EKONOMIA ECONOMICS 2(14) • 2011

ISSN 2080-5977

Jonas Mackevičius, Erika Ragauskiene
Vilnius University

ANATOMY OF FRAUDS. TYPES, CONDITIONS, PREVENTION MEASURES

Summary: Frauds are committed in all the areas of human activities, in all countries – only their scope, methods, and motives differ. In the current dynamic and competitive business environment, they are committed using the latest scientific achievements and advanced technologies. Frauds always make the major financial scandals and bankruptcies of world's biggest companies. The article explores the main fraud types: misappropriation of assets, corruption, tax evasion, distortions of financial statements, etc. It suggests fraud diagnostics and prevention measures.

Keywords: frauds, types, prevention.

1. Introduction

In the present dynamic and competitive business conditions, frauds are committed in all countries, spread in all business spheres and among all management levels. Not only does a particular company bare the cost of fraud, but often it is spread among related subjects: investors, suppliers, banks, insurance companies, etc. Frauds have a negative effect on the country, especially on its economy and image.

In Lithuania, the number of companies' bankruptcies increased due to various types of frauds. During the period of 1993-2010 (the first of January), 8,685 companies have declared bankruptcies in Lithuania (14 banks). The number of initiated bankruptcies escalated at the beginning of 2008, per quarter on average 239 companies initiated bankruptcy procedures (80 companies per month), whereas in 2009 this number rose to 461 companies on average per quarter (154 companies per month) [Garškaite-Milvydiene 2011].

Despite the fact that fraud issue is highly relevant on the scale of a given country's economy, the subject is not deeply researched. The greatest input into the analysis of frauds was made by Association of Certified Fraud Examiners (ACFE), which prepared a classification of frauds. Among other researchers who publish on this topic we should point out Turpen [1997], Vanasco [1998], Well [2002], Silver, Fleming, Riley [2008], Bell, Carcello [2000], Spahis *et al*. [2002], Weld *et al*. [2004]. The publications of Lithuanian scientists should also be mentioned: Kanapickienė [2007, 2008]; Lakis [2008, 2009]; Gruzdiene [2009]; Mackevičius, Kazlauskiene [2009]. Nevertheless, the aforementioned publications do not fully uncover the fraud types and fraud prevention measures.

The aim of the research is to examine the fraud types, propose their classification and to create fraud prevention system. The following research methods were used: scientific literature analysis, comparison, grouping, specification and generalization of information.

2. Fraud types and their classification

The fraud variety depends on numerous factors: the organizational structure of company's management, the peculiarities of pursued activities (production, commercial, financial, investment, etc.), the effectiveness of internal control and accounting systems, the competencies of executives, legal imperfections, etc. Since there are many fraud types, they can be separated into certain groups. Nevertheless, currently a unified classification of frauds, which would help detect and prevent frauds, does not exist.

The Association of Certified Fraud Examiners focuses on fraud classification. It proposes a unified profession fraud classification, known as "Fraud tree". This association distinguishes three main branches in the fraud tree: 1) asset misappropriation, 2) corruption, and 3) fraudulent announcements. The 240th international audit standard distinguishes two types of frauds: misleading financial reporting and asset misappropriation [*International Standards…* 2009]. Economic literature presents a more detailed fraud classification. McNamee [1999] separates frauds into four groups: 1) financial frauds, 2) asset misappropriation, 3) misappropriation of services, and 4) fraudulent announcements related to assets, performance, and reputation. Kutera [2008] points out that all frauds can be divided also into four groups: 1) corruption, 2) falsification of financial accounts, 3) misappropriation of asset value, and 4) money laudering. Kanapickienė [2007] separates frauds into five groups: 1) corruption, 2) asset misappropriation, 3) misappropriation of services, 4) fraudulent reports, and 5) fraudulent announcements. Mackevicius and Kazlauskiene [2009] point out the following fraud tree branches: 1) tax evasion, 2) corruption, 3) fraudulent financial reporting, 4) asset misappropriation, and 5) other frauds.

The fraud classifications mentioned earlier point out only general types of frauds, which is their biggest shortcoming. Furthermore, the main fraud groups are not well defined. Basing on the analysis of various fraud classifications, the authors of this article propose seven fraud groups: 1) fraudulent accounting; 2) acquisition, production, and exploitation of fixed and current assets; 3) corruption; 4) tax fraud; 5) misappropriation of services; 6) fraudulent announcements; and 7) other frauds. These groups encompass various frauds, the most important of which are listed in Table 1.

Table 1. Fraud types and their classification

Fraud groups	Fraud types
1	2
1. Fraudulent accounting	1. Forgery of the content and the forms of accounting documents and their illegal use: incorrectly written numbers, misleading text of transactions 2. Forgery of accounting registers and their illegal use 3. Exclusion of realized transactions from accounting 4. Inclusion of non-realized transactions into accounting 5. Purposely set and applied incorrect accounting policy 6. Keeping double accounting 7. Deliberate accounting which violates legal acts regulating bookkeeping and its requirements 8. Concealment, destruction, and damage of accounting documents and registers 9. Deliberate registration of transactions in accounting documents and registers during an incorrect reporting period 10. Deliberate misrepresentation of accounts, such as the display of transactions in incorrect accounts 11. Deliberate incorrect application of valuation methods (LIFO, FIFO, depreciation and others) 12. Presentation of fraudulent data in financial reports (when data is correct in accounting and register documents) 13. Incorrect transfer of account residuals from one reporting period to another 14. Change of records and conditions for large and unusual transactions 15. Amplification or reduction of revenues and expenditures 16. Other
2. Acquisition, production and exploitation of fixed and current assets	1. Embezzlement 2. Securities fraud 3. Theft and misappropriation of various fixed and current assets (except cash and securities) 4. Concealing the cost of purchased (embezzled) fixed or current assets 5. Misappropriation of fixed and current assets in order to profit 6. Withholding reconstruction and maintenance of tangible fixed assets and increasing estimated costs 7. Incorrect calculation of depreciation of fixed assets 8. Concealment of revenues obtained from asset sale or rent 9. Manipulations while writing-off tangible fixed assets 10. Manipulations related to fixed and current asset classification into groups 11. The use of company's assets for personal needs 12. Other

1	2
3. Corruption	1. Bribery 2. Conflict of interests 3. Racketeering 4. Illegal payments and briberies 5. Illegal presents 6. Other
4. Tax fraud	1. Illegal amplification of expenses 2. Concealing revenues 3. Illegal value-added tax restitution from the budget 4. Use of forged value-added tax invoices 5. Forging the formalization of export operations 6. Registration of fictitious companies and their illegal operations through them 7. Vending of contraband goods 8. Avoidance to purchase business license 9. Payment of wages in cash to avoid taxes 10. Other
5. Misappropriation of services	The use of company's services for personal needs: – employees use company's computers, telephones, other devices for their personal use; – company's executives, managers use company's transportation for trips home and back to work, as well as other needs not related to their work;
6. Fraudulent announcements about the company and its financial state	– employees of a company renovate houses or do gardening for their managers, etc. Illegal announcement to external information users (banks, investors, suppliers, buyers, insurance companies, etc) about company's assets, liabilities, financial state, transactions, developments, etc.
7. Other frauds	Various frauds committed in practice, however, unexplained in scientific literature

Source: the study based on [Kanapickienė 2007; Lakis 2008, 2009; Mackevičius, Bartaska 2003; Mackevičius, Kazlauskiene 2009; Association of Certified Fraud Examiners 2006; McNamee 1999; Silver *et al*. 2008].

The greatest losses from fraud groups listed in Table 1 occur from fraudulent accounting and acquisition, the production and the exploitation of fixed and current assets. According to the study performed by the Association of Certified Fraud Examiners in 2006, due to fraudulent reports the USA lost two million USD, and further 150 thousand USD due to asset misappropriation and 250 thousand USD due to corruption. Nevertheless, the majority of committed frauds belongs to asset misappropriation group; they constituted 91.5% of overall frauds, which shows that assets are the most desired fraud object [Association of Certified Fraud Examiners 2006]. Research performed in Western European countries show that on average the loss from all fraudulent activities was double the value of lost assets [Farrell, Franco 1999].

Lithuanian financial crime investigation service performed an analysis of disclosed financial crimes and determined the following structure of financial crimes: 1) fraudulent accounting amounted to 31.24%; 2) negligent bookkeeping – 16.63%; 3) the presentation of fraudulent data about revenues and profit – 15.06%; 4) the forgery of official documents and their implementation, use of forged official documents – 12.13%; 5) tax or deposit avoidance – 6.97%; 6) cheating – 3.82%; 7) other crimes – 14.15% [Mackevičius, Bartaška 2003].

The structure of disclosed crimes shows that the crimes related to bookkeeping constitute their largest part. Most frauds are committed at the stage of documentation and entering into accounting registers, due to the favorable environment: large number of documents and their variety; many employees participating in preparing and processing them.

The following frauds usually happen during the documentation stage: incorrectly written transaction content; goods are received and sent without necessary documents; primary documents are forged or replaced by new forged documents; vital details are changed in the documents, such as signatures, dates, price, etc. Frauds related to double-entry bookkeeping are also perceived as documentation stage frauds.

Mistakes related to reporting period are related to an incorrect transaction-reporting period; for instance, when general ledger or financial reports contain records from another reporting period. There are two types of these frauds: 1) accounts are closed before the reporting period and reportable transactions are shown in the upcoming year; 2) accounts are closed after the reporting period and operations which should be showed in the upcoming year are shown in the current report. Both types of frauds happen in December and January. Therefore, the documents and accounting entries in registers for months of December and January should be thoroughly checked.

Valuation frauds stem from incorrectly valued assets, capital, liabilities, and financial results. For instance, incorrectly reappraised fixed assets, incorrectly calculated asset depreciation, incorrectly set production value, etc. These frauds can increase or decrease the overall amount in the balance; therefore, all asset, capital, and liability accounts must be checked in order to track these frauds.

Financial reports are usually forged in large companies which have publicly traded stocks [Wąsowski 2005]. In Lithuania, financial reports are usually forged in medium-size companies. The consequences of forging financial reports in large companies are very painful for the entire region where the company operates. The financial report forging consequences in middle-size companies are local and often unnoticed [Lakis 2008].

Many frauds are committed while performing various operations with fixed and current assets. The value of fixed assets is often distorted by incorrect depreciation calculations. The following cases of fixed assets' value distortion are common: 1) assets acquired for resale are added to fixed assets, 2) the asset value is augmented after reconstruction, even though it is unknown whether its qualities were improved or its life-cycle was prolonged, 3) the asset value is not corrected, even though its balance and real value differ [Lakis 2009]. At times, purchased tangible assets are allocated to repair parts, leasing expenses, small inventory or written off as expenses. The value of fixed tangible asset might be deliberately changed through the manipulation of depreciation methods [Mackevičius 2009]. It is rather difficult to disclose frauds related to inventory stock transactions. Data related to the available stock value could be distorted if its value is not corrected after it has decreased due to changes in quality or due to the long-term price decrease on the market, also if broken or unused stock is not written off [Lakis 2009]. Work-in-process and finished goods (adding production, period, and sales expenses) are often incorrectly priced. Writing off broken or unused stock creates many possibilities for frauds (the opposite is also possible, when they are not written off on time). Company's managers are prone to value production produced for their needs expensively.

Tax frauds become increasingly relevant in Lithuania as well as in other countries. Due to value added tax (VAT) frauds, the budget of Lithuania loses around one billion Litas per year. Especially popular crime is fraudulent restitution of VAT from state's budget. These crimes not only decrease budget inflows, but also distort competition between businesses: honest businesses have difficulties selling their goods on the market, since tax avoiding businesses are able to decrease the production cost of their goods; therefore, they lower their price in the market. The crimes, which involve fraudulent ways of restituting the not paid VAT from the government or to pay a lowed VAT, are planned very thoroughly and professionally; they are usually committed by individuals who know tax legislation well. The value added tax frauds are committed by: 1) forging the export transactions of goods; 2) forging the acquisition documents of goods and services, when acquiring from other Lithuanian companies; 3) formalizing the purchase of goods form fictitiously registered companies. By using these methods, the purchasing price of goods is increased [Lakis 2009].

Intellectual tax avoidance methods are also often used, for instance: the decreased amount of taxes that need to be paid, tax avoidance, postponed tax deadlines, the increased tax restitution of overpaid tax (the difference) or the shortened restitution period of overpaid tax, the concealment of revenues related to work relations by paying them as bonuses, etc. [Rėksnys 2002].

Recently a new method called the "Phoenix syndrome" for avoiding taxes became known. Company goes out of business, when a substantial amount of debt is accumulated, then its owners establish a new company and sell the assets of the first company to the newly established. The cycle is repeated on. The operation period of “Phoenix” companies is usually short. They try to “disappear” before the first inspection by tax authorities, since they do not pay any or the majority of taxes. Favorable conditions usually encourage various frauds. There is a great variety of conditions that increase the risk of frauds. The most important conditions for frauds are related to: 1) morals, competences, and business style of company’s executives; 2) company’s employees; 3) company’s organizational management structure; 4) financial state of a company; 5) organization of company’s activities and performed transactions; 6) the state of accounting, audit, and internal control; 7) external conditions (economic, political state of a country, inflation, unemployment, etc.). A consistent fraud prevention system is needed to disclose all the types of frauds and explore the conditions, which may increase the risk of fraud.

3. Fraud prevention system

The aim of fraud prevention is to foresee the extent of fraud threat and prevent them from happening, with the use of special company’s management measures. It is vital to disclose frauds at their early stages. The following main provisions must be taken into account, when preparing fraud prevention system: 1) constantly being prepared for different fraudulent cases, they can be committed by any employee of a company; 2) diagnosing fraudulent cases, forms, and ways on time; 3) reacting to possible fraud, its scope and potential threat to the financial state of a company, its image and sustainability; 4) analyzing previous fraud cases and forecasting the possibilities of their repetition; 5) always assuming that not all frauds were found and disclosed.

Fraud prevention is a continuous process. It consists of the complex preparation, implementation, and evaluation of results. Fraud prevention system is presented in Figure 1.

Particular attention should be paid to company’s activity’s analysis, internal control system, and audit (internal and external), while developing and implementing fraud prevention system. The essence of these fraud prevention measures is the following:

Company’s activity’s analysis: the proper management of company’s resources, optimal investment and financial decisions, further company’s development plans are not possible without a thorough analysis performed on time. A well organized company’s activity’s analysis helps to reveal various conditions and factors favorable for fraudulent activities. The analysis of the main absolute and relative financial indicators (solvency, profitability, cash flow, capital market, etc.) enables us to see the activity areas and divisions where frauds can be committed and which type of frauds is most likely to take place.

Internal control system: internal control system is the totality of co-ordination ways and measures used to ensure the security of company’s assets, the correct accounting data, activity’s efficiency and presumed management policy. Company’s

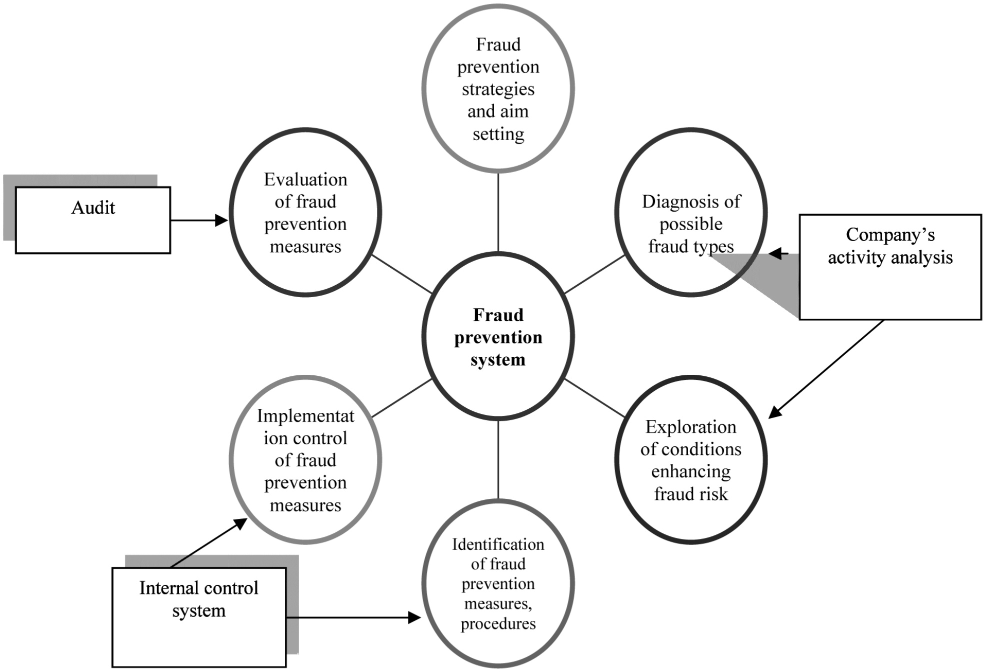

Fig. 1. Fraud prevention system

Source: authors' own study.

top managers are responsible for the creation and operation of internal control system, which would quickly locate frauds and find responsible individuals. Nevertheless, as experience has shown, there is always a risk that internal control system will not function as foreseen and will be ineffective in disclosing frauds, which include collusion between staff and frauds committed by top managers. Moreover, certain middle-level managers might be interested in not efficient internal control system. The interest of criminal groups in internal control system grew in past few years. Mostly, they are interested in sanctioning and the registration of transactions, the allocation of authorization and responsibility.

Audit: the duty of every auditor is to reveal frauds in accounting and financial reports: he or she has to feel moral responsibility if fraud is revealed by others after his or her audit. Therefore, if there is at least a smallest suspicion that financial statements are fraudulent, the auditor must increase the number of tests and procedures to confirm or dismiss the suspicion. The auditor should answer the following questions before audit: whether he or she will be able to reveal all the cases of frauds, which frauds can stem from financial reports, which financial report indicators might be fraudulent, which transactions might be fraudulent, which supervisory bodies or individuals are most likely to be associated with frauds, etc.

Integrity, diligence, prudence, and responsibility of nominated operators are of paramount importance during the development and implementation of fraud prevention system. A person who does not posses these qualities becomes a factor that increases fraud risk. Fraud prevention system must be created and implemented to assist in revealing frauds at their initial (latent) stage and prevent them from occurring.

Literature

Association of Certified Fraud Examiners, *Report to the Nation Occupational Fraud and Abuse*, www.cfenet.com /resources/rttn.asp, 2006.

Atestuoto auditoriaus darbo vadovas, Lietuvos auditorių rūmai, Vilnius 2003.

Bell T., Carcello J., *A decision aid for assesing the likelihood of fraudulent financial reporting*, "Auditing: A Journal of Practice and Theory", 2000, No. 19(1).

Garškaitė-Milvydienė K., *Įmonių bankroto grėsmės diagnostika*, Technika, Vilnius 2011.

Grundienė Ž., *Apgaulių finansinėse ataskaitose nustatymo UTADIS metodas*, "Ekonomika ir vadyba", 2009, nr 14.

Farell B., Franco J., *The Role of the Auditor in the Prevention and Detection of Business Fraud*: SAS, nr 82 (online), http://wer.sonoma.edu.

International Standards on Auditing, IFAC, London 2009.

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

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

Kanapickienė R., *Įmonių vidaus kontrolės sistema transformacijų procese: kūrimas, raida, problemos*, "Ekonomika ir vadyba: aktualijos ir perspektyvos" 2009, nr 2.

Kutera M., Surdykowska S.T., Hołda A, *Oszustwa księgowe – teoria i praktyka*, Difin, Warszawa 2006.

Kutera M., *Rola audytu finansowego w wykrywaniu przestępstw gospodarczych*, Difin, Warszawa 2008.

Kutera M., *Audyt finansowy a przestępstwa gospodarcze*, Zeszyty Teoretyczne Rachunkowości, Tom 49(105). Stowarzyszenie Księgowych w Polsce, Rada Naukowa, Warszawa 2009.

Lakis V., *Audito sistema: raida ir problemos*, Vilniaus universiteto leidykla, Vilnius 2007.

Lakis V., *Finansinių ataskaitų klastojimas – rinkos ekonomikos ir globalizacijos procesų palydovas*, "Ekonomika" 2008, t. 82.

Lakis V., *Informacijos apie įmonę iškraipymo būdai ir padariniai*, "Informacijos mokslai" 2009, nr 49.

Mackevičius J., *Auditas. Teorija, praktika, perspektyvos*, Lietuvos mokslas, Vilnius 2001.

Mackevičius J., Bartaška R., *Klaidų ir apgaulių aptikimas, įvertinimas ir prevencija*, "Pinigų studijos" 2003, nr 2.

Mackevičius J., *Finansinių ataskaitų analizė ir auditas*, Lietuvos mokslas, Vilnius 2009.

Mackevičius J., Kazlauskienė L., *The fraud tree and its investigation in audit*, "Ekonomika" 2009, t. 85.

McNamee D., *Risk Assesment and Fraud*, http:www.mc2consulting.com/fraurisk.htm>, 1999.

Rėksnys J., *Užkarda naujiems 'intelektualams'*, "Apskaitos ir mokesčių apžvalga", 2002, nr 9.

Silver P., Fleming A., Riley R., *Preventing and detecting collusive management fraud*, "The CPA Journal" 2008, October.

Spathis Ch., Doumpos M., Zapounidis C., *Detecting falsified financial statements: A comparative study using multicriteria analysis and multivariate statistical techniques*, "The European Accounting Review" 2002, nr 4.
Turpen R., *Fraud prevention and the management accountant*, "Management Accounting" 1997, February.
Vanasco R., *Fraud auditing*, "Managerial AuditingJournal", 1998, Vol. 13, No. 1.
Wąsowski W., *Kreatywna rachunkowość*, Difin. Warszawa 2005.
Weld L., Bergevin P., Magrath L., *Anatomy of a Financial Fraud*, "The CPA Journal" 2004, October.
Well J., *Occupational Fraud: The Audit as Deterrent*, "Journal of Accountancy" 2002, April.
Соколов Я.В., *Классификация ошибок в аудите*, "Бухгалтерский учет" 1998, nr 3.

ANATOMIA OSZUSTW.
RODZAJE, UWARUNKOWANIA, ŚRODKI ZAPOBIEGAWCZE

Streszczenie: Oszustwa popełniane są we wszystkich dziedzinach działalności człowieka oraz we wszystkich krajach – różni się jedynie ich stopień oraz zakres, który wpływa na metody oraz motywy. W obecnej konkurencyjnej i dynamicznej sytuacji gospodarczej zostają one popełniane z wykorzystaniem najnowszych osiągnięć nauki oraz zaawansowanych technologii. Oszustwa zawsze powodują poważne skandale finansowe oraz bankructwa największych na świecie firm. W artykule przedstawione zostały główne rodzaje nadużyć: sprzeniewierzenie aktywów, korupcje, oszustwa podatkowe, zakłócenia sprawozdań finansowych, itp. Zasugerowano metody identyfikacji nadużyć finansowych oraz narzędzia o charakterze prewencyjnym.