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## **A Review of Research into the Phenomenon of Fraud and Abuse in the Modern Economy: The Scale of the Problem and the Prospects for Counteracting**

### **Abstract**

*Objective:* The phenomenon of fraud and abuse is currently one of the greatest threats to the effective functioning of organisations. The purpose of this article is to assess the scale of the fraud phenomenon, taking into account the main types of fraud and their perpetrators. The paper also presents the anti-fraud mechanism used by organisations to reduce the risk of fraud and abuse over the past years. Based on the results of the study, conclusions have been formulated.

*Research Design & Methods:* This article uses a combination of quantitative and qualitative methods to describe the development of the phenomenon of fraud and abuse.

*Findings:* The analysis undertaken in the article showed that among anti-fraud controls, the whistleblowing tool has the highest effectiveness. In contrast, among the perpetrators of fraud, the highest percentage is taken by the employees of the organisation. The study also showed the progress of companies in implementing anti-fraud mechanisms when compared to previous years. However, it is still not sufficient enough to effectively reduce the rate of growth of committed fraud and abuse.

*Implications / Recommendations:* The discussion undertaken in the publication around the development of fraud and abuse indicated that the implementation of appropriate control mechanisms is essential to reduce this phenomenon. Technological advances are giving fraudsters much greater opportunities, which means that anti-fraud mechanisms will prove insufficient in the long run. It is, therefore, necessary to better adjust anti-fraud control mechanisms to the organisational structure as well as its level of culture and ethical maturity. This should be accompanied by legal initiatives at the national and international level, such as sanctioning mandatory reporting in this regard by entities.

*Contribution / Value Added:* The phenomenon of fraud and abuse is a significant problem for the development of organisations. Meanwhile, the controls to reduce it are still insufficient. Organisations should put much more emphasis not only on implementing anti-fraud controls, but also on monitoring their effectiveness. Legal support aimed at creating tighter anti-fraud systems is also necessary.

*Keywords:* bribery, fraud, anti-fraud mechanism

*Article classification:* theoretical/review paper

*JEL classification:* D81, D82, G31, G38

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## Introduction

Today, the phenomenon of fraud and abuse is an inherent part of the economy and a threat to its proper functioning. Fraud causes huge losses to businesses and the state budget distorts market competition and lowers staff morale. This phenomenon is facilitated by ubiquitous globalisation, the development of information technology, as well as new possibilities to communicate and establish transactions. This means that organisations' anti-fraud systems cannot keep up with the advances in fraud techniques. Control mechanisms are proving not only insufficient, but also too weak in the face of fraudulent practices. The largest percentage of fraud is that of occupational fraud committed by employees, i.e., by those who are most familiar with the specifics and weaknesses of the institution's operations. The costs of fraud are not easy to quantify, as, in many cases, the fraud goes undetected or unreported. Meanwhile, the phenomenon of fraud and abuse has been on an upward trend over the years, which is confirmed by numerous reports, including international studies (see, e.g., ACFE, 2022; ZPF, 2022; PwC, 2022). In addition, a significant problem involves the passivity of businesses towards fraud risk management and their failure to take monitoring measures that are adequate to the scale of the phenomenon. Apart from establishing controls, these entities do not report the results and effects of their application. Another issue may be that they do not exploit the potential of the anti-fraud systems they implement, or the poor quality of the controls.

This article undertakes a consideration of the causes of the growing scale of fraud and abuse, taking into account the types of fraudsters and their perpetrators. It also describes the types and nature of anti-fraud controls implemented in companies and the scale of their development. Based on the results of the analysis, a discussion has been undertaken and conclusions formulated.

## Literature review

The phenomenon of fraud and abuse has existed for centuries. However, it was only in the 21<sup>st</sup> century when fraud became a severe problem for the economy, and the access to information about it became so widespread that the interest in the subject increased. E. H. Sutherland (1949) made a significant contribution to the fraud and abuse theory (Benson & Simpson, 2009; Simpson, 2019). He described the theory of differential association, which assumed that criminal behaviour is learned (Douglas & Douglas, 2006). Sutherland's research had a significant impact on the development of perceptions of the issue of fraud. As a result, the approach to the perception of fraud changed. Researchers began to concentrate on identifying the reasons for a crime based on the nature of the perpetrator (van Onna et al., 2014). In addition, Sutherland (1949) pointed out that there is a certain relationship between human behaviours, namely that dishonest employees and their unethical behaviours affect the honest ones, and *vice versa* (Bugdol, 2007). Research was also undertaken into the scale of fraud, its types, and the methods and techniques used to reduce it (Wells, 2007; Bales & Fox, 2011; Trompeter et al., 2013; Anand et al., 2015; Sandhu, 2022). Literature on the subject presents case studies of famous frauds (Surdykowska, 2012) or the motives behind the committed frauds (Free, 2015; Homer, 2020; Rustiarini et al., 2019; Scheaf & Wood, 2022), as well as a number of studies on the development of the phenomenon (EY, PwC, Deloitte, ACFE). Unfortunately, despite significant advances in the development of the fraud theory, as well as the presentation of the undertaken research, the phenomenon is constantly

evolving. The reasons for this can be attributed to the progressive development of economies, the accompanying crises, or the increasing pressure of society.

The reasons for the growing scale of fraud include both social, economic, and legal factors, as well as those on the part of companies. The former are shaped by the prevailing national and international socio-economic situation. This has a significant impact on the measures taken against fraud risks in the form of legislation and the development of guidelines or standards. The latter factors depend on the organisation and the culture of organisational behaviour. They have an influence on the estimation of the likelihood and degree of fraud risks based on the specifics of the undertaken activities and the disposition of assets. The subject of this article is precisely about those factors conditioned by companies, as they have the ultimate influence on the design of fraud risk management policies (Erbuga, 2020). The literature emphasises the particular importance of developing an ethical and compliance culture within the organisation (Pfister, 2009; Saluja et al., 2022). These are important in minimising fraud risk. Therefore, an organisation's cultural environment plays a significant role. Its appropriate formation influences a number of actions taken to mitigate the risk of fraud. Actions taken to implement procedures and guidelines shape the anti-fraud system (Norman et al., 2010). These include, in particular: internal control system, reporting mechanism, clear lines of authority, employee fraud education, independent checks/audits, competent personnel in oversight roles, tone at the top, management review. The lack of these mechanisms can significantly undermine an organisation's effectiveness (Dewi, 2017; Jalil, 2018). In addition, it can be the cause of ineffective measures taken against fraud risk mitigation (Sadgali et al., 2019). Meanwhile, most of these mechanisms, if implemented, can be insufficient or too weak to minimise the likelihood and effect of fraud risk. This is confirmed by ongoing research and the increasing scale of fraud.

## Research methodology

The purpose of this article is to analyse the development of fraud and abuse. It presents the types of committed fraud, the perpetrators of fraud, and the anti-fraud controls that are used in organisations. The primary research method was an analysis of both quantitative and qualitative character. The article uses data published since 2002 by the American Association of Certified Fraud Examiners (ACFE) as well as data published by the EY Poland in its 2020 report. It contained information on the use of fraud and abuse detection mechanisms in selected financial institutions in Poland in the period of 2019–2020.

The results of the survey were used to assess the degree of the use of anti-fraud controls in organisations. The paper is a continuation of a series of articles on fraud and abuse in companies, the tools used in their mitigation, and the disclosure of information about them.

## Results

Economic abuse can be considered from a number of points of view. They can be divided according to the type of fraud committed, the nature of the damage, the degree of detection, or the persons involved (Kutera, 2008). Globally, the most popular classification is based on the subject criterion. This classification was developed by the ACFE organisation. It has developed an occupational fraud and abuse classification system, the so-called "fraud tree" (ACFE, 2022a). It identifies three main categories for the division of fraud: corruption, asset misappropriation, and

financial statement fraud. Corruption frauds include understatement, bribery, illegal gratuities, and economic extortion. A misappropriation of assets includes cash and inventory, and all other assets. Financial fraud, on the other hand, includes net worth, net income, and overstatement or undervaluation (ACFE, 2022a, 2022b). Table 1 shows the scale of fraud according to its types.

Table 1. Percentage of fraud committed by fraud group between 2002 and 2022

| Type/group of fraud    | 2002 | 2004 | 2006 | 2008 | 2010 | 2012 | 2014 | 2016 | 2018 | 2020 | 2022 |
|------------------------|------|------|------|------|------|------|------|------|------|------|------|
| Corruption             | 12.8 | 30.1 | 30.8 | 26.9 | 32.8 | 33.4 | 36.8 | 35.4 | 38   | 43   | 50   |
| Asset misappropriation | 85.7 | 92.7 | 91.5 | 88.7 | 86.3 | 86.7 | 85.4 | 83.5 | 89   | 86   | 86   |
| Financial statement    | 5.1  | 7.9  | 10.6 | 10.3 | 4.8  | 9.6  | 9    | 7.6  | 10   | 10   | 9    |

Source: ACFE, 2022a.

The data included in the table shows that the largest number of fraud cases are committed in the area of asset misappropriation fraud. The smallest percentage comes from the area of financial statement fraud. While the level of both types of indicated fraud has remained almost unchanged since 2012, the risk of corruption is on an upward trend. Among the potential perpetrators of fraud, the literature identifies the following groups of people: senior and middle management, employees, accountants, customers, other people from outside the organisation, and organised crime groups (Kutera, 2008). The analysed data indicates that anyone can be a fraudster. However, the largest percentage of fraudsters are company employees; they have a much greater and better knowledge of the company’s procedures than an external customer. Figure 1 shows the evolution of fraudulent acts committed by potential perpetrators.

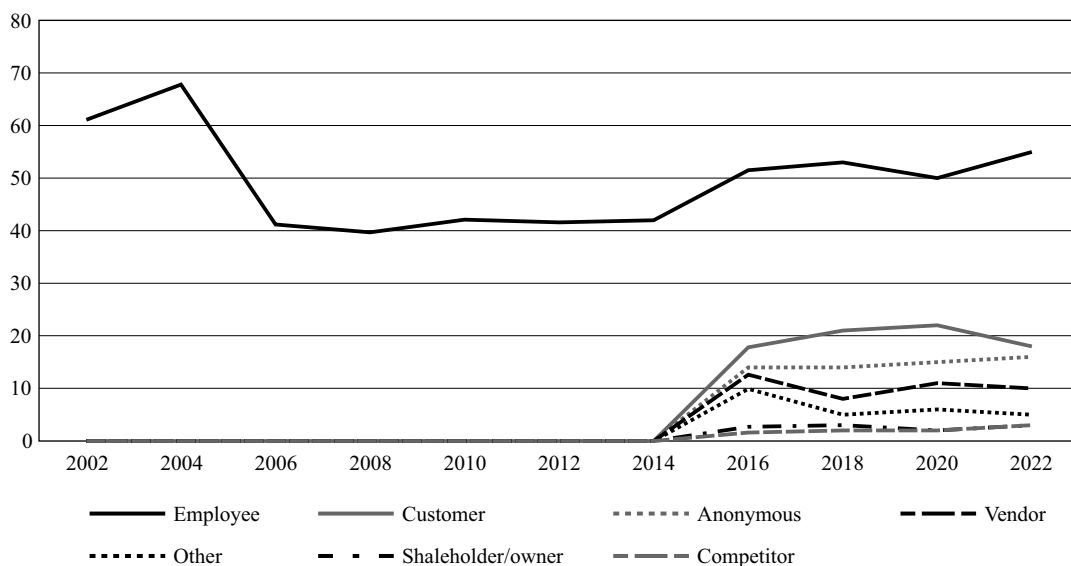


Figure 1. Perpetrators of professional fraud between 2002 and 2022

Source: own elaboration based on ACFE, 2022a.

The data in the figure shows that, amongst the identified perpetrators, employees of the organisation commit the highest proportion of fraud. Employee fraud, also known as professional fraud, refers to the act of an employee to enrich himself/herself or to gain other financial or personal benefits to the detriment of the organisation. Data shows that employee fraud is one of the costliest financial crimes.

Fraud is a long-term process; it is not a one-off activity. For example, research confirms that the duration of professional fraud ranges from 12 to 60 months and even up to 10 years (ACFE, 2022a, 2022b). Thus, this indicates that the preparation for committing a fraudulent act is a very meticulous process that requires a significant commitment on the part of the perpetrator. It includes not only an analysis of the possibilities, but also of the weaknesses of the organisation. Therefore, employees and management members are the biggest potential perpetrators, because they know the organisation best. With this assumption, customers are certainly a smaller threat to the company, but they cannot be ignored. They tend to exploit system or legal loopholes to gain possible benefits. The motives for committing fraud are attributed to psychological and economic factors, but issues such as knowledge of the organisation, its weaknesses, and system gaps increase the success of the fraud.

The preparation of the perpetrator to commit fraud is the point at which the organisation should start to have the right tools in place to prevent the perpetrator from seeing weaknesses in the systems. Monitoring tools should have the most significant role; their function is to raise the awareness of the potential perpetrator through signalling that every operation and transaction is subject to verification and double-checking. Evoking in employees a feeling that internal audit annually evaluates processes with the highest probability of fraud risk, the management oversees and fosters the right ethical attitude by pointing out unethical acts; they know how to admit a mistake, rectify it, and approach their duties with full responsibility for their actions (tone of the top). Only when all these elements are working properly and are consistent, do they constitute an effective barrier for fraud perpetrators. Hence, organisations and their boards of directors have a very important role in shaping the anti-fraud system. It is worth emphasising that the application of appropriate and effective fraud risk mitigation tools is not an impossible matter, but this requires commitment and appropriate knowledge, as well as continuous improvement of these tools.

Taking into account the described development of fraud and its greatest concentration on employee or professional fraud, it is necessary to take applied measures to reduce the likelihood of such events occurring. Research indicates that the mechanisms by which professional fraud is most frequently detected involve: whistleblowers, internal audit, management review, 'by accident' tools, and other sources. The degree to which these are implemented in entities has been assessed based on the research conducted by the ACFE (2022a, 2022b). The results are shown in Figure 2.

The data in the figure shows that tip tools are the most common and effective method of detecting fraud. It is noteworthy that slightly more than 40% of all cases were detected through tips, and almost half of these were disclosed by employees (ACFE, 2022a). Tips are a form of whistleblowing, so they provide information about a potential threat. Tip information can be shared via hotline, anonymously, or overtly. The choice of channel depends on the methods made available by the organisation and the decision of the whistleblowers themselves. Among the identified tools, internal auditing is also highly effective. Tools such as 'management review' and 'by accident' show slightly lower effectiveness. It is worth noting that the other control tools seem to be on an increasing trend; they include external audit, account reconciliation, document examination, surveillance/monitoring, notifications by law enforcement, IT controls, confession.

Therefore, the question must be asked whether the controls analysed over the period of 2002–2022 are slowly beginning to be replaced by other tools, i.e. more modern ones, taking into account socio-economic progress. The basic tools will not lose their relevance, but taking into consideration the progressive development of technology, companies, and fraudsters, the implementation of new mechanisms should give companies greater advantages in reducing fraud.

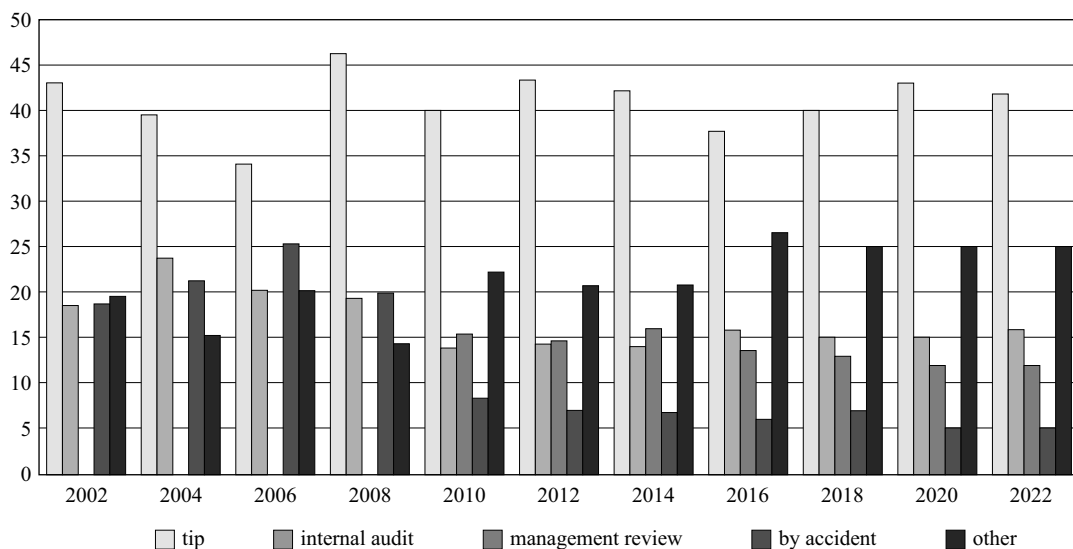


Figure 2. Scale of use of fraud detection tools between 2002 and 2022

Source: own elaboration based on ACFE, 2022a.

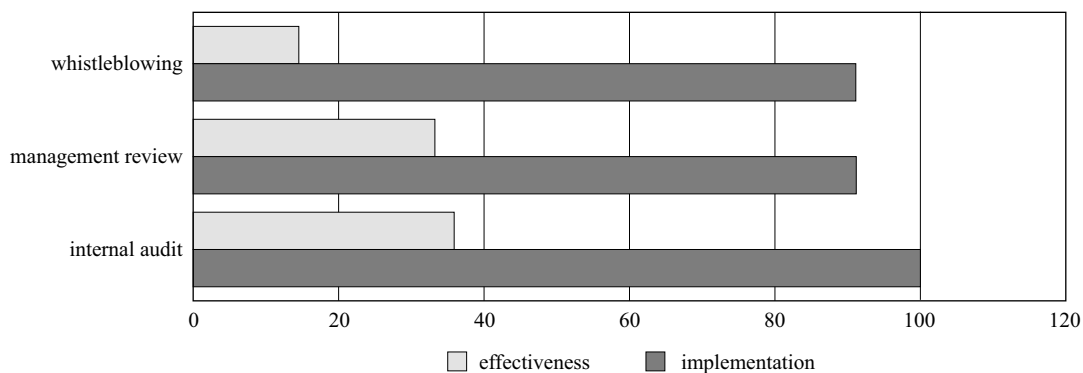


Figure 3. Application of fraud and abuse detection mechanisms in selected financial institutions during the period from 2019 to 2020

Source: own compilation based on EY Poland (2020), Financial Sector Fraud Survey 2020, Association of Financial Enterprises, available at: [https://assets.ey.com/content/dam/ey-sites/ey-com/pl\\_pl/news/2020/10/ey-raportnaduzycia-2020.pdf](https://assets.ey.com/content/dam/ey-sites/ey-com/pl_pl/news/2020/10/ey-raportnaduzycia-2020.pdf) (ac-cessed: 17.08.2022).

Taking the Polish financial sector as an example, an assessment of the fraud mitigation mechanisms in place was carried out by the EY institution. The study covered the years 2019–

2020 and addressed the use and effectiveness of selected fraud detection mechanisms. The results of the survey are shown in Figure 3 and relate to the already analysed selected tools. Research does not include the ‘by accident’ tool.

The study showed that financial entities use the internal audit mechanism, management review, and whistleblowing. However, it is worth pointing out that in the case of the banking sector, which is part of the financial sector, such an action is due to legal regulations. Despite the widespread use of these tools, the results of the study reveal that they have low efficiency in detecting fraud.

The use of mechanisms to detect fraud and abuse was also analysed for Polish market players. As in previous analyses, the subject of the study was the use of four main tools, i.e. tip, internal audit, management review, and ‘by accident’ tools. The tip tool was classified as an implementation of the whistleblowing tool. The ‘by accident’ detection method was also not referenced, which results from the fact that entities do not include such mechanisms in their reports. The survey covered entities listed on the Warsaw Stock Exchange, included in the WIG20 index, i.e. those that publish financial and non-financial information on their operations, as well as the anti-fraud tools they use. While risk mitigation tools are disclosed, these entities do not show an assessment of the effectiveness of fraud detection mechanisms. Hence, Figure 4 only shows the use of fraud detection mechanisms such as whistleblowing, internal audit, and management review. The assessment covers the period 2017–2021.

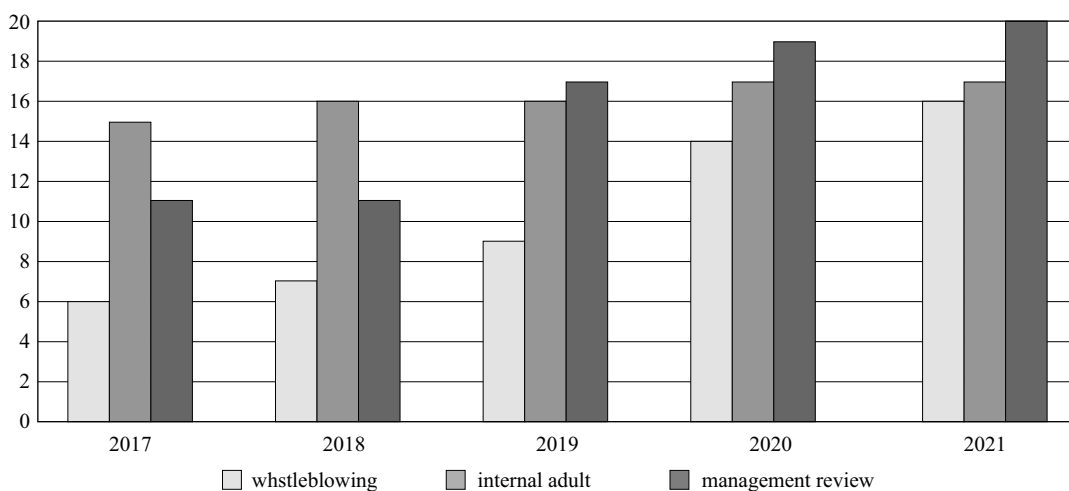


Figure 4. Application of the main fraud detection mechanisms in WIG20 Index entities in the period of 2017–2021

Source: own elaboration based on reports and statements on non-financial information published in 2017–2021 by companies included in the Index WIG20.

Among the surveyed market entities, the internal audit tool is the most popular, followed by whistleblowing and management review. With regard to whistleblowing, it should be noted that procedures for its implementation have been established in most of the entities. Unfortunately, the level of their detail and the use of whistleblowing channels vary. Published information in this regard is incomplete. As in the management review mechanism, entities do not always

indicate the use of this tool for risk mitigation. It is worth mentioning that the level of application of the main tools for the surveyed group of entities is relatively high. However, entities do not publish information on the effectiveness of their application. Only a few companies indicate the number of reported frauds as a result of implementing whistleblowing, which does not provide information on its effectiveness in reducing the risk of fraud.

The results of the presented analyses show that entities are implementing fraud detection mechanisms. However, in most cases, these are selected main tools. There is a lack of certain innovations in this area, which organisations should strive for. Despite the fact that the conducted analyses concern different groups of organisations as well as different periods, an improving trend in the use of anti-frauds mechanisms is noticeable. Due to the lack of sufficient information and research, it is difficult to take a clear position on their effectiveness. The effectiveness of these tools is studied by external national and international institutions. Companies do not report on the effectiveness of the implemented fraud detection tools. Therefore, given the growing scale of fraud, the effectiveness of these mechanisms can be questioned.

## **Concluding remarks**

The threat of fraud is one of the most common management challenges faced by organisations regardless of size, industry, or location. Having proper internal control procedures that include an adequate risk response plan is fundamental in the fight against fraud. However, in addition to implementing mechanisms for mitigating the risk of fraud, it is essential to implement fraud detection tools. Unfortunately, their catalogue is limited. According to research conducted by the ACFE (2022a, 2022b), the tool associated with obtaining whistleblowing tips has the highest effectiveness. It is the employees of the organisation who account for the highest number of fraud perpetrators, as well as whistleblowers. Thus, we have a situation in which an employee is not only a perpetrator of fraudulent acts, but can also be a whistleblower of information regarding the committing of a fraudulent act. Thus, this is the person who has the most knowledge. The question then arises about how he/she will use this knowledge, i.e. whether that will be for personal gain or in the name of protecting the institution and its assets. The dilemmas that occur are of an ethical and moral nature. They also depend on the situation of the enterprise, economic factors, and the motives behind the actions. All these shape the employee's attitude towards the organisation.

Another problem is the provisions of the EU law that go out to whistleblowers and oblige entities to implement procedures for their protection. This is very important, necessary, and can significantly contribute to the detection of abuse. However, it should not be forgotten that as a human being, a person is difficult to diagnose. This means that he/she will report irregularities or fraud to gain appropriate protection and divert attention from his/her own illegal acts. To mitigate this risk, it is necessary to ensure adequate whistleblowing procedures and establish a system for monitoring them. Other tools for detecting wrongdoing applied in the organisation can be used for this purpose. It is always necessary to consider the advantage of eliminating or reducing a fraudulent act over the negative side of using a particular mechanism. In order to increase fraud detection at the organisational level, it is also necessary to tighten internal control systems, which involves extensive monitoring. This is essential, because the controls in place can already be insufficient or too weak to curb fraud. Moreover, this makes sense given the advances in the development of fraudulent methods and techniques. This is confirmed by the results of studies conducted at the national and international levels of research on fraud.



In summary, economic fraud is now a major problem affecting the entire world. The scale of this phenomenon and the extent of the damage experienced by companies affected by fraud are significant. The damage is not only financial, but also concerns non-financial losses. Economic crimes can take many forms. It is, therefore, extremely important to consciously manage the risk of fraud, as well as to adopt appropriate methods for its disclosure. Studies have shown that there is visible progress in the implementation of anti-fraud mechanism when compared to previous years, but it is still not enough to effectively reduce the rate of growth of a committed fraud and abuse. Part of the problem accompanying this phenomenon is the apathy of businesses. It is related to the fact that many organisations are not doing enough to prevent and report fraud, and management does not care sufficiently to set the right tone to promote a culture of honesty and ethical behaviour. In addition, taking into account the changing socio-economic conditions, it should be pointed out that the risk of fraud is growing faster than the development of anti-fraud mechanism is progressing.

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### **Research Ethics Committee**

Not applicable.

### **Conflicts of Interest**

The author/authors declare no conflict of interest.

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### **Data Availability Statement**

All data will be available and shared upon request.

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