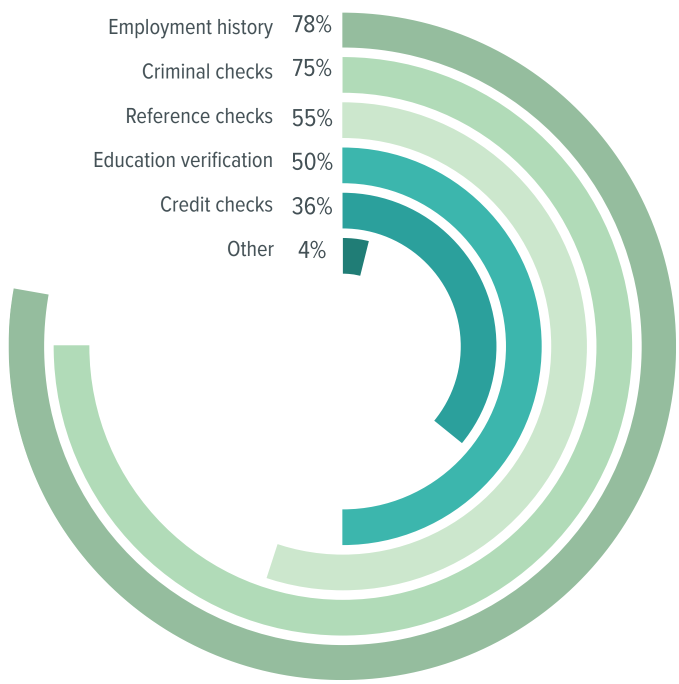


FIG. 21 **What types of background checks were run on the perpetrator prior to hiring?**



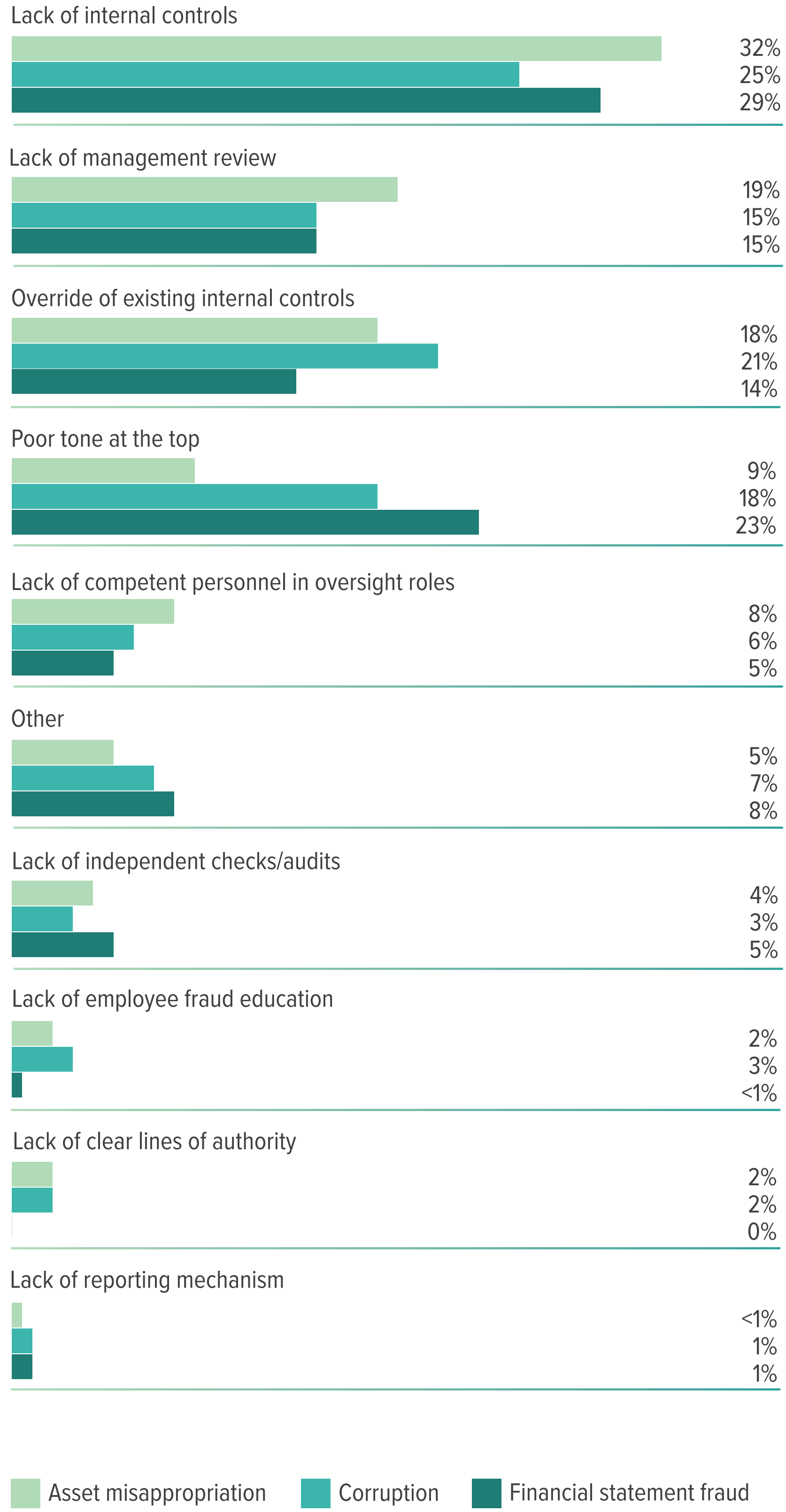
Internal Control Weaknesses that Contributed to Fraud

Understanding the factors that can lead to fraud is the foundation of preventing future occurrences. Consequently, we asked survey respondents what they perceived to be the primary internal control weakness that contributed to the fraud they reported. In 30% of cases, a simple lack of controls was the main factor that enabled the fraud to occur, while another 19% of cases occurred because the perpetrator was able to override the controls that had been put in place.

FIG. 22 **What are the primary internal control weaknesses that contribute to occupational fraud?**

We also analyzed these control weaknesses based on the category of fraud involved in the scheme (see Figure 23). Not surprisingly, a poor tone at the top was much more likely to be the primary factor in financial statement fraud and corruption cases than in asset misappropriation cases. However, it is interesting to note that a lack of internal controls is more common in asset misappropriation and financial statement frauds, while corruption schemes are more likely than other schemes to involve an override of existing controls. In addition, a lack of management review is more commonly the reason for asset misappropriation schemes than other forms of fraud.

FIG. 23 **How do internal control weaknesses vary by scheme type?**



PERPETRATORS

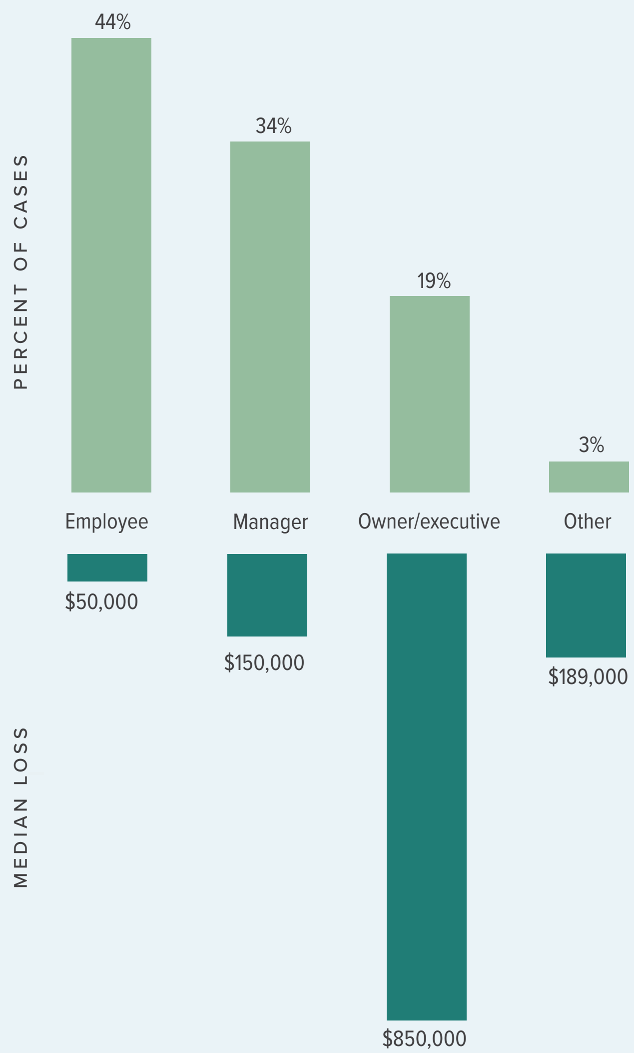
What does a typical fraudster look like?

We asked survey respondents to provide a broad range of information about the fraud perpetrators they investigated, including the offenders' conditions of employment, basic demographics, prior misconduct, and behavior that might have been warning signs of fraudulent activity. Our goal is to identify common characteristics and risk profiles for those who commit occupational fraud, which can help organizations better recognize fraud perpetrators or those at risk for engaging in fraudulent activity.

Perpetrator's Position

As seen in Figure 24, there is a strong correlation between the fraud perpetrator's level of authority and the size of the fraud. While owners/executives only committed 19% of the frauds in our study, the schemes committed by these individuals resulted in a median loss of USD 850,000, which was nearly six times larger than the median loss caused by managers, and 17 times larger than the median loss caused by low-level employees. A significant correlation between authority and fraud loss has been found in every edition of the report dating back to 1996. This correlation likely reflects the fact that high-level fraudsters tend to have greater access to an organization's assets than low-level personnel. They may also have greater technical ability to commit and conceal fraud, and they might be able to use their authority to override or conceal their crimes in ways that low-level employees cannot.

FIG. 24 **How does the perpetrator's level of authority relate to occupational fraud?**



One reason frauds committed by high-level perpetrators are more costly could be that their schemes tend to last longer. The median duration of a scheme committed by an owner/executive was 24 months, compared to 18 months for schemes committed by managers and 12 months for those committed by employees (See Figure 7 on pg. 14 for more information on the correlation between fraud duration and median loss.).

FIG. 25 How does the perpetrator's level of authority relate to scheme duration?

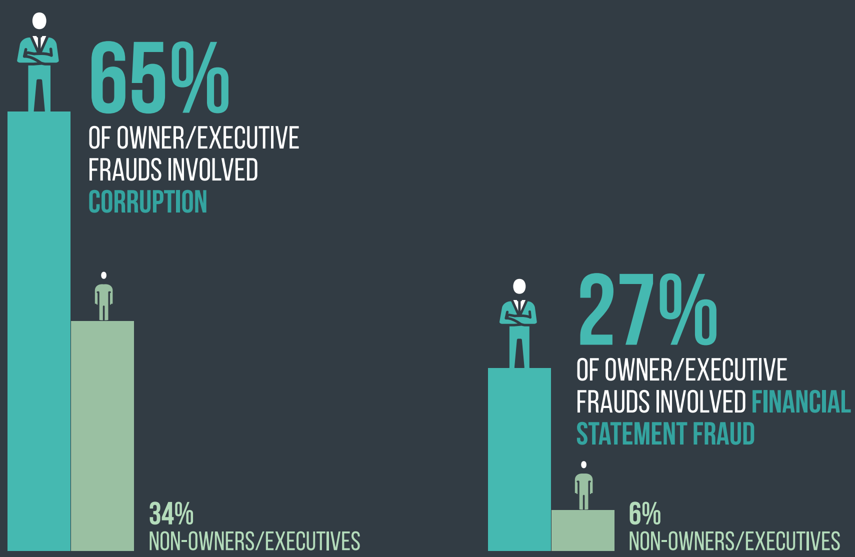
Position	Median months to detection
Employee	12 months
Manager	18 months
Owner/executive	24 months

Perpetrator's Tenure

As Figure 26 shows, fraud losses tend to increase based on how long the fraud perpetrator worked for the victim organization. Perpetrators with less than one year of tenure caused a median loss of USD 40,000, while those with more than ten years' experience at the victim organization caused a median loss of USD 241,000, more than six times as high.

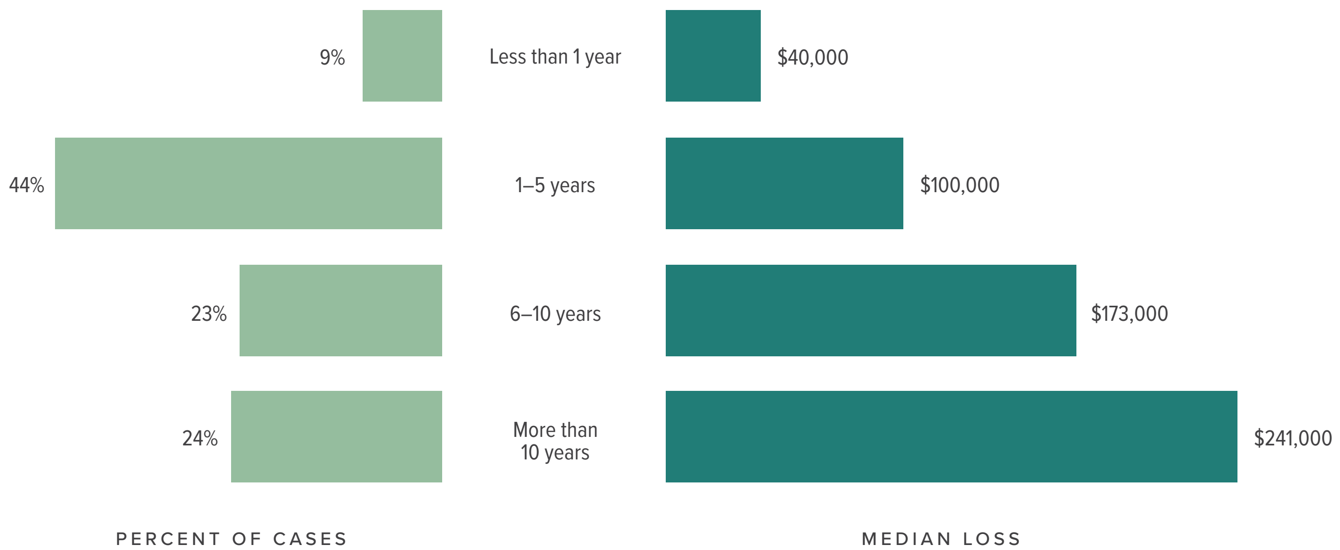
FRAUD COMMITTED BY OWNERS AND EXECUTIVES

Occupational frauds committed by owners/executives tend to be extremely costly. How do these cases differ from non-owner/executive frauds?



CORRUPTION AND FINANCIAL STATEMENT FRAUD ARE THE TWO COSTLIEST FORMS OF OCCUPATIONAL FRAUD

FIG. 26 **How does the perpetrator's tenure relate to occupational fraud?**



OWNERS/EXECUTIVES ARE MORE LIKELY TO COLLUDE WITH OTHERS

Collusion schemes tend to be more costly than single-perpetrator frauds

OWNERS/EXECUTIVES **66%** OF CASES INVOLVED COLLUSION

NON-OWNERS/EXECUTIVES **45%** OF CASES INVOLVED COLLUSION

OWNERS/EXECUTIVES ENGAGED IN NON-FRAUD-RELATED MISCONDUCT MORE OFTEN

OWNERS/EXECUTIVES **62%** OF CASES INVOLVED NON-FRAUD-RELATED MISCONDUCT

NON-OWNERS/EXECUTIVES **41%** OF CASES INVOLVED NON-FRAUD-RELATED MISCONDUCT

BULLYING OR INTIMIDATION was most common, observed in 41% of owner/executive cases

FRAUDS DETECTED BY A THIRD-PARTY AUDITOR OR LAW ENFORCEMENT:

Owner/executive
1 in 8

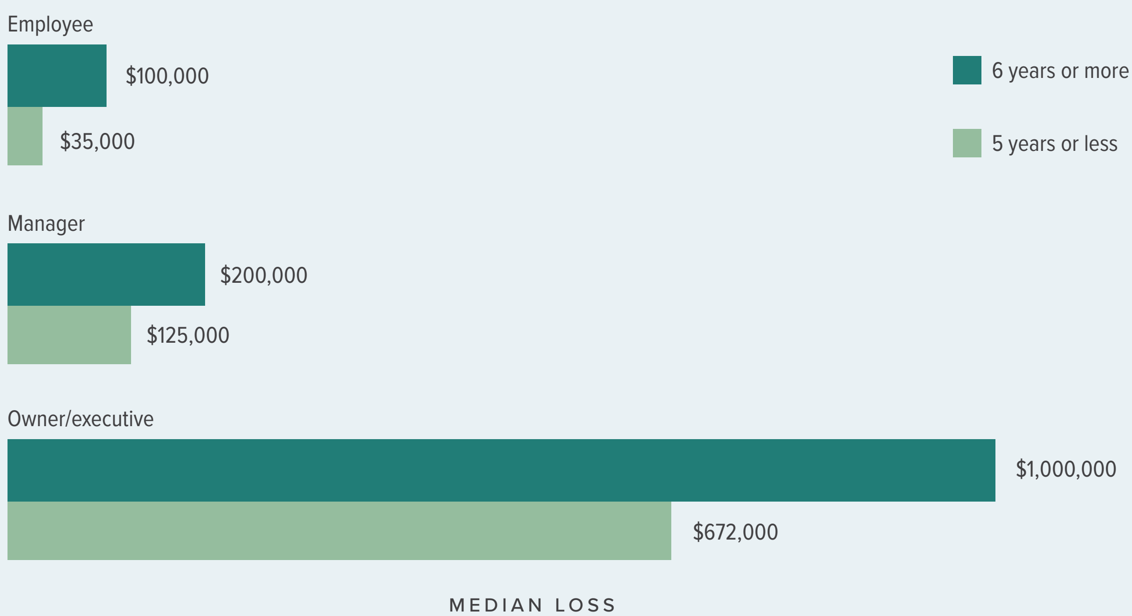
Non-owner/executive
1 in 25

FRAUDS THAT ARE NOT DETECTED INTERNALLY TEND TO BE MUCH MORE COSTLY

One possible explanation for the correlation between tenure and fraud loss might be that employees who have been with an organization for long periods of time are often promoted to positions of greater authority. As seen in Figure 24 on pg. 33, there is a strong correlation between authority and fraud loss.

To test this explanation, we separated all fraud offenders into two groups: those who had been with their organizations five years or fewer, and those who had been with their organizations six years or more. We then compared the median loss for these two groups across similar levels of authority. Interestingly, at every level, the more tenured fraudsters caused significantly larger losses than their less tenured counterparts. This indicates that the correlation between tenure and fraud loss to some extent operates independently from the offender's level of authority. We believe it is likely that those with longer tenure at a victim organization tend to have a better understanding of the organization's controls and processes—including gaps or weaknesses in those processes—which may enable them to do a better job of committing and concealing fraud. In a sense, these perpetrators are learning from experience how to steal from their employers.

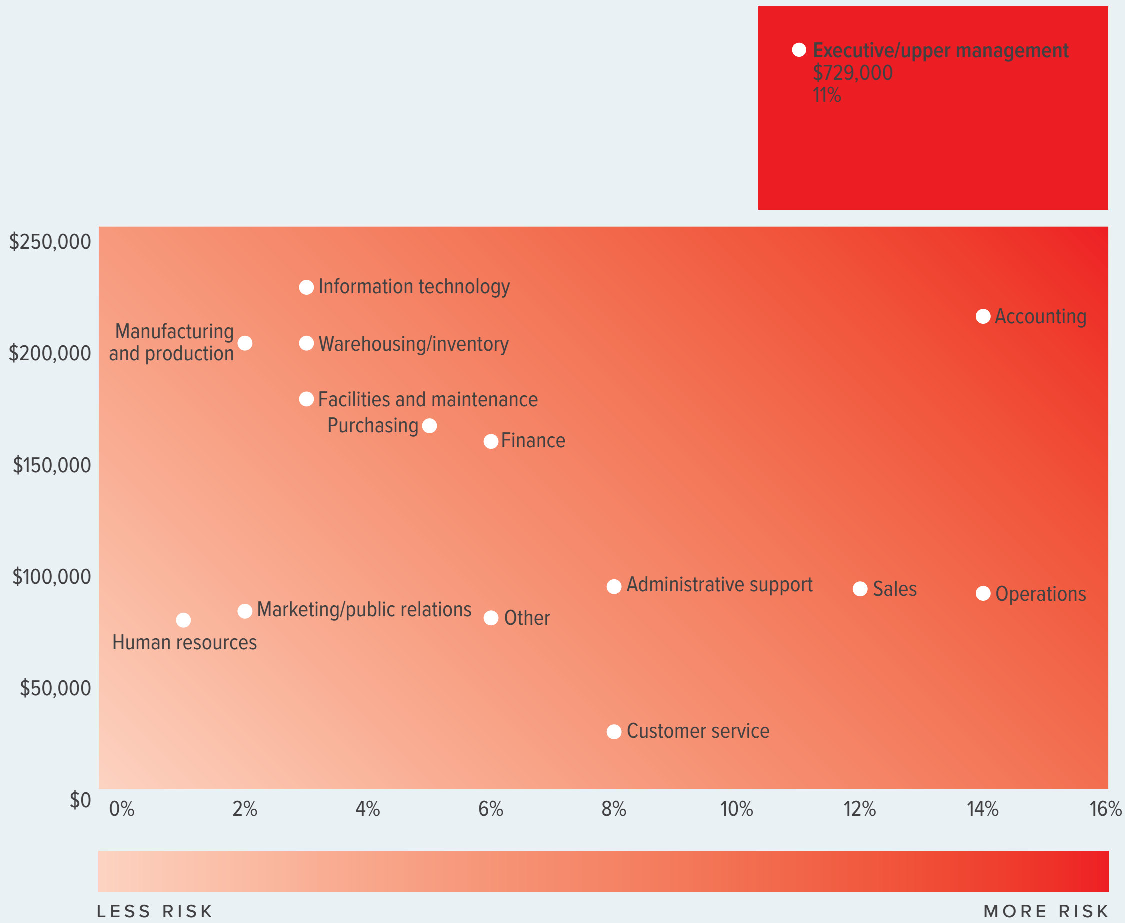
FIG. 27 **How does the perpetrator's tenure relate to median loss at different levels of authority?**



Perpetrator's Department

Figure 28 shows the frequency and median loss in fraud cases based on where the fraudster worked within the victim organization. This heat map provides a visual representation of the relative fraud risks posed by various departments. For example, we can see that accounting and operations were each responsible for 14% of the frauds in our study, but the median loss caused by those in the accounting department (USD 212,000) was significantly larger than the median loss from operations (USD 88,000). Frauds committed by those in executive or upper-management roles were slightly less common, but much costlier.

FIG. 28 **What departments pose the greatest risk for occupational fraud?**



Department*	Percent of cases	Median loss
Accounting	14%	$ 212,000
Operations	14%	$ 88,000
Sales	12%	$ 90,000
Executive/upper management	11%	$729,000
Customer service	8%	$ 26,000
Administrative support	8%	$ 91,000
Other	6%	$ 77,000
Finance	6%	$ 156,000
Purchasing	5%	$ 163,000
Facilities and maintenance	3%	$ 175,000
Warehousing/inventory	3%	$200,000
Information technology	3%	$225,000
Marketing/public relations	2%	$ 80,000
Manufacturing and production	2%	$200,000
Human resources	1%	$ 76,000

**Departments with fewer than ten cases were omitted.*

Schemes Based on Perpetrator's Department

Overall, 77% of the occupational frauds in our study came from eight departments: accounting, operations, sales, executive/upper management, customer service, administrative support, finance, and purchasing. Figure 29 shows the relative frequency of various fraud schemes in each of those departments. Boxes are shaded from light to dark red based on the frequency for each particular scheme, with darker boxes indicating higher levels of risk. This data should be useful for organizations to assess risk and develop effective anti-fraud controls in the departments most likely to be occupational fraud hotspots.

FIG. 29 **What are the most common occupational fraud schemes in high-risk departments?**

INDUSTRY	Cases	Billing	Cash larceny	Cash on hand	Check and payment tampering	Corruption	Expense reimbursements	Financial statement fraud	Noncash	Payroll	Register disbursements	Skimming
Accounting	290	29%	14%	17%	30%	23%	12%	13%	7%	14%	2%	19%
Operations	266	15%	8%	15%	8%	36%	11%	4%	20%	5%	2%	11%
Executive/upper management	223	35%	14%	16%	15%	62%	29%	30%	20%	12%	3%	9%
Sales	216	10%	12%	12%	6%	34%	13%	6%	25%	2%	5%	14%
Customer service	155	5%	16%	31%	8%	19%	4%	1%	15%	3%	5%	14%
Administrative support	147	33%	7%	21%	14%	26%	22%	8%	19%	13%	3%	14%
Finance	110	17%	15%	21%	16%	37%	13%	16%	15%	6%	2%	10%
Purchasing	94	18%	5%	6%	5%	77%	10%	3%	31%	3%	2%	4%

LESS RISK — MORE RISK

Perpetrator's Gender

Figure 30 shows that a sizeable majority of the fraudsters in our study (69%) were males. Men also caused much larger median losses (USD 156,000) than females (USD 89,000). This is consistent with our past studies, which have all shown males to be responsible for between 65% and 70% of frauds along with a significant disparity in fraud loss.

Perpetrator's Gender Based on Region

The gender distribution of occupational fraudsters varies significantly by region. As seen in Figure 31, in the United States men accounted for 58% of all occupational frauds, whereas in the Middle East and North Africa this figure was 92%.

FIG. 30 **How does the perpetrator's gender relate to occupational fraud?**

FIG. 31 **How does the gender distribution of perpetrators vary by region?**

Position of Perpetrator Based on Gender

One possible reason that fraud losses caused by men are larger than those caused by women could be related to levels of authority. As shown in Figure 24 on pg. 33, fraudsters with high levels of authority (e.g., executives and owners) tend to cause much larger losses than those with low authority (e.g., rank-and-file employees).

Figure 32 shows that the proportion of male fraudsters rises with the perpetrators' level of authority. At the employee level, only 58% of fraudsters were male, but that number increased to 73% for managers and 86% for owners/executives. Given that there were far more men than women in higher levels of authority in our dataset, we would expect the median loss for males to be larger.

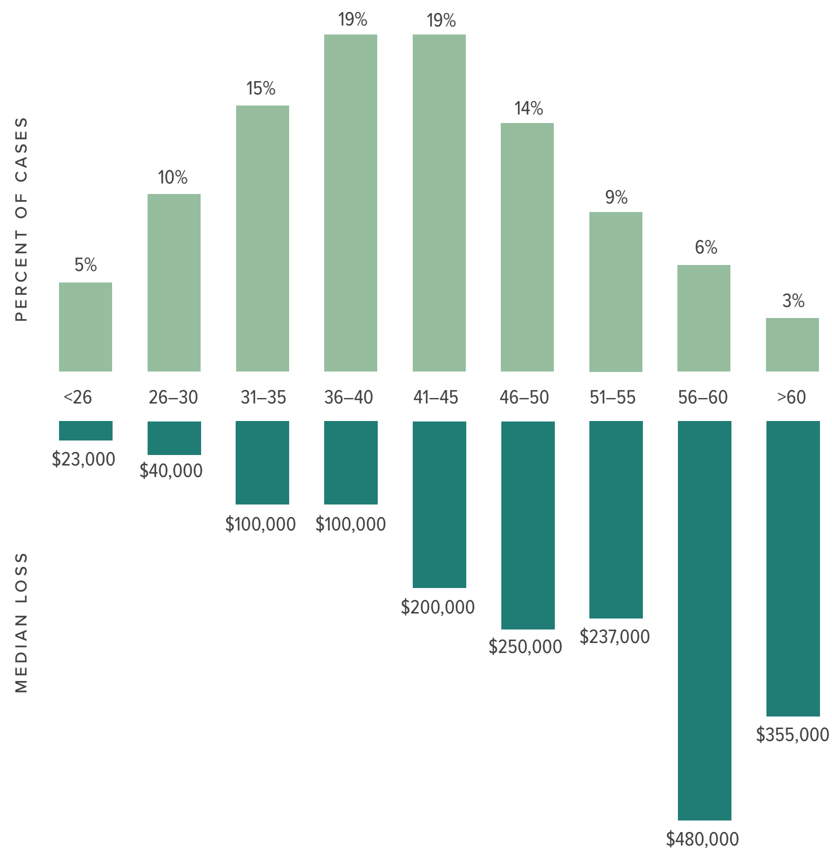
But interestingly, even when we account for authority level, males still tend to cause significantly larger losses than females in managerial and owner/executive roles. Male owners/executives caused a median loss of USD 1 million, as opposed to a median loss of USD 295,000 caused by female owners/executives. Among managers there was also a gender discrepancy in median loss, although not nearly as large. At the employee level, male and female median losses were equal.

FIG. 32 **How does gender distribution and median loss vary based on the perpetrator's level of authority?**

Perpetrator's Age

The age distribution of occupational fraudsters is roughly bell-shaped, as seen in Figure 33. Losses, however, tend to rise with the age of the fraudster. The largest median losses in our study were caused by fraudsters in the oldest age ranges (56 and older), while those who were 30 or younger caused a much smaller amount of damage.

FIG. 33 **How does the perpetrator's age relate to occupational fraud?**

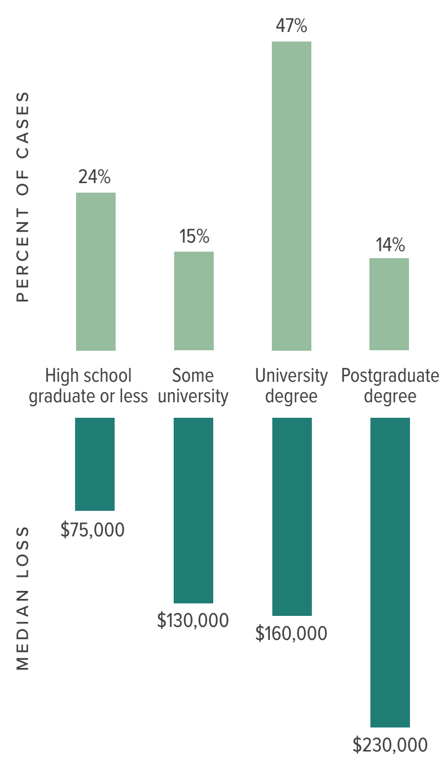


Perpetrator's Education Level

Figure 34 shows there is also a correlation between the fraudster's education level and the size of the fraud. Those with a postgraduate degree caused a median loss of USD 230,000 and those with a university degree caused a median loss of USD 160,000. Both of these figures were much higher than the median loss of schemes by fraudsters with a high school degree or less.

This data might indicate that highly educated fraudsters have superior technical abilities or knowledge that make them more effective at committing fraud, but it is also probably influenced by the fraudster's position of authority. More highly educated individuals tend to occupy higher positions within an organization. For example, in our study approximately 68% of those with a university or postgraduate degree were either managers or owners/executives.

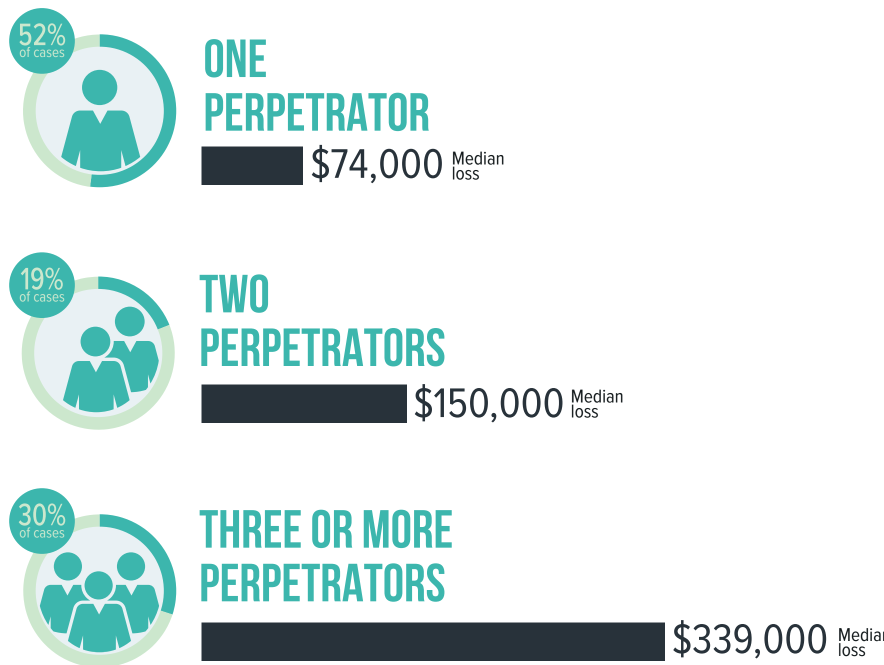
FIG. 34 **How does the perpetrator's education level relate to occupational fraud?**



Collusion by Multiple Perpetrators

Approximately half of the cases in our study involved multiple perpetrators who colluded with one another to commit fraud. As Figure 35 illustrates, fraud losses rose significantly when more than one fraudster was involved in a scheme. One likely explanation for this finding is that many anti-fraud controls work on the principles of separation of duties and independent checks. When multiple perpetrators conspire in a fraud scheme, they can circumvent the system of independent verification that might otherwise detect fraud.

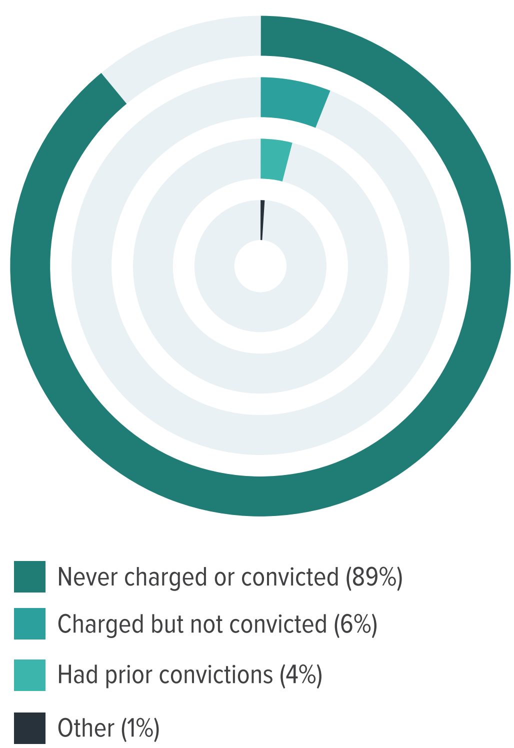
FIG. 35 **How does the number of perpetrators in a scheme relate to occupational fraud?**



Perpetrator's Criminal Background

The vast majority of occupational fraudsters have no prior history of criminal fraud convictions. Only 4% of the perpetrators in our 2018 study had previously been convicted of a fraud-related offense, which is consistent with our findings in every study dating back to 1996. This suggests that most occupational fraudsters are first-time offenders. However, according to Figure 43 on pg. 49, between 58% and 69% of occupational fraud cases in our past studies were never referred to law enforcement, which indicates that the actual number of repeat offenders is probably higher than what can be identified through conviction records.

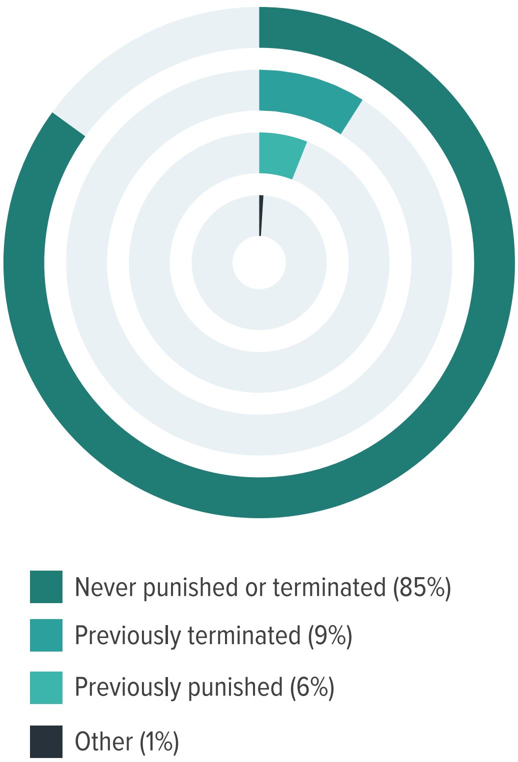
FIG. 36 **Do perpetrators tend to have prior fraud convictions?**



Perpetrator's Employment History

Figure 37 shows that 85% of occupational fraud perpetrators had never been punished or terminated for fraud-related conduct prior to the crimes in this study. This also tends to indicate that most occupational fraudsters are first-time offenders, but as with criminal conviction data discussed earlier, this data might understate the real number of repeat offenders. According to Figure 41 on pg. 47, 28% of fraudsters in our study either received no punishment from their employers, were permitted to resign, or entered into private settlement agreements (which are typically confidential). Therefore, the true number of repeat offenders may be higher than what is indicated by employment background checks.

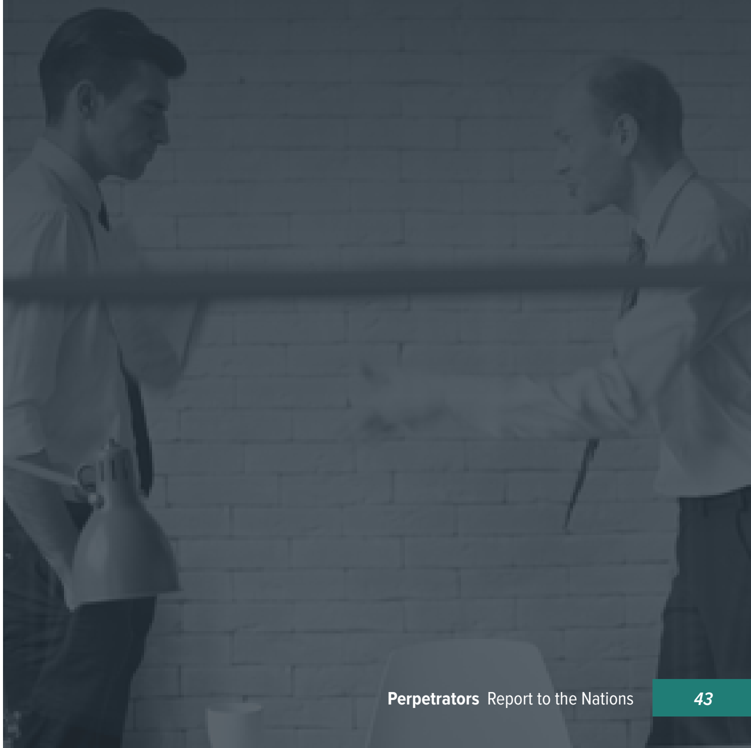
FIG. 37 **Do perpetrators tend to have prior employment-related disciplinary actions for fraud?**



Behavioral Red Flags Displayed by Perpetrators

Individuals who are engaged in occupational fraud schemes often exhibit certain behavioral traits or warning signs associated with their illegal activity. We presented survey respondents with a list of 17 common behavioral red flags and asked them to tell us which, if any, of these red flags had been displayed by the perpetrator before the fraud was discovered.

Figure 38 on pg. 45 shows the frequency of behavioral red flags in our 2018 cases. The six most common behavioral indicators of occupational fraud were: (1) living beyond means; (2) financial difficulties; (3) unusually close association with a vendor or customer; (4) excessive control issues or unwillingness to share duties; (5) recent divorce or family problems; and (6) a general "wheeler-dealer" attitude involving shrewd or unscrupulous behavior. These six red flags have been the six most common behavioral indicators in every report since we began tracking this data in 2008. (See "The Red Flags of Fraud" on pg. 44.)



THE RED FLAGS OF FRAUD

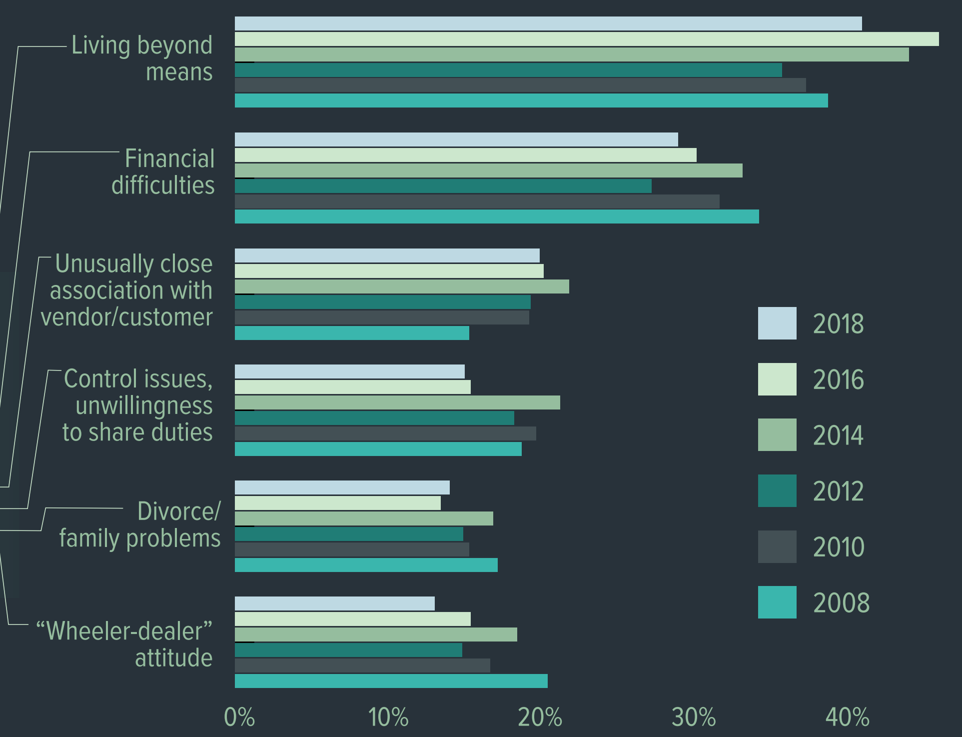
Understanding and recognizing the behavioral red flags displayed by fraud perpetrators can help organizations detect fraud and mitigate losses.

IN **85% OF CASES** FRAUDSTERS DISPLAYED AT LEAST ONE BEHAVIORAL RED FLAG

AND IN

50% OF CASES THEY EXHIBITED MULTIPLE RED FLAGS

These **6 BEHAVIORAL RED FLAGS** have been the most common in every one of our studies dating back to 2008, with a remarkably consistent distribution



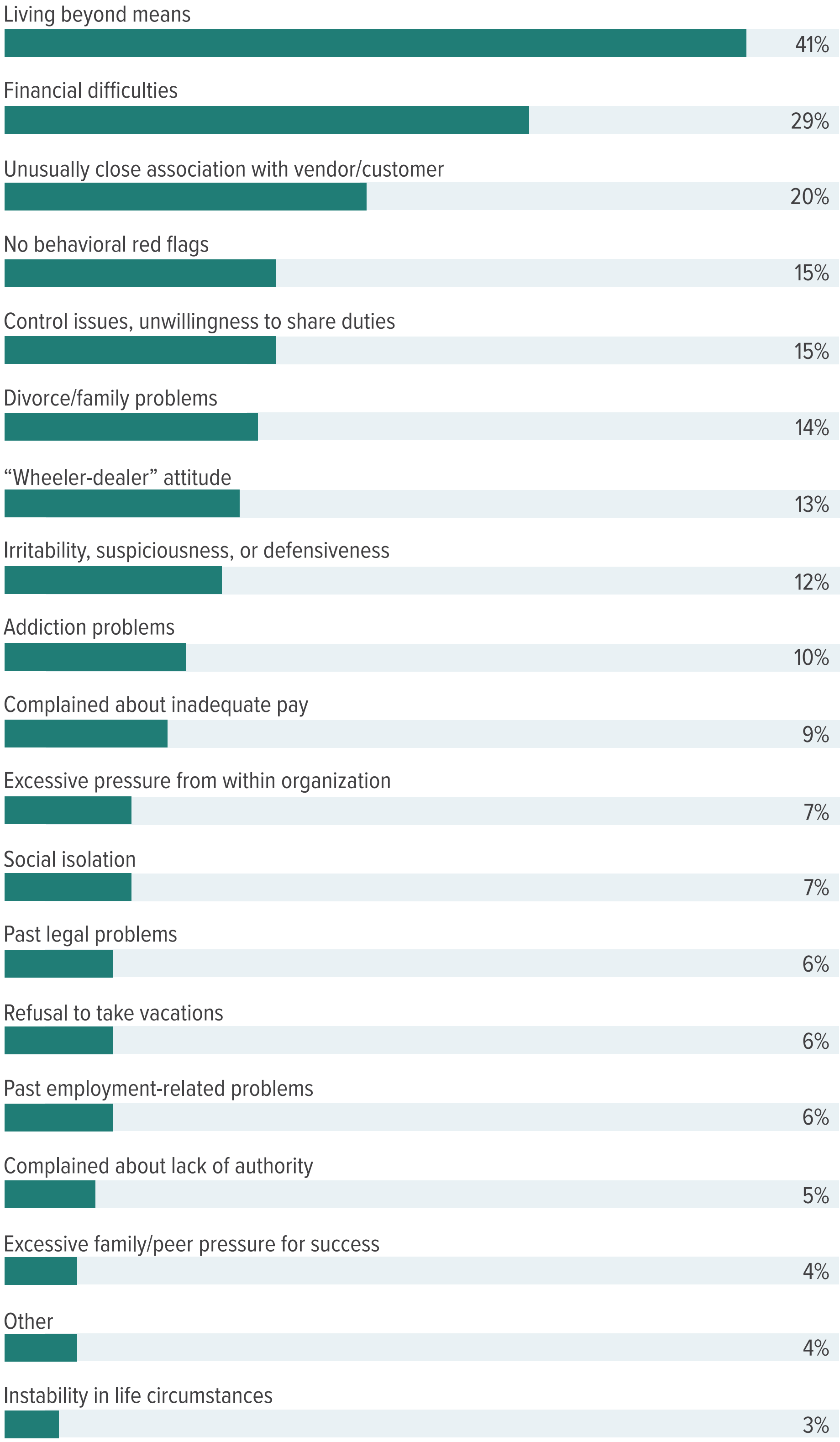
Red flags varied by PERPETRATOR’S POSITION

Red flag	OWNER/ EXECUTIVE	EMPLOYEE
Unusually close association with vendor/customer	24%	16%
Control issues, unwillingness to share duties	21%	8%
“Wheeler-dealer” attitude	22%	9%
Irritability, suspiciousness, or defensiveness	18%	10%
Financial difficulties	23%	35%
Complained about inadequate pay	4%	11%

Red flags varied by PERPETRATOR’S GENDER

Red flag	Male	Female
Financial difficulties	24%	39%
Divorce/family problems	11%	20%
Instability in life circumstances	2%	6%
Unusually close association with vendor/customer	24%	11%
“Wheeler-dealer” attitude	16%	6%
Excessive pressure from within the organization	8%	3%

FIG. 38 **How often do perpetrators exhibit behavioral red flags?**



Non-Fraud-Related Misconduct by Perpetrators

We presented survey respondents with a list of common non-fraud workplace violations and asked them to identify any that the fraudster had been engaged in prior to or during the time of the fraud. As Figure 39 shows, 45% of fraud offenders had committed some form of non-fraud workplace violation, which could potentially indicate a link between occupational fraud and other forms of workplace misconduct. The most common non-fraud violation was bullying or intimidation, which was observed in 21% of all cases.

Human Resources-Related Red Flags

In some circumstances, negative events surrounding a person's conditions of employment (such as poor performance evaluations, loss of pay or benefits, fear of job loss, etc.) can cause financial stress or resentment toward the employer, which might play a role in the decision to commit fraud. We refer to these events as "human resources-related red flags." As Figure 40 shows, 39% of fraudsters had experienced some form of HR-related red flags prior to or during the time of their frauds. The most common of these were negative performance evaluations (14% of cases) and fear of job loss (13%).

FIG. 39 **Do fraud perpetrators also engage in non-fraud-related misconduct?**

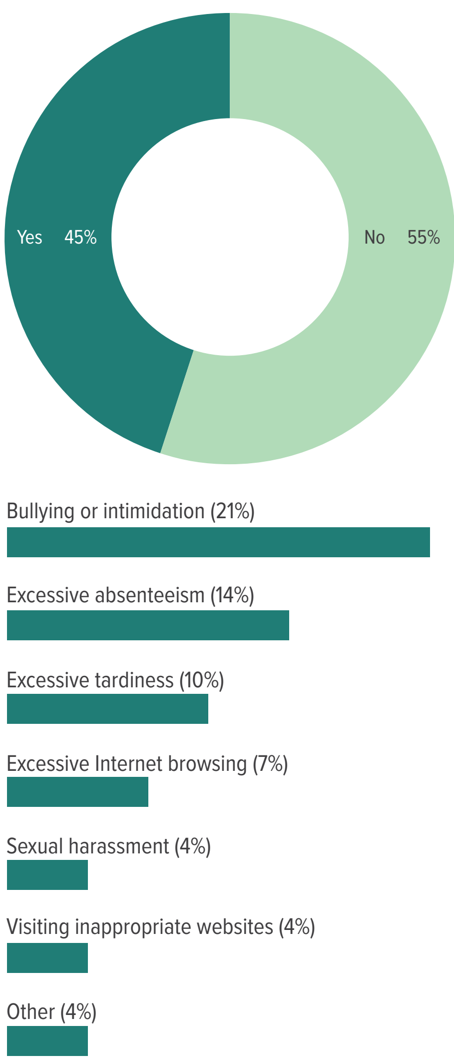
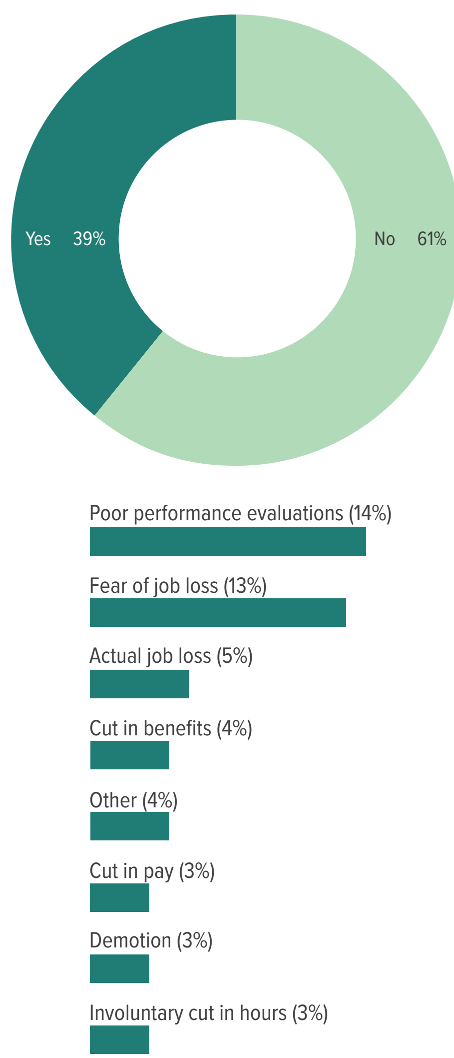


FIG. 40 **Do fraud perpetrators experience negative HR-related issues prior to or during their frauds?**



CASE RESULTS

How do organizations react after a fraud has been discovered?

We asked our respondents about what happened after the fraud was determined to have occurred. This data is valuable for developing expectations about the remedies that are available to organizations, as well as evaluating the common punitive actions taken against fraud perpetrators. The common theme in this data is that while it is often worthwhile to pursue remedial action against perpetrators, victims will usually not be made whole.

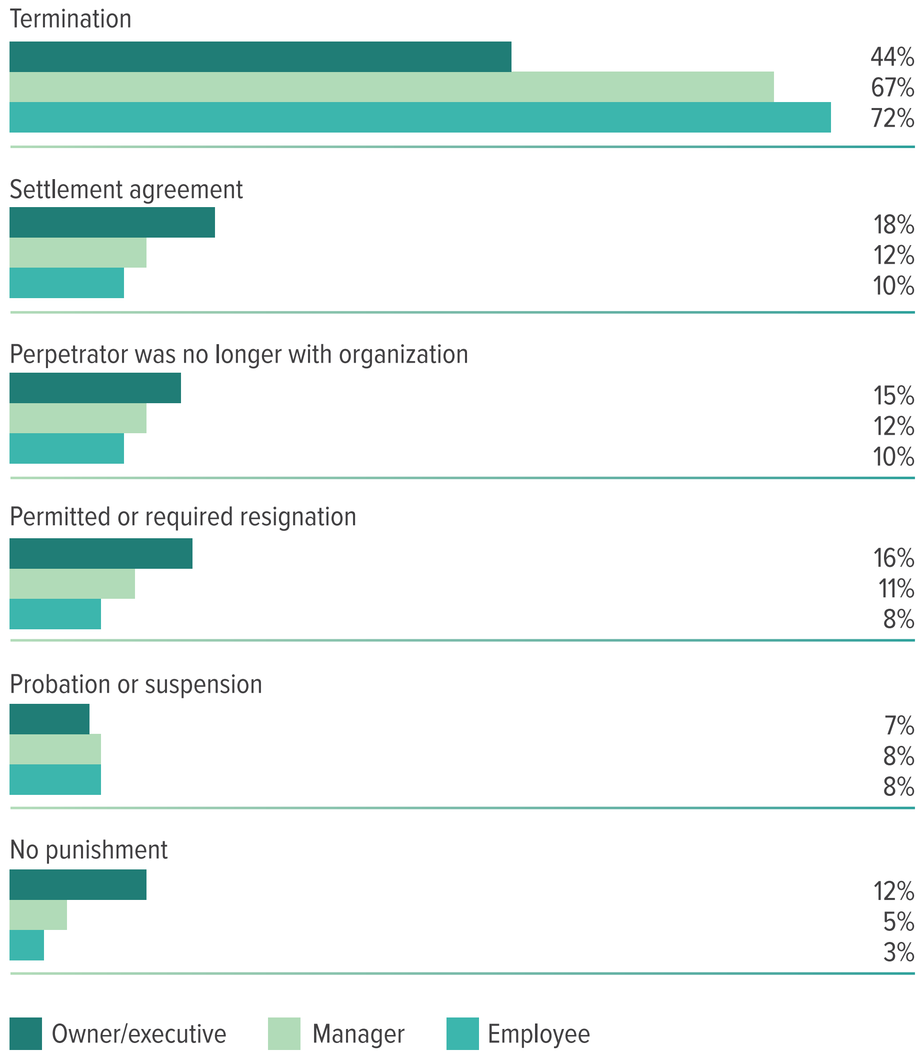
Internal Action Taken Against Perpetrator

Survey respondents provided information about how perpetrators were internally punished or dealt with. Not surprisingly, termination was the most common disciplinary action taken in occupational fraud cases (65%). It is noteworthy that over one-third of perpetrators were not terminated as a direct result of committing fraud. In some cases the victim organization imposed lighter punishments such as permitting the offender to resign (10% of cases) or placing him or her on probation (8% of cases), while in 6% of cases the fraudster received no punishment at all.

FIG. 41 **How do victim organizations punish fraud perpetrators?**

From the perspective of ethics and fairness, there might be no reason to treat a high-level fraud perpetrator more leniently than an entry-level employee. However, our data shows that punishment is substantially dependent on the perpetrator's position at the organization. While employees and mid-level managers are more likely than not to be terminated (72% and 67%, respectively), fewer than half of owners/executives were terminated (44%). Generally, the higher up the perpetrators were at the organization, the more likely they were to receive lighter punishments (e.g., permitted or required resignation) or no punishment at all.

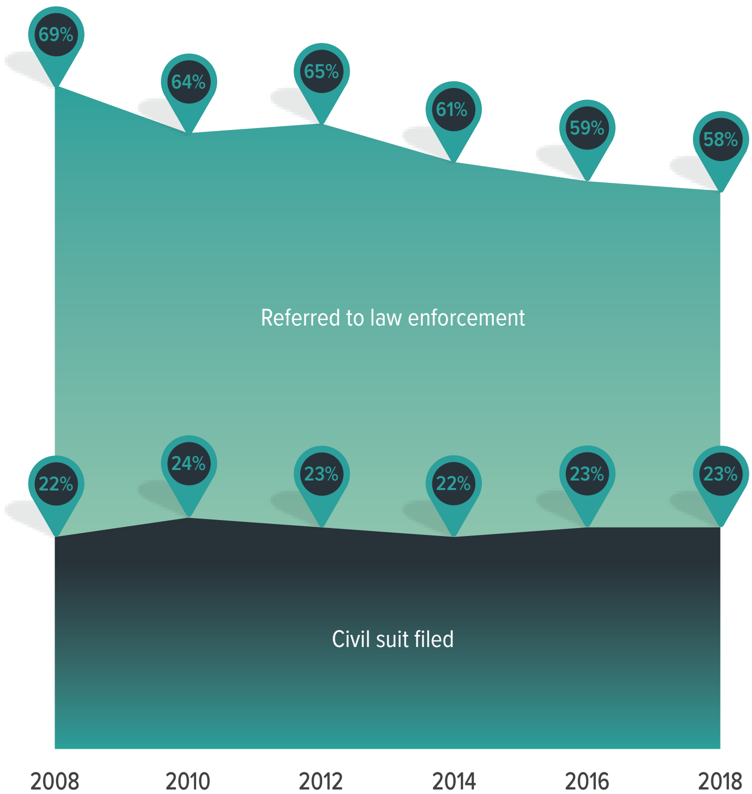
FIG. 42 **Does the perpetrator's position affect the punishment for fraud?**



Criminal Prosecutions and Civil Suits

After a fraud has been discovered and investigated, the case might proceed to prosecution, civil litigation, both, or neither. There are many factors that can affect this result, such as the amount of the financial loss, the strength of evidence, and prosecutorial discretion. Figure 43 shows the percent of cases that were referred to law enforcement or resulted in a civil suit being filed for each of our studies dating back to 2008. This chart illustrates that the rate of criminal referrals has gradually decreased over that time, from 69% in 2008 to 58% in 2018. In contrast, the rate at which civil suits are filed has stayed consistent, ranging from 22% to 24% within the same timeframe.

FIG. 43 **How often is litigation pursued against occupational fraud perpetrators?**



Results of Criminal or Civil Litigation

We also asked respondents about the results of any litigation pursued; this data is shown in Figures 44 and 45. On the criminal side, most cases that were referred to law enforcement ended in a plea agreement or a conviction at trial (73% combined). If a case referred to law enforcement did not end in a conviction, it was most likely because law enforcement declined to prosecute (18%). The results suggest that once law enforcement decides that it will proceed with prosecution, it has an overwhelming chance of securing a conviction; only 1% of defendants obtained an acquittal.

In addition, more than half of judgments in civil suits were favorable to victims, with an additional 27% of cases being settled. Perpetrators obtained a favorable judgment in only 15% of civil cases that went to trial.

FIG. 44 **What were the results of criminal referrals?**

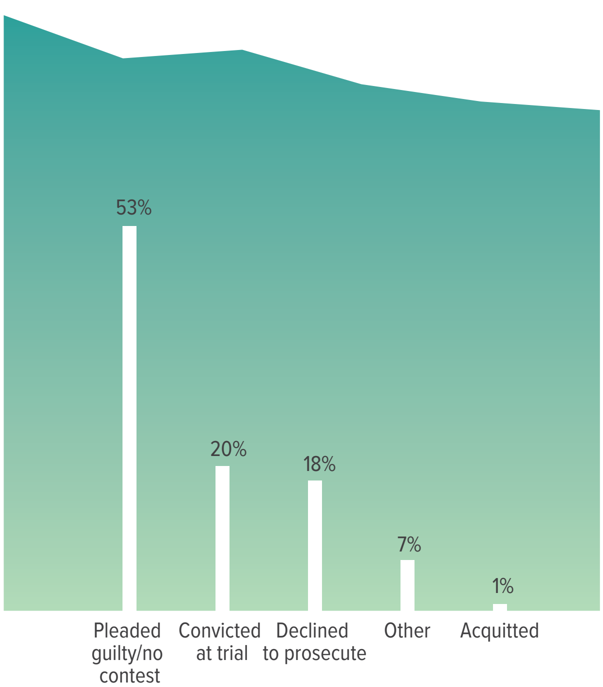
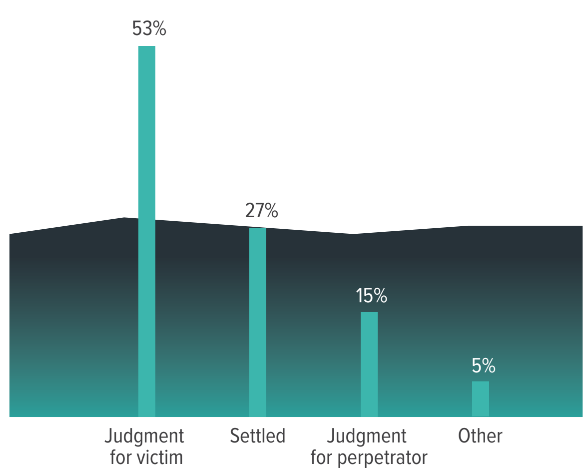


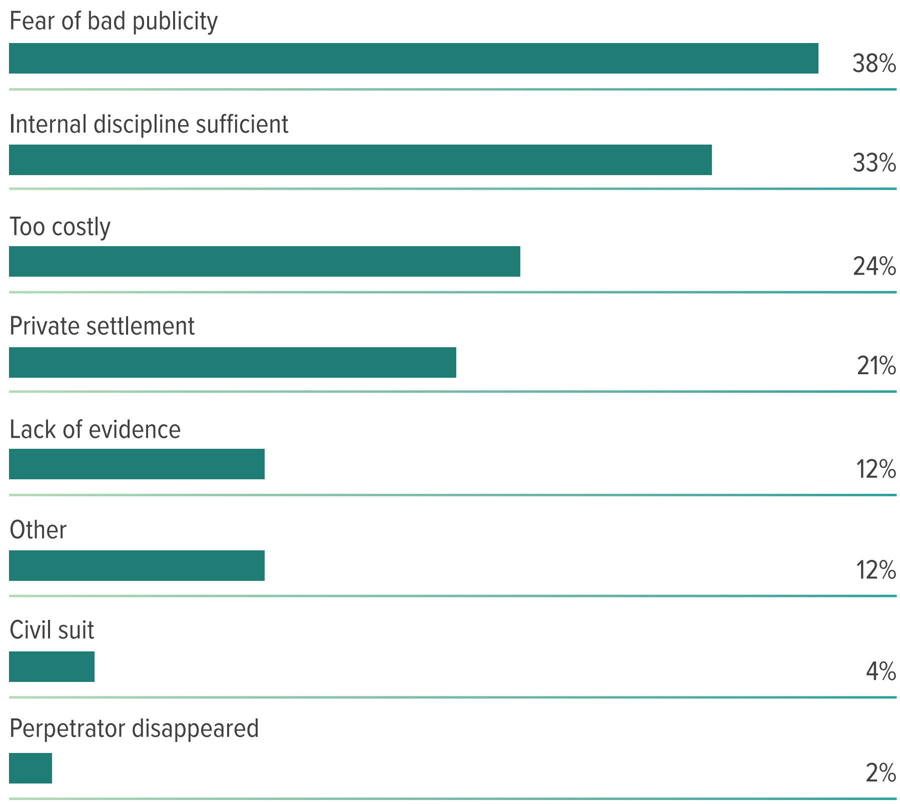
FIG. 45 **What were the results of civil suits?**



Reasons for Not Referring Cases to Law Enforcement

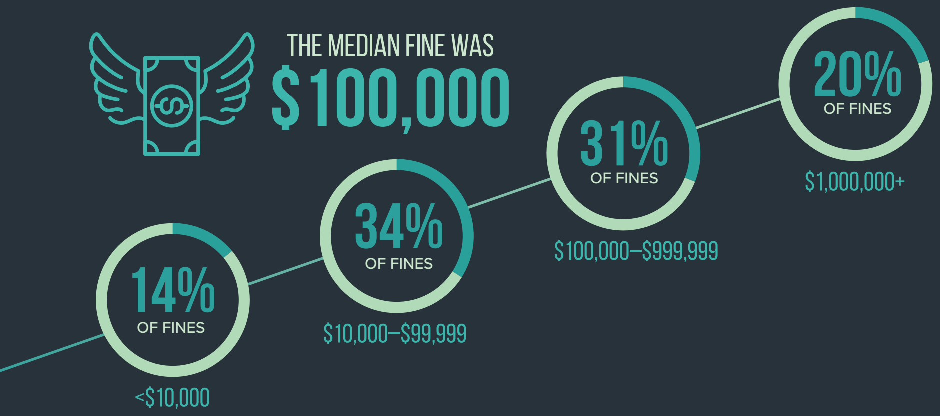
We know that the rate of victim organizations reporting occupational fraud to law enforcement has decreased in recent years (see Figure 43 on pg. 49). There are many reasons why organizations might decline to refer cases for prosecution. In our study, the top cause cited was fear of bad publicity (38%), followed by internal discipline being sufficient (33%) and costliness (24%).

FIG. 46 **Why do organizations decide not to refer cases to law enforcement?**



WHEN VICTIM ORGANIZATIONS ARE FINED

In addition to the direct cost of the fraud, some organizations receive monetary fines from authorities for having inadequate controls or allowing the fraud to occur.

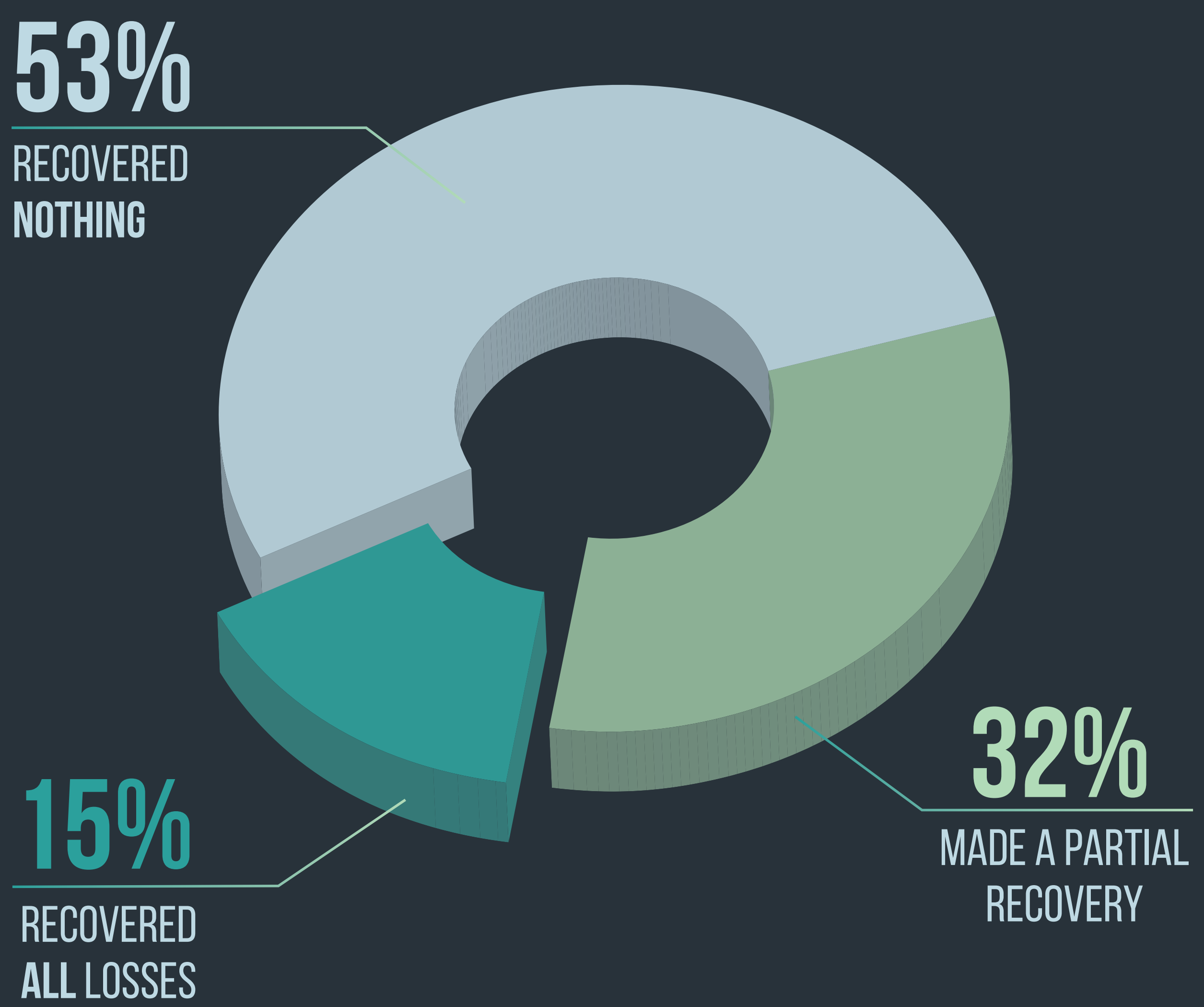


FINANCIAL STATEMENT FRAUD SCHEMES were the most likely to result in a fine to the victim organization

17%	11%	8%
Financial statement fraud	Corruption	Asset misappropriation

RECOVERING FRAUD LOSSES

After a fraud has been detected, the victim might try to recover its losses from the fraudster or other sources. Our data shows that victims are rarely made whole.



The more victims lose, the less likely they are to make a FULL RECOVERY

METHODOLOGY

Who contributed to our survey?

The 2018 *Report to the Nations* is based on the results of the 2017 *Global Fraud Survey*, an online survey opened to 41,573 Certified Fraud Examiners (CFEs) from July 2017 to October 2017. As part of the survey, respondents were asked to provide a narrative description of the single largest fraud case they had investigated since January 2016. Additionally, after completing the survey the first time, respondents were provided the option to submit information about a second case that they investigated.

Cases submitted were required to meet the following four criteria:

1. **The case** must have involved occupational fraud (defined as fraud committed by a person against the organization for which he or she works).
2. **The investigation** must have occurred between January 2016 and the time of survey participation.
3. **The investigation** must have been complete at the time of survey participation.
4. **The respondent** must have been reasonably sure the perpetrator(s) was (were) identified.

Respondents were then presented with 76 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 fraud trends in general. (Respondents were not asked to identify the perpetrator or the victim.) We received 7,232 total responses to the survey, 2,690 of which were usable for purposes of this report. The data contained herein is based solely on the information provided in these 2,690 survey responses.

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. Consequently, the total number of cases included in each analysis varies.

In addition, several survey questions allowed participants to select more than one answer. Therefore, the sum of percentages in many figures throughout the report exceeds 100%. The sum of percentages in other figures might not be exactly 100% (i.e., it might be 99% or 101%) due to rounding of individual category data.

Unless otherwise indicated, all loss amounts discussed throughout the report are calculated using median loss rather than mean, or average, loss. Average losses were 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. Additionally, we excluded median loss calculations for categories for which there were fewer than ten responses.

Because the direct losses caused by financial statement frauds are typically spread among numerous stakeholders, obtaining an accurate estimate for this amount is extremely difficult. Consequently, for schemes involving financial statement fraud, we asked survey participants to provide the gross amount of the financial statement misstatement (over- or under-statement) involved in the scheme. All losses reported for financial statement frauds throughout this report are based on those reported amounts.

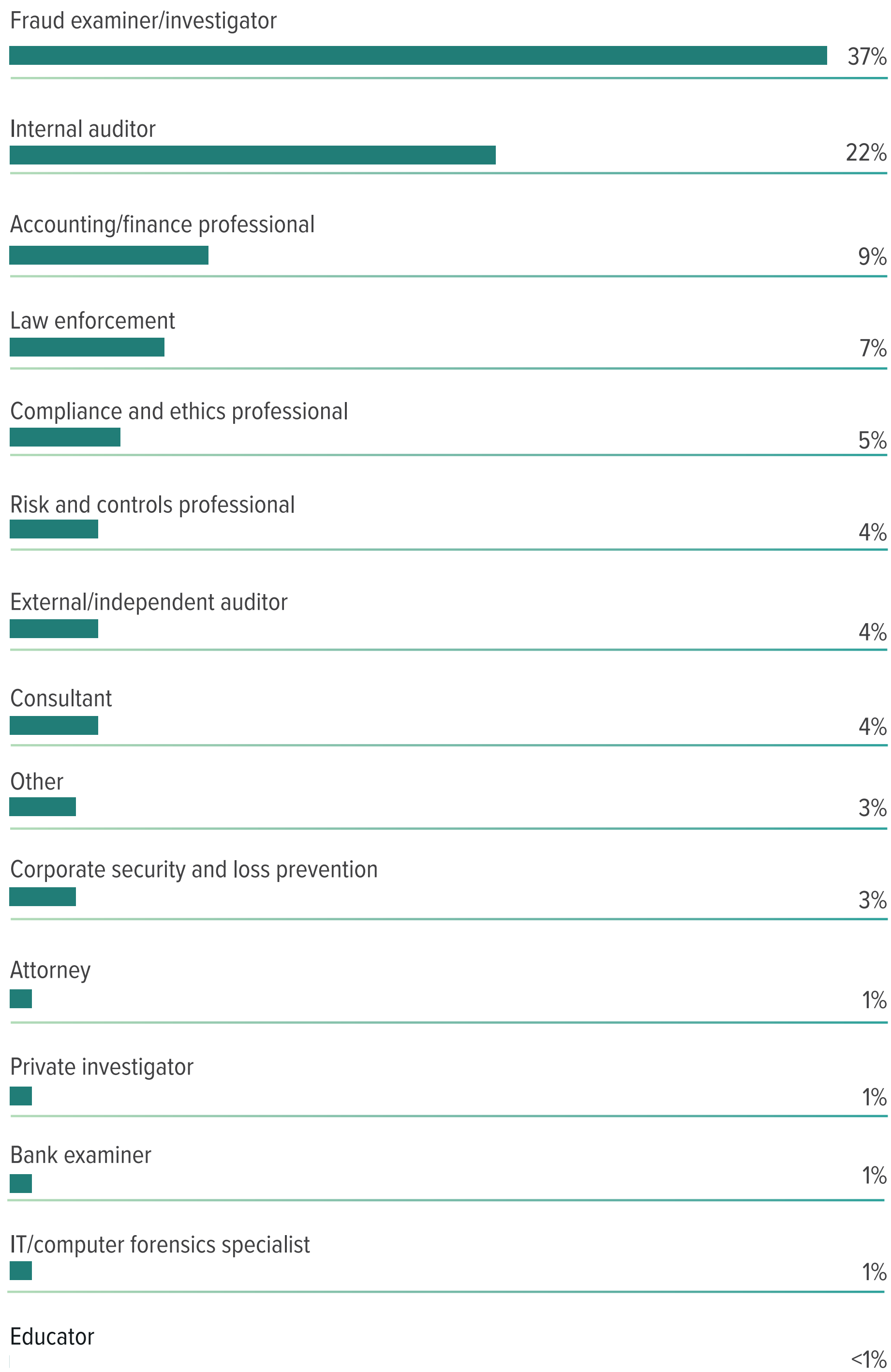
Survey Participants

To provide context for the survey responses and to understand who investigates cases of occupational fraud, we asked respondents to provide certain information about their professional experience and qualifications.

Primary Occupation

As noted in Figure 47, 37% of survey respondents indicated that their primary occupation is as a fraud examiner/investigator, followed by 22% who indicated they are internal auditors.

FIG. 47 **What was the primary occupation of survey participants?**



Nature of Fraud Examination Role

More than half of the CFEs who participated in our study work in-house, conducting fraud examinations on behalf of a single company or agency. Twenty-seven percent work for a professional services firm that conducts fraud examinations for client organizations, while 18% work in law enforcement and conduct fraud examinations under the authority of their agency.

Experience

The CFEs who participated in our study had a median 11 years of experience in the fraud examination field, with over 30% having more than 15 years of experience.

Respondents also provided information on the total number of fraud cases they worked on in the prior two years. As shown in Figure 50, one-quarter investigated more than 20 cases, while 41% investigated five or fewer cases during that time.

FIG. 48 **What was the professional role of the survey participants?**

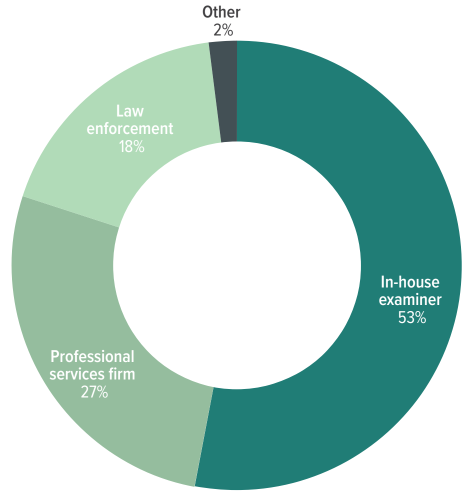


FIG. 49 **How much fraud examination experience did survey participants have?**

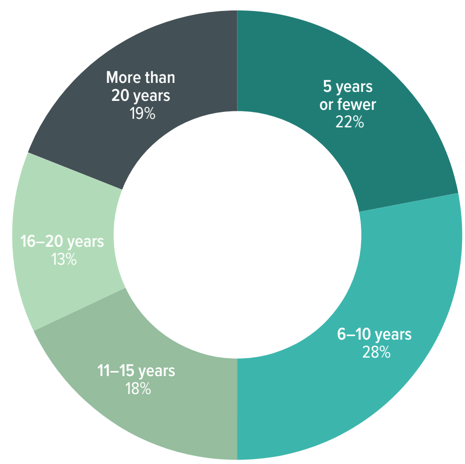
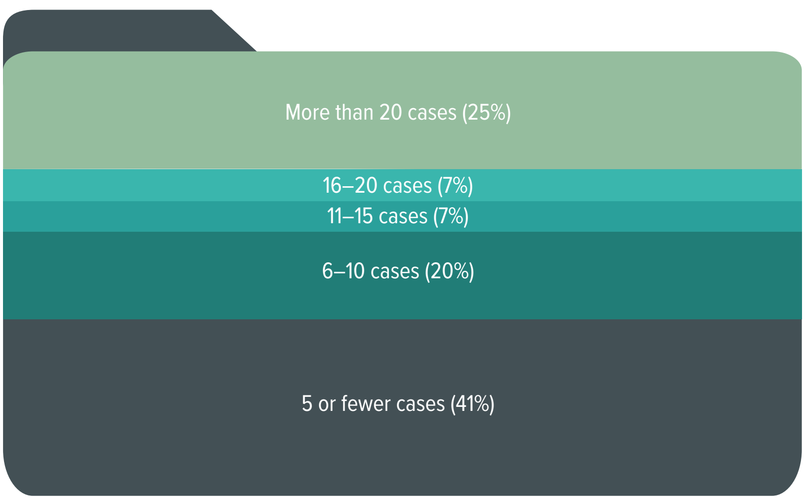


FIG. 50 **How many fraud cases have survey participants investigated in the past two years?**



REGIONAL FOCUS

ASIA-PACIFIC

FIG. 51 **What are the most common occupational fraud schemes in the Asia-Pacific region?**

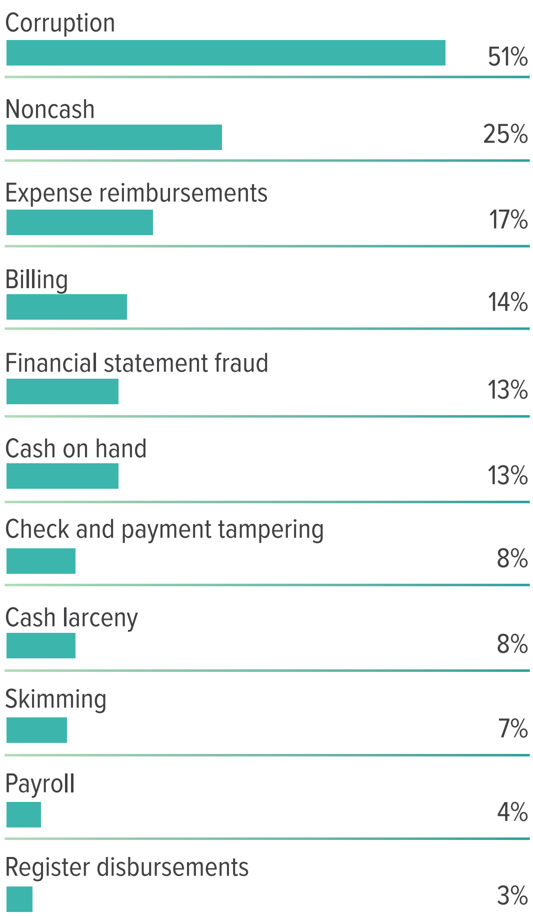


FIG. 52 **How is occupational fraud initially detected in the Asia-Pacific region?**

FIG. 53 What anti-fraud controls are the most common in the Asia-Pacific region?

Control	Percent of cases
External audit of financial statements	93%
Code of conduct	87%
Internal audit department	80%
Management certification of financial statements	79%
Hotline	74%
External audit of internal controls over financial reporting	73%
Management review	71%
Independent audit committee	69%
Anti-fraud policy	60%
Fraud training for employees	59%
Fraud training for managers/executives	57%
Employee support programs	49%
Dedicated fraud department, function, or team	42%
Formal fraud risk assessments	37%
Surprise audits	34%
Proactive data monitoring/analysis	32%
Job rotation/mandatory vacation	16%
Rewards for whistleblowers	11%

FIG. 54 How does the perpetrator's level of authority relate to occupational fraud in the Asia-Pacific region?

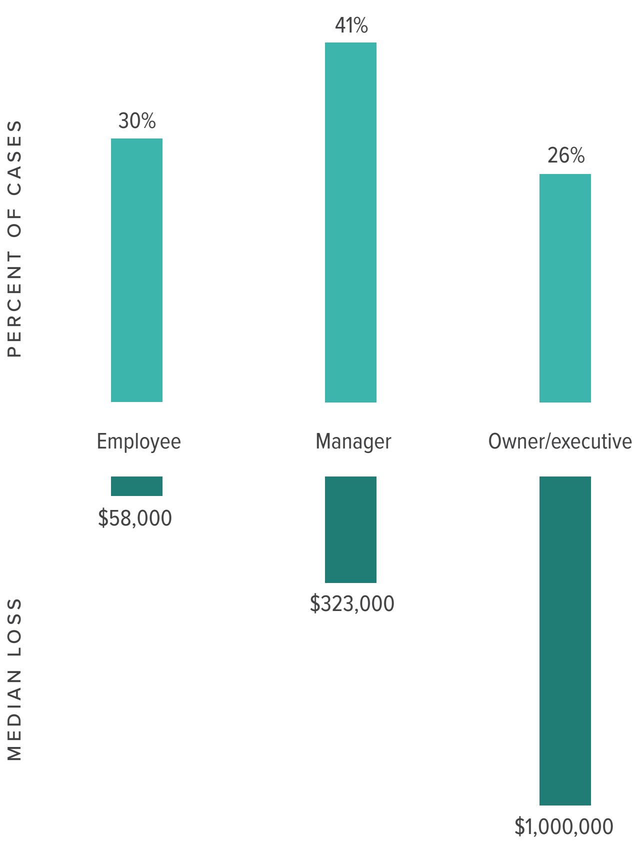


FIG. 55 Cases by country in the Asia-Pacific region

Country	Number of cases
Australia	38
Cambodia	2
China	49
East Timor	1
Hong Kong	10
Indonesia	29
Japan	4
Macau	1
Malaysia	14
Myanmar (Burma)	1
New Zealand	8
Papua New Guinea	1
Philippines	25
Singapore	17
South Korea	6
Taiwan	6
Thailand	3
Vietnam	5
Total cases:	**220**

MEDIAN LOSS:
USD 236,000

REGIONAL FOCUS

CANADA

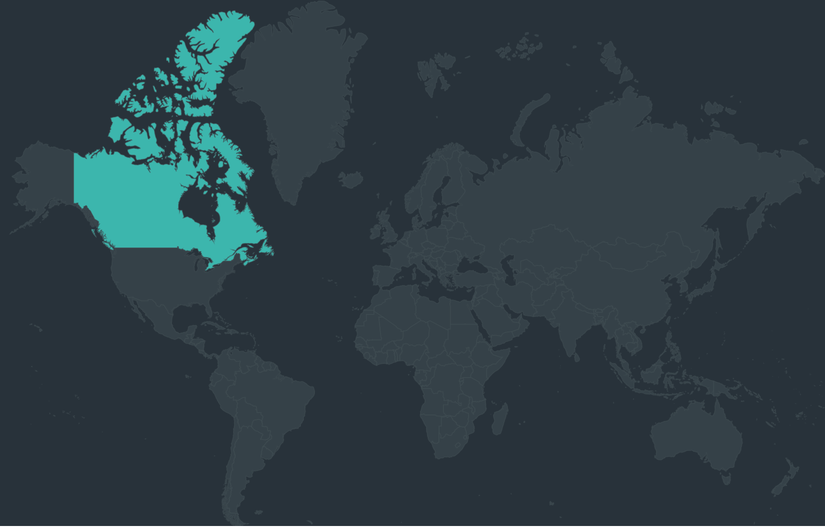


FIG. 56 **What are the most common occupational fraud schemes in Canada?**

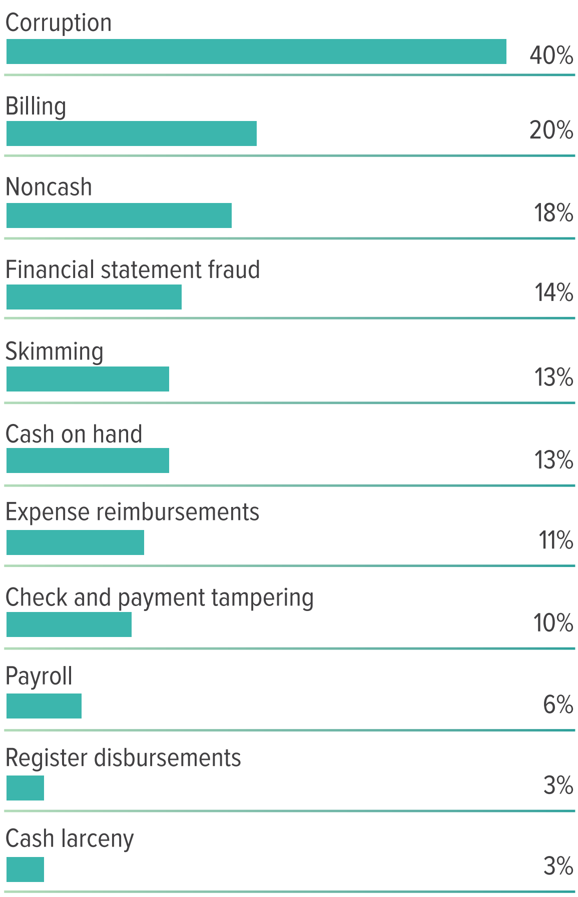
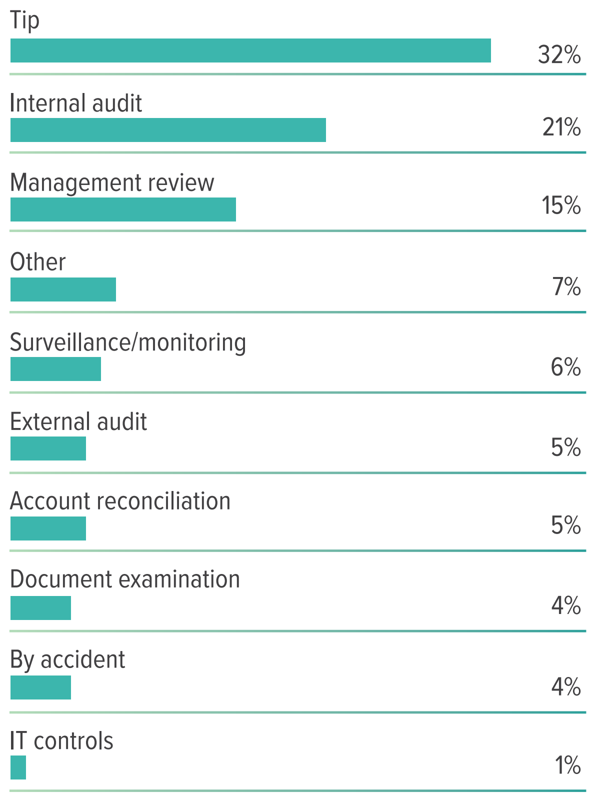


FIG. 57 **How is occupational fraud initially detected in Canada?**



MEDIAN LOSS:
USD 200,000

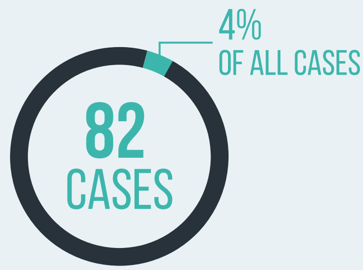
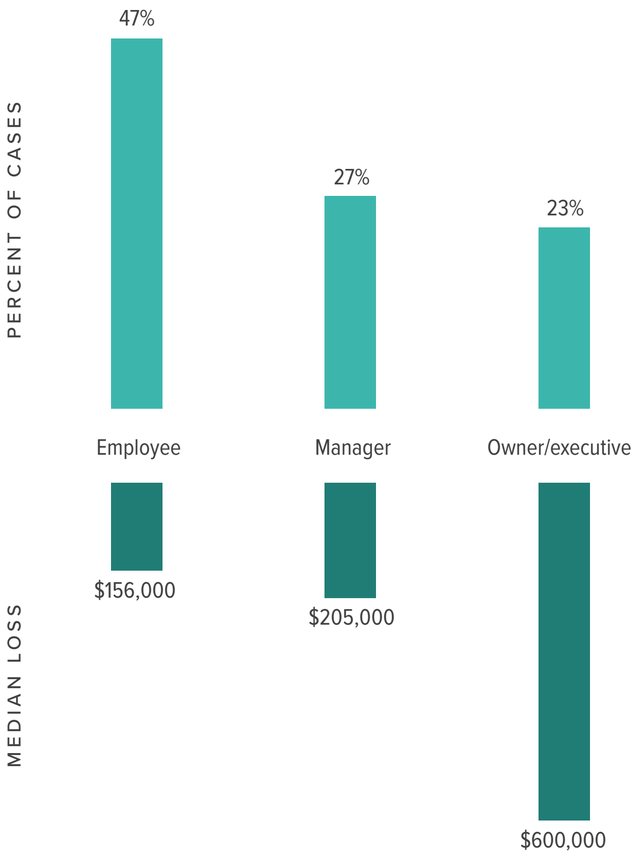


FIG. 58 **What anti-fraud controls are the most common in Canada?**

Control	Percent of cases
Code of conduct	80%
External audit of financial statements	72%
Internal audit department	71%
Employee support programs	71%
Management review	68%
Management certification of financial statements	67%
Independent audit committee	61%
Hotline	57%
External audit of internal controls over financial reporting	54%
Fraud training for managers/executives	51%
Fraud training for employees	51%
Anti-fraud policy	44%
Proactive data monitoring/analysis	38%
Formal fraud risk assessments	35%
Dedicated fraud department, function, or team	33%
Surprise audits	28%
Job rotation/mandatory vacation	15%
Rewards for whistleblowers	10%

FIG. 59 **How does the perpetrator's level of authority relate to occupational fraud in Canada?**



REGIONAL FOCUS

EASTERN EUROPE AND WESTERN/ CENTRAL ASIA

FIG. 60 **What are the most common occupational fraud schemes in Eastern Europe and Western/ Central Asia?**

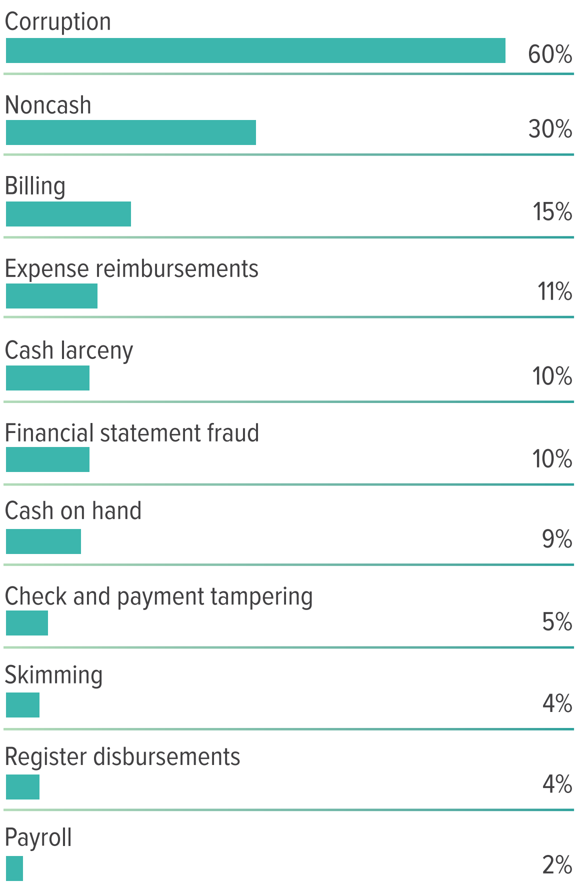


FIG. 61 **How is occupational fraud initially detected in Eastern Europe and Western/ Central Asia?**

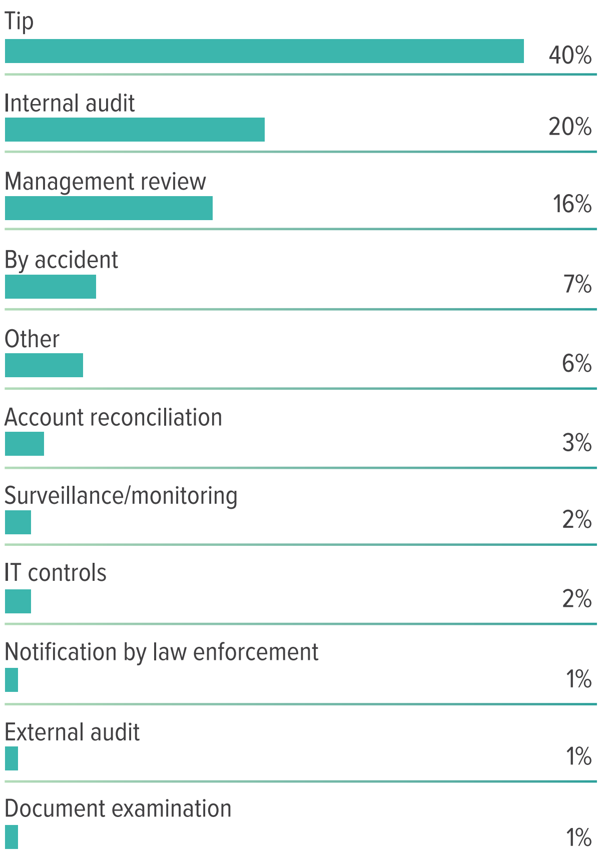


FIG. 62 What anti-fraud controls are the most common in Eastern Europe and Western/Central Asia?

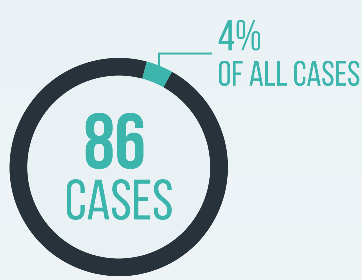
Control	Percent of cases
External audit of financial statements	95%
Internal audit department	91%
Code of conduct	83%
Management certification of financial statements	79%
Management review	76%
Hotline	75%
External audit of internal controls over financial reporting	75%
Independent audit committee	73%
Anti-fraud policy	66%
Fraud training for employees	58%
Dedicated fraud department, function, or team	57%
Fraud training for managers/executives	56%
Formal fraud risk assessments	46%
Surprise audits	40%
Proactive data monitoring/analysis	36%
Employee support programs	27%
Job rotation/mandatory vacation	17%
Rewards for whistleblowers	5%

FIG. 63 How does the perpetrator's level of authority relate to occupational fraud in Eastern Europe and Western/Central Asia?

FIG. 64 Cases by country in Eastern Europe and Western/Central Asia

Country	Number of cases
Bulgaria	3
Czech Republic	3
Georgia	1
Hungary	1
Kazakhstan	4
Kosovo	2
Latvia	2
Lithuania	1
Macedonia	2
Montenegro	1
Poland	5
Romania	11
Russia	15
Serbia	9
Slovakia	4
Slovenia	4
Tajikistan	1
Turkey	13
Ukraine	3
Uzbekistan	1
Total cases:	**86**

MEDIAN LOSS:
USD 150,000



REGIONAL FOCUS

LATIN AMERICA AND THE CARIBBEAN

FIG. 65 **What are the most common occupational fraud schemes in Latin America and the Caribbean?**

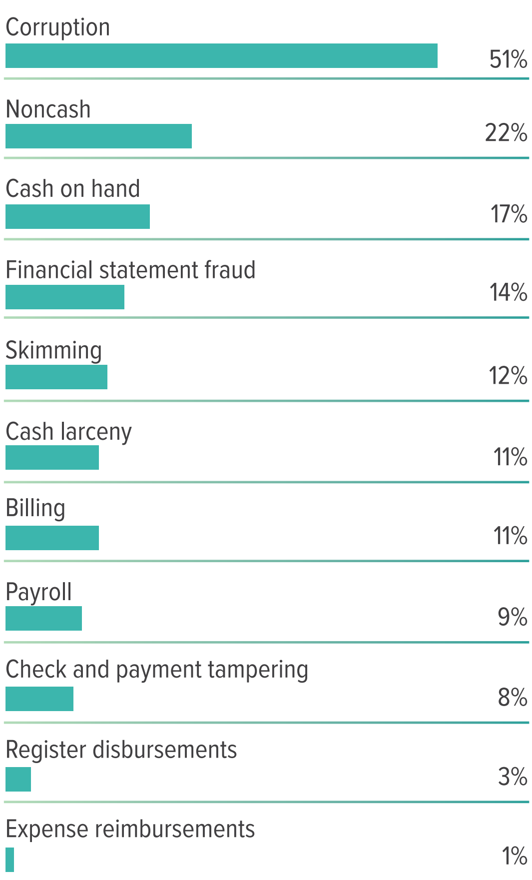


FIG. 66 **How is occupational fraud initially detected in Latin America and the Caribbean?**

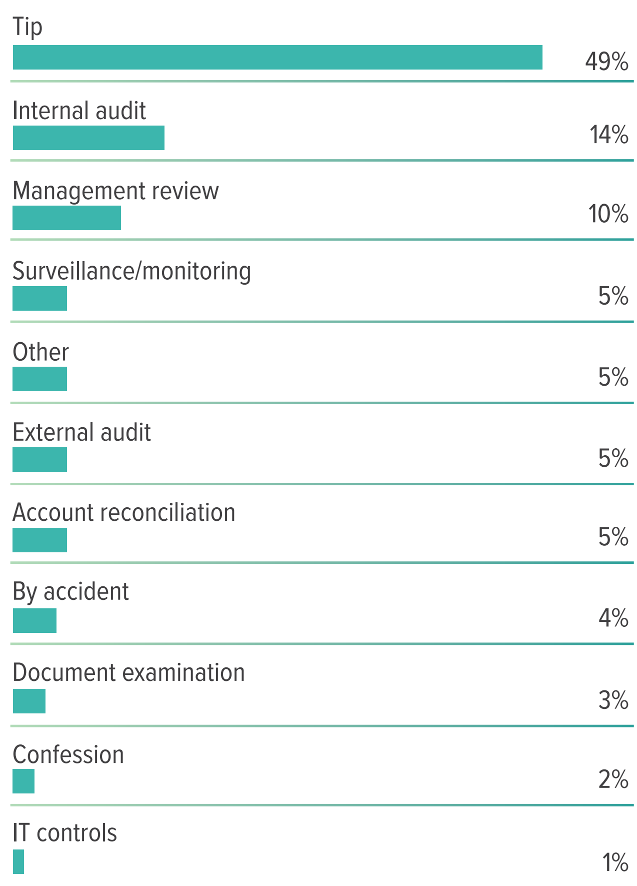


FIG. 67 What anti-fraud controls are the most common in Latin America and the Caribbean?

Control	Percent of cases
Internal audit department	89%
External audit of financial statements	86%
Code of conduct	81%
Management certification of financial statements	73%
Management review	71%
External audit of internal controls over financial reporting	70%
Hotline	68%
Independent audit committee	61%
Employee support programs	51%
Anti-fraud policy	50%
Fraud training for employees	50%
Fraud training for managers/executives	48%
Dedicated fraud department, function, or team	44%
Formal fraud risk assessments	40%
Surprise audits	35%
Proactive data monitoring/analysis	32%
Job rotation/mandatory vacation	26%
Rewards for whistleblowers	6%

FIG. 68 How does the perpetrator's level of authority relate to occupational fraud in Latin America and the Caribbean?

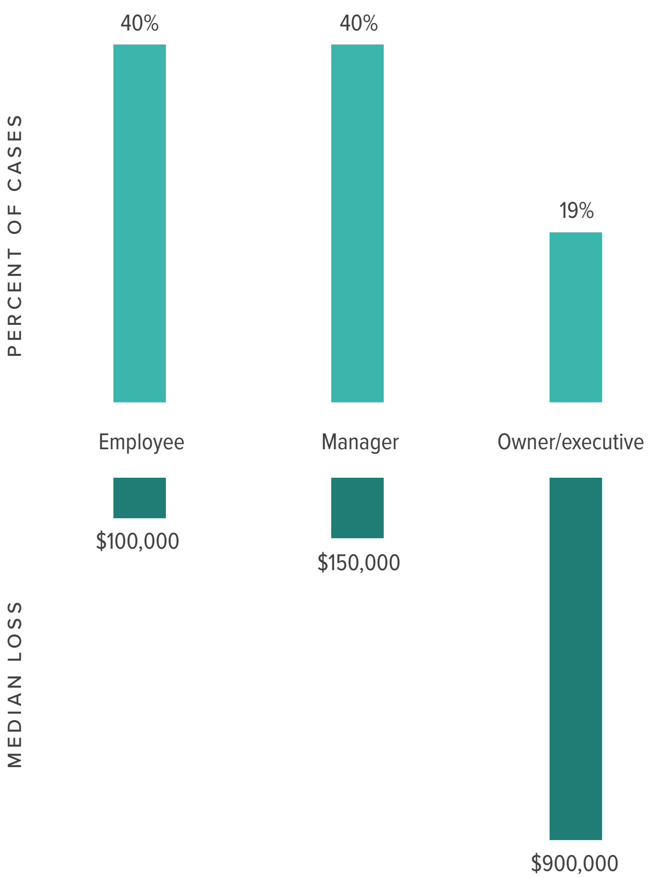


FIG. 69 Cases by country in Latin America and the Caribbean

Country	Number of cases
Antigua and Barbuda	1
Argentina	8
Bahamas	3
Belize	1
Brazil	22
Chile	8
Colombia	10
Costa Rica	1
Curaçao	2
Grenada	1
Haiti	1
Honduras	1
Jamaica	6
Mexico	29
Nicaragua	3
Peru	5
Saint Kitts and Nevis	1
Trinidad and Tobago	7
Total cases:	**110**

MEDIAN LOSS:
USD 193,000

REGIONAL FOCUS

MIDDLE EAST AND NORTH AFRICA

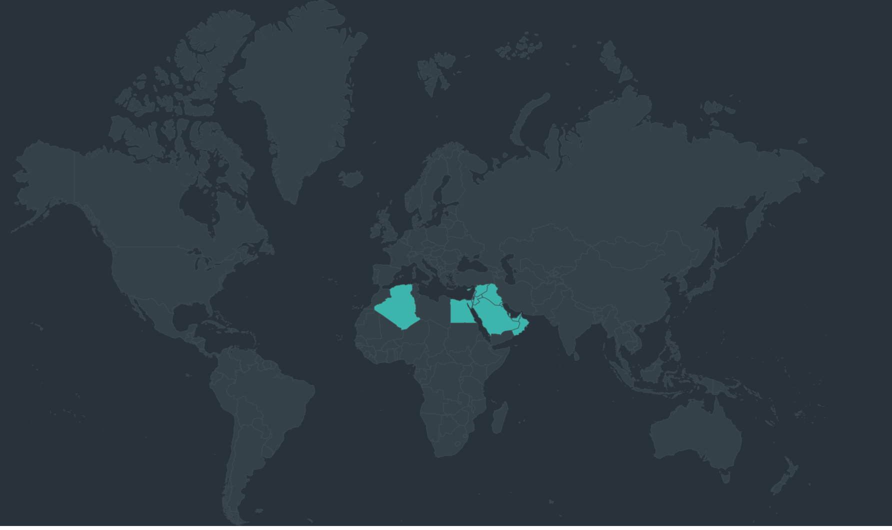


FIG. 70 **What are the most common occupational fraud schemes in the Middle East and North Africa?**

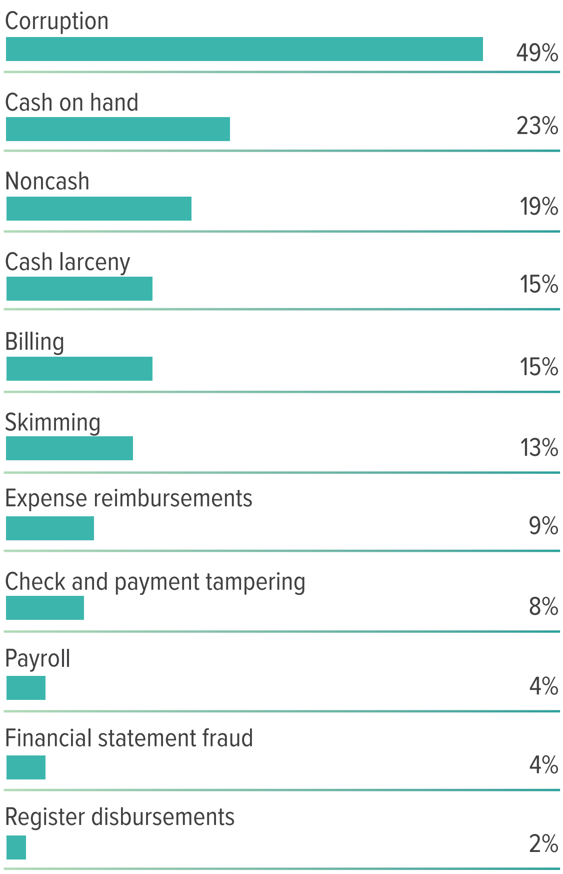


FIG. 71 **How is occupational fraud initially detected in the Middle East and North Africa?**

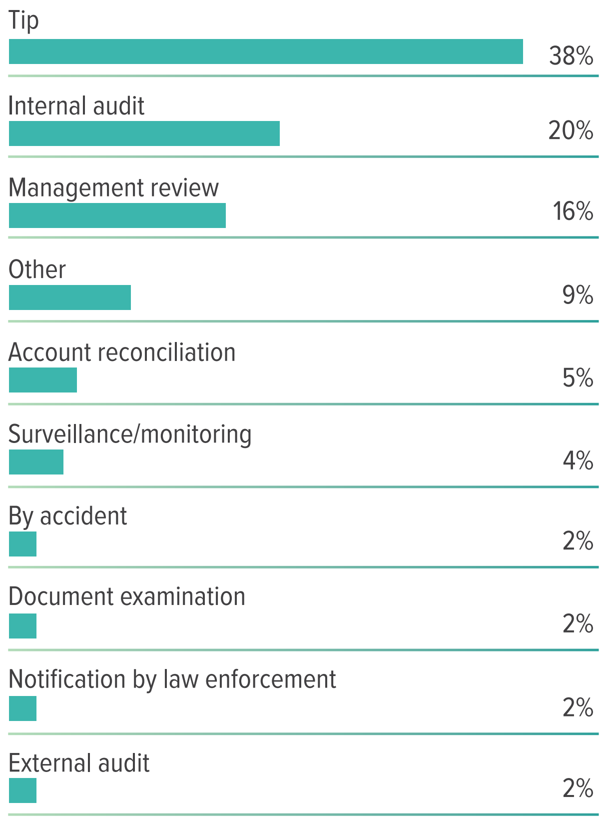


FIG. 72 What anti-fraud controls are the most common in the Middle East and North Africa?

Control	Percent of cases
External audit of financial statements	93%
Internal audit department	85%
Management certification of financial statements	81%
Code of conduct	78%
External audit of internal controls over financial reporting	69%
Management review	68%
Independent audit committee	67%
Hotline	59%
Surprise audits	59%
Anti-fraud policy	54%
Fraud training for managers/executives	47%
Fraud training for employees	47%
Dedicated fraud department, function, or team	44%
Formal fraud risk assessments	40%
Proactive data monitoring/analysis	40%
Employee support programs	33%
Job rotation/mandatory vacation	23%
Rewards for whistleblowers	9%

FIG. 73 How does the perpetrator's level of authority relate to occupational fraud in the Middle East and North Africa?

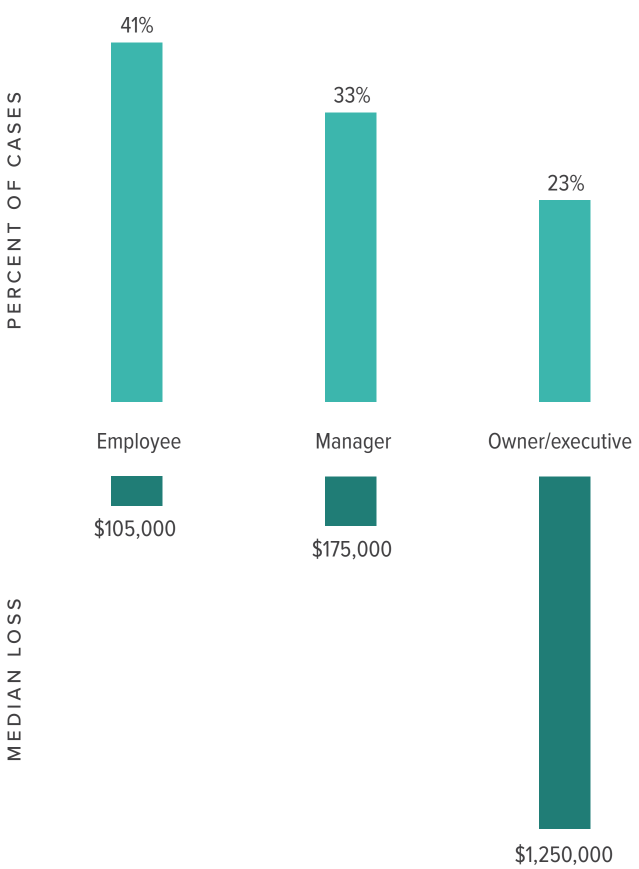


FIG. 74 Cases by country in the Middle East and North Africa

Country	Number of cases
Algeria	1
Bahrain	2
Cyprus	5
Egypt	8
Iraq	1
Israel	4
Jordan	10
Kuwait	5
Lebanon	2
Oman	4
Qatar	8
Saudi Arabia	16
Syria	1
United Arab Emirates	34
Total cases:	**101**

MEDIAN LOSS:
USD 200,000

REGIONAL FOCUS

SOUTHERN ASIA

FIG. 75 **What are the most common occupational fraud schemes in Southern Asia?**

Corruption	62%
Noncash	20%
Billing	13%
Expense reimbursements	13%
Skimming	12%
Financial statement fraud	10%
Cash on hand	9%
Cash larceny	8%
Check and payment tampering	7%
Payroll	3%
Register disbursements	1%

FIG. 76 **How is occupational fraud initially detected in Southern Asia?**

Tip	53%
Internal audit	13%
Management review	10%
Surveillance/monitoring	4%
Other	3%
External audit	3%
By accident	3%
Account reconciliation	3%
Notification by law enforcement	2%
Document examination	2%
Confession	2%
IT controls	1%

FIG. 77 What anti-fraud controls are the most common in Southern Asia?

Control	Percent of cases
External audit of financial statements	90%
Internal audit department	88%
Code of conduct	88%
Management certification of financial statements	85%
External audit of internal controls over financial reporting	77%
Independent audit committee	76%
Management review	76%
Hotline	63%
Anti-fraud policy	58%
Fraud training for employees	56%
Surprise audits	53%
Fraud training for managers/executives	53%
Dedicated fraud department, function, or team	49%
Employee support programs	43%
Formal fraud risk assessments	42%
Proactive data monitoring/analysis	35%
Job rotation/mandatory vacation	25%
Rewards for whistleblowers	9%

FIG. 78 How does the perpetrator's level of authority relate to occupational fraud in Southern Asia?

FIG. 79 Cases by country in Southern Asia

Country	Number of cases
Afghanistan	6
Bangladesh	3
India	72
Maldives	2
Pakistan	13
Total cases:	**96**

MEDIAN LOSS:
USD 100,000

REGIONAL FOCUS

SUB-SAHARAN AFRICA

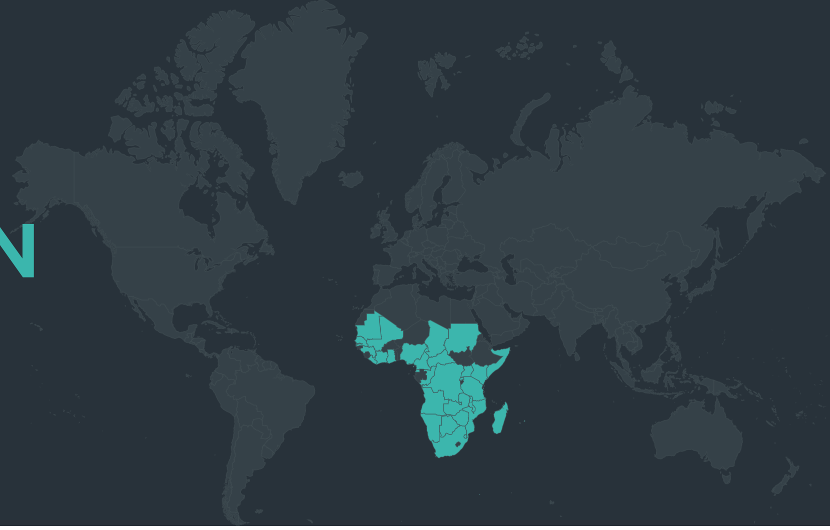


FIG. 80 **What are the most common occupational fraud schemes in Sub-Saharan Africa?**

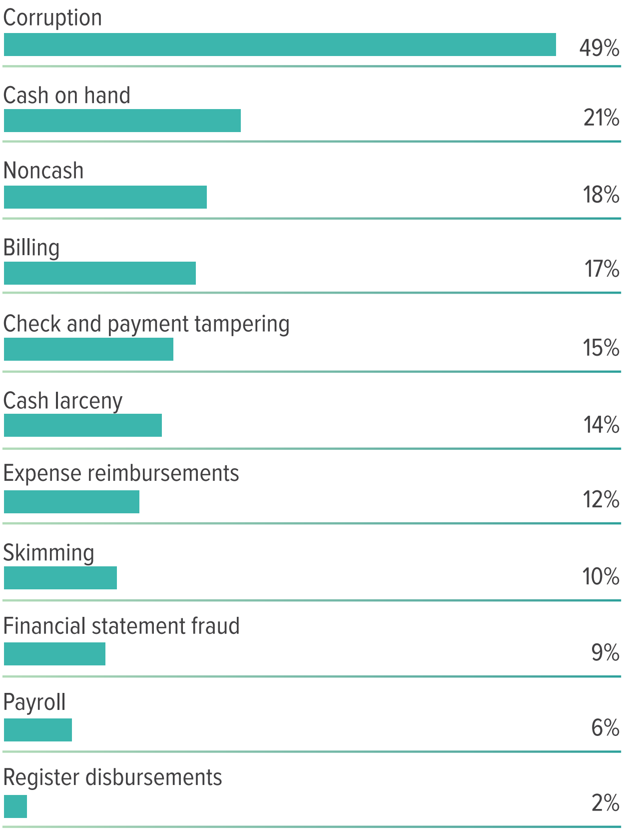


FIG. 81 **How is occupational fraud initially detected in Sub-Saharan Africa?**

FIG. 82 What anti-fraud controls are the most common in Sub-Saharan Africa?

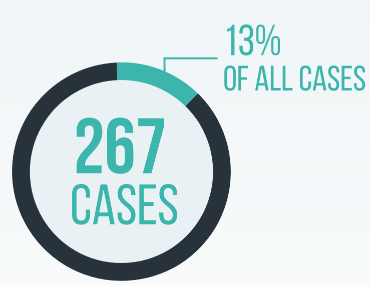
Control	Percent of cases
External audit of financial statements	90%
Code of conduct	89%
Internal audit department	87%
Management certification of financial statements	81%
Independent audit committee	73%
External audit of internal controls over financial reporting	72%
Hotline	70%
Management review	69%
Anti-fraud policy	60%
Fraud training for employees	55%
Fraud training for managers/executives	52%
Employee support programs	50%
Formal fraud risk assessments	46%
Surprise audits	46%
Dedicated fraud department, function, or team	43%
Proactive data monitoring/analysis	40%
Job rotation/mandatory vacation	25%
Rewards for whistleblowers	20%

FIG. 83 How does the perpetrator's level of authority relate to occupational fraud in Sub-Saharan Africa?

FIG. 84 Cases by country in Sub-Saharan Africa

Country	Number of cases
Angola	3
Botswana	1
Cameroon	1
Central African Republic	1
Chad	3
Congo, Democratic Republic of the	3
Congo, Republic of the	1
Cote d'Ivoire	5
Equatorial Guinea	1
Gambia	1
Ghana	8
Guinea	1
Kenya	34
Liberia	8
Madagascar	2
Malawi	3
Mali	4
Mauritania	1
Mauritius	2
Mozambique	1
Namibia	4
Nigeria	55
Rwanda	1
Senegal	1
Somalia	2
South Africa	87
Sudan	1
Swaziland	1
Tanzania	5
Uganda	11
Zambia	5
Zimbabwe	10
Total cases:	**267**

MEDIAN LOSS:
USD 90,000



REGIONAL FOCUS

UNITED STATES

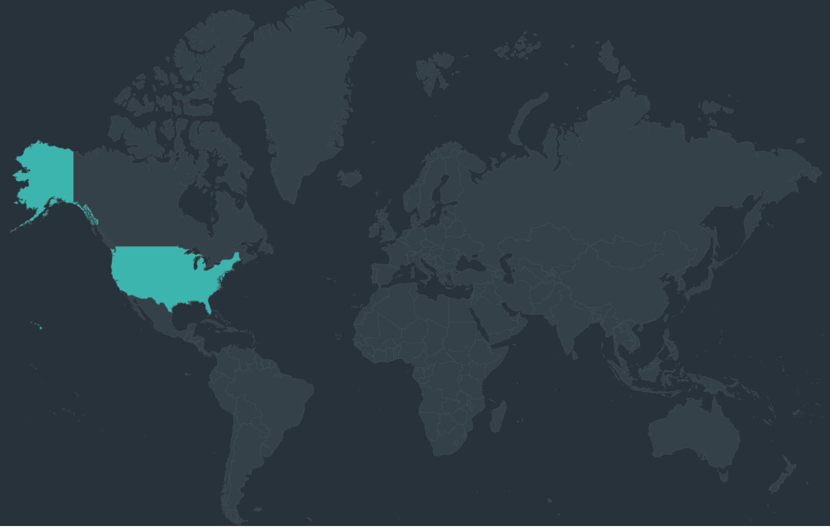


FIG. 85 **What are the most common occupational fraud schemes in the United States?**

Corruption	30%
Billing	26%
Noncash	21%
Expense reimbursements	17%
Cash on hand	15%
Check and payment tampering	15%
Skimming	14%
Cash larceny	11%
Payroll	10%
Financial statement fraud	9%
Register disbursements	3%

FIG. 86 **How is occupational fraud initially detected in the United States?**

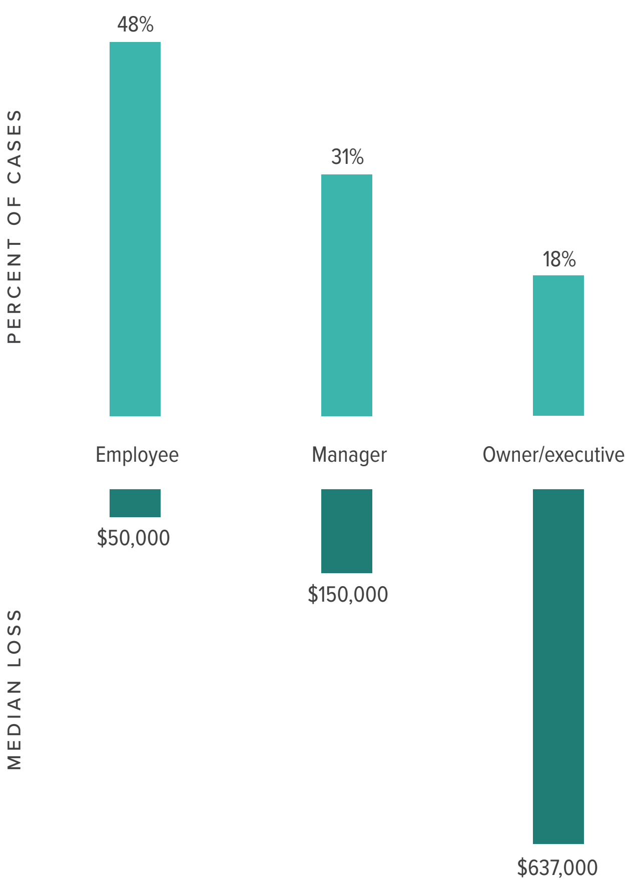
Tip	37%
Management review	14%
Internal audit	13%
By accident	9%
Other	7%
Account reconciliation	5%
Document examination	5%
External audit	3%
Notification by law enforcement	3%
Surveillance/monitoring	3%
Confession	1%
IT controls	1%

MEDIAN LOSS:
USD 108,000

FIG. 87 **What anti-fraud controls are the most common in the United States?**

Control	Percent of cases
Code of conduct	73%
External audit of financial statements	69%
Employee support programs	62%
Management certification of financial statements	61%
Internal audit department	60%
External audit of internal controls over financial reporting	60%
Management review	59%
Hotline	56%
Fraud training for employees	50%
Fraud training for managers/executives	49%
Independent audit committee	49%
Anti-fraud policy	47%
Formal fraud risk assessments	37%
Proactive data monitoring/analysis	36%
Dedicated fraud department, function, or team	35%
Surprise audits	31%
Job rotation/mandatory vacation	15%
Rewards for whistleblowers	12%

FIG. 88 **How does the perpetrator's level of authority relate to occupational fraud in the United States?**



REGIONAL FOCUS

WESTERN EUROPE

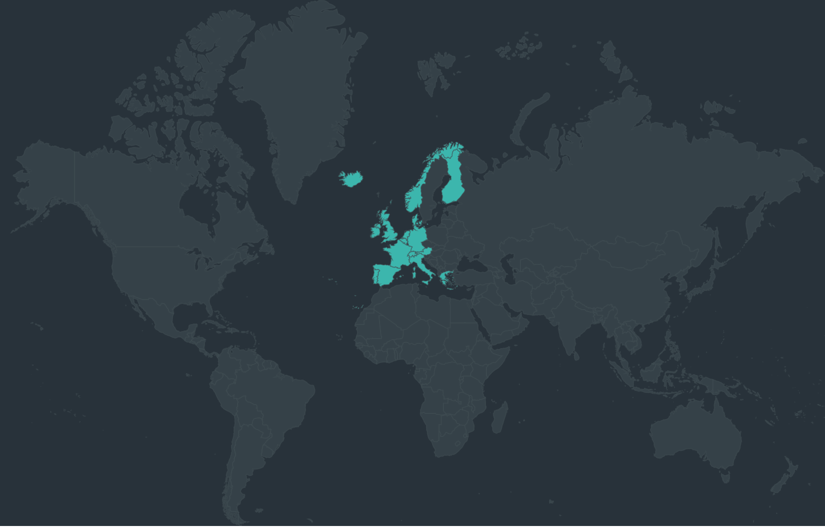


FIG. 89 **What are the most common occupational fraud schemes in Western Europe?**

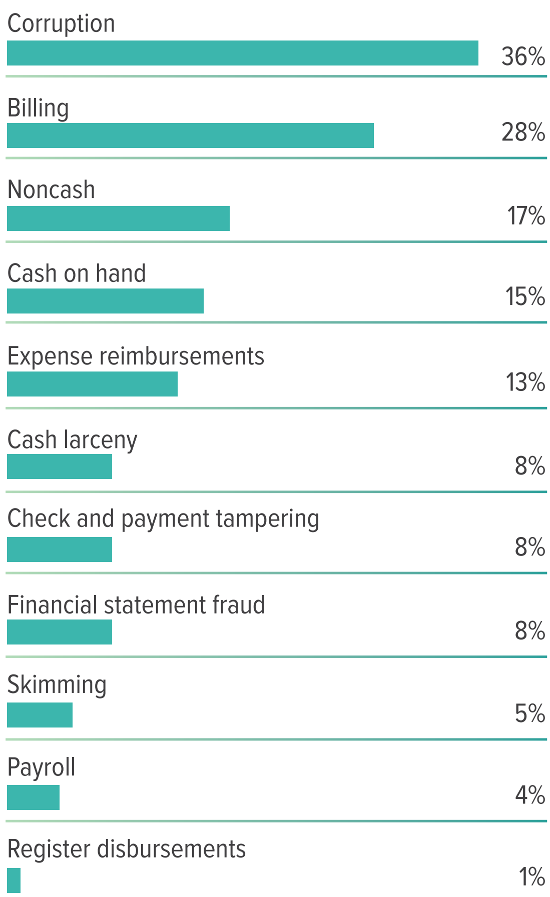


FIG. 90 **How is occupational fraud initially detected in Western Europe?**

FIG. 91 What anti-fraud controls are the most common in Western Europe?

Control	Percent of cases
Code of conduct	93%
Management certification of financial statements	88%
External audit of financial statements	88%
External audit of internal controls over financial reporting	85%
Management review	83%
Internal audit department	80%
Independent audit committee	78%
Hotline	76%
Anti-fraud policy	65%
Fraud training for managers/executives	63%
Fraud training for employees	59%
Formal fraud risk assessments	53%
Dedicated fraud department, function, or team	49%
Employee support programs	48%
Surprise audits	41%
Proactive data monitoring/analysis	38%
Job rotation/mandatory vacation	22%
Rewards for whistleblowers	10%

FIG. 92 How does the perpetrator's level of authority relate to occupational fraud in Western Europe?

FIG. 93 Cases by country in Western Europe

Country	Number of cases
Austria	4
Belgium	7
Denmark	2
Finland	2
France	4
Germany	16
Greece	22
Iceland	1
Ireland	2
Italy	8
Netherlands	10
Norway	2
Portugal	1
Spain	4
Switzerland	11
United Kingdom	34
Total cases:	**130**

MEDIAN LOSS:
USD 200,000

INDEX OF FIGURES

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. Additional guidance, resources, and tools for managing organizational fraud risk can be found at ACFE.com/fraudrisktools.

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, potential 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?

2. **Is an effective fraud reporting mechanism in place?**
   - ❑ Have employees been taught how to communicate concerns about known or potential wrongdoing?
   - ❑ Is there a reporting channel, such as a third-party hotline, available to employees?
   - ❑ Do employees trust that they can report suspicious activity anonymously and/or confidentially (where legally permissible) 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?

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

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 that are used to evaluate managers and 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)?

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

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

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

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 checks

9. **Are employee support programs in place to assist employees struggling with addiction, 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 regular, anonymous surveys conducted to assess employee morale?**

GLOSSARY OF TERMINOLOGY

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

Billing scheme: A fraudulent disbursement 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 (e.g., 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)

Cash larceny: A scheme in which an incoming payment is stolen from an organization after it has been recorded on the organization's books and records (e.g., employee steals cash and checks from daily receipts before they can be deposited in the bank)

Cash-on-hand misappropriations: A scheme in which the perpetrator misappropriates cash kept on hand at the victim organization's premises (e.g., employee steals cash from a company vault)

Check or payment tampering scheme[8]***:*** A fraudulent disbursement scheme in which a person steals his or her employer's funds by intercepting, forging, or altering a check or electronic payment drawn on one of the organization's bank accounts (e.g., employee steals blank company checks and makes them out to himself or herself or an accomplice; employee re-routes an outgoing electronic payment to a vendor to be deposited into his or her own bank account)

Corruption: A scheme 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)

Employee support programs: Programs that provide support and assistance to employees dealing with personal issues or challenges, such as counseling services for drug, family, or financial problems

Expense reimbursements scheme: A fraudulent disbursement scheme in which an employee makes a claim for reimbursement of fictitious or inflated business expenses (e.g., employee files fraudulent expense report, claiming personal travel, nonexistent meals)

Financial statement fraud: A scheme 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)

Hotline: A mechanism to report fraud or other violations, whether managed internally or by an external party

Management review: The process of management reviewing organizational controls, processes, accounts, or transactions for adherence to company policies and expectations

Noncash misappropriations: Any scheme in which an employee steals or misuses noncash assets of the victim organization (e.g., employee steals inventory from a warehouse or storeroom; employee steals or misuses confidential customer information)

Occupational fraud: The use of one's occupation for personal enrichment through the deliberate misuse or misapplication of the employing organization's resources or assets

Payroll scheme: A fraudulent disbursement scheme in which an employee causes his or her employer to issue a payment by making false claims for compensation (e.g., employee claims overtime for hours not worked; employee adds ghost employees to the payroll)

Primary perpetrator: The person who worked for the victim organization and who was reasonably confirmed as the primary culprit in the case

Register disbursements scheme: A fraudulent disbursement scheme in which an employee makes false entries on a cash register to conceal the fraudulent removal of cash (e.g., employee fraudulently voids a sale on his or her cash register and steals the cash)

Skimming: A scheme in which an incoming payment is stolen from an organization before it is recorded on the organization's books and records (e.g., employee accepts payment from a customer but does not record the sale and instead pockets the money)

[8] In previous reports, this category was referred to simply as *check tampering*. However, to better reflect the increasing shift toward electronic payment methods, we have changed the category title to *check and payment tampering*.

ABOUT THE ACFE

Founded in 1988 by Dr. Joseph T. Wells, CFE, CPA, the Association of Certified Fraud Examiners (ACFE) is the world's largest anti-fraud organization and premier provider of anti-fraud training and education. Together with nearly 85,000 members in more than 180 countries, the ACFE is reducing business fraud worldwide and providing the training and resources needed to fight fraud more effectively. The ACFE provides educational tools and practical solutions for anti-fraud professionals through events, education, publications, networking, and educational tools for colleges and universities.

Certified Fraud Examiners

The ACFE offers its members the opportunity for professional certification with the Certified Fraud Examiner (CFE) credential. The CFE is preferred by businesses and government entities around the world, and indicates expertise in fraud prevention and detection. CFEs are anti-fraud experts who have demonstrated knowledge in four critical areas: Financial Transactions and Fraud Schemes, Law, Investigation, and Fraud Prevention and Deterrence.

Membership

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. 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.

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