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THE DETECTION AND PREVENTION OF MANIPULATIONS IN THE BALANCE SHEET AND THE CASH FLOW STATEMENT

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Financial statements which consist of objective, real and reliable information represent the key basis for making many business decisions. If, when writing financial statements, certain manipulation techniques are used for displaying the best possible results of transactions, the quality of financial reports will be endangered. Many financial frauds have led to a great mistrust in the system of financial reporting and the profession of accounting and auditing, which are often accused of the emergence of fraud and losing trust in the reliability of financial information by many users and economic decision makers. These are the reasons why the paper discusses the techniques of manipulation in financial statements, especially in balance sheets and cash flow statements, since these forms of manipulation are harder to detect and prevent when compared to manipulations of revenues and expenses in the income statement.

Keywords: balance sheet, cash flow statement, financial reporting, manipulations, techniques of manipulations

JEL Classification: M48, K42

INTRODUCTION

Frauds in a company's operations are most often related to manipulation positions in financial statements. Big financial scandals, which broke at the beginning of the 21st century - Enron, Worldcom (Stančić, Dimitrijević, Stančić, 2013, 1895), led to losses of several billion dollars. Not only did the owners and creditors of the companies in which frauds were committed suffer losses, but also various economies around the world within which these companies operated. A financial statement manipulation is performed with the aim of displaying a false financial position, performance, and cash flows of a company. The greatest responsibility for a financial statement manipulation is held by a company's management. The most frequent excuse of the management for committing a fraud is that it was a way to try to save the company and ensure a profit for the company's owners. The most frequent forms of manipulation include increasing a revenue, decreasing expenses, the increasing and falsifying of receivables, reducing or not showing liabilities, increasing the value of inventories, counterfeiting the inflow and outflow of money from the company and many others.

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These are only some of the forms of manipulation in financial statements by which the management wants to show the best possible business results. However, many examples of financial frauds pointed that behind all these manipulations there is the wish of the management to accomplish their personal goals, such as achieving extra bonuses related to the result of business operations, their desire for additional wealth, the securing of their job positions, the greed of an individual, the wish to have a better life standard than their own financial possibilities allow them, the existence of personal debts, bad creditworthiness, a personal financial loss and the like.

By analyzing various cases of fraud incurred by financial statements manipulation, it can be seen that the techniques of manipulation mostly used were frauds related to the revenue and expenses in the income statement. Manipulations with revenues and expenses are „simpler" for fraudsters because there are a great number of techniques for manipulation; this is a way to directly and in a short period of time influence the financial results of a company and by doing so to accomplish the personal goals of the management more rapidly and more easily. However, since the revenues and expenses in income statements are most frequently the „target" of fraudsters, various control bodies (internal and external audit, public authorities, and forensic accountants) handle a great number of techniques by which they detect and prevent manipulations in revenues and expenses. On the other hand, the positions of other financial statements, especially the balance sheet and cash flow statements, are also objects of manipulations. Still, practice has shown that these manipulations are much rarer in relation to manipulations in cash flow statements. This does not mean that they are not applied, but rather that they are harder to detect and that they are only applied by fraudsters capable of the skillful concealment of evidence.

It is exactly the techniques of detecting and preventing manipulations in the balance sheet and cash flow statements that are the subject of the analysis carried out in the paper. All of the positions in a balance sheet can be objects of manipulation. However, it has been shown that inventories, cash and liabilities are most often objects of manipulation. On the other hand, all the inflows and outflows of money, which are shown in cash flow statements, can be manipulated, but practice has shown that an increase in the inflow and a decrease in the outflow on the basis of operating activities are in the majority of cases the most frequent techniques of manipulation in cash flow statements.

The aim of the research in this paper is to identify the possibilities of and instruments for preventing and detecting manipulations in balance sheets and cash flow statements. That every manipulation in revenues and expenses in balance sheets either directly or indirectly influences assets, equity and liabilities, as well as the inflow and outflow of money has to be taken into account. However, this paper presents the manipulation techniques which directly influence the positions in a balance sheet and a cash flow statement with the aim to show the best business result possible and a more beneficial financial situation of a company.

In accordance with the established topic and aim of the research, the paper starts with the following hypotheses:

H1: The most widely used manipulations in balance sheets, which are used to directly influence the business result and the financial position of a company, are manipulations of inventories, liabilities and cash.

H2: The manipulation techniques of the inflow and outflow of money in cash flow statements are much harder to detect and prevent than other forms of manipulation.

The established hypotheses will be tested by applying the qualitative methodology of research based on a descriptive analysis. Starting from the relevant literature consisting of theoretical discussions and from case studies, general conclusions on the discussed problem will be derived. What will be of special significance is the method of induction, which will, starting from concrete instances of manipulation, lead to the derivation of a general conclusion about all the techniques of manipulation used in balance sheets and cash flow statements. Therefore, by analyzing the already applied manipulation techniques, it is to be pointed out to the possibility of the simpler and faster

detection and prevention of these and similar forms of manipulation in the future.

The paper is composed of six parts. After the introductory discussions, in the second part there is a list of the relevant literature about the term, importance and techniques of manipulation in financial statements. In the third part, the manipulation techniques in balance sheets are discussed, with a special analysis of the manipulation techniques of inventories, liabilities and cash. The most frequent methods of the manipulation of the inflow and outflow of money in cash flow statements are the subjects of the analysis in the fourth part. The manipulation techniques of the inflow and outflow from the operating activities of a company are analyzed in detail. The fifth part includes an analysis of the methods of the prevention of all forms of a fraud, and thus of frauds in financial statements. In the end, the standpoints on the fulfillment of the hypotheses are presented and it is pointed to the contribution of the work.

THEORETICAL ASPECTS

The system of financial reporting represents the only complete quantitative system comprised of all the business transactions executed within a company as well as transactions with individuals, companies and institutions in the environment (Malinić, 2009a, 139). Financial reporting is the exclusive responsibility of the management and a powerful instrument for various adjustments for the purpose of displaying an image of a business subject as a better one than it actually is. This is all aimed at attracting potential investors, getting convenient loans more easily, increasing the price of shares on the stock exchange and the like (Dmitrović Šaponja, Milutinović, Šijan, 2007). „Changing the balance sheet", „earnings management", „cooking the books" are the terms used for explaining the procedures oriented towards the manipulation of financial statements in order to achieve certain goals. They can subsume a wide spectrum of legal and illegal managing procedures (Petrova, 2008, 24). Financial embezzlement is a phenomenon that has its own motives, and a fertile ground for a destructive action is more convenient in a weakly -organized financial reporting environment (Milojević, 2009, 41).

A number of financial frauds and scandals from the end of the last and the beginning of the 21st century, as well as the emergence of the global financial and economic crisis, have put to attention that it is necessary that financial and accounting information should contain certain main characteristics: comprehensibility, relevance, reliance, comparability and consistency (Radulović, 2010, 27). Manipulations in financial statements can impact even the most developed capital markets and lead to a bigger or smaller financial crisis and a disturbance in their functioning. Fraudulent financial statements have existed since the beginning of financial reporting because they have been used for achieving certain short -term material goals of the management or the owner. They are present not only in transition countries, but also in countries with developed economies and the system of financial reporting. The basic goal of the financial statement manipulation is to gain some benefits for fraudsters by showing a wrong image about the financial situation of a company and its profitability and in this form of criminal action, some of the users of financial statements (creditors, investors) are the damaged party taking the risk of losing financial means by being led to make wrong decisions (Jakšić, Vuković, 2012, 414).

According to the International Standards on Auditing, fraudulent financial reporting represents a criminal act characterized by the intentional misstatement or omission of certain information or a disclosure in financial statements (International Standards and Audit Announcements, 2005, 277). The Association of Certified Fraud Examiners (ACFE) defines fraudulent financial reporting as the „intentional misstatement of material facts or accounting information, which leads the user of financial information, presented in the financial statements, to make wrong decisions" (Zabihollah, 2002, 2). The American Institute of Certified Public Auditors (AICPA) defines fraudulent financial reporting as the „intentional incorrectness or omission of the amount or disclosure in financial statements in order to deceive the users of financial statements." This may include (Stefanović, 2000, 4):

- he manipulation, falsification or editing of accounting records or accompanying documents used in the preparation of financial statements;
- the incorrect (false) presentation or intentional omission of significant events or transactions from financial statements;
- the Intentionally wrong application of accounting rules.

Frauds in financial statements may arise from (Wells, 2005, 324):

- falsifying material facts, documents or business transactions;
- the misstatement of events, transactions, accounts or other significant information on the basis of which financial statements are made;
- the intentionally wrong use of the accounting principles, policies or procedures applied for the evaluation, recognition and recording of business transactions;
- the false presentation of financial information in financial statements.

MANIPULATIONS IN BALANCE SHEETS

The most frequent forms of malversation that occur in companies and are connected with the categories in balance sheets are the overestimation of receivables, the manipulation of the inventories of materials, goods and final products, the overestimation and underestimation of liabilities, the absence of liabilities records etc. Manipulations made in balance sheets are either directly or indirectly connected with the manipulations of revenues and expenses in balance sheets and with the cash flow in cash flow statements. In other words, it is impossible to manipulate particular elements from balance sheets without influencing revenues and expenses. If a fraudster wants to hide his/her criminal acts, they need to „conceal" the trace of such manipulations in every financial statement in which the fraud in question is involved. For example, if a certain account payable is omitted, it affects a decrease in future expenses and the outflow of cash that would occur when paying for this liability. However, this concealed account payable results in an increase in a certain part of assets which also needs to be omitted from the balance. This indicates that frauds in balance sheets are so complex that they are hard to detect if fraudsters have successfully hidden all the „evidence" of it.

When it comes to tangible and intangible assets, the effect on their value is, on the part of the management and accountants, most often realized by an incorrect application, or more precisely, the abuse of the rules for the activation of the expenses executed in connection with these assets or by an overestimation, i.e. an underestimation of the residual value of the assets, their duration period and the choice of the methods of amortization. Within the scope of IAS 16 - Property, plant, and equipment, IAS 38 - Intangible assets, IAS 23 - Borrowing costs, IFRS 3 - Business combinations, there are requirements for the activation of expenses connected with tangible and intangible investments from which an inflow of the economic benefit is expected. In other words, capitalization by itself is not an instrument for accomplishing frauds in financial statements. The activation of additional investments into fixed assets, interest costs, investment in development costs, as the most common expenditures that are capitalized, become an instrument of fraud if not implemented with the standard - prescribed conditions for capitalization (Škarić Jovanović, 2011, 218). The previously stated possibilities of influencing the result and the equity of a company by overestimating its assets and underestimating its liabilities are potential causes for a bigger or smaller violation of the propositional power of the balance. The problem is the fact that this behavior creates hidden losses and that the balances burdened with those hidden losses lead investors towards making wrong decisions through an unreal presentation of the real earning and financial position of the company. The objectification of high hidden losses often means the end for a company (Malinić, 2009b, 58).

The typical examples of the overestimation of assets and the underestimation of liabilities are accounted for in Figure 1.

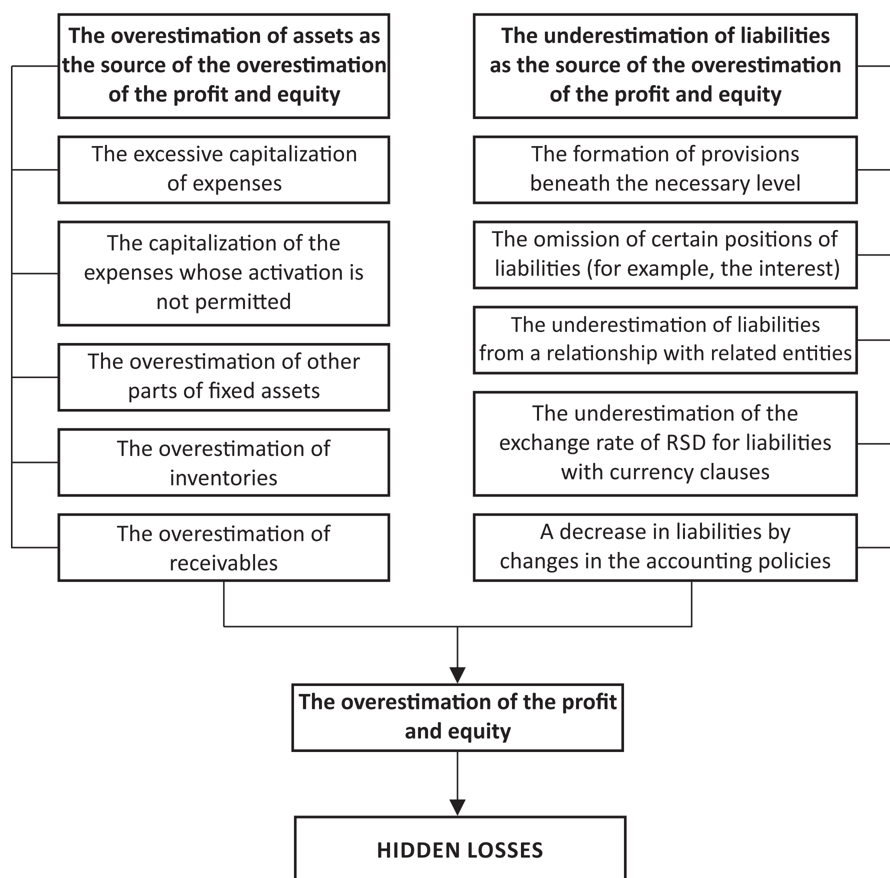

Figure 1 The overestimation of assets and the underestimation of liabilities as the sources of an unreal increase in the profit and the capital

Source: Malinić, 2009b, 57

Inventories are a very important element of a company's business performance. The success of a company's business depends on the proper and efficient management of inventories. More precisely, if a company obtains the necessary level of inventories and does not „block" its own money in them, it will lead to better business results, other conditions being equal. Also, many financial institutions have made a condition of taking some of the inventories as pawn for giving loans, and therefore they are interested in the flow of inventories and their influence on the result of the business. If frauds regarding all these forms of inventories are taken into consideration, then the illegal appropriation of inventories can be said to be possible to perform by:

Forming false requisitions - Under false requisitions, the fraudster takes from the inventories a greater amount than necessary with the aim to illegally keep or sell that redundancy;

Making a fictional sale - It involves false invoices usually addressed to dummy corporations or accomplice firms. This manipulation solves the problem of the shortage of inventories and also the one of inflating revenues from the sales incurred by false invoices;

Illegal appropriation during the purchase and reception of inventories - During the purchase and reception of inventories, the fraudster knowingly

keeps one part of the inventories. In order to conceal this manipulation, the falsified documentation is formed during the reception of the purchased inventories. One of the possible ways to perform this form of fraud is when the person who is in charge of the reception of the purchased material assets falsifies the reception documents which show that instead of, for example, the actual 1,000 units of goods only 900 of such goods came from the supplier, and by this, he or she appropriates the remaining 100 units for themselves. An obvious problem in this case is that the reception document will not match the supplier's invoice and hence there will be a payment problem. In this example, if the supplier's invoice states that there are 1,000 units of goods, but the reception document shows the reception of 900 units, this lack will have to be explained. The problem for the fraudster is that the supplier can claim that the delivery was fully accomplished. In this case, on certain conditions, the fraudster can avoid the problem by changing only one copy of the reception document. The copy of the document sent to the accountant would show the full reception of the goods and the supplier would be fully paid, but the copy sent to the inventory accounting would be false and reduced by the appropriated amount. By this, the real state of goods in the warehouse would match the documents in the inventory accounting. This is a simplified example of a fraud which can only be accomplished in companies with weak internal control and during the purchase of goods which are individually very expensive, but easily sold (Petković, 2010, 213);

The evaluation of materials inventory - The most widely used manipulation is a frequent change of the methods of the calculation of the output value of inventories because by frequent changes of these methods, different effects in income statements are shown. What is primarily meant here is a situation in which a company changes its accounting policy of calculating the inventory output in short periods of time. For instance, in the previous year, for the same kind of inventories, a company used the FIFO model when calculating the output, and in the next year, it is the method of the weighted average expense. IAS 2 allows the application of both methods, but that does not mean that they should be applied to one kind of inventories alternately. The FIFO method implies that the output of inventories is calculated by taking the first input price for the first output, and so on, while in the case of the method of weighted average expenses, the price taken for every single output is the one calculated by multiplying the amount and the price of a concrete kind of inventories which preceded the output (Urošević, 2010, 54).

Liabilities are inevitable in every company. The ability of a company to execute its liabilities on time indicates the healthy financial position of the company. On the other hand, problems in executing these liabilities indicate problems in the company's business. Some liabilities bring, by their own appearance, changes only within the balance sheet, which means that there is an increase in assets. In another case, they arise together with the occurrence of expenses, which means that changes extend to both the balance sheet and the income statement. A susceptibility to fraud regarding liabilities is larger if operations related to fraud can extend to both the balance sheet and the income statement. Different liabilities give different manipulation possibilities (Milojević, 2010, 23). They include the following: concealing and the non -disclosure or incorrect disclosure of liabilities, including in the balance sheet those that should not be included, the overestimation or underestimation of liabilities, compensation with other positions in a prohibited way and a series of other actions. All of this enables the changing of the financial positions and the image of the earning ability of a company. Frauds are committed when forming liabilities are hard to detect. The fields and situations in which manipulations regarding liabilities can occur are the following ones:

When *buying inventories*, it is possible to manipulate liabilities emerging during this transaction. One of the methods is for a company not to show the liabilities that emerged during the purchase of different kinds of inventories or to show in its financial statements that those have been paid for. The American company Sirena Apparel Group Inc. inflated its sales revenue in 1999 with the aim of displaying the best trade results possible. At the same time, this company left out the record of the expenses having been made during the purchase and consequently the liabilities having emerged during the purchase

of certain inventories. These manipulations created a seemingly better financial position of the company.

Accrued expenses (accrued liabilities) are expenses recognized as accrued and calculated, but which have not been paid yet. As a result, the unpaid sum is recorded as a liability in the balance sheet. The most frequent example of such accrued liabilities are calculated liabilities for salaries, taxes and contributions, various fees, rents, utility services, interest etc. If accrued liabilities are omitted or underestimated, it leads to an increase in the achieved result or to the underestimation of expenses from which those accrued liabilities have emerged. When, during the year 1998, General Electric Co. made its accrued expenses as a guarantee for the new turbines used for gas transport, the problem occurred when the design of the new turbine failed and the estimates showed that the expenses of the return or repair of the product would increase by around 100 million dollars more than what had been accrued and calculated previously. It was clear for them that it was inevitable to record a special sum which would increase the already accrued liabilities by the amount of the expenses of the guarantee in order to compensate for the potential receivable for the repair or cancellation of the turbines, so the company did not calculate the additional expenses and by this it performed a manipulation. A more radical example of using this method for the financial result manipulation is the company Centuri Inc. This company did not calculate the expenses of its employees' vacations, certain expenses related to tax and contributions, and the expenses of certain costs related to assets. All this resulted in the underestimation of the accrued liabilities in the amount of 912,672 dollars (Mulford & Comiskey, 2002, 259);

The underestimation of liabilities is an equally „successful" instrument of fraud for stating bigger net assets and a bigger profit. Accounts payable, liabilities for employees, those based on accrued expenses, and those for the state, will be shown in a lower sum by omitting their recognition and the recognition of the expenses related to them (Škarić Jovanović, 2011, 221). Since, as a rule, accounts payable have the greatest share in overall current liabilities, and are strongly related to a change in the amount of inventories, a change of the relative relation between the growth of accounts payable and the growth of inventories is considered to be a good indication of a possible „financial numbers game" (Mulford & Comiskey, 2002, 261);

One of the easiest ways to conceal liabilities is a conscious omission of their entry, i.e. the *omission of liabilities*. Perpetrators of this kind of frauds simply destroy, hide or put aside the documents on liabilities and related expenses; they do not record them in accounting books nor do they include them in financial statements (Petković, 2010, 232). Omissions in the recording of liabilities have the same purpose - without these, there are neither additional expenses nor a decrease in assets and a decrease in equity, which usually occurs (Singleton, Singleton, Bologna & Lindquist, 2006, 110). A certain number of companies omit their liabilities on the basis of obtained loans. This is a radical move and it is very hard to conceal because every loan is seen both in the balance of the company which took it and in the balance of the company or bank which gave the loan. However, the justification of companies for not recording a loan is that the loan was taken by the owner as a natural person rather than by the company as a legal person or that there are technical issues on the part of the bank which did not provide the recording of the loan. Sometimes, certain companies do not record their liabilities for loans thinking that „no one will notice". The most frequent motive for concealing liabilities is the avoiding of showing the company's indebtedness in order to be granted new loans, deceive suppliers, attract investors and maintain the share prices on the capital market.

Cash - Cash - related frauds involve taking cash from the employer. The most frequent frauds of this type are: frauds related to stealing cash, frauds related to payment and the appropriation of a portion of cash.

Stealing cash - In order for a perpetrator to steal cash, he or she has to be in a position enabling him/her to have a direct contact with cash and the company's cash flows - the inflow and outflow of cash. The methods of stealing it can be assorted into two basic groups: the appropriation of cash „from the cash box" - this manipulation implies that cash is stolen directly from the box office of the company or from the fiscal

cash register in a shop; the appropriation of cash „from deposit" - a company is obliged to pay all the money received from a sale or the provision of services in its current account at the end of the day. What happens is that individuals appropriate a portion of this money;

Frauds connected with paying in cash - This manipulation is hard to notice because the actions taken belong to the legitimate ways of payment. The problem is that certain parts of the transactions of charging and paying cash are fictional or unreal. The most frequent frauds related to payment in cash are: frauds related to invoicing - this manipulation involves using false invoices to take cash from a company; frauds related to the calculation of earnings - by using fictional employees, falsifying working hours, salaries and the sum of provision, by performing this kind of manipulation, cash goes out of a company in an illegal way; frauds related to the reimbursement of expenses - cash from a company is used for paying non-existing business expenses; and check frauds - the essence of this manipulation is falsifying checks either completely or only some parts of them (the sum, the issuer and the like);

The appropriation of a portion of cash - This manipulation appears in companies which do business with commerce , such as bars, restaurants, gas stations and retail stores. A good example would be the way Seigel Bugsy led transactions when he founded several casinos in Las Vegas. S. Bugsy needed to take the cash earned during a day or a week, appropriate one portion of it for the Chicago mafia and another for himself (non -taxable money) and register the rest as a revenue. If an owner, such as S. Bugsy, appropriates a certain amount from the cash which comes in and then records the rest in the accounting books, it is very hard to notice this kind of fraud. These frauds have the worst consequence on the state because of unpaid taxes. An example of this kind of fraud is the one known by the name of „Crazy Eddie", in which a family owning a company appropriated millions of dollars from retail stores selling electronics, leaving only as much as was necessary to show a minimal profit (Singleton, Singleton, Bologna & Lindquist, 2006, 119).

MANIPULATIONS IN CASH FLOW STATEMENTS

A cash flow statement is a component of a regular annual set of financial statements in the practice of regular financial reporting. This statement enables an insight into a company's performance from a perspective completely different from balance sheets and income statements, by giving very detailed information on an inflow and an outflow within its business, financial and investing activities. In this way, cash flow statements function as the estimate of a company's exposure to financial risks. Frauds committed through financial statements are most often accomplished by manipulating the positions in balance sheets and income statements. This leads to information from cash flow statements being a valuable and very reliable informational resource for making business decisions. Information provided by a cash flow statement is safer because it is simpler to manipulate with revenues, expenses, assets and liabilities than with an inflow and an outflow of money. In general, there are two basic methods to manipulate operational activities in cash flow statements:

- *Maximizing the inflow of money from operating activities* - The inflow of money from operating activities should include an inflow from operating activities. However, companies may try to include inflows from the sale of assets in these. In the case of Enron, loans from banks were treated as inflows from operating activities. Although these items should be shown within the scope of financial activities, in cases like this, companies try to expand the definition of what falls into inflows from operating activities, on the one hand, and on the other, to narrow the scope of what falls into inflows from investment and financial activities. By displaying the biggest possible amount of inflows as inflows from operating activities, a company tends to show as good business results as they can be;
- *Minimizing the outflow of money from operating activities* - Companies applying this method perform a procedure opposite to the method of maximizing the inflow of money from operating activities. Companies tend to avoid showing

as many outflows from operating activities as possible or transfer them to outflows from investment or financial activities by trying to narrow the definition of what falls into outflow from operating activities, on the one hand, and on the other, expand the scope of what falls into outflow from investment and financial activities. The reasons are the same as with the previous method: to show that a company is as successful as possible by reducing the outflow from its operating activities (Jones, 2011, 61).

According to certain theoreticians, there are four major methods of a cash flow manipulation, and these are (Schilit & Perler, 2010, 190):

- Transferring an inflow from financial activities to an inflow from operating activities;
- Transferring outflows from operating activities to outflows from investing activities;
- Inflating cash flows from operating activities using acquisitions or selling a part of or the whole company;
- Increasing cash flows from operating activities using additional unsustainable activities.

Figure 2 is a presentation of the major methods of transferring an inflow to operating activities or an outflow from operating activities.

Transferring an inflow from financial activities into an inflow from operating activities

In certain situations, companies resort to various manipulations in order to display as much of an inflow from operating activities as possible. One of the methods enabling this is transferring an inflow from financial activities to an inflow from operating activities. The techniques of this type of fraud are as follows:

Recording fictitious inflows from operating activities on the basis of regular bank loans - This manipulation was accomplished in Delphi Corporation, a company from the USA which had problems during 2000 and was expelled from the General Motors Corporation a year earlier. The whole car industry within which Delphi Corporation operated had problems, so the management of this company tried in many ways to manipulate the results of the business in order to show the company's operation as successful as possible. During the year 2000, especially in the fourth quarter, the cash flows from operating activities were in the red. This was a big problem for Delphi Corporation because of the fact that exactly the inflow from operating activities was what was repeatedly emphasized as a sign of its successful operation. In December the same year, Delphi Corporation offered to sell inventories worth 200 million dollars to a bank (Bank One). The bank refused the offer, but Delphi Corporation offered

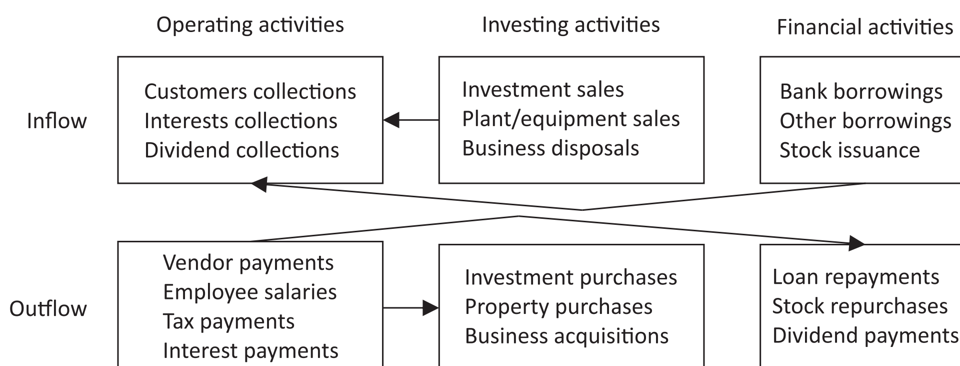

Figure 2 Cash flow frauds: „Robin Hoodd" tricks

Source: Schilit & Perler, 2010, 194

the bank a possibility of buying out those inventories and „re-selling" them to the company in several weeks. In return, the Delphi Corporation would pay the bank certain compensation, depending on the sales value. Essentially, this was a classical short-term loan from the bank which, in the economic sense, demanded collateral (Delphi Corporation gave these inventories precisely as a guarantee). This loan was supposed to be shown as a bank loan and as an increase in the cash flows from financial activities. However, Delphi Corporation decided to show this loan as a classical sale of inventories to the bank in the amount of 200 million dollars. In the first place, this was a way to manipulate the inflow from sales, which was increased by 200 million dollars, and also falsely showed an increase in the inflow from operating activities on the basis of selling inventories. Using this manipulation in its cash flow statement from 2000, Delphi Corporation displayed a sum of 268 million dollars of the inflow from the operating activities, out of which sum only 68 million dollars were real (SEC Report, 2006). This is an example of the so -called double manipulation which many companies use. When a company increases its sales inflow artificially, such an inflow from operating activities is simultaneously increased. However, many auditors who discover the inflating of an inflow from sales neglect it, so this kind of manipulation often goes unnoticed.

Increasing the inflow from operating activities on the basis of selling receivables before the deadline - Companies often resort to selling their receivables as a useful strategy of improving their business results. From an economic standpoint, this is a very simple transaction: a company seeks an investor (most usually a bank) who wants to buy their receivables. In return, the company receives the money in the amount of those receivables reduced by the amount of a certain provision charged by the bank during the purchase. But there appears a question of how to interpret this transaction from the standpoint of cash flows. It is most frequently defined as an inflow from financial activities. However, companies very often define this inflow as the one originating from operating activities, due to the fact that they are most often receivables from sales. What needs to be taken into account is that the selling of such receivables can be performed in two ways: by the classical selling of receivables to a third party (most often a bank or some other financial organization), which is called factoring, or the selling of receivables to a third party (a financial organization) with the aim of buying a new financial instrument, i.e. some new securities, which is referred to as securitization. During 2004, the American pharmaceutical distributor Cardinal Health had problems with a lack of money and decided to sell a number of receivables. By the end of the year, Cardinal Health managed to gather over 800 million dollars by doing this. The sale represented the base for an increase in the inflow from operating activities during 2004 in the total sum of 971 million dollars in comparison with the previous year (from 548 million to 1.5 billion dollars). In this way, Cardinal Health transferred the inflow from operating activities from a future period (which it would have achieved by charging for the sold receivables) to the current one, thus creating the so -called „hole" in the future inflow of cash from operating activities (SEC Report, 2007). That is why it is very important that a sudden growth should be noticed during the conducting of an analysis of an inflow from operating activities, that not only the amount of such an increase but also the reason that led to the increase should be examined;

The inflating of an inflow from operating activities by charging for false receivables from customers - In order to display as good business results as possible, the American company Peregrine Systems decided to inflate their inflow by displaying a sale to non -existing buyers. By doing so, this company displayed not only a false inflow but also false receivables through which it had allegedly achieved that inflow. However, in addition to inflating the inflow from the false sale, Peregrine Systems did execute the sale of those non -existent receivables accounted for in the balance sheet. A bank bought those receivables, but the risk from charging, or non -charging, was taken by Peregrine Systems. From the economic standpoint, this is a classical bank loan because this money was given to Peregrine Systems by the bank, and the false receivables were taken from the bank as a guarantee; hence, this inflow was supposed to be shown as an inflow from financial activities rather than an inflow from selling receivables, i.e. as an inflow from operating activities (Ketz, 2004).

Transferring outflows from operating activities to outflows from investing activities

A frequently used method of cash flow manipulation is transferring outflows from operating activities to outflows from investing activities with the aim of relieving cash flows from operating activities and showing the best business result possible. This method of manipulation can be achieved by applying the following techniques:

Inflating cash flows from operating activities with the so-called „boomerang" transactions - The American company Global Crossing dealt with building underwater optical cables intended to connect over 200 biggest cities in the world. However, since the project was approaching an end at the end of 2000 and at the beginning of 2001, doubts appeared considering whether Global Crossing would be able to cover the great expenses of the business and return the big loan taken. Global Crossing responded to these doubts by saying that there was no such problem and that one of the biggest indicators of their successful business was the big amount of the money at the company's disposal. Global Crossing had made many contracts beforehand, so it had received a large sum of money as an advance before the job was finished, which significantly increased the inflow from operating activities. During 2000, although Global Crossing had suffered a loss of 1.7 billion dollars, the cash flow statement showed positive cash flows from operating activities in the amount of 911 million dollars (Fabrikant & Romero, 2002). This information appeased the investors. However, in a later analysis, it was noted that this high level of the inflow in cash was, on the one part, falsely shown through the so -called „boomerang" transactions. Since the majority of the companies dealing with telecommunications had problems at that time, Global Crossing agreed with the rest of them to make „boomerang" transactions to one another, which implied that Global Crossing would sell their products to other companies, but at the same time it would buy their products in the same amount. The influence of these transactions on the cash flow was such that Global Crossing showed the selling of these products as an outflow from investing activities, which relived cash flows from operating activities.

The inadequate capitalization of normal operational expenses - Performing the capitalization of operational expenses is one of the simplest operations by which expenses are decreased and business results are improved. However, many companies forget that by doing this, they burden cash flows, which can lead to a negatively shown cash flow. The famous example is WorldCom Company, which performed one of the biggest financial frauds in history. This company performed the capitalization of operational expenses in the amount of several billion dollars, but manipulated cash flows from operating activities at the same time. WorldCom showed the operational expenses as the purchasing of assets and therefore classified them in the cash flow statement as outflows from investing activities, rather than operating activities. In this way, WorldCom reclassified over 5 billion dollars of the cash outflow during 2000 and 2001 from business into investing activities (Beresford, Katzenbach & Rogers, 2003);

Inflating cash flows from operating activities by using acquisitions or selling a part of or the whole company

Cash flow manipulations often occur when companies merge through acquisition or by selling a part of or the whole company. In this way, what happens is that they either solve the problem of a negatively displayed cash flow in a company undergoing merging or being sold, or a good base for a new merged company is set. The most widely used technique for this kind of fraud is the transfer of an outflow from operating activities to investing activities through an acquisition. By applying this manipulation in many cases during the purchase of a target company, the cash flows of that company, especially those from operating activities, are impressive; so, on that basis, investors come to the conclusion that companies work successfully. However, investigations often show that successful cash flows were the result of financial frauds. Every acquisition brings improvement of the cash flows of a company created by taking over another company. If a company is bought with cash, then that payment is recorded in outflows from investing activities. If it is paid in shares, there is no outflow of cash. The sole acquisition brings the acquiring company many other benefits. For

example, every sale performed by the target company is recorded in the statements of the company which took over the other one as an inflow from sale, as well as an inflow from operating activities. However, the greatest chance for the improvement of cash flows through acquisition lies in the taken receivables and assets. These receivables and assets form certain expenses and outflows while being acquired, but all of that disappears before the acquisition. Then, after the acquisition, by charging these receivables and selling these assets, inflows are recorded in cash flow statements, which means that a company records an inflow from operating activities (by charging for receivables), but does not record outflows because they have occurred before the acquisition.

An increase in cash flows from operating activities by using additional unsustainable activities

In situations when they have problems with cash flows, many companies turn to the so -called unsustainable activities that help them overcome the existing problems. Unsustainable activities companies can use are numerous, but the most frequent ones are:

An increase in cash flows from operating activities by slowing the tempo of paying for liabilities - This is the easiest technique of a simple delay in paying for liabilities, especially towards suppliers, with the aim of manipulating cash flows. In this way, outflows from operating activities are delayed, most often for a period of one month. For instance, liabilities for December in the current year are delayed for January in the next year and in that way, the outflow of the current business year is decreased in the cash flow statement. However, it should be noted that this technique is typically not used for a longer period of time, because paying for liabilities cannot be delayed for an indefinite period of time. When Bob Nardelli was assigned the position of the top manager in the American company The Home Depot Inc. during 2000, great expectations were set before him. Nardelli found increasing cash flows from operating activities by decreasing the tempo of paying the accounts payable to be one of the ways for him to fulfill the investors' expectations. During 2001, Nardelli managed to prolong the payment deadline from 22 to 34 days, which brought the company a leap of cash flows from operating activities from 2.8 billion dollars to 6 billion dollars at the end of 2001. This big leap of cash flows is, on the one part, also accomplished by decreasing the tempo of buying inventories, which will later be discussed. During 2002, Nardelli kept trying to keep the high level of cash flows, primarily by prolonging the payment deadline. He partly succeeded in prolonging it from 34 to 41 days, but the cash flows from operating activities at the end of the year 2002 still fell from 6 billion to 4.8 billion dollars (Schilit & Perler, 2010, 243);

An increase in cash flows from operating activities by accelerating the tempo of charging for receivables - With this technique, a company can improve its cash flow if there is a possibility for the company to convince its buyers in some way to pay their liabilities before the payment deadline. From the economic standpoint, larger charging of liabilities from customers is a good indicator. During 2002, through negotiations with its current customers, the American company EDS managed to obtain in advance 200 million dollars which they were supposed to take for the services to be given in the next two years. Still, EDS was not sincere towards its investors and failed to mention that the increase in the cash flows was the result of the accelerated charging of liabilities and that the tempo would not be maintained in the following period. The accelerated charging did lead to a sudden leap of the cash flows during 2002, but still it was the result of the short -term frauds with the aim of displaying a better image of the company's business. This example of a manipulation shows that it is a good, when the analysis of financial statements is carried out and the accelerated charging of accounts receivable is noticed. However, one should always be careful when coming to conclusions and thoroughly explore whether such accelerated charging is the result of successful business operations or a form of fraud.

An increase in cash flows from operating activities by decreasing the scope of buying inventories - The Home Depot Inc. company, as has already been said, managed to enlarge its cash flows in 2001 by turning to the prolonging of the deadline for the payment for liabilities. However, one part of the increase in the cash flow was also achieved by decreasing the scope of buying inventories. Quite simply, The Home Depot

Inc. reduced the order from its suppliers by purchasing a smaller amount of inventories for every store than they had done before, i.e. the company did not buy the inventories in the same tempo as it had used to do in the previous period. With this technique, The Home Depot Inc. managed to decrease the outflow for buying inventories from 1.1 billion dollars during 2000 to even 166 million dollars during 2001 (Grow, 2007).

METHODS OF FRAUD PREVENTION

Detecting frauds is inevitably connected with preventing them and taken together these aspects secure the system of fraud control. For a successful prevention of frauds an adequate controlling environment needs to be established, the one in which all the employees, especially a company's manager, will adhere to certain ethical codes of behavior. The point is to stop all forms of fraud as well as the financial statement manipulations. The most important forms of fraud prevention are the following ones:

- The establishment and correct organization of internal control - Internal control represents a set of procedures or rules which serve to control a company's business operations. An efficient system of internal control implies, i.e. includes, a reliable accounting system, adequate control policies and the procedures and policies of securing the adequate protection of a company's assets. It also requires the clearly defined policies of accounting and financial reporting (Stefanović, 2000, 9). A company's management are responsible for establishing internal control. The most frequent forms of control used by internal control are: preventive control - focused on protecting the assets and the financial data of a company by trying to prevent frauds; detective control - tries to investigate into a fraud as soon as possible; corrective control - includes the activities intended to find a solution to the fraud detected in order to prevent future frauds;
- Creating fair business conditions - Fair conditions presume those in which employees follow ethical principles, where the aims of the company, rather than personal ones, are in the first place for the management, and in which employees' work is appreciated and respected. One of the first elements of creating these conditions is employing honest people. It is necessary that companies have a good system of checking their employees, especially new ones. A constant check of employees has shown in practice as an excellent way of checking employees (Albrecht & Albrecht, 2004, 101). The second element contributing to creating fair business conditions is creating a positive working environment. For companies to be less sensitive to frauds, it is necessary that the system of „open doors" should be devised through a good corporate code of behavior, which would enable employees to have undisturbed communication, especially with senior managers, and to appoint positive and honest people to the key positions in the company;
- Providing employee training on dangers from frauds - Employees' awareness of what is considered to be an acceptable behavior and what is not should be developed amongst employees. The training of employees begins with the introduction of the term „fraud". The goal is for them to understand that preventing fraud is important for them as individuals as much as it is for the company as an entity. This training is important because many researches have shown that employees may be of key importance for detecting and preventing frauds, in terms of signaling and providing information on possible frauds.
- Establishing policies and procedures in a company - Internal control is established on certain policies and transactions which are deemed to be ethical are determined against the ones which are not. According to this, the fraud -related policy and carefully made accounting policies represent the base of the process of detecting and preventing business frauds.
- In addition to the previously stated general preventive measures, many companies use a number of other specific preventive measures. There are a large number of the measures that

can be used in the process of business fraud prevention. The choice of a measure depends on many factors such as the size of a company, its financial possibilities, its personnel's qualifications, the characteristics of the company's business, the country where it operates, the system of internal control development, legal obligations etc. Only some of these measures will be mentioned here:

- Video surveillance - Surveillance mainly serves as a measure for detecting frauds, but it can also serve as a preventive measure for preventing frauds. It is important for video surveillance to be put in a visible spot, so that employees could be aware of the fact that every attempt they make to perform a fraud will be shot and seen.
- Constant supervision - Within this preventive measure, internal auditors and other kinds of control have the key role. Constant supervision does not leave individuals a possibility of committing a fraud. However, practice has shown that because of financial and human limitations constant supervision has to be performed in certain periods of time. There is a danger that fraudsters will be cautious in those periods and commit a fraud in periods deprived of such supervision;
- Legal proceedings taken against a fraudster can bring a great benefit to a company. It sends a strong message that if someone commits a fraud and is caught, the company will initiate legal proceedings and seek imprisonment for the perpetrators. Hence, legal proceedings may be considered as a preventive measure against future frauds in a company, because acting seriously as it does, the company shows future perpetrators that they should not take frauds lightly;
- Performing frequent and unannounced controls - In many companies, the exact time of the performance of regular controls is known and there is a danger that fraudsters will prepare themselves to conceal their frauds in many ways. For that particular reason, it is very important that frequent unannounced controls should be conducted. (Singleton, Singleton, Bologna & Lindquist, 2006, 186)

CONCLUSION

The financial statements of a company are an important and inevitable source of information for investors and creditors in the process of making decisions on the allocation of assets; therefore, information which is clear, relevant and comparable needs to be contained in them. The tendency of managers to embellish the results of the business and the financial position of the company and to show its performances better than they really are lead to the financial statement manipulation, which can be marked as one of the main means of committing frauds. Many frauds in the previous period have led to the emergence of a large number of financial scandals which were the result of false financial reporting, which has led to a stricter and more detailed control of financial information.

A company's management is under constant pressure to achieve as good results as possible, especially in the conditions of a financial crisis. This pressure forces the management to resort to many forms of financial manipulation more frequently in order to show the expected business results. In addition to this pressure, many managers resort to financial frauds so as to achieve personal goals, get extra bonuses or avoid being fired. The techniques of creating fraudulent financial statements are manifold, and many items in such statements can be subject to manipulation (revenues, expenses, liabilities, assets, cash flows etc.). Still, practice has shown that revenues and expenses are most often the subjects of financial frauds. The reason for that is, before all, their significance for the analysis of a company's business as well as the existence of many techniques for manipulating the elements of financial statements. However, by analyzing a big number of frauds, it can be noticed that many fraudsters have manipulated the positions of balance sheets with the aim of influencing the result of the business and the financial position of the company in that way. The fact is that all forms of fraud ultimately leave a mark on indicators in balance sheets; in this paper, however, the manipulation techniques

with a direct influence on the positions of balance sheets are emphasized.

It is precisely the analyses presented in the third part of this paper that point to the fact that manipulations of inventories, liabilities and cash are manipulation techniques most frequently used in balance sheets and that these manipulations have a long -term negative influence on the results of the business and the assets of a company. This proves the first hypothesis stated in this paper. The second hypothesis, saying that the techniques of the manipulation of an inflow and an outflow in cash flow statements are much harder to detect and prevent than other forms of manipulation, is proved by the analysis carried out in the fourth part of the paper.

Cash flow manipulations are much harder to commit, but also much harder to detect and prevent. The problem is that such manipulations are performed with real cash flows, unlike revenues and expenses yet to be collected. That is precisely the reason why manipulations with an inflow and an outflow are what only „experienced" fraudsters carry out. Practice has shown that perpetrators of these manipulations very skillfully conceal their traces and that the techniques used for committing them very often border with legal methods for showing the cash flows of a company. That is why it is very hard to detect this mode of manipulation and when analyzing these frauds, it is necessary that a company's business operations should much more thoroughly be analyzed in order to notice the interconnectedness of the positions in different financial statements and use various techniques of detecting frauds in the right way in order to prevent this kind of manipulation in future and regain trust in the information presented in financial statements.

Analyzing manipulations in balance sheets and cash flow statements and pointing to a need for a more serious control of the elements of these reports are the biggest contributions of this paper. The problem is that all forms of control pay the most attention to the analysis of manipulations of revenues and expenses and by that fail to notice manipulations perpetrated in balance sheets and cash flow statements. All these statements are interconnected and a manipulation performed in one statement either directly or indirectly influences all the others. By analyzing the techniques of the manipulation of inventories, liabilities, cash, an inflow and an outflow, the problem of their detection and simultaneously their prevention is pointed out.

REFERENCES

Albrecht, S., & Albrecht, C. (2004). *Fraud Examination and Prevention.* Ohio: USA, Thomson-South-Western.

Beresford, D., Katzenbach, N., & Rogers, C. (2003). *Report of Investigation of the Board of directors of Worldcom*. INC. retrived 20.05.2015, from http://www.sec.gov/Archives/edgar/data/723527/000093176303001862/dex991.htm.

Grow, B. (2007). *Out a Home Depot*. retrived 21.05.2015, from http://www.bloomberg.com/bw/stories/2007-01-04/out-at-home-depotbusinessweek-business-news-stock-market-and-financial-advice.

Dmitrović Šaponja, Lj., Milutinović, S. i Šijan, G. (2007, maj). *Zloupotrebe u računovodstvu - rizik objektivnog finansijskog izveštavanja*. Rad prezentiran na XII međunarodnom naučnom skupu SM 2007 Strategijski menadžment i sistemi podrške odlučivanju u strategijskom menadžmentu, Subotica, Republika Srbija: Ekonomski fakultet u Subotici Univerzitet u Novom Sadu.

Fabrikant, G., & Romero, S. (2002). *How Executives Prospered as Global Crossing Collapsed*. retrived 15.05.2015, from http://www.nytimes.com/2002/02/11/business/how-executives-prospered-as-global-crossing-collapsed.html.

Jakšić, D. i Vuković, B. (2012). *Uticaj krize na manipulisanje finansijskim izveštajima.* Rad prezentiran na 16. kongresu Saveza računovođa i revizora Republike Srpske. Banja Vrućica: Republika Srpska.

Jones, M. (2011). *Creative Accounting, Fraud and International Accounting Scandals.* London, England: John Wiley & Sons.

Ketz, E. (2004). *The Accounting CyclePeregrine Systems - Or the Lack of Them.* retrived 15.05.2015, from http://accounting.smartpros.com/x46099.xml.

Malinić, D. (2009a). *Prepoznavanje bilansnih rizika.* Ekonomija preduzeća - Tajne bilansa: Menadžerski pristup. Beograd.

Malinić, D. (2009b). *Cash-flow kao instrument otkrivanja poslovno-finansijskog rizika.* Zbornik radova XL Simpozijuma 40 godina Računovodstva i Poslovnih finansija - dometi i perspektive, Beograd: Republika Srbija, Savez računovođa i revizora Srbije, 57-60.

Međunarodni standardi i saopštenja revizije. (2005). Beograd, Republika Srbija: Savez računovođa i revizora Srbije.

Milojević, M. (2009). Motivi i uslovi za finansijske prevare. *Revizor*, 46, 41-48.

Milojević, M. (2010). O rizicima finansijskog izveštavanja. *Revizor*, 52, 7-25.

Mulford, C., & Comiskey E. (2002). *The Financial Numbers Game*, New York, NY: John Wiley & Sons.

Petković, A. (2010). *Forenzička revizija - Kriminalne radnje u finansijskim izveštajima*, Novi Sad, Republika Srbija: Proleter A.D. Bečej.

Petrova, D. (2008). Korišćenje računovodstvenih procena u manipulativnom finansijskom izveštavanju i odgovornosti revizora. *Računovodstvo*, 7-8, 23-34.

Schilit, H., & Perler, J. (2010). *Financial shenanigans - How to detect accounting gimmicks & fraud in financial reports (third edition).* New York, NY: McGraw-Hill.

SEC Report. (2006). *Charges Delphi Corporation and Nine Individuals, Including Former CEO, CFO, Treasurer and Controller, in Wide-Ranging Financial Fraud; Four Others Charged With Aiding and Abetting Related Violations*, retrived 20.05.2015, from http://www.sec.gov/news/press/2006/2006-183.htm.

SEC Report. (2007). *SEC Sues Cardinal Health, Inc. For Fraudulent Earnings and Revenue Management Scheme*, retrived 20.05.2015, from http://www.sec.gov/news/press/2007/2007-147.htm.

Singleton, T., Singleton, A., Bologna, J., & Lindquist, R. (2006). *Fraud auditing and Forensic Accounting*. New York, NY: Johne Wiley & Sons.

Stančić, P., Dimitrijević, D. i Stančić, V. (2013). Forenzičko računovodstvo - odgovor profesije na prevare u finansijskim izveštajima. *Teme*, 4, 1879-1897.

Stefanović, R. (2000). Sprečavanje i otkrivanje lažnog finansijskog izveštavanja. *Računovodstvo*, 11, 3-11.

Radulović, B. (2010). Procenjivanje i rizici finansijskog izveštavanja. *Revizor*, 52, 27-45.

Škarić Jovanović, K. (2011). *Finansijski izveštaji kao instrument prevare.* Rad prezentiran na VI kongresu računovođa i revizora Crne Gore.

Urošević, N. (2010). Neistiniti finansijski izveštaji - kome služe. *Privredni savetnik*, 5, 50-59.

Wells, J. (2005). *Principles of Fraud Examination*. New York: NY, John Wiley & Sons.

Zabihollah, R. (2002). *Financial Statement Fraud - Prevention and Detection.* New York, NY: John Wiley & Sons.

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