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global economic crime survey 2005*

MARTIN-LUTHER-UNIVERSITY
ECONOMY & CRIME RESEARCH CENTER
Prof. Dr. Kai-D. Bussmann

The penalties for violating regulations are severe and identifying and responding to incidents of fraud remain ongoing challenges for even the most sophisticated of companies

Introduction

We are pleased to present PricewaterhouseCoopers' Global Economic Crime Survey 2005. Based on 3,634 interviews with senior executives[1] in 34 countries, PwC's third biennial economic crime survey provides unparalleled depth of insight into the perceptions, awareness, and impact of economic crime on business around the world.

Fraud continues to be a prominent issue and has become increasingly important in the eyes of the world's regulators. Tougher domestic and international regulations are spurring companies to improve their governance with the goals of engendering trust and encouraging further investment. The penalties for violating regulations are severe, and identifying and responding to incidents of fraud remain ongoing challenges for even the most sophisticated of companies. However, as this survey demonstrates, fraud can be mitigated by effective controls, a strong culture of prevention and deterrence, and assertive action when cases arise.

In conducting this 2005 survey, we have been fortunate to collaborate with Professor Bussmann of Martin-Luther-University, Halle-Wittenberg in Germany. Based on his expertise, we have further explored two topics: "the effectiveness of fraud risk management systems" and "the profiles of fraud perpetrators." We believe that the results of our analysis in these areas will be of great value in helping companies to better understand the significant impact that economic crimes can have on their business, assess the risks of fraud that they may face, and find ways to mitigate those risks wherever they operate in the world.

This report is based on a very fruitful co-operation between scientists and forensic accounting practitioners. This co-operation is all the more important because the cost of fraud is becoming widely recognized, lessening the reluctance to openly discuss the topic as businesses of all sizes seek practical deterrence measures. Further, both the business and academic communities depend on reliable, unbiased information to advance the study of this topic. This report marks another important step towards a future where experience and practices in the business world contribute towards our dialogue on effective control and prevention strategies. In the fight against economic crime, we are unlikely to find a panacea, but we are finding out more about "what works, and what doesn't". In order to continue this process, we will need ongoing co-operation with the business community which – as in the case of this report – was willing to talk about this still rather sensitive topic. For this, we would like to express our thanks.

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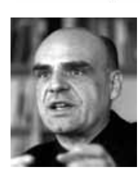

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November, 2005

1 52% of the respondents were members of the executive board and 43% had a main responsibility in finance.



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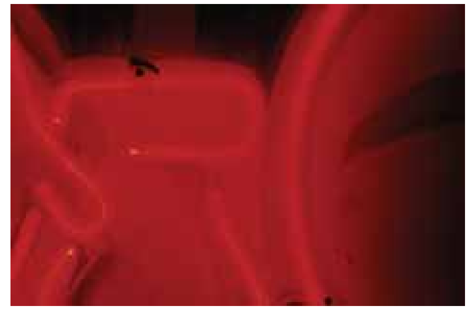


Economic Crime Survey – Executive Summary

1 Fraud, a significant and growing threat worldwide

- 45% of companies worldwide have fallen victim to economic crime in the past two years – an 8 percentage point increase on our previous survey.
- The larger the company, the higher the likelihood that it will experience and detect acts of fraud. While companies around the world, on average, reported suffering 8 fraud incidents since 2003, larger companies reported an average of 12 incidents.
- No industry is safe – whether regulated or unregulated. From 38% to 60% of the companies in each of the sectors we surveyed reported significant frauds.

2 Types of economic crime

- The number of companies reporting incidents of fraud has increased in every category since 2003. In particular, there has been a 71% increase in the number reporting corruption & bribery, a 133% increase in the number reporting money laundering, and a 140% increase in the number reporting financial misrepresentation.
- Despite the increase in the number of frauds reported, companies perceived the prevalence of fraud in their business to have been greater in 2003 than it is today. Given the increases documented in this survey, does this perception reflect an over-confidence in the success of existing fraud risk management systems?

3 The cost of economic crime

- In the past two years, the average financial damage to companies from tangible frauds (i.e., asset misappropriation, false pretences, and counterfeiting) was US$ 1.7 million.
- In 2004, 120 accounting-related securities litigation matters were filed against registrants on US exchanges, 20 of which were for criminal activity.
- In the wake of fraud incidents, 40% of the companies responding to our survey indicated that they had suffered significant ‘collateral damage’, such as loss of reputation, decreased staff motivation, and declining business relations. The impact of such ‘collateral damage’ was perceived to be strongest in cases where incidents were leaked to customers or the media.

4 Fraud’s perpetrators

- For a fraud to occur there must be an opportunity and an individual (or group) with an incentive to commit it, and those individuals must also be able to rationalise their own actions – at least to themselves. Most frauds reported involved a lack of adequate internal controls (opportunity), the need to maintain an expensive lifestyle (incentive), and the perpetrator’s lack of awareness that their actions were wrong (self-rationalisation).
- In most cases, perpetrators of fraud were male, between the ages of 31 and 40, and educated to degree level or higher. Half of the perpetrators were employed by the defrauded company, almost one quarter of them in senior management positions.
- Companies typically dismiss perpetrators – although this occurs less often if the perpetrator is employed at the senior management level. While the decision not to dismiss a fraudster can be helpful in limiting unwanted media and regulatory attention, our experience indicates that this approach has little or no long-term value, since it does not act as a deterrent to other potential fraudsters within the business.

5 The effectiveness of fraud controls

- Despite the growing confidence that the corporations surveyed have in their risk management systems, most fraud (34%) is still detected by chance (e.g., through tip-offs). According to 2005 survey

45% of companies worldwide have fallen victim to economic crime in the past two years – an 8 percentage point increase on our previous survey

respondents, an internal audit is the single most successful control/process for detecting incidents of fraud (26% of cases).

- Companies that employ a range of fraud detection measures uncover significantly more incidents than those who rely on internal controls and audit processes alone to detect fraud. They are also more capable of recovering losses.

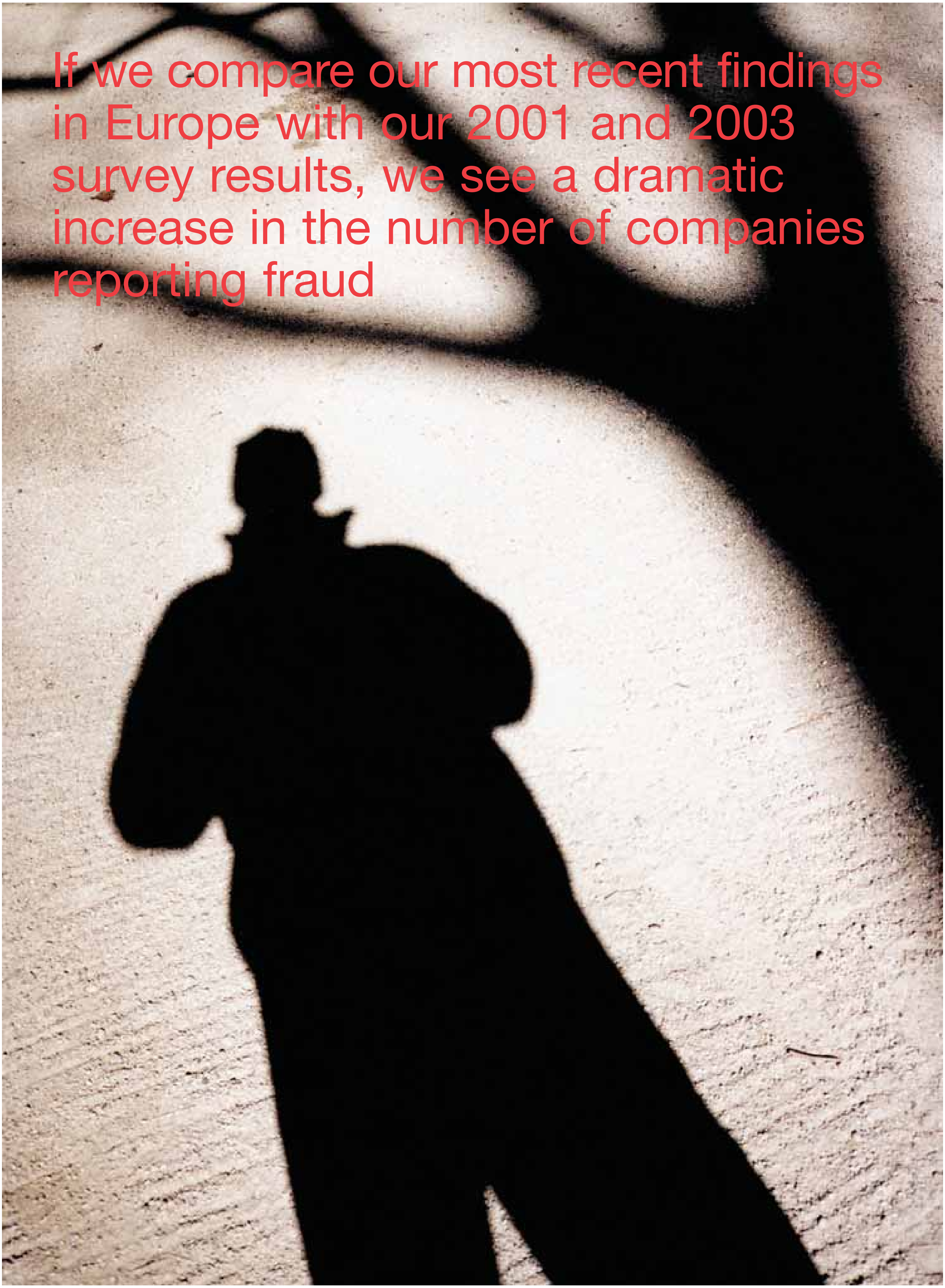
6 Investigating and dealing with fraudsters

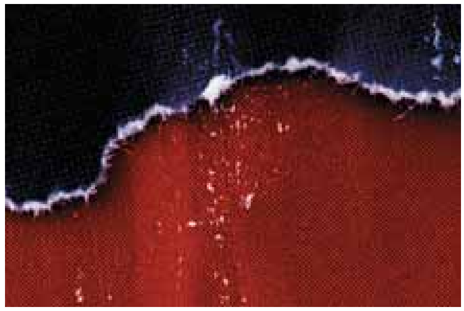
- Most companies worldwide (81%) launched internal investigations and informed their Boards of Directors about their actions. Almost two thirds notified law enforcement agencies. Many companies also commissioned external investigators.
- In 89% of financial misrepresentation cases companies saw fit to undertake an internal investigation, but in only 84% of these cases did they inform their Boards of Directors and in only 50%, their Audit Committees.
- According to survey findings, companies respond inconsistently when they uncover incidents of fraud. Senior managers are less likely to be dismissed or have criminal charges brought against them than are other employees, despite the greater financial and 'collateral damage' that acts of fraud committed by senior managers can cause.
- 47% of the companies that suffered fraud managed to recover at least some of their assets. In the case of companies that had taken out insurance, the rate of recovery increased to 59%.

7 Fraud in the future: an illusion of safety?

- Despite the growing number of companies reporting fraud year-on-year in our surveys, only 21% of those interviewed consider it likely that their company will be a victim of fraud over the next five years.
- Companies that have been victims before are more sceptical of their chances of not being victims again. 90% of companies that had no fraud to report thought it unlikely they might suffer it in the future. This declined to 67% for those that had already experienced fraud in their organisation.

If we compare our most recent findings in Europe with our 2001 and 2003 survey results, we see a dramatic increase in the number of companies reporting fraud

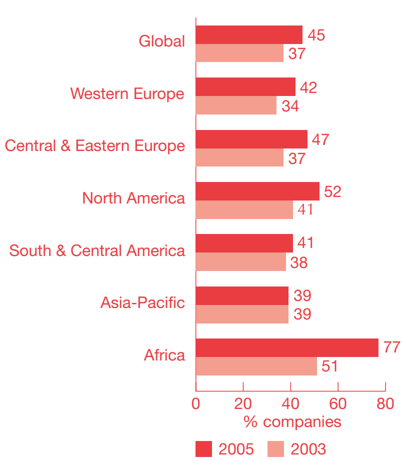




1 Fraud – a significant and growing threat worldwide

Our 2005 economic crime survey reveals that 45% of the 3,634 companies surveyed around the world reported being subject to one or more significant economic crimes during the previous two years – an 8 percentage point increase on our 2003 survey. This increase is not limited to one or two countries, but has occurred in every region[2].

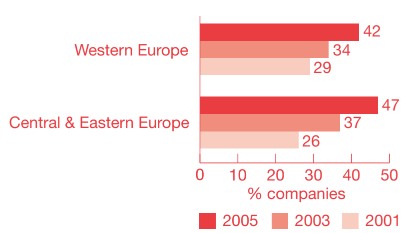
Figure 1: Companies reporting fraud (worldwide)



With the exception of Africa (where reported levels of fraud were significantly higher), according to our analysis, approximately 40% to 50% of companies were victims of economic crime worldwide.

If we compare our most recent findings in Europe with our 2001 and 2003 survey results, we see a dramatic increase in the number of companies reporting fraud. In Western Europe, we see an overall increase of 13 percentage points; in Central & Eastern Europe, this figure has increased by 21 percentage points.

Figure 2: Companies reporting fraud (Europe)



This dramatic rise in the number of companies reporting incidents may be due to a number of factors:

- An increase in the amount of fraud being committed[3]
- The tightening of market regulations in many countries and a resulting increase by companies in their efforts to demonstrate transparency and good governance by reporting more fraud
- The introduction of more stringent controls and risk management systems leading to companies detecting more fraud
- A decrease in the stigma attached to reporting fraud. In many places, regulators have fostered an atmosphere in which it is acceptable to report – and remedy – economic crimes in the interest of good governance[4]

1.1 The bigger the company – the harder the fall

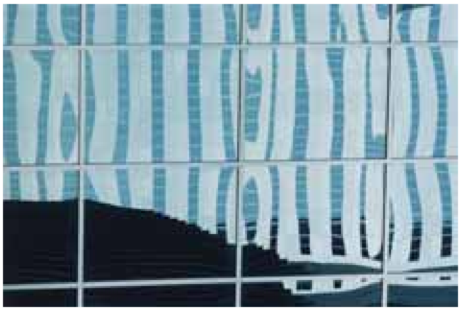
Our 2005 survey, just like its predecessor, shows that a company's size is directly related to the likelihood that it will experience fraud. While only 36% of small companies surveyed reported suffering fraud in the past two years, 62% of the large companies reported fraudulent activities during the same period[5].

2 The exception to this statistic is Asia-Pacific, where growth appears static. However, if one explores the results from individual countries within that region, the number of companies reporting fraud varies dramatically from a high of 63% in Australia to a low of 16% in Singapore. For more details, please see the individual Asia-Pacific regional and country supplements.

3 This survey has also seen the introduction of two new categories of fraud: 'insider trading' and 'false pretences' which may in part account for the increase in reported frauds.

4 This is by no means the case in every country. Indeed, in many developing countries, levels of reported fraud have remained static or dropped, suggesting that economic crime may still have a stigma attached to it.

5 In this instance, 'small companies' refers to those with less than 200 employees nationally and 'large companies' those with more than 5000 employees nationally.



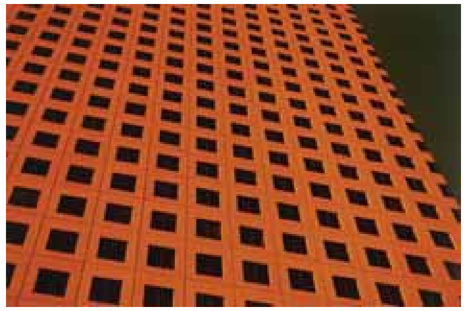
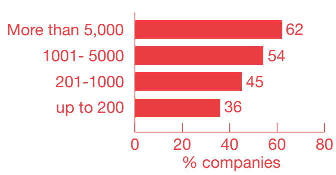


Figure 3: Size of companies reporting fraud (by number of employees)



In particular, large companies reported high incidences of asset misappropriation and financial misrepresentation[6], with these frauds occurring three times more often than in smaller companies.

Larger companies also detected a higher number of economic crimes since 2003, reporting an average of 12 incidents, compared to an average of 5 incidents reported by smaller companies. Based on our analysis, the reasons for this difference may include:

- Greater opportunities for fraud in large companies
  - The larger and more complex the organisation, the greater the devolution of responsibilities and the greater the anonymity among staff
  - In larger companies, fraudsters are more likely to view fraud as a 'victimless crime'. They can often regard themselves as tiny cogs in big wheels and can therefore also be less concerned about the financial impact of their actions on their employer
- Transactional complexity
  - Large companies often undertake a higher number of complex transactions that can leave them open to accusations of unscrupulousness in their financial dealings
- Better fraud detection systems
  - Our survey results show that larger companies often have the ability to – and do – implement a greater number of controls and risk management procedures than smaller companies, thereby increasing their chances of detecting fraud[7]
- Threats arising from international operations
  - Larger companies often pursue a greater number of opportunities in new and unfamiliar markets (both domestic and overseas), increasing their risk of fraud in these areas
  - Our survey of companies with offices in the Peoples' Republic of China revealed that only 8% of them reported suffering additional fraud because of activities in the region[8]. In 75% of the cases, this was attributed primarily to a lack of understanding of foreign business customs and ethics

There is a saying that "opportunity makes the thief". According to our survey findings, where companies considered themselves to be in a dynamic period of change they were 20% more likely to suffer fraud than those that perceived themselves as being in a stable period. In our experience, phases of instability can also weaken control and precautionary measures – and provide unexpected opportunities for fraud.

1.2 No industry is immune

Again, like its predecessor, our 2005 survey shows that no industry is immune from the risks of fraud.

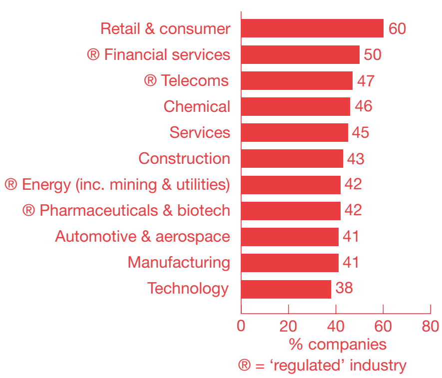
In previous years, we explored the concept – reflected in the survey results – that 'regulated' industries[9] reported more incidents of fraud as their procedures and systems required greater levels of

6 As well as money laundering in the financial services sector.
7 Despite their investment in control systems, many larger companies reported that the complexity of their organisation meant that they actually had insufficient controls in place, hence the high number of reported frauds.
8 This low number may be due to the fact that fraud lies undetected in China.
9 In these cases, 'regulated' industries refers to those that have a 'regulated' production or services process, such as pharmaceuticals, telecommunications, energy and financial services.

Larger companies also detected a higher number of economic crimes since 2003, reporting an average of 12 incidents, compared to an average of 5 incidents reported by smaller companies

transparency. The financial services sector, for example, has always dominated the top position in our surveys for the number of frauds reported. Their high level of (near) cash assets and complex financial transactions make this sector an obvious target for fraudsters. But the often-sophisticated risk management systems that financial services firms have in place also increase the likelihood that they will have greater success in detecting incidents of fraud.

Figure 4: Companies reporting fraud (by industry sector)



However, the results of our 2005 survey indicate that 'unregulated' industries are showing equal levels of success in

uncovering economic crimes. Our analysis suggests that this is the result of two key factors:

- Public companies – whether 'regulated' or 'unregulated' – are under increasing pressure from financial regulators to show strong corporate governance and transparency
- All companies – both public and private – are showing a growing awareness of the need to promote good governance in order to drive stakeholder confidence

While companies appear to be improving their fraud controls, it is noteworthy that companies in 'regulated' industries appear to have benefited from their longer established risk management cultures. Close to 40% of regulated companies reported the recovery of lost or stolen assets compared to 27% of companies in unregulated industries.

Despite perceptions that financial misrepresentation and corruption & bribery are not particularly prevalent… the number of companies that reported suffering incidents of these two frauds has grown significantly since 2003

2 Types of economic crime

2.1 The perceived prevalence of fraud

Before exploring the types of fraud that companies have suffered over the past two years, it is interesting to compare companies' recent perceptions as to how prevalent individual categories of fraud are with perceptions expressed in our previous survey.

Figure 5: Perceived prevalence of fraud (among all companies interviewed)

With the exceptions of counterfeiting and money laundering, our respondents regarded fraud to be more prevalent in

2003 than in 2005. At first, this appears surprising, especially in the light of recent media coverage of investigations into corporate scandals and the increase in the number of frauds reported in our survey. However, this view may suggest that many organisations believe that, with the increase in the number of frauds that they have detected and with the introduction of ever-more sophisticated controls, they are succeeding in countering the threats that these economic crimes present.

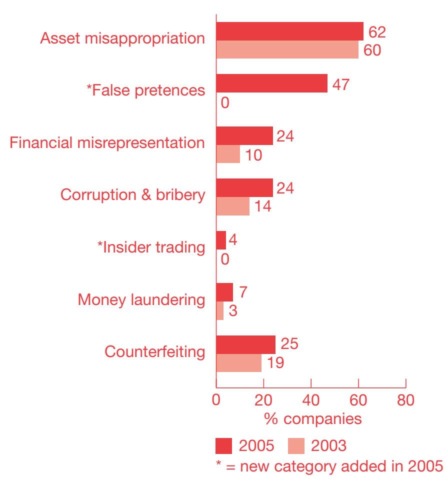
2.2 The different frauds experienced

Companies that suffered fraud reported an average of 8 incidents during the previous two years.

The highest number of reported frauds in this survey appeared in the categories of asset misappropriation (62%) and false pretences (47%). This is not surprising as these are among the easier frauds to detect because they involve the taking of items with a defined value.

However, despite respondents' perceptions that financial misrepresentation and corruption & bribery are not particularly prevalent in their business communities, the number of companies surveyed that reported suffering actual incidents of these two frauds has grown significantly since 2003 – more than doubling in the case of the former. This may reflect a general increase in these crimes; it is also likely that, due to the legal and regulatory penalties attached to them, there has been a move by senior management to root them out where they occur in order to demonstrate good self-governance.

Figure 6: Incidents of fraud (by companies that reported fraud)



Typically, incidents of corruption & bribery have shown a regional bias. They are most prevalent in the developing markets of South & Central America, Africa, and Asia-Pacific, where such acts are often viewed as accepted practices in conducting business. Increased pressure from developed markets is forcing a number of companies to promote awareness of the detrimental impact of these practices. As a result, many companies operating in these markets are now taking steps to review their protocols.

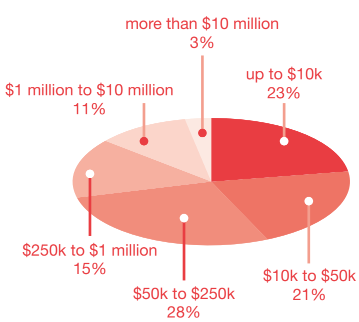
It is also interesting to note that the developed and regulated regions of North America and Western Europe do not report high levels of corruption & bribery but do report high levels of financial misrepresentation – the exact opposite of their 'sister continents', South & Central America and Central & Eastern Europe. As corruption & bribery have been identified – and in many cases accepted – in North America and Western Europe as bad business practices, the eye of the regulator has now turned to eradicating another form of 'corruption': that within corporate accounting.

3 The cost of economic crime

3.1 The financial damage from 'tangible' frauds

When estimating the immediate financial cost of fraud, our survey asked companies about the three categories of fraud that involve loss of tangible items to which it is possible to attach a value: asset misappropriation, false pretences, and counterfeiting[10]. 1227 companies were able to provide an answer[11].

Figure 7: Financial losses from 'tangible' fraud



Asset misappropriation, false pretences, and counterfeiting

The average loss per company surveyed = US$ 1,732,253

The total loss by companies surveyed = in excess of US$ 2 billion

More than 10% of smaller companies reported losing more than US$ 1 million in the past two years due to 'tangible' frauds. In addition, 6% of larger companies reporting fraud revealed that they had lost in excess of US$ 10 million through these types of economic crime during the same period. While many larger companies regard these types of fraud as an inherent risk of conducting business, the losses incurred are a clear threat to their potential profits. For smaller companies, such losses pose a genuine threat to their commercial success.

The financial damage companies suffer as a result of 'tangible' frauds such as asset misappropriation may be only the tip of the iceberg. The 'collateral damage' from these types of fraud can also be substantial – as this report will show.

3.2 The penalties from regulators

Financial misrepresentation, corruption & bribery, money laundering, and insider trading are categories of fraud for which it is difficult to estimate an immediate financial loss. However, in our experience, their impact upon confidence within the business community can be substantial. And the penalties from regulators for transgressions can have a crippling financial impact.

PricewaterhouseCoopers' Securities Litigation Study[12] reveals that in the US in 2004 120 accounting-related securities litigation matters were filed against registrants on US exchanges, 20 of which also involved some criminal or Department of Justice ('DOJ') investigations. These cases were not limited to US companies. Foreign private issuers were also affected: 22 companies from overseas faced accounting-related filings, 8 of which involved criminal or DOJ investigations.

It is noteworthy that the top 5 shareholder class action settlements of all time each involved some sort of criminal investigation and/or indictment or guilty plea. Those cases have settled for almost $20 billion

10 The other types of fraud surveyed involve the altering of accounts and values or the disguising of the proceeds of crime and it is therefore difficult – if not impossible – to attribute a direct, financial loss to their actions.
11 This is a 50% increase over 2003. In our 2003 survey, respondents were asked to provide the estimated value lost from all categories of economic crime.
12 The PricewaterhouseCoopers Securities Litigation Study (published annually since 1997) analyses all US securities litigation cases in a given year. For more information or copies of the report, visit www.10b5.com.

More than 10% of smaller companies reported losing more than US$ 1 million in the past two years due to ‘tangible’ fraud... Such losses can pose a genuine threat to their commercial success

Year	Number of accounting cases filed	Accounting cases involving criminal activity
2004	120	20
2003	117	15
2002	161	43
2001	107	13

dollars in civil suits – not including the Securities and Exchange Commission ('SEC') cash settlements.

The US SEC and the US DOJ have also been supported in their activities by the Foreign Corrupt Practices Act and the Sarbanes-Oxley Act. With the goal of compelling companies to eradicate corruption and financial fraud, both these Acts have had a profound influence on the corporate conscience, and played a key role in the drive toward greater corporate transparency. In turn, many of the world's regulatory bodies are choosing to emulate the US – and some are adopting even more draconian measures.

3.3 'Collateral damage': beyond the financial consequences

While quantifying the financial damage from fraud is hard, it can be even harder to estimate the 'collateral damage'. Yet 40% of the respondents reported significant damage to their brand or reputation, a decline of staff morale or impaired business relations. Each of these elements is critical to the success of any business and all can be undermined by the occurrence – or even the perception – of fraud.

With the revelation that many companies suffered repeated occurrences of fraud – on average 8 times – during the period of this survey, management should be aware that exposure to such issues can seriously undermine staff loyalty, raising questions about a company's governance and the quality of its leadership. This can lead to demoralisation among staff and, in some cases, lead them to copy the actions of perpetrators.

A company's management of its brand can have a significant impact not only on the likelihood of fraud, but also on its ability to limit damage should fraud occur. Employees who have no emotional investment in the fortunes of their company are more difficult to motivate. Conversely, employees who believe in their company, its mission and products, and in the competence and fairness of its management, are easier to supervise and motivate. They are also much less likely

Figure 8: Types of 'collateral damage' experienced

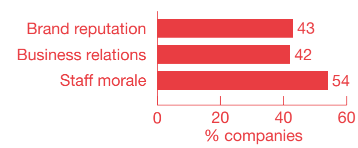


Figure total more than 100% as respondents were able to provide multiple answers

to defraud 'their' own company. So when management introduces anti-fraud values and an ethics code into its brand – and these are understood and supported by employees – their employees often become the best guardians of the company brand and its ethics[13].

Irrespective of the type of incident, smaller companies reported suffering greater 'collateral damage' than larger companies, with 51% of them reporting significant intangible damage compared with 39% of larger companies. This, again, is unsurprising. With a smaller work force and client base, a negative reaction from either of these segments in response to a fraud, combined with its impact upon the brand and reputation, can have a critical – and sometimes fatal – effect on the business.

When asked to consider the level of intangible damage from each type of fraud, a high number of companies regarded

13 David Baral and John Wilkinson, "Economic Crime: beyond the financial costs", re: Business, March 2004.

40% of the respondents reported significant damage to their brand or reputation, a decline of staff morale or impaired business relations

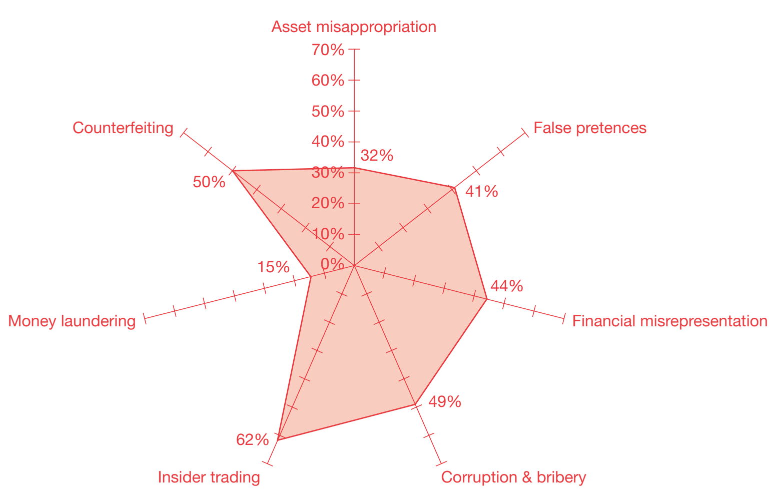
insider trading (62%), corruption & bribery (49%), and counterfeiting (49%) as causing them serious 'collateral damage'.

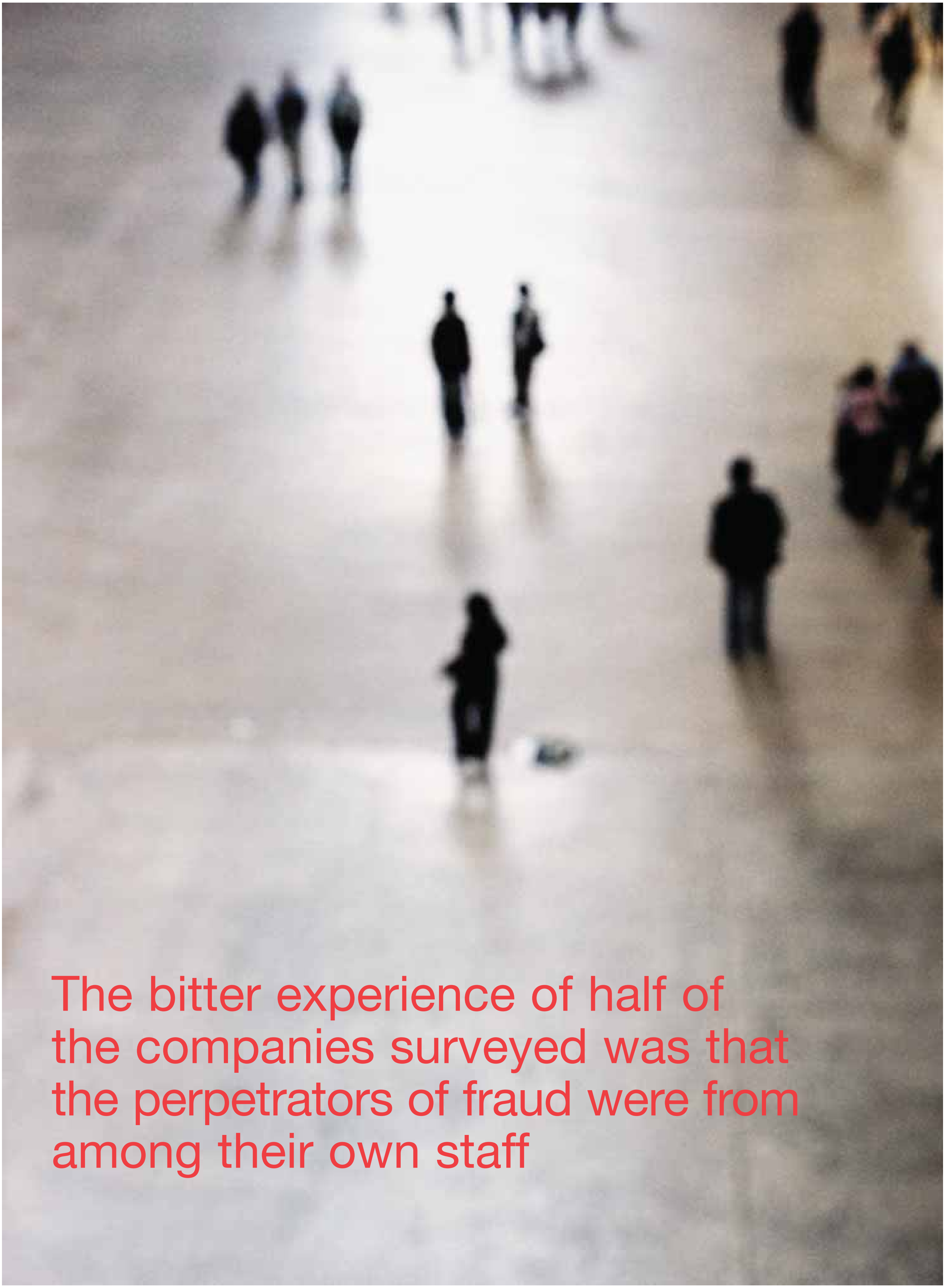
- In the case of insider trading, this is not surprising since it damages the integrity of a company and those involved in its financing
- The high level of damage associated with corruption & bribery is also not surprising, given the intense recent media coverage in this area
- As for counterfeiting, any company can face serious threats to its brand and its business relations if fake goods enter the marketplace – but this can be particularly damaging to those companies involved in the manufacture of products with health and safety implications

In most cases, companies reported that greater 'collateral damage' would result should the fraud that had occurred become known to the media and public rather than just the limited community of business partners and clients. This view might be based on two factors:

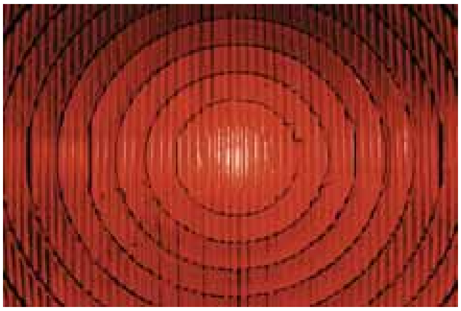
- The media's intense interest in good corporate governance and its bulldog-like qualities in reporting on companies that have 'slipped-up'
- Many business partners and clients may be aware that companies on occasion make mistakes and may be more inclined to 'forgive-and-forget' should management take immediate steps to correct the situation

Figure 9: Companies reporting collateral damage (by fraud category)





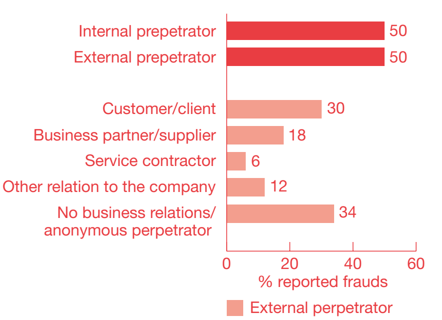
The bitter experience of half of the companies surveyed was that the perpetrators of fraud were from among their own staff



4 Fraud's perpetrators

The bitter experience of half of the companies surveyed was that the perpetrators of fraud were from among their own staff[14]. While disappointing, this is not surprising, as fraudsters operating within a company have a strong understanding of the business, including the strengths and weaknesses of the controls in place to prevent fraud.

Figure 10: Fraudsters' relation to the company



4.1 The greenhouse effect – exploring the environments that propagate fraud

The development of internal control and risk management systems is important in managing the risk of fraud, but they can only go so far before they become complex and unwieldy – and, importantly, before they create an atmosphere of distrust. Companies that classified their prevention attitude as control-oriented rather than trust-oriented reported a higher number of frauds[15].

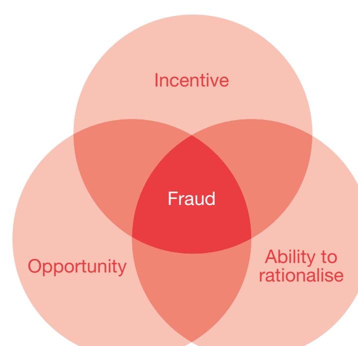
An employee's affinity with the company is often brought into the discussion as a means of fraud prevention. Some criminological theories, such as social bond theories ask not why an individual turns to criminal activities but rather why the majority of people do not. Such theories lay particular stress on the importance of personal attachment to other individuals or institutions.

From a criminological viewpoint, individuals' affinity with the company and its brand can represent an effective fraud prevention strategy. While an atmosphere of anonymity and distrust within an organisation can increase the likelihood that employees will engage in criminal behaviour, strong social and emotional identification with the company can protect it, just as shared values and beliefs do. People who identify with their organisation are less likely to damage it as the psychological barriers to this are higher.

Before someone can commit fraud, it is generally accepted that three conditions must exist:

- The individual must have an incentive (or cause) to commit fraud
- The individual must identify an opportunity to commit fraud
- The individual must be able to rationalise (at least to himself or herself) the reason for committing fraud

Figure 11: The fraud environment



Respondents who remembered the details of individual cases of fraud within their companies[16] were asked to categorise the perpetrators' incentives, opportunities, and means of rationalising

14 The only significant difference was in the financial services, where 64% of the perpetrators were external to the company.
15 48% of companies that operate a control culture reported fraud, compared with 40% of companies operating a trust culture.
16 Since an answer that refers to a specific perpetrator and incident is more reliable than one that is only a hypothetical assessment of the causes of fraud, only answers concerning concrete incidents were analysed (1,821 cases).

their crimes. Their answers highlighted the following reasons that fraud was committed.

- The perpetrator's need to maintain an expensive lifestyle (39%) – an incentive
- The company's lack of internal controls (41%) – an opportunity
- The perpetrator's low temptation threshold (50%) or lack of awareness that what he or she was doing was wrong (52%) – a means of (sub-conscious) self-rationalisation

Among these reported cases, other reasons for committing fraud – such as the perpetrator's dissatisfaction with the company (14%), occupational disappointment (13%), or the levels of anonymity amongst the staff or management (13%) – appear to have played a less significant role. However, ignoring these factors in the development of a company brand or risk management system can prove dangerous as they can accumulate and join with other motivations for fraud. Socio-psychological studies confirm that individuals give foremost importance to the way they are treated and that fairness matters to them even more than material advantage[17].

Figure 12: Reasons for committing fraud

Collaboration with external parties played a role in one third of the cases and was a particularly significant factor (up to 46%) in Africa, South & Central America as well as in Asia-Pacific and Central & Eastern Europe. In the cases where external perpetrators were involved, the following causes of fraud were cited more frequently:

- A lack of awareness of wrongdoing (60%)
- A lack of understanding of the financial consequences to the target company (30%)
- A different set of foreign business customs/ethics (26%)

4.2 Profiling the fraudster

The typical perpetrator was male (87%), between the ages of 31 and 40 (38%) and educated to degree level or higher (52%).

While fraud is perpetrated by all levels of staff within businesses, what is perhaps startling is the extent to which our survey showed members of senior management – the figureheads within a business – are incriminated in frauds: Overall, they are responsible for 23% of reported frauds and, in smaller companies, they committed 35% of the frauds reported.

It was reported that, once discovered, perpetrators within senior management appeared to have been driven by the *incentive* to maintain expensive lifestyles and claimed that they were unaware they were committing any wrongdoing.

17 The following causes were quoted significantly more frequently in the case of external perpetrators: lacking awareness of wrongdoing 60%, denial of (or lack of care for) financial consequences to the company 30%, different foreign business customs/ethics 26%, collaboration with other external parties 43%.

While fraud is perpetrated by all levels of staff… what is perhaps startling is the extent to which our survey showed members of senior management are incriminated

Figure 13: Fraudster profiles

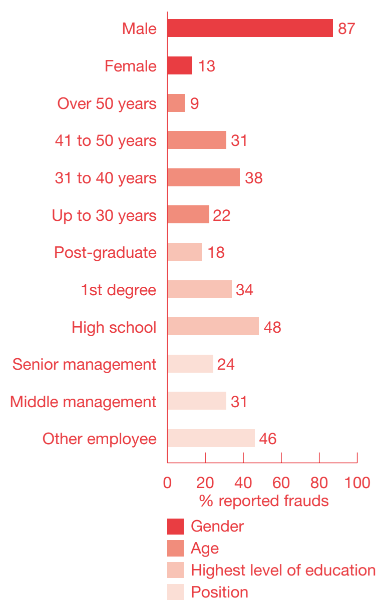
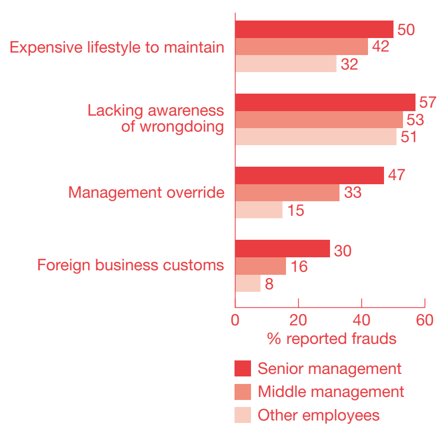


Figure 14: Reasons for committing fraud (by position in company)



However, because of their position within the business, they had had the *opportunity* to use their management authority to override controls designed to detect fraud.

It is little wonder that the financial and 'collateral damage' from fraud increases the higher up the company ladder a perpetrator operates. Respondents perceived the impact from fraud perpetrated by senior management to be up to three times more serious than the impact from fraud committed by lower level employees.

Furthermore, the type of intangible damage inflicted largely depends on the perpetrator's position. The higher the status of an internal perpetrator, the more frequently companies report a loss of reputation (up to 43%) and impairment of business relationships (up to 50%). Workforce motivation, on the other hand, is most frequently affected by fraud committed by middle management and employees (58%).

5 The effectiveness of fraud controls

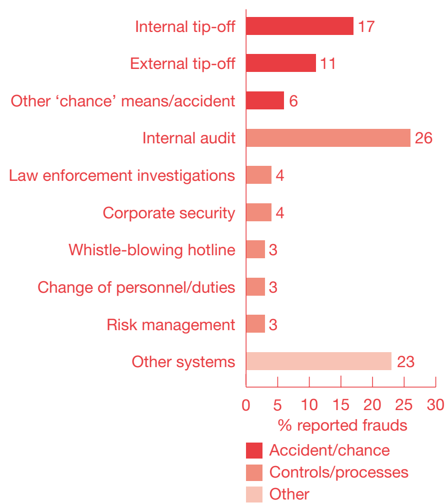
The means by which fraud is detected can be split into two broad categories: detection through chance and detection through risk management controls and systems.

In most cases, the internal audit function was the most successful 'control' in detecting economic crimes. In our opinion, this is not surprising since day-to-day analysis of company accounts can often be successful in detecting unusual and suspicious transactions (and all the more so if it is supported by a comprehensive suite of risk management systems, as we show later).

However, the fact that fraud was detected by chance in over one third of cases is cause for concern[18], particularly as many respondents to our survey were confident that their existing risk management systems would lessen their risk from fraud over the next five years.

The way in which a crime is initially detected often depends on the perpetrator's relation to the company. Crimes committed by internal perpetrators

Figure 15: Means by which fraud was originally detected



are most frequently uncovered through internal tip-offs or the internal audit process. External perpetrators are most often detected from external tip-offs, effective risk management systems, and good corporate security.

In addition, the probability of uncovering economic crime – as we shall show – is strongly dependent on the number and effectiveness of the control mechanisms that are implemented. For example,

- Companies that had implemented a strong, internal audit process increased the probability of uncovering economic crime by over 10%
- Companies that had introduced a whistle-blowing system were significantly less dependent on external informers and/or external accountants[19]

When looked at individually, each control may not appear to be particularly successful in detecting fraud, but when these processes are layered on top of one another, the resulting risk management system proves to be considerably more effective.

Clearly, a reliance on luck is no basis for a strong anti-fraud regime. The earlier the crime is discovered, the lower the risk of damage and the higher the probability of recovering lost assets. We advise that companies:

- Assess the real risks and vulnerabilities to fraud within the organisation
- Proactively monitor risky areas
- Develop policies to encourage (and protect) 'whistle-blowers'
- Actively communicate the company's stance on fraud – and 'walk the talk'
- Expect the worst and be prepared by devising a robust fraud response plan

18 Internal tip-off 17% + external tip-off 11% + other accidental means 6% = 34%.
19 Where whistle-blowing systems have been successfully implemented, corruption & bribery have been detected much more frequently in both Africa (18%) and Asia-Pacific (12%).

The fact that fraud was detected by chance measures in over one third of cases is cause for concern

5.1 Communicating the company’s stance on fraud

Companies can encourage employees to act appropriately and report unusual and irregular activities by implementing workable ethics programmes which, “create a commitment to shared values …develop people’s capacity to engage in moral reasoning, and… create an environment that enables responsible conduct”[20]. And when explicit norms of criminal law are incorporated into an ethics code its effectiveness is definitely increased, counteracting the fragmentation of values in society as well as in business[21].

To achieve any level of success, an ethics code must be clearly communicated to all employees, and everyone, from the CEO and board to the lowest-ranking employees, should know what it permits and what it does not. The ethics code should also inform employees about how they can report their concerns and observations. And for the greatest levels of success, the code should be directly linked to the company’s brand values, performance management systems, and reward policies.

As PricewaterhouseCoopers’ CEO, Sam Di Piazza, points out, “People in an organisation pick up quickly on how the CEO and other senior executives deal with individuals and situations that may not conform to the ethical code. The board also has something at stake: It is the responsibility of the total leadership, including the board, to infuse an organisational culture of ethics, and this challenge includes communicating effectively.”[22]

5.2 The impact of fraud controls

Compared with the 2003 survey, many respondents appear to have significantly increased their efforts to mitigate the risk of economic crime. The more control measures a company puts in place, the more incidents of fraud it will uncover and the less likely it is that the company will suffer significant, ongoing financial and ‘collateral damage’.

In conducting the survey, we presented to interviewees a list of 15 controls that can help in the detection of fraud and asked them which of these measures had been established in their companies.

We learned that the measures most commonly instituted were external audit, internal audit and internal control systems.

Figure 16: Most common control measures instituted

The correlation between a higher number of controls and a higher chance of detecting fraud can best be illustrated by comparing two groups within our 2005 survey, each of which consisted of around 1,800 companies. The first group

20 Marie McKendall, Beverly DeMarr and Catherine Jones-Rikkers, “Ethical Compliance Programmes and Corporate Illegality: Testing the Assumptions of the Corporate Sentencing Guidelines,” Journal of Business Ethics, June 2002.
21 Kai Bussmann, “Causes of EconCrime and the Impact of Values”, 2003, (http://www.econcrime.uni-halle.de/publikationen_ecrc).
22 “It's All Down to Personal Values”, re: Business, May, 2003.

The difficulty in adopting a proactive fraud risk management system is a reflection of the deceitful nature of fraud

	Group A Companies with *up to* 5 controls	Group B Companies with *more than* 5 controls
Percentage of companies that reported detecting fraud	39%	51%
Average number of reported incidents of fraud per company	6	9
Average financial loss through fraud per company	US$ 812,000	US$ 2,449,000
Percentage of companies that reported (at least partial) recovery of losses	43%	52%

comprises companies that implemented up to 5 (and on average 3) fraud risk management measures[23]; the second group consists of companies that had implemented more than 5 measures.

Companies with a larger number of controls reported not only uncovering frauds more frequently, but also that the frauds they detected were three times more financially damaging. In addition, a higher number of the companies that implemented more than 5 measures were able to recover their losses (at least in part).

It is heartening to report that almost half the companies surveyed had in excess of 5 fraud risk management controls in place. However, it is our view that the levels of reported fraud are, in many cases, only the tip of the iceberg.

The difficulty in adopting a proactive fraud risk management system is a reflection of the deceitful nature of fraud; as a result, the more successful that companies are in developing layers of differing, but complementary, controls, the more frauds they detect. If companies are serious in their desire to mitigate not only the financial and collateral threats from fraud itself, but also the threat of penalties from the ever-growing arm of the regulator, significantly more layers of control need to be added.

23 Other measures were listed, but each measure was implemented by less than one third of the companies within the group.

Once a suspected fraud is authenticated, a response is mandatory to deter other potential fraudsters and to show stakeholders in the business that the organisation will not tolerate such malpractice

6 Investigating and dealing with fraudsters

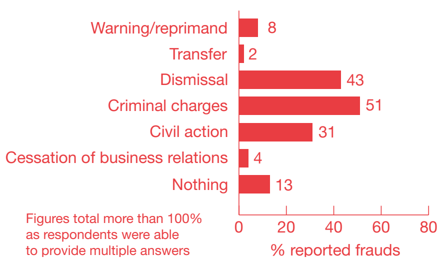
Once the spectre of fraud has been raised, steps must be taken to investigate and authenticate any such claims. In the majority of countries, once an allegation had been made, most companies launched an internal investigation (81%) and over three-quarters of respondents reported informing the board of directors (76%). In addition, a high number of organisations also reported commissioning an external investigator, whether the law enforcement authorities (63%)[24], a lawyer (36%), or a forensic accountant (22%).

Figure 17: Corporate reaction on detecting fraud

In 89% of financial misrepresentation cases, which as we have seen can lead to the most significant financial losses and penalties, companies saw fit to undertake an internal investigation; in only 84% did they inform their Boards of Directors – and in only 50% were Audit Committees informed.

Once a suspected fraud is authenticated, a response is mandatory to deter other potential fraudsters and to show stakeholders in the business that the organisation will not tolerate such malpractice.

Figure 18: Punitive actions taken



Company's attitudes to dismissal also varied depending on the type of fraud. In the case of money laundering, for example, companies only exercised a dismissal in 33% of reported cases.

The range of responses and sanctions available can also depend on whether an internal or external perpetrator is involved. Internal perpetrators were usually dismissed (81%), and in most cases charges were filed, whether criminal (47%) or civil (27%). As a dismissal action was not possible against external perpetrators, civil charges were brought (36%) or the case was referred to a prosecutor for criminal charges (56%); when business relations were involved, only 1 in 10 companies saw fit to end the relationship.

However, there are many reasons why an organisation may choose not to report a fraud to an external body or bring charges. These include:

- The potential impact of negative publicity on business relationships or staff morale
- The fear of the costs of a drawn-out judicial process
- The belief that there is little chance of recovering the stolen assets

Interestingly, this survey revealed a significant difference between the way companies respond to senior management discovered to be involved in fraud and the way they deal with other staff members.

Fraudsters within senior management were reported not only to have been dismissed less frequently than other grades of staff, but also to have been subject to criminal

24 Law enforcement officers are informed less frequently in both South & Central America (41%) and Asia-Pacific (55%).

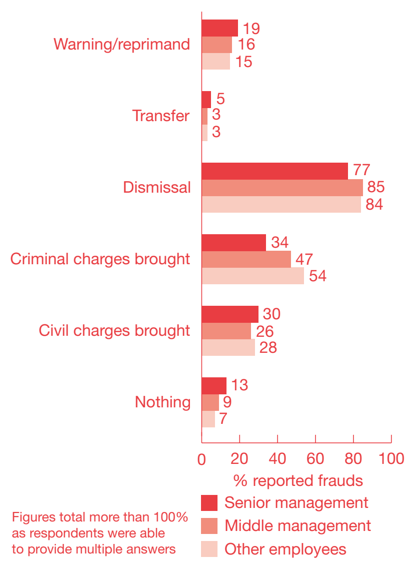
charges less frequently (34%)[25]. Senior managers may be treated more leniently for a number of reasons:

- To curb possible damage to the brand or reputation of the company
- To avoid enquiries into the capabilities and character of the senior management group
- To prevent demoralisation of staff
- To prevent senior staff from being diverted into investigation activities

However, in almost a third of cases, private, civil charges were brought against senior management, showing that some companies, at least, do take seriously the need to recover lost assets.

In our experience, the threat of severe penalty is not a sufficient deterrent to individuals committing fraud. Rather, potential fraudsters are deterred by a respect for the company's brand and the expectation that plentiful, sophisticated control systems are likely to detect their crimes. In addition, a consistency in dealing with frauds when detected, whether by internal censure or criminal prosecution, is of primary importance, no matter what the staff grade. In our experience, signs of favouritism in responding to incidents can lead to a rapid drop in staff morale and the possibility of further, associated problems.

Figure 19: Actions brought against fraudsters



Figures total more than 100% as respondents were able to provide multiple answers

While many companies – unless governed by a legal requirement – would not choose to involve the law enforcement agencies because of potential 'collateral damage', our research reveals that those companies that did involve them actually reported suffering less 'collateral damage'. This may be in part due to the recent focus on good corporate governance and the desire of companies to show regulators and stakeholders that they can self-govern in such matters: By instigating an investigation, the company reassures stakeholders that it pays significant attention to good governance and ethics.

6.1 Recovery of stolen assets

Besides deterring other fraudsters with a prompt and decisive response, recovering financial losses is another important aim for companies – and, compared to the 2003 survey, companies were more successful in this respect: 47% recovered at least part of their losses, with 27% achieving a recovery rate of more than 60% of their lost or misappropriated assets. Results for recovering assets were worst in South & Central America and Central & Eastern Europe (both with 63% of companies recovering nothing), whilst North America recorded the best results with 38% of

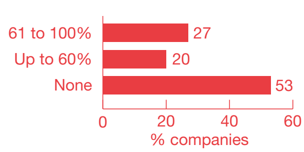
25 When it came to uncovering frauds perpetrated by another organisation, companies had fewer qualms about bringing criminal actions. Where only 34% of companies brought criminal charges against their own senior management, 63% of companies reported referring for prosecution the senior management of another company involved in fraud against them.

Fraudsters within senior management were reported not only to have been dismissed less frequently than other grades of staff, but also to have been subject to criminal charges less frequently

companies recording recoveries in excess of 61% of their lost assets.

The recovery rate for fraud can be increased significantly by insurance. Almost half the companies that reported suffering fraud (49%) had taken out insurance to cover for economic crime losses, with above-average numbers in Africa and North America (around 73%) and in companies with a domestic workforce in excess of 5,000 (58%).

Figure 20: Amount of lost assets recovered

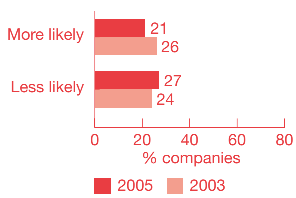


In the case of companies who had taken out insurance, the rate of at least partial recovery increased to 59% – and for those that involved external investigators (whether lawyers or forensic accountants), this number increased to 66%. 37% were even able to recover more than 60% of their financial losses. In contrast to this, only 18% of companies without insurance managed to recover more than 60% of their losses.

7 Fraud in the future: an illusion of safety?

Despite the fact that the number of reported cases seems to have grown, companies' concerns over the likelihood of falling victim to fraud have fallen since 2003.

Figure 21: Perceived threat of suffering fraud over 5 years



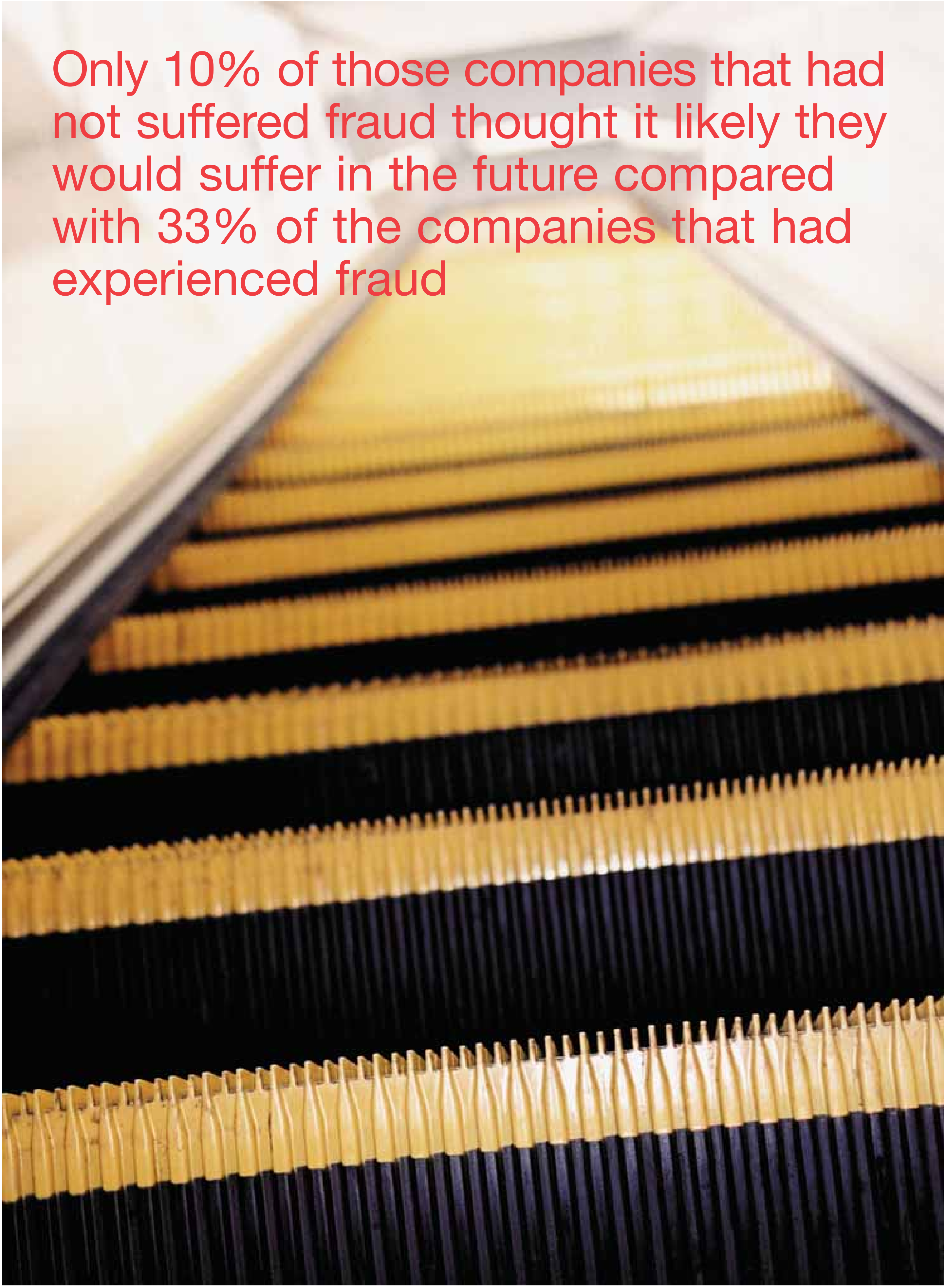
Our research shows that only 21% of companies consider it more likely that they will be victims of fraud over the next five years – a drop of five percentage points from 2003. This change in statistics appears to reflect companies' increasing confidence in their risk management systems. In our opinion this may well be a sign of over-confidence.

Companies that had not suffered fraud during the past two years considered themselves better informed about the causes of fraud and measures to prevent it than those that had been defrauded. Moreover, these same companies also reported having fewer control and prevention measures in place than those that had suffered fraud, making them less well prepared to tackle future risks. This statistic is emphasised by their confidence in their future safety. Only 10% of those companies that had not suffered fraud thought it likely they would suffer in the future compared with 33% of the companies that had experienced fraud.

In our opinion, it is this latter group that is best prepared to face the future. With an increased awareness of the risks, vigilance and preparedness, they will uncover more offences and minimise damage to a larger extent than those companies that consider themselves to be relatively safe.

The fight against fraud is a constant struggle. Despite the increase in the number of frauds being detected and the effectiveness of risk management systems being deployed, there are always individuals or groups of individuals who have an incentive and the ability to rationalise committing fraud and/or who are able to spot an opportunity to circumvent or override controls. Companies must not drop their guard, but must constantly develop controls and build on the loyalty of their employees to ensure that, even if it is impossible to eradicate fraud, they do not provide an environment in which it can flourish.

Only 10% of those companies that had not suffered fraud thought it likely they would suffer in the future compared with 33% of the companies that had experienced fraud



8 Demographics

8.1 Methodology

This is the third PwC Economic Crime Survey and was conducted on behalf of PricewaterhouseCoopers and the University of Halle-Wittenberg by TNS-Emnid in Germany.

The survey was conducted in 34 countries between May and September 2005. Over 3,634 computer-assisted telephone interviews were conducted with CEOs, CFOs and other executives who claimed responsibility for crime prevention and detection within their respective companies. More than half of the respondents (52%) are members of the executive board or company management; 43% stated that their main responsibility was in the field of finance.

The companies were randomly selected with preference given to the 1,000 largest companies of a country and the target number of respondents for each country was determined according to its GDP.

Each company was asked to respond to the questions with regard to (a) their company in (b) the country in which the interviewee was located. The interviews were undertaken in the native language of each country by native speakers, all of whom had been trained in the specific terminology around fraud, as well as fraud's various forms and impact.

The questionnaire was devised jointly by PricewaterhouseCoopers and the Economy and Crime Research Center at Martin-Luther University, Halle-Wittenberg. The report contains a review of the results from 1,821 cases of fraud reported by 1,321 companies. This enabled the analysis of their experiences of fraud, its causes and losses, corporate responses and recovery actions and the effectiveness of fraud prevention measures.

Due to the diverse descriptions of individual types of economic crime in countries' legal statutes, we developed the following categories for the purposes of this survey. The descriptions were read to each of the respondents at the start of the survey to ensure consistency.

Economic Crime or Fraud	Generic terms used in this survey to denote wrongful or criminal activities to or in an organisation, intended to result in the gain of money or benefits for the perpetrator(s).
Asset Misappropriation (inc. embezzlement by employees)	The theft of company assets (including monetary assets/cash or supplies and equipment) by company directors, others in fiduciary positions or an employee for their own benefit.
False Pretences (inc. Confidence Game)	The intentional action of a perpetrator to deceive those in fiduciary positions and make a personal or financial gain.
Financial Misrepresentation	Company accounts are altered or presented in such a way that they do not reflect the true value or financial activities of the company.
Corruption & Bribery (inc. racketeering & extortion)	Typically, the unlawful use of an official position to gain an advantage in contravention of duty. This can involve the promise of an economic benefit or other favour, the use of intimidation or blackmail. It can also refer to the acceptance of such inducements.
Insider Trading *(only asked to listed companies)*	Trading of securities by a person inside a company based on non-public information.
Money Laundering	Actions intended to legitimise the proceeds of crime by disguising their true origin.
Counterfeiting (inc. product piracy, industrial espionage)	This includes the illegal copying and/or distribution of fake goods in breach of patent or copyright, and the creation of false currency notes and coins with the intention of passing them off as genuine. It also includes the illegal acquisition of trade secrets or company information.

8.2 The Global Economic Crime Survey Editorial Board

The Global Economic Crime Survey 2005 editorial board consisted of the following individuals:

PricewaterhouseCoopers Dispute Analysis & Investigations' Practice

- Claudia Nestler, Partner, Germany Leader and Survey Sponsor
- Steven Skalak, Partner, Global & US Investigations Leader
- Chuck Hacker, Partner, US
- James Parker, Global Associate Marketing Director
- John Wilkinson, Partner, Eurofirm and Switzerland Leader
- Rick Helsby, Partner, Russia Leader
- Tony Parton, Partner, Asia-Pacific and Hong Kong/China Leader

Martin Luther University, Halle-Wittenberg

- Prof. Dr. Kai Bussmann, Chair of Criminology and Penal Law, (Halle/S., Germany)
- Markus Werle, Economy and Crime Research Center (Halle & Berlin, Germany)

TNS Emnid (Bielefeld, Germany)

- Oliver Krieg, Director Social & Opinion

Particular thanks in compiling this report are also due to the following at PricewaterhouseCoopers: Denise Browne, Victoria McConnell, Alison Blair, Lynne Rainey, Jane Kotecha and Jennifer Cibinic

Western Europe	**1778**
Austria	75
Belgium	77
Denmark	75
France	150
Germany*	400
Italy	150
Netherlands	151
Norway	100
Spain	100
Sweden	75
Switzerland	125
UK*	300
Central & Eastern Europe	**476**
Czech Republic	75
Hungary	75
Poland	101
Romania	75
Russia	75
Bulgaria	75
South & Central America	**226**
Argentina	75
Brazil	75
Mexico	76
North America	**250**
Canada	100
USA	150
Asia & Pacific	**729**
Hong Kong	101
India	75
Indonesia	75
Japan	101
Malaysia	100
Thailand	101
Singapore	75
Australia	101
Africa	**175**
East Africa (Kenya, Tanzania)	75
South Africa	100
TOTAL	**3634**

* Weighted in the statistics to the country's target number according to its GDP

Figure 22: size of participating organisations

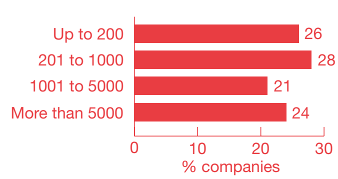
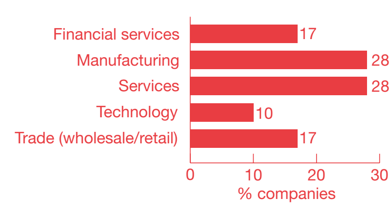


Figure 23: industry groups participating



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