

# TRANSFORMATIONAL RESEARCH OF THE FRAUD TRIANGLE

Jonas Mackevičius, Lukas Giriūnas\*

*Vilnius University, Lithuania*

---

**Abstract.** *Fraud is one of the most negative factors of society. Because of frauds, some companies experience many financial and even business continuity problems. The article analyses the theory of the fraud triangle and its transformation into a square. Their various elements – motives, possibilities, pressure, rationalisation, incentive and others – suggested by different authors are presented. The article provides a theoretical analysis of fraud scales and their elements: motives, conditions, possibilities, and performance.*

**Key words:** *fraud triangle, motives for fraud, fraud scales*

---

## Introduction

Fraud is one of the most negative factors of society; it had appeared in ancient times and has not disappeared to this day. In today's environment, dominated by democratic, high-tech and information systems, not only the number of the executed frauds has increased, but also their volume; there have also emerged new types of fraud, fraud-committing, and evasion techniques that have been completely unknown before (Mackevičius, Bartaška, 2003; Mackevičius, 2012). As a consequence, individuals who commit fraud are constantly searching for more efficient, more sophisticated methods of fraud by thoroughly investigating the company's internal and external environment, accounting and internal control systems, by analysing the company's financial condition and results of operation, and by evaluating a number of other factors. It should be noted that fraud causes damage not only to a particular company, but also to all parties involved – investors, suppliers, banks, and insurance companies.

Fraud has never been such a serious threat to the global financial system as it is at present due to the increasing number of factors that determine the occurrence of fraud, such as the globalization of financial flows and markets, Internet usage, conscious corporate bankruptcies, merging and division of companies, constantly growing competition, political and economic factors in other countries (Lakis, 2008; Mackevičius, 2012). For this

\* *Corresponding author:*

Faculty of Economics, Department of Accounting and Audit, Vilnius University  
Sauletekis Ave. 9, LT10222, Vilnius, Lithuania;  
E-mail: lukas.girunas@ef.vu.lt

reason, fraud has become a frequent topic not only in the scientific environment, but also has drawn the attention of internal and external auditors. Therefore, auditors, who play an important role in discovering employee-initiated frauds, are increasingly being asked by the company's management not only to detect, but also to help to avoid fraud. However, as practice shows, the identification of fraud is not an easy task; it requires detailed and specific knowledge of the company's economic activity, potential spheres for fraud occurrence and existence, and their character. However, as Rezaee (2002) states, not only researchers but also practitioners have a more important task – to prevent frauds from occurring; therefore, it is necessary to analyse thoroughly the reasons for their appearance and possible techniques for execution and hiding. For this reason, in 1973, Cressey, after examining the reasons why the company's employees tend to commit fraud, created the fraud triangle which has been extensively analysed and evaluated by various scholars. Critics of the fraud triangle, Kassem, Higson (2012), Anandarajan, Kleinman (2011), Charles, Christopher (2006), have argued that it cannot identify and explain the reasons for fraud appearance, because it ignores such factors as a fraudster's capability and skills. However, despite the existing contradictions, this issue is explored by many foreign and Lithuanian researchers, among whom should be mentioned Kanapickienė, Gipienė & Jefimovas (2004), Mackevičius (2005, 2012), Lakis (2008, 2012), Fedosiuk (2010), Ragauskienė & Mackevičius (2011), LaSalle (2007), Greenberg (1997, 2002), Albrecht (1982, 1984, 1995, 2011). However, until now, there remain many obscure questions that have not been addressed by these authors: what are the motives for fraud? Do they vary depending on the fraudster's sex? What are the reasons for the deficiency of the fraud triangle? When there is the highest risk of fraud execution? What are the usual conditions of fraud execution?

The object of the research is the theory of transformation of the fraud triangle.

The purpose of the research is to analyse the fraud triangle and its transformations and to create its improved version – the fraud scales.

The methods of the research include an analysis of scientific literature as well as gathering, organisation, comparison, elaboration, and generalisation of information.

## **1. Transformations of the fraud triangle and their analysis**

In the today's complex and competitive business environment, in order to objectively assess the current activities of the company and its prospects, it is very important to have as much as possible detailed information about the company's financial condition, results of operation, and cash flows. But frauds distort this information; as a result, wrong management decisions can be taken. Therefore, it is important to analyse not only the reasons, motives, opportunities, etc. for fraud, which are best reflected by the

so-called fraud triangle. Foreign researchers Biegelman & Bartow (2012), Pfister (2009) and the Association of Certified Fraud Examiners (ACFE) have grouped and presented the factors, appearance, and conditions of fraud in the form of the fraud triangle. This triangle consists of three elements – opportunity, motive, and realization. According to these authors, the existence of all these three elements creates favourable conditions for committing a fraud. However, in the scientific literature, elements of the fraud triangle are distinguished and identified differently. Bressler & Bressler (2007) have suggested to improve the fraud triangle and presented it in the form of a square. They identified four elements of the fraud square: incentive, opportunity, capability, and realization. The fraud triangle transformation is presented in Fig. 1.

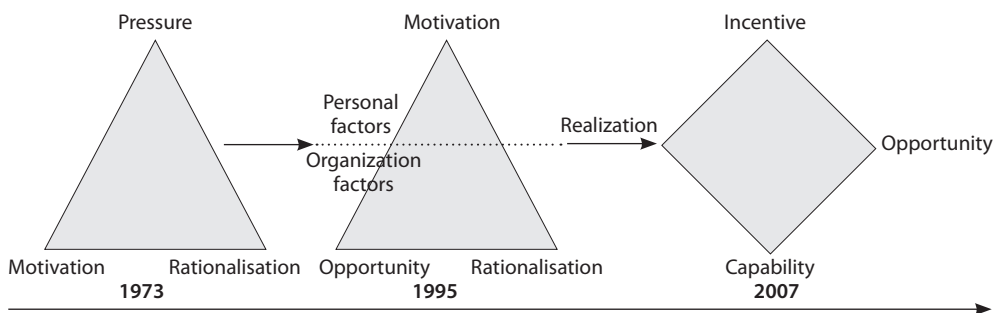


FIG. 1. Evolution of the fraud triangle

Source: compiled by authors with reference to Albrecht, Williams, Wernz (1995), Bressler, Bressler (2007), Cressey (1973).

Despite different attitudes towards the fraud triangle and its elements, suggested by different researchers, its essence remains unchanged for fifty years, and it just proves that the research of fraud was, is, and will be relevant in the future. Cressey (1973), who was the first to propose the fraud triangle, explained that the pressure to commit fraud can be identified with a person's internal motives, but he stressed that the presence of financial trouble does not mean that people will be inclined to commit fraud. He also stressed that the pressure can be of three types: a personal pressure to pay for the promoted lifestyle, pressure by the employer (company's management) to meet the interests of the company in spite of his / her own, and the external pressure. However, it should be noted that this list can be expanded to include other pressure describing variables such as debt, greed, a challenge or a strong desire to go against the system, dissatisfaction with wages and the like. In the scientific literature, all these variables are defined as the motive to commit fraud.

The second element of the fraud triangle is a possibility. Turner, Mock, Srivastava (2003) argue that even if a person has a motive, he cannot commit fraud if no possibilities are created, for example, if there is a poor job division, a large number of complex

transactions completed, a poor internal control, the audit is not performed on a regular basis, and the like. However, the authors believe that the possibility is mostly affected by a poor control of the company's assets, procedures and accounting, and if all the conditions for fraud are favourable to the employee, he will commit it if he will have another element of fraud triangle – realization. The latter, according to Duffield, Grabosky (2001), is often described as a kind of personal excuse for fraud-committing and is defined as “borrowing”, “no one will suffer”, “company executives deserve even more, because they exploit me”, “this is for a noble purpose”, etc.

However, in terms of the fraud triangle evolution or transformation, it should be noted that even though auditors cannot evaluate each individual's personal value system enterprise-wide, they can assess the overall company's culture; therefore, in 1995, the fraud triangle was much improved and divided into two parts in order to make it easier to distinguish between the elements of an employee and of the company. According to Albrecht et al. (2011), such cross-section of the fraud triangle will allow to assess whether there exists a direct correlation between the ability to commit a fraud and the company's ability to cover it up. However, it should be noted that such representation of the fraud triangle, even though it played a role in its perception, it still has not been widely applied in practice or research. Later, the fraud square took a slightly different shade and is still widely considered by practitioners and researchers. The first authors, Bressler & Bressler (2007), proposed the idea of the fraud square by claiming that the triangle is not sufficiently detailed because it lacks a crucial element – capabilities: not every person who has the motivation, opportunities, and realization may decide to commit fraud due to the lack of the capability to carry it out or to conceal it. According to Albrecht, Williams, Wernz (1995), this element is particularly important when it concerns a large-scale or long-term fraud. Furthermore, the authors believe that only the person who has an extremely high capacity will be smart enough to understand the existing internal control, to identify its weaknesses and to use them in planning the implementation of fraud. However, it should be noted that the fraud square has a few drawbacks, namely it does not reflect the conditions under which it is the easiest to commit fraud and persons' abilities to commit a fraud, it does not reveal when there is the greatest risk of fraud, it does not take into account the role of the internal control system in assessing and detecting fraud and, therefore, it is appropriate to correct this deficiency by creating fraud scales. Therefore, we propose an improved version of the fraud square – the fraud scales.

## **2. Fraud scales and their elements**

The elements of the fraud scales are the following: motives, conditions, capabilities and fulfilment. All of them are closely related to the internal control system (Fig. 2).

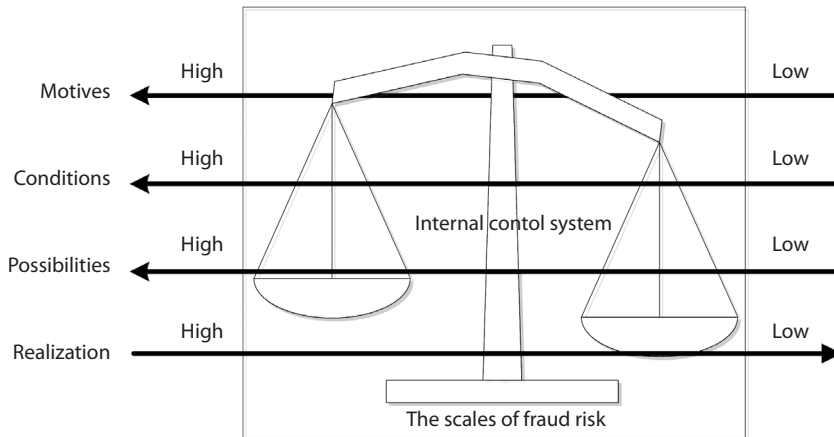


FIG. 2. The scales of evaluating the components of the fraud risk

Source: compiled by authors.

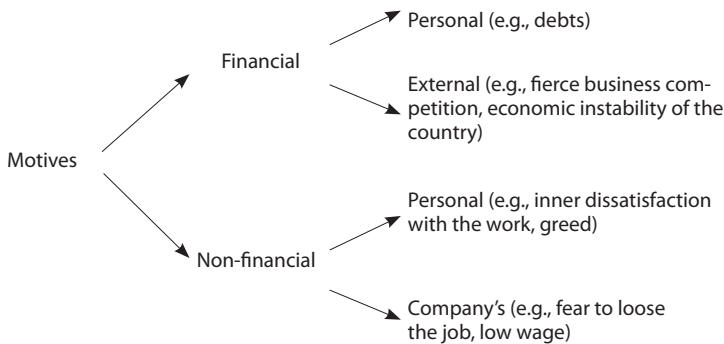


FIG. 3. Classification of motives for fraud-committing

Source: compiled by authors with reference to Rezaee (2005), Yu, F., Yu, X. (2011), Duffield, Grabosky (2001).

The first element of the fraud scales is the motive. It determines whether an employee tends to behave unfairly and why. The motive is often associated with greed and some circumstances in life, such as a sudden need of financial resources, which is influenced by debts, bad credits taken, drugs, alcohol or gambling, personal problems in the family, and the like. In the most general sense, the motive is seen as an incentive reason, the force, the operating basis (Dabartinės lietuvių kalbos žodynas, 1993, p. 408). Motives for fraud are numerous and varying, their list is quite large. Analysis of different literature showed that the most recurrent motives for fraud are gain, different types of addictions, dissatisfaction with the work, dissatisfaction with the leaders, health problems. Thus, motives for fraud-committing can be divided into two groups – financial and non-financial (see Fig. 3).

Figure 3 shows that motives for fraud may be economic, ideological, psychological or purely personal, and all of them can be attributed to a financial or non-financial motivation. It should be noted that the motives for fraud can be also classified by age or gender. Data in Table 1 show that men's main motives for frauds are economic, different types of addictions (alcohol, drugs, gambling, etc.), dissatisfaction with the work and the leaders, and the reputation of being a loser and underestimated. Women often decide to commit a fraud on the basis of their emotions and solving their personal problems (health, household, love, etc.). They can commit some frauds encouraged by hatred, pride, revenge against certain individuals, seeking to punish the employer, etc. (Table 1).

TABLE 1. The motives for fraud by fraudster's sex

Motives for fraud	Men	Women
1. Gain	X	
2. Addiction to alcohol, drugs, gambling	X	
3. Dissatisfaction with the work	X	X
4. Dissatisfaction with the head	X	X
5. Reputation of being underestimated	X	X
6. Reputation of being a loser, incompetent	X	
7. Fear to lose a job	X	X
8. Envy		X
9. Anger		X
10. Revenge		X
11. Greed	X	X
12. Hatred		X
13. Pride		X
14. Prejudice	X	X
15. Distrust		X
16. Laziness	X	
17. Dissatisfaction with the wage	X	X
18. Health problems		X
19. Household problems	X	X
20. Insecurity and possibilities of various losses		X
21. Striving to punish the employer	X	X
22. Political motives	X	

Source: compiled by authors with reference to Kabašinskas, Toliatienė (1997), Mackevičius (2001), Giriūnas (2011), Greenberg (1997, 2002), Rezaee (2002, 2005), Pfister (2009), data of questionnaire-based surveys.

It should be noted that there is a direct correlation between the age of employees who are engaged in fraud and the size and volume of fraud which is measured in monetary terms. Thus, the lower is the age of the employees the smaller are the company's losses, but this factor is also determined by the fact that older employees are usually more fa-

miliar with the work environment, have a better understanding of deficiencies in internal control, i.e. they see more opportunities for fraud and have more skills and abilities. Scientific research into motives for fraud by age has not been conducted yet. It can be assumed that the main motive for fraud for young employees is gain and for old employees ideological, psychological, and personal motives. Researches show that frauds are usually committed by employees aged 30 to 50 years. Younger employees whose age does not reach 25 years commit less frauds because they usually do not work in responsible positions and thus have no opportunities to initiate a fraud; they are closely monitored by employers and try to acquire a good reputation and seek for a career advancement. Employees aged 50–60 commit less frauds because they have already reached a certain level of career and try to save their job. However, frauds committed by such employees in monetary terms are the biggest. The main reason is that older workers are more familiar with the company's organizational structure, internal control system, the working environment and with the employees who perform particular operational functions (Giriūnas, 2013). What steps should be taken to reduce the employee's motives for fraud? Supposedly, the main means are to improve the working climate in the company, to promote closer ties among the employees, to set specific functions to employees, to ensure a good internal control system.

The second element of the fraud scales is the study of the conditions that increase their risk. In the most general sense, conditions are the circumstances under which something is happening (Dabartinis lietuvių kalbos žodynas, 1993, p. 672). The conditions to commit a fraud are especially favourable in the processes of economic globalization. The free flow of capital, services, and labour force among different regions and countries, a fierce competition, rapid changes in all spheres of life, an increased uncertainty of the possibility to remain in the market – these are the real conditions to commit frauds and even to justify them (Cutter, Surdykowska, Holda, 2006).

Almost every company has a number of favourable conditions for committing a fraud. After examining various researches into the conditions for fraud (Cutter, 2009; Kanapickienė, 2007, 2008; Koczmarek, 2005; Lakis, 2008, 2009; Mackevičius, Bartaška, 2003; Mackevičius, Kazlauskienė, 2009; Sokolov, Piatov, 2000; Swiderska, 2005, etc.), a classification of the most important conditions that increase the risk of fraud has been prepared. Seven groups of conditions have been identified, i.e. the conditions associated with: 1) honesty, competence, and style of action of the company's managers; 2) the employees of the company; 3) the organisational structure of a company; 4) the financial condition and operating results of the company; 5) the organisation of activities and industrial activities of the company; 6) accounting, auditing, and the internal control system; 7) external conditions.

This classification will help business managers, accountants, and auditors to identify frauds easier, to determine their causes and location, to objectively assess their impact on performance results and to provide specific prevention measures. Internal and external auditors must pay especially much attention to the analysis of the conditions that increase the risk of fraud (Table 2).

TABLE 2. The main conditions that increase fraud risk

Groups of conditions	Specifications of the conditions
1. Conditions related to honesty, competence and style of action of company managers	<ol style="list-style-type: none"> <li>1) The management structure is dominated by a single person (or a small group of people)</li> <li>2) There is no effective supervisory board or other supervisory institution</li> <li>3) Improper approach by the company's management to business, risk, and competitive environment</li> <li>4) Managers are too confident, they create giant plans, operate at a huge risk</li> <li>5) Managers ignore business planning, accounting, and control</li> <li>6) Improper action style by the company management (e.g., the tendency to establish a close relationship with the heads of departments of the company as well as other employees; managers are too aggressive, impulsive, like risk-taking, etc.)</li> <li>7) Managers' reproachful reputation and disturbing weaknesses (e.g., drunkenness, drug addiction, gambling, etc.), carelessness, and lack of dutifulness</li> <li>8) Incompetence and inability of the company's management to make optimal management decisions (lack of specific knowledge in management, accounting, planning, forecasting, law, financial and other sciences)</li> <li>9) The disorderly management system, unevenly distributed roles and responsibilities of the managers</li> <li>10) Disagreements among the company's management, heads of departments, and employees</li> <li>11) Decreasing working discipline in the company.</li> </ol>
2. Conditions relating to the employees of the company	<ol style="list-style-type: none"> <li>1) Unfavourable relationships among employees, loss of relationship</li> <li>2) Insufficient level of professionalism, honesty and reliability of employees</li> <li>3) Long-lasting shortage of employees of some professions</li> <li>4) Frequent change of accountants, financiers, lawyers, and internal auditors</li> <li>5) Staff (the main, but not necessarily) do not take a holiday</li> <li>6) Employees take responsibility for the functions that could be easily delegated to others</li> <li>7) Employees engaged in full control of a certain activity</li> <li>8) Inappropriately distributed material responsibility among employees, no liability agreements made</li> <li>9) Inappropriate adjustment of rights and duties among employees, poor division of tasks</li> <li>10) Personal problems of employees (domestic, financial, healthcare, lavish lifestyle, etc.)</li> <li>11) Dissatisfaction with work and behaviour of the management of the company</li> <li>12) Psychological isolation of an employee.</li> </ol>



Groups of conditions	Specifications of the conditions
3. Conditions related to the organisational structure of a company	<ol style="list-style-type: none"> <li>1) Insecure system for the storage of cash, securities, and tangibles</li> <li>2) Free access to tangibles</li> <li>3) Poor security system of warehouses and administrative buildings</li> <li>4) Inappropriate keeping of company stamps, forms, and various documents</li> <li>5) Poor information links among the departments of the company</li> <li>6) Too many or too few departments</li> <li>7) The nature of activities and objectives of the company does not match with the organisational management structure</li> <li>8) A badly implemented reorganization of the company, unreasonable establishment or liquidation of its branches</li> <li>9) Too frequent application of new technologies and programmes; they are changed by others before they are mastered and assessed.</li> </ol>
4. Conditions related to financial condition and operating results of the company	<ol style="list-style-type: none"> <li>1) Poor solvency indices, increasing short-term and long-term liabilities</li> <li>2) High operating losses</li> <li>3) Working capital is inadequate to the development of the company, its mobility ratio is bad</li> <li>4) Deteriorating income indicators (in order to improve them, risk is taken by selling goods on credit, changes in business practices and accounting policies)</li> <li>5) The company's endeavour to show higher profits, which allows to maintain the market price of its stock or to obtain a credit</li> <li>6) The downward trend of cash flows from operating, financial and investing activities</li> <li>7) Profit is much lower than the average profit for the branch of the industry</li> <li>8) The company has accumulated too much resources; they should be much fewer according to the volume of activities and the nature of the company.</li> </ol>
5. Conditions related to the organisational activities and industrial activities of the company	<ol style="list-style-type: none"> <li>1) Abundant investments in activities or products that should change radically and soon</li> <li>2) The company is highly dependent on one or several products, suppliers or customers</li> <li>3) Unusual transactions (especially at short notice before the end of the year)</li> <li>4) Complex or unusual transactions with related parties</li> <li>5) Too much money paid for services (such as lawyers, consultants, experts, etc.)</li> <li>6) Large sums for economic transactions, programs and projects which are often concealed from some employees</li> <li>7) A large number of small sales or purchase transactions</li> <li>8) A large part of settlements for the sold or bought goods is carried out in cash</li> <li>9) Deadlines for payment or receipt of money are postponed for a long term</li> <li>10) Involuntary termination of activity, as well as the malfunction of the rhythm of industrial and technical process and downtime</li> <li>11) The ongoing cases in court.</li> </ol>
6. Conditions related to accounting, auditing and internal control system	<ol style="list-style-type: none"> <li>1) Frequent changes in the accounting policies of the company</li> <li>2) Bad working conditions for accounting employees</li> <li>3) Prevailing complex accounting procedures or calculations that are difficult to control</li> <li>4) Information from the computer database is not available due to the lack of data</li> </ol>

Groups of conditions	Specifications of the conditions
6. Conditions related to accounting, auditing and internal control system	5) Many changes made in computer programs, but these changes are not supported by documents and not sanctioned 6) Poorly formed files, a lot of corrections in the accounting documents and the registers, economic transactions made not complying with the prescribed procedure 7) Inappropriate management of records of economic transactions (for example, the lack of necessary authorization, no documents related to economic transactions, etc.) 8) Inappropriate approach by the management to audit (for example, audit timing and extent are limited), unjustified and unconvincing responses to auditors' questions 9) So far, no independent audit has been carried out in the company 10) Weak internal audit control not capable to guarantee error and fraud detection and prevention 11) Wrong distribution of duties related to asset accounting and protection 12) Performance of some of the economic transactions is completely uncontrolled 13) Disregard of the internal control system by the management 14) A permanent failure to correct deficiencies in the internal control system, elimination of which would be effective.
7. External conditions	1) The unstable economic and political situation in the country 2) Imperfections in legislation and their instability 3) Fluctuations in the foreign currency exchange rates 4) Changes in the tax system 5) Changes in the interest rate 6) High levels of inflation and deflation 7) High level of corruption in the branch of industry in which the company operates 8) Recession of the branch of industry, instability, bankruptcies of companies 9) Changes in the labour market, appearance of new competitors 10) Disagreements between the partners and owners of the company and breaches of contracts 11) High level of unemployment 12) Increase in the number of various crimes 13) Emigration and immigration.

Source: compiled by authors.

Companies operate in a continuously changing environment: there always appear new conditions to commit frauds. These conditions especially increase when the external and internal environment of the company is unstable for a longer period of time.

The third element of the scales of fraud risk is the possibilities, which are treated as an option granted to an employee who is hoping to commit a fraud. The latter is determined by a person's position and power in a company, the access to the company's assets and accounting records. The latter is usually associated with the existing internal control system of a company; the more it is effective, the lower are the possibilities to make a mistake or to commit a fraud. However, as practice shows, if earlier the fraud has been

more often committed by less skilled and low-competence employees, nowadays more and more frauds are committed by intelligent, creative, having high positions, and highly experienced employees who have better access to performing a of large-scale fraud. Even 51 per cent of employees engaged in fraud have a university education, and even 46 per cent have worked in senior executive positions (ACFE, 2012). These statistics only prove that the fraud triangle is purposefully improved and presented in the form of a square.

The fourth element of the scales of fraud risk is realization, even though all scientific literature on the fraud triangle and its elements indicates that this element is rationalization, which is seen as a means by which employees justify unfair behaviour. However, it would be more appropriate to define the fourth element of the scales of fraud risk as performance, because it is not the reasons for justification, but the employee's personal characteristics such as honesty and integrity that allow to objectively assess whether he is willing to make any errors or to commit a fraud. Only due to certain personal characteristics, motivation, and later the possibility, an employee of the company will be willing to make intentional errors or any kind of fraud. The process of fraud is very different: it depends on the kind of the fraud scales, conditions, fraudsters, and other things. It is appropriate to assign to the process of fraud the first two stages of the existence of fraud – the intention and preparation. In the intention stage, it is firmly decided what to do, what kind of fraud to commit. In the preparation stage, the time and specific measures for fraud are planned and the actions of fraudsters are coordinated. The very process of fraud performance can be very short (for example, cash theft) or it can last several months or even several years (for example, income tax miscalculation). The possibilities of fraud detection depend on the “quality” of fraud performance. It is not a secret that many of the frauds are not detected at all: the iceberg theory of fraud states that the volume of undisclosed frauds is higher than that of the disclosed ones. The problem is that the persons who commit fraud are highly qualified, they prepare for it very carefully, study the technologies of production or services, the organizational structure of the company's management, accounting and the internal control system, pay a lot of attention to the analysis of different laws and standards of certain provisions, etc.

Even though the scales of fraud risk indicate all the elements of the fraud square, most importantly, in contrast to the latter, it is able to specify when there is a high risk of fraud execution. It is important to note that each of the elements has the same impact on the result of the scales, but one of the elements – realization – has the opposite effect of evaluation, because if the employee has a low integrity and lacks honesty, the risk of fraud committing will be higher. However, the most important element of the scales of fraud risk is considered to be the very scales rather than elements reflected in the fraud square. It is they, conceived and presented as an internal control, that determine the level

of fraud risk: the stronger is the internal control in a company, the lower is the risk of fraud manifestation, in spite of an integrated assessment of the four elements. Therefore, it can be concluded that it is the internal control that is the major component in determining the risk of fraud, which is reflected neither in the fraud triangle nor in the fraud square.

## Conclusions

Following an analysis of the scientific literature, it can be stated that it is very difficult, even using the scientific methods, to reveal exquisitely committed frauds when they are carefully prepared for. Individuals who have committed a fraud are trying to hide its tracks by all means. Therefore, an analysis of the fraud triangle, as a means to evaluate the risk of fraud and the possibilities of its expression, is extremely important. The review of its evolutionary development and transformation into the scales of fraud risk is gaining a significant value not only from the scientific but also from the practical point of view. The composition of the fraud scales will facilitate the work of the auditors who must constantly study fraud methods, know their symptoms, be able to recognize and estimate them. However, not only auditors but also company managers must examine the activity spheres, terms and conditions under which fraud is most likely to appear; thus, the scales of fraud risk will only make their hard and difficult work easier.

## REFERENCES

- Association of Certified Fraud Examiners (ACFE) (2012). Report to the nation on occupational fraud & abuse [interaktyvus]. Prieiga per internetą: <http://www.acfe.com/rtn/rtn-2012.pdf>
- Albrecht, W. S., Albrecht, C. C., Albrecht, C. O., Zimbelman, M. F. (2011). *Fraud examination*. South-Western Pub.
- Albrecht, W. S., Howe, K. R., Romney, M. B. (1984). *Deterring Fraud: The Internal Auditor's Perspective*. Institute of Internal Auditors Research Foundation.
- Albrecht, W. S., Romney, M. B., Cherrington, D. J., Payne, I. R., Roe, A. J. (1982). *How to Detect and Prevent Business Fraud*. Prentice-Hall.
- Albrecht, W. S., Williams, T. L., Wernz, G. W. (1995). *Fraud: Bringing Light to the Dark Side of Business*. Burr Ridge, IL: Irwin.
- Anandarajan, A., Kleinman, G. (2011). The impact of cognitive biases on fraudulent behaviour: the Leeson case. *International Journal of Behavioural Accounting and Finance*, Vol. 2(1), pp. 40–55.
- Beržinskas, G. (2008). *Elevacinė etika. Moralės doktrina lyderiams, mokytojams, šviesuoliams, vadovams*. Kaunas: UAB „Kvalitetas“.
- Biegelman, M. T., Bartow, J. T. (2012). *Executive Roadmap to Fraud Prevention and Internal Control: Creating a Culture of Compliance*. Wiley.
- Bressler, M. S., & Bressler, L. A. (2007). A model for prevention and detection of criminal activity impacting small business. *The Entrepreneurial Executive*, Vol. 12, pp. 23–36.
- Charles, P. K., Christopher, P. (2006). Religion in the workplace: Implications for financial fraud and organizational decision making. *Journal of Management, Spirituality and Religion*, Vol. 3(4), pp. 305–318.

Cressey, D.R. (1973). *Other People's Money: A Study in the Social Psychology of Embezzlement*. Montclair, NJ: Patterson-Smith.

Dabartinės lietuvių kalbos žodynas (1993). Trečias leidimas. Redaktorių kolegija: Stasys Keinys (vyr. redaktorius), Laimutis Bilkis, Jonas Paulauskas, Vytautas Vitkauskas. – Vilnius: Lietuvių kalbos institutas.

Daujotaitė, D. (2006). *Finansinis auditas*. Vilnius: Vilniaus vadybos aukštoji mokykla.

Dorminey, J., Fleming, A. S., Kranacher, M. J., Riley Jr, R. A. (2012). The Evolution of Fraud Theory. *Issues in Accounting Education*, Vol. 27(2), pp. 555–579.

Duffield, G. M., & Grabosky, P. N. (2001). *The Psychology of Fraud*. Australian Institute of Criminology.

Fedosiuk, O. (2010). Sukčiavimas pridėtinės vertės mokesčio srityje: samprata ir kvalifikavimo pagrindai. *Jurisprudence*, Vol. 4(122), pp. 169–187.

Giriūnas, L. (2013). Apgaulių ir klaidų atsiradimą sąlygojančių veiksnių vertinimas. // Buhalterinės apskaitos teorija ir praktika / Lietuvos buhalterinės apskaitos tyrėjų ir švietėjų asociacija. Kaunas : Lietuvos buhalterinės apskaitos tyrėjų ir švietėjų asociacija. ISSN 1822-8682. 2013, t. 13, pp. 32–39.

Greenberg, J. (1997). A Social Influence Model of Employee Theft: Beyond the Fraud Triangle.

Greenberg, J. (2002). Who stole the money, and when? Individual and situational determinants of employee theft. *Organizational Behavior and Human Decision Processes*, Vol. 89(1), pp. 985–1003.

Holtfreter, K., Reising, M. D., Piquero, N. L., Piquero, A. R. (2010). Low Self-Control and Fraud Offending, Victimization, and Their Overlap. *Criminal Justice and Behavior*, Vol. 37(2), pp. 188–203.

Yu, F., Yu, X. (2011). Corporate lobbying and fraud detection. *Journal of Financial and Quantitative Analysis*, Vol. 46(6), pp. 1865.

Kabašinskas, J., Toliatienė, I. (1997). *Auditas*. Vilnius : Amžius, 382 p.

Kanapickienė, R., Gipiienė, G., & Jefimovas, B. (2004). Apgaulių ir klaidų rizikos vertinimas audito metu. *Ekonomika: mokslo darbai*, Vol. 67(2), pp. 27–38.

Kanapickienė, R. (2007). Apgaulės ir klaidos finansinėje atskaitomybėje. Apskaitos, audito ir mokesčių aktualijos, Nr. 17(449).

Kanapickienė, R. (2008). Įmonės vidaus kontrolė: teorija ir praktika. Kaunas, LBAŠTA.

Kassem, R., Higson, A. (2012). The New Fraud Triangle Model. *Journal of Emerging Trends in Economics and Management Sciences (JETEMS)*, Vol.3(3), pp. 191–195.

Koczmarek, T. (2005). *Ryzyko i zarządzanie ryzykiem – ujęcie interdyscyplinarne*. Warszawa: Difin.

Kutera, M. (2009). *Audyt finansowy a przestępstwa gospodarcze. Zeszyty teoretyczne rachunkowsci*. Tom 49(105). Warszawa, stowarzyszenie księgowych w Polsce, Rada Naukowa.

Kutera, M., Surdykowska, S., Holda, A. (2006). *Oszustwa księgowe – teoria i praktyka*. Warszawa: Difin.

LaSalle, R. E. (2007). Effects of the fraud triangle on students' risk assessments. *Journal of Accounting Education*, Vol. 25(1), pp. 74–87.

Lakis, V. (2008). Finansinių ataskaitų klastojimas–rinkos ekonomikos ir globalizacijos procesų palydovas. *Ekonomika*, Vol. 82, pp. 91–103.

Lakis, V. (2009). Informacijos apie įmonę iškraipymo būdai ir padariniai. *Informacijos mokslai*, Nr. 49.

Lakis, V. (2012). Problems of loss estimation and substantiation in companies. *Verslo ir teisės aktualijos / Current Issues of Business and Law*, Vol. 6(2), pp. 319–334.

Mackevičius, J., Bartaška, R. (2003). Klaidų ir apgaulių aptikimas, įvertinimas ir prevencija. *Pinigų studijos*, Vol. 2, pp. 36–41.

Mackevičius, J. (2005). Audito rizikos veiksnių vertinimas. *Organizacijų vadyba: Sisteminiai tyrimai*, (33), pp. 111.

Mackevičius J., Kazlauskienė L. (2009). The fraud tree and its investigation in audit. *Ekonomika*. Vol. 85. Vilnius University Publishing House.

Mackevičius, J. (2012). Apgaulių gyvavimo ciklas ir sąlygos, didinančios jų atsiradimo riziką. *Ver-slas: teorija ir praktika*, Nr. 1, p. 50.

Pfister, J. (2009). The Individual Level. *Managing Organizational Culture for Effective Internal Control*, pp. 145–158.

Ragauskienė, E., Mackevičius, J. (2011). Anatomia oszustw. Rodzaje, uwarunkowania, środki zapobiegawcze. *Ekonomia*, (2 (14), p. 204.

Rezaee, Z. (2002). *Financial Statement Fraud: Prevention and Detection*. Wiley.

Rezaee, Z. (2005). Causes, consequences, and deterrence of financial statement fraud. *Critical Perspectives on Accounting*. Vol. 16(3), pp. 277–298.

Swiderska, M. 2005. Sprawozdawczosc finansowa jako zrodlo informacji dla oceny efektow dzialalnosci gospodarczej, *Zeszyty Teoretyczne Rachunkowosci*, 29(85).

Turner, J. L., Mock, T. J., & Srivastava, R. P. (2003). An analysis of the fraud triangle. The University of Memphis Working Paper.

Соколов, Я. В., Пятов, М. Л. (2000). *Бухгалтерский учет для руководителя*. Москва: Проспект.