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ECONOMIC CONSEQUENCES OF DISCLOSURE OF INFORMATION ON THE EFFECTIVENESS OF INTERNAL CONTROL OVER THE FINANCIAL REPORTING SYSTEM

JEL CLASSIFICATION: M21, M41

ABSTRACT:

After the major corporate accounting scandals that happened at the beginning of the 21st century, many countries introduced the obligation to disclose information about the effectiveness of internal control over the financial reporting system. It was based on the assumption that mandatory reporting on internal control will encourage managers to pay more attention to the improvement of internal control over the financial reporting system and that this will lead to an improvement in the quality of financial statements and restore investor confidence in financial statements. The aim of this paper is to examine the economic consequences of the introduction of the obligation to disclose information on the effectiveness of internal control i.e., whether the assumed benefits have been realised. In order to realize the established goal, the author analyses the results of numerous empirical studies that investigated the impact of disclosure of information about the effectiveness of internal control on the quality of financial statements, the behaviour of investors and the behaviour of lenders. According to the author's findings, the obligation to disclose information about the effectiveness of internal control led to an improve-

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ment in the quality of financial statements. Also, the disclosure of this information has informational value for investors and lenders and affects their behaviour i.e., their risk assessment and the decisions they make.

KEYWORDS:
DISCLOSURE, INTERNAL CONTROL OVER THE FINANCIAL REPORTING SYSTEM, QUALITY OF FINANCIAL STATEMENTS, INVESTOR BEHAVIOUR

1. INTRODUCTION

The globalization of the world economy, accompanied by the increase in the volume of international trade, the expansion of foreign direct investments, the increase in the number of multinational companies and the creation of global financial markets brings to the fore the need for quality financial reporting, which will primarily serve to protect the interests of current and potential investors.[2] A series of major corporate accounting scandals, such as Enron, WorldCom, Skandia, Fisher Partner, Parmalat, Lehman Brothers, Bernie Madoff, Satyam, CHS, FTX, Credit Suisse, etc. have seriously undermined investor confidence in the reliability of financial statements. These accounting scandals related to the discovery of materially significant errors in financial statements. The main reason why owners and other stakeholders questioned the reliability of financial statements was that they could not assess the actual financial position of companies based on these statements.[3] Because of this, they suffered huge losses. It is believed that accounting scandals have been mainly caused by weak internal control.[4] Weak internal control can lead to the creation of financial statements that do not give a true and objective view of the company's financial condition and results. Such internal control allows managers to intentionally manipulate the information contained in financial statements or unintentionally misrepresent information in these statements. Having that in mind, the aforementioned scandals caused public concern about the lack of quality of internal control. At the same time, they raised awareness of the key role of effective internal control in company management.

Internal control consists of policies and procedures that are designed to provide reasonable assurance that the company's specific goals will be achieved, that any undesirable event or occurrence will be prevented, or that the consequences of such events or occurrences will be timely detected and eliminated. By establishing internal control, the management strives to achieve three broadly defined goals related to: reliable financial reporting, effectiveness and efficiency of operations, and compliance of operations with laws and other regulations.

The part of internal control that is designed and implemented to ensure reliable financial reporting (internal control over the financial reporting system) includes policies and procedures that should provide reasonable assurance that the financial statements are prepared and presented in accordance with the applicable financial reporting framework. It includes control policies and procedures related to the maintenance of accounting records, the authorizing of transactions by the management and the safeguarding of company assets.[5] The task of internal control over the financial reporting system is to reduce the risks of unintentional errors in accounting records, as well as intentional manipulation of accounting information contained in financial statements.

Effective internal control enables the company to carry out only those transactions that have been initiated and approved by an authorized person, to record and process business events in accordance with the applicable financial reporting framework and to report

2 Sekerez (2019).

3 Pobrić (2019).

4 Agrawal et al (2005); Verschoor (2002).

5 PCAOB, (2004).

on them in a truthful and objective manner. Such internal control can provide reasonable assurance that the financial statements will be reliable, that is, assurance that there is only a small probability that misstatements in the financial statements will not be prevented or detected in a timely manner. Strong internal control provides better opportunities to detect and deter fraud. Many frauds that resulted in financial statement restatements relied on management's ability to exploit weaknesses in internal control.[6]

It has long been considered that the establishment of effective internal control is the main prerequisite for ensuring quality financial statements. Companies could voluntarily establish a system of internal control to improve the quality of their financial statements, but they were not required to do so.[7] Although quality financial statements are necessary for making optimal decisions by external stakeholders and for the normal functioning of financial markets, the establishment and functioning of internal control was an exclusively internal issue of the company for years. External users of financial statements had no insight into the quality of the company's internal control.

The accounting scandals showed that the issue of the quality of internal control cannot remain an internal matter of the company. These scandals have prompted regulatory authorities in many countries to think about how to improve the quality of internal control in companies.[8] In some countries, the obligation for companies to report on the effectiveness of internal control has been introduced. Those who advocated the disclosure of this type of information assumed that reporting on the effectiveness of internal control would encourage managers to pay more attention to internal control and to identify and eliminate weaknesses in a timely manner. This should lead to an improvement in the quality of the financial statements. At the same time, it would restore the confidence of investors and other external stakeholders in the reliability of financial statements.[9]

The regulation concerning internal control is the subject of constant discussion between regulatory authorities, practitioners (managers, accountants, auditors, etc.) and academic researchers. The question arises whether the introduction of the obligation to disclose information on the effectiveness of internal control has produced the expected results. By presenting the results of a lot of research, we will try to answer this question, that is, to look at the economic consequences of disclosing information about the effectiveness of internal control over the financial reporting system. This could be useful to regulatory authorities in the countries where internal control effectiveness reporting has not yet been introduced, but is being considered, as well as companies considering the possibility of voluntarily disclosing this information.

The paper is structured as follows. In Section 2, an overview of the regulations related to reporting on the effectiveness of internal control in certain countries is given. In Section 3, the impact of the disclosure of information on the effectiveness of internal control on the quality of financial reporting is presented. In Sections 4 and 5 respectively, the influence of the disclosure of information about the effectiveness of internal control on the behaviour of investors and lenders is considered. Section 6 contains the main conclusions of the paper.

6 PCAOB, (2004).

7 Altamuro et al. (2010).

8 Hu et al. (2014).

9 Van de Poel et al. (2011); Krishnan et al. (2020).

2. DISCLOSURE OF INFORMATION ON THE EFFECTIVENESS OF INTERNAL CONTROL OVER THE FINANCIAL REPORTING SYSTEM

The first efforts to regulate the issues concerning internal control occurred in the USA. In 1977, the Foreign Corrupt Practices Act (FCPA)[10] was adopted, according to which listed companies are required to establish and maintain an effective system of internal control over transactions and assets and to disclose internal control weaknesses only after a change of auditor. This legal solution was rather loose. The corporate accounting scandals of the early 21st century have raised questions about whether the existing regulations ensure quality financial reporting and provide sufficient protection to investors. As a result, in 2002 the US Congress passed the Sarbanes-Oxley Act (SOX), which significantly tightened the rules and raised corporate governance standards. An important part of SOX is the requirement concerning internal control.

SOX[11], like the FCPA, requires all listed companies, including small, medium and large companies, to establish and maintain effective internal control, while additionally imposing strict rules regarding the disclosure of information about internal control. According to SOX, the management of listed companies is obliged to assess the effectiveness of internal control in a period of 90 days before issuing financial statements. It is also obliged to disclose in annual and quarterly financial statements its conclusions about the effectiveness of internal control based on the performed assessment, including any identified significant deficiencies in the design or operation of internal control that could negatively affect the company's ability to record, process, summarize and report business transactions; any fraud that involves managers or other employees which have a significant role in internal control; and any significant changes in internal control after the date of their assessments, including any corrective actions. Additionally, SOX requires listed companies with a market capitalization of over $75 million that their annual financial statements contain not only management's assessment of the effectiveness of internal control, but also an auditor's opinion on the management's assessment. All listed companies in the US must strictly adhere to the requirements defined in SOX. If the management knowingly issues financial statements that do not comply with the defined requirements, a fine of up to $5,000,000 and a prison sentence of up to 20 years can be imposed. Some countries have followed the US example while many others have not. The US SOX has influenced regulations in other countries, although most other countries do not have such rigorous rules.

In 2006, in China, the Shanghai Stock Exchange and the Shenzhen Stock Exchange issued internal control guidelines for companies listed on these exchanges. Within these guidelines, it is recommended that companies submit a report on internal control together with an auditor's opinion. However, these guidelines were not generally followed by listed companies. The main reason is that most listed companies in China are state-owned enterprises that do not take management practice related to internal control seriously.[12] In order to improve the governance of Chinese listed companies, as well as to respond

10 FCPA (1977).

11 SOX (2002).

12 Ji et al. (2015).

to the global trend of adopting regulations related to internal control, regulatory bodies in China issued the Basic Standard of Enterprise Internal Control, known as Chinese SOX, in 2008. The Basic Standard requires the listed companies to establish and maintain effective internal control. Furthermore, they are required to publish a report on the self-assessment of the effectiveness of internal control, as well as the auditor's opinion. Unlike the American SOX, which is focused exclusively on the internal control over the financial reporting system, the Chinese SOX also requires the assessment and reporting on internal control related to compliance with laws and regulations, safeguarding of assets and effectiveness and efficiency of operations.[13]

In 2007, the Financial Instruments and Exchange Act was adopted in Japan. Among other things, this law regulates issues related to internal control. These issues are regulated in a similar way as in the USA and China. This means that listed companies are required to perform an assessment of the effectiveness of internal control, make a report on it and disclose the external auditor's opinion on the effectiveness of internal control.[14]

The regulation regarding the disclosure of information about internal control, which is applied in Canada, is less demanding compared to the regulation in the USA, China and Japan. In 2008, a National Instrument 52-109 was adopted in Canada that requires the management of listed companies to assess the effectiveness of internal control and to disclose the conclusions reached on the basis of the assessment.[15] Also, the disclosure of any identified material weaknesses in the internal control over the financial reporting system, as well as planned and undertaken activities to eliminate them, is required. Unlike the regulations in the USA, China and Japan, companies whose shares are listed on Canadian stock exchanges are not required to submit an external auditor's opinion on the effectiveness of internal control.

In 2006, the European Parliament and the Council of the European Union adopted Directive 2006/43/EC and Directive 2006/46/EC which define the obligation of the audit committee, or an alternative body, of companies whose shares are listed on stock exchanges in member states of the European Union to monitor the effectiveness of the internal control system[16] and the obligation of companies to include a description of the main characteristics of their internal control in their reports on corporate governance[17]. The management is not required to make an explicit statement about the effectiveness of internal control or to provide an auditor's opinion. Individual member states are allowed to expand the requirements related to the establishment, functioning and reporting of internal control within the framework of national legislation. Only Italy and the Netherlands did so.[18] The legislation of these countries requires the management of listed companies to provide an assessment of the effectiveness of internal control as well, in addition to the description of the internal control system, whereby the opinion of the external auditor on the effectiveness of internal control is not required.

13 Zhang et al. (2016).
14 FIEA (2007).
15 CSA (2008).
16 Directive 2006/43/EC.
17 Directive 2006/46/EC.
18 Deloitte (2022).

In contrast to the American SOX, which is based on strict rules, the European Union has decided to base regulations related to internal control, and corporate governance in general, on the "comply or explain" principle. This principle implies that companies must either comply with national regulations related to internal control or they can deviate, but they must explain in the annual report why they deviated from the regulations and to what extent.[19] In other words, the publication of information on compliance with national regulations is mandatory, while compliance is voluntary. In 2021, the European Commission launched an initiative to tighten regulations related to internal control, and corporate governance in general, in order to improve the quality of corporate reporting.[20] This means that in the coming period, changes in regulations related to internal control in the member states of the European Union could be expected.

3. THE IMPACT OF DISCLOSURE OF INFORMATION ON THE EFFECTIVENESS OF INTERNAL CONTROL ON THE QUALITY OF FINANCIAL STATEMENTS

The main motive for introducing the obligation to report on internal control is to improve the quality of financial statements. The supporters of introducing this obligation believed that internal control reporting would lead managers to increase their focus on internal control. Regular assessment of the effectiveness of internal control and reporting on it enables early detection of material weaknesses. The company may have a documented internal control policy that defines how the effects of individual transactions should be evaluated, processed and recorded but this does not mean that they are well-designed and adequately applied. An assessment of the effectiveness of internal control will show that controls are effective or indicate that ineffective controls need to be improved.[21] Research conducted by Kinney and Shepardson[22] showed that the probability of discovering material weaknesses is 13.6% higher in companies that are required to report on the effectiveness of internal control compared to companies that are not subject to this obligation.

Thanks to the early detection of material weaknesses and their timely elimination, the management can develop and maintain effective internal control. Such internal control will prevent the occurrence of unintentional errors and fraud in financial statements and thus improve their quality. Research shows that certain types of regulation related to internal control have led to an improvement in the quality of internal control. This means that this regulation has had some success in achieving its primary goal.[23] Although, even before the introduction of the obligation to disclose information on the effectiveness of internal control, it was believed that increasing the effectiveness of internal control leads to an improvement in the quality of financial statements, no empirical research was conducted to prove or disprove this because the information on the effectiveness of internal

19 Directive 2006/46/EC.

20 Deloitte (2022).

21 Dowdell et al. (2014).

22 Kinney et al. (2011).

23 Dowdell et al. (2014).

control was not publicly available. The introduction of the obligation to disclose information on the effectiveness of internal control made it possible to conduct such research. Most of these studies were conducted on a sample of companies from the USA.

In an effort to empirically test whether the disclosure of information on internal control affects the quality of financial statements, most researchers use discretionary accruals as an indicator of financial statements' quality. Accruals are earned income and incurred expenses that are included in the calculation of the company's net result, which is reported in the income statement, even though the cash related to these transactions has not yet been collected or paid. It is a difference between reported earnings and net cash flow. Accruals consist of two components, namely non-discretionary (normal) accruals and discretionary (abnormal) accruals. Non-discretionary accruals are a component of accruals arising from the normal activities of the company and the application of imposed accounting regulations. Discretionary accruals are a consequence of the flexible application of accounting rules and earnings management. Non-discretionary accruals are the expected level of accruals assuming no earnings manipulation, while discretionary accruals are the result of permitted and illegal forms of earnings manipulation.

A lower level of discretionary accruals indicates a higher quality of financial statements. A high level of discretionary accruals can be caused by accounting errors and irregularities or the use of discretionary rights when assessing the value of certain assets, writing off assets, recognizing income and expenses, etc. in order to show the desired financial result in the financial statements. The regulation concerning the disclosure of internal control information affects the level of discretionary accruals by encouraging managers to pay attention to internal control, assess its effectiveness, notice and eliminate weaknesses in a timely manner, and thus reduce the likelihood of unintentional errors and fraud in financial statements. In this way, discretionary accruals are reduced, which indicates an increase in the quality of financial statements. Numerous authors have empirically confirmed that a lower level of discretionary accruals appears in financial statements in the period after the introduction of the obligation to disclose information on internal control compared to the period before the introduction of this obligation.[24]

Cohen et al.[25] found in a sample of US companies that accrual-based earnings management (measured by the level of discretionary accruals) increased steadily in the pre-SOX period and declined significantly after SOX. At the same time, they found that the level of earnings management based on real activities declined before SOX and increased significantly after the adoption of SOX. This suggests that companies have shifted from accrual-based earnings management methods to earnings management based on real activities after the introduction of SOX. Earnings management based on real activities includes reducing costs of research and development, marketing and maintenance, delaying the start of a new project even though it may mean losing a certain amount of income, etc., all in order to achieve the target earnings. This way of earnings management causes higher costs for the company, but it is more difficult to detect.

24 Krishnan et al. (2020); Dowdell et al. (2014); Van de Poel et al. (2011); Cohen et al. (2008); Doyle et al. (2007); Lobo et al. (2006); Bedard (2006).

25 Cohen et al. (2008).

Given that different countries impose different requirements regarding the disclosure of information on internal control, the question arises whether they all have the same effect on the quality of financial statements. Based on the fact that different rules apply in the US for companies with a market capitalization below and above $75 million, Dowdell et al.[26] investigated the impact of the disclosure of management's assessment of the internal control effectiveness, on the one hand, and the impact of disclosure of the assessment of the internal control effectiveness by the external auditor, on the other hand, on the quality of financial statements. Their study showed that both the disclosure of management's assessment and the disclosure of the external auditor's assessment led to a reduction in the level of discretionary accruals and an improvement in the quality of financial statements. Based on this, the authors concluded that it is justified to exclude smaller companies from the obligation to engage external auditors for the purpose of evaluating the effectiveness of internal control, especially considering that the costs of audit fees can be disproportionately high for these companies.

Kinney and Shepardson[27] showed on a sample of smaller listed companies in the USA that the introduction of the obligation to disclose management's assessment of the effectiveness of internal control resulted in an increase in the scope of material weakness disclosures. They believe that the results they reached indicate that managers are capable to identify material weaknesses independently and that imposing an obligation on these companies to engage external auditors for the purpose of assessing the effectiveness of internal control would cause greater costs than benefits. In contrast, Bedard and Graham[28] found that auditors detect about three-quarters of internal control deficiencies. Such results indicate the importance of evaluating the effectiveness of internal control by external auditors. Bedard and Graham[29] believe that removing the obligation to conduct the audit of internal control effectiveness could lead to internal control weaknesses remaining undetected, and this would result in a failure to fully realize potential improvements in the quality of financial reporting.

Van de Poel and Vanstraelen[30] researched the relationship between internal control reporting and the level of discretionary accruals in the context of the adoption of regulations based on the "comply-or-explain" principle in the Netherlands. Their research showed that the description of the internal control system does not affect the level of discretionary accruals and therefore the quality of financial statements, while the disclosure of managerial assessment of the effectiveness of internal control leads to a reduction of discretionary accruals and an improvement in the quality of financial statements. They also determined that the majority of companies do not disclose the management report on the assessment of the effectiveness of internal control, and these companies do not give an explanation or provide a general explanation of the reason for not disclosing this report. It is obvious that this way of regulating reporting on internal control does not give the desired results in terms of improving the quality of financial reporting.

26 Dowdell et al. (2014).

27 Kinney et al. (2011).

28 Bedard et al. (2011).

29 Bedard et al. (2011).

30 Van de Poel et al, (2011).

4. THE IMPACT OF DISCLOSURE OF INFORMATION ABOUT THE EFFECTIVENESS OF INTERNAL CONTROL ON INVESTOR BEHAVIOUR

By introducing the obligation for companies to report on internal control, information about the effectiveness of internal control became available to external stakeholders. Thanks to this, external stakeholders can use this information when making their decisions. However, the question arises as to whether this information has informational value for them. The question of whether information on the effectiveness of internal control affects the decisions and behaviour of investors is particularly important, given that the main intention of introducing the obligation to report on internal control was to restore investor confidence in the quality of financial statements.

It is expected that investors should take into account information on the effectiveness of internal control when assessing investment risk, which would further affect their willingness to invest, trading volume, share price and cost of equity capital.[31] A company disclosing that its internal control contains material weaknesses sends a signal to market participants that the reliability of its financial statements is less than desirable.[32] This means that there is a high probability of intentional and unintentional errors in financial statements. Because of this, there is uncertainty in making decisions based on such financial statements. It is assumed that based on this, investors will assess that the information risk is high.[33]

It is believed that a low level of internal control efficiency can lead to a decrease in the expected future earnings.[34] Namely, an increase in costs due to the elimination of internal control weaknesses and an increase in auditor fees could be expected. Also, ineffective internal control can lead to inadequate management decisions, for example investing in high-risk projects, which increases the variability of cash flow and the likelihood of business failure and the occurrence of losses. Finally, a low level of internal control effectiveness can undermine market confidence in the company and lead customers, suppliers and other market participants to question the company's ability to meet its obligations. Any of these factors could cause lower actual future earnings. Investors are aware of this and because of this, they are likely to lower their expectations regarding the company's profitability.

Based on the decrease in expected future earnings and the increase in decision-making uncertainty, investors could assess that the risk of investing in a company with low internal control efficiency is high. As a consequence, they may be less interested in buying shares of that company, which should lead to a drop in trading volume. Due to the decrease in the demand for shares in relation to the supply, there should be a decrease in the share price. Also, investors will probably demand a higher premium for the risk they are exposed to. They will likely expect a higher return from a company that discloses material weaknesses in internal control than from a company whose internal control is

31 Chalmers et al. (2018).

32 Gordon et al. (2012).

33 Ogneva et al. (2007).

34 Khlif et al. (2019).

effective.[35] This means that the disclosure of information about material weaknesses in internal control should lead to an increase in the cost of equity capital.

The disclosure of the information that a company's internal control is effective and does not contain material weaknesses should have an inverse effect on investment risk, trading volume, share price, and cost of equity capital. Such information indicates that the financial statements are reliable, which reduces decision-making uncertainty. Based on this, investors should estimate a lower level of investment risk. This would further cause an increase in the volume of trading in the company's shares, a rise in the price of shares and a fall in the cost of equity capital.

Numerous researchers have empirically confirmed that reports on the effectiveness of internal control have informational value for investors and influence their behaviour.[36] Lopez et al.[37] determined that the auditor's negative opinion on the effectiveness of internal control over the financial reporting system influences investors to assess a higher risk of misstatements in financial statements and a higher risk of future restatement of financial statements. It also leads to greater information asymmetry, less transparency of financial statements, higher risk premium, higher costs of equity capital, lower sustainability of earnings and lower predictability of earnings.

Church and Schneider[38] investigated the impact of internal control information disclosure on individuals' willingness to invest in a target company. They found that potential investors react negatively to the disclosure of material weaknesses in internal control. Namely, potential investors attribute less reliability to the financial statements of companies whose internal control is ineffective and are less willing to invest in such companies. They react more negatively when the disclosure of material weaknesses in internal control is unexpected than when it is expected. Also, they respond positively to the disclosure of information that internal control is effective.

Hammersley et al.[39] examined the share price reaction to management's disclosure of internal control weaknesses. They found that on the day of the disclosure of material weaknesses in internal control, share prices fall. The magnitude of the share price decline is related to the severity of material weaknesses. The drop in share price is significantly lower if management concludes that internal control is effective despite the existence of material weaknesses.

Chen et al.[40] confirmed the results obtained by Hammersley et al.[41]. They determined that the effectiveness of internal control reduces the share price crash risk, but that all components of internal control do not have an equal impact on this risk. The quality of the control environment, information and communication, and monitoring components

35 Gordon et al. (2012).

36 Hammersley et al. (2008); Ashbaugh–Skaife et al. (2009); Lopez et al. (2009); Ittonen (2010); Gordon et al. (2012); Church et al. 82016); Gao et al. (2017); Chen et al. (2017).

37 Lopez et al. (2009).

38 Church et al. (2016).

39 Hammersley et al. (2008).

40 Chen et al. (2017).

41 Hammersley et al. (2008).

significantly reduce the share price crash risk, while risk assessment and control activities do not affect it.

Ittonen[42] also examined the impact of the disclosure of material weaknesses in internal control on the share price. Interestingly, the initial results of this research showed that the share price rises after the disclosure of material weaknesses. However, further research has shown that the market reacts positively to the disclosure of material weaknesses when the auditor's report on internal control and management's assessment are consistent and that it reacts negatively when the auditor's report contradicts management's assessment i.e. when management was unable or unwilling to detect material weaknesses in internal control.

Ogneva et al.[43] investigated the impact of internal control reporting on the cost of equity capital. They found no statistically significant difference in the cost of equity capital between companies that disclose and those that do not disclose material weaknesses in internal control, neither before nor after disclosure of material weaknesses. They concluded that internal control reporting has no direct impact on the cost of equity capital.

Ashbaugh–Skaife et al.[44] as well as Gao and Jia[45] also examined the impact of internal control reporting on the cost of equity capital. However, they found that there is a materially significant relationship between these variables. More specifically, they determined that the disclosure of information about the effectiveness of internal control leads to a decrease in the cost of equity capital and that the disclosure of material weaknesses in internal control leads to an increase in the cost of equity capital. Unlike them, who conducted their research on a sample of companies that are required to report on internal control, Zhang et al.[46], as well as Khlif et al.[47], conducted similar research on a sample of companies that voluntarily report on internal control and they reached the same conclusions about the impact of disclosure of information about the effectiveness of internal control on the cost of equity capital.

Through their research, Gordon and Wilford[48] sought to explore more deeply the relationship between internal control reporting and the cost of equity capital. They analysed the companies that disclosed material weaknesses in internal control over several consecutive years. Their intention was to determine how the remediation and non-remediation of material weaknesses affect the cost of equity capital. The results they reached show that the disclosure of material weaknesses in several consecutive years has a progressively greater negative impact on the cost of equity capital. Also, they determined that the market reacts positively to the reduction in the number of material weaknesses i.e., their partial remediation. These findings are important given that some companies timely remediate material weaknesses in internal control while other companies are slow to remediate material weaknesses and report them for several consecutive years.

42 Ittonen (2010).
43 Ogneva et al. (2007).
44 Ashbaugh–Skaife et al. (2009).
45 Gao et al. (2017).
46 Zhang et al. (2017).
47 Khlif et al. (2019).
48 Gordon et al. (2012).

5. THE IMPACT OF THE DISCLOSURE OF INFORMATION ON THE EFFECTIVENESS OF INTERNAL CONTROL ON THE CREDIT TERMS AND CREDIT RATING

Although the results of empirical research confirm that reporting on internal control affects the behaviour of investors, the researchers considered that these results cannot be generalized to refer to lenders. They believe that lenders have access to a larger volume of information about the company compared to investors and that this larger volume of information can mitigate the negative impact of information about internal control weaknesses on the defining of credit conditions. Also, lenders tend to take a shorter-term view than investors and tend to focus more on cash flows rather than accrual-based earnings.[49] Bearing this in mind, a series of studies were conducted on the impact of internal control reporting on the cost of debt, the definition of non-price credit terms and the assessment of the company's credit rating.

When assessing the creditworthiness of a company before making a decision on loan approval and during the duration of the loan agreement, lenders rely to a large extent on the information contained in the financial statements of the loan applicant. Disclosure of information about weaknesses in internal control reduces lenders' confidence that the financial statements are prepared in accordance with the applicable financial reporting framework.[50] In such circumstances, lenders assess a company's creditworthiness based on insufficiently reliable information. Also, weak internal control indicates that there is a higher probability of misuse of cash flows by the management. In conditions of weak internal control, managers may use borrowed funds to pay dividends or increase managerial compensation instead of investing in profitable projects. An increased misappropriation risk increases the risk of default.[51] To compensate for the uncertainty of accurately assessing a company's creditworthiness, lenders are likely to charge a higher cost of debt. They will also try to protect themselves from uncertainty by defining additional, non-price credit conditions, such as, for example, collateral requirements.[52]

It is assumed that reporting on internal control will also affect the credit rating of the company. Unlike the cost of debt and non-price credit terms set by lenders, a credit rating is determined by a team of analysts at an independent credit rating agency. The credit rating is an independent assessment of the risk of default. The estimated probability of default depends on a large number of factors. Credit rating agencies use the information from financial statements to assess a company's liquidity and long-term solvency as important inputs in determining a company's credit rating. All information related to the integrity and truthfulness of a company's financial statements is important in determining the level of confidence that analysts have in these statements.[53] Disclosure of weaknesses in internal control reduces confidence in the reliability of financial statements, which may lead credit rating agencies to increase the risk of default.

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49 Schneider et al. (2008).

50 Schneider et al. (2008).

51 Guidara et al. (2016).

52 Kim et al. (2011).

53 Crabtree et al. (2012).

Schneider and Church[54] conducted an empirical study to examine whether the internal control report affects the creditworthiness assessment of a company by bank loan officers. They determined that the assessment of loan officers is influenced by the internal control report i.e., that the disclosure of internal control weaknesses has a negative impact on credit risk assessment and the likelihood of loan approval.

Dhaliwal et al.[55] examined the impact of the disclosure of material weaknesses in internal control on the cost of debt in the secondary bond market. They empirically confirmed that the disclosure of material weaknesses in internal control leads to an increase in the cost of debt. Also, they found that in the companies that were assumed to have a low probability of material weaknesses in internal control, there is a greater increase in the cost of debt compared to companies that were assumed to have a high probability. This means that the debt market reacts with a greater increase in the cost of debt when material weaknesses in internal control are discovered in a company that is not expected to have material weaknesses than in a company that is expected to do so.

Kim et al.[56] conducted an extensive study of the impact of disclosure of material weaknesses in internal control on the cost of debt and non-price credit terms. They compared the price and non-price terms of loan agreements between the borrowers who disclosed material weaknesses in internal control and the borrowers whose internal control had no such weaknesses. They found that banks take into account the effectiveness of internal control over financial reporting when determining the cost of debt and that they charge higher direct and indirect costs of bank loans to borrowers whose internal control has material weaknesses compared to borrowers whose internal control is effective. They also found that borrowers with more serious internal control weaknesses pay higher loan rates than those with less serious weaknesses. They also obtained results that indicate that lenders impose stricter non-price conditions on borrowers who have material weaknesses in internal control than on the borrowers whose internal control is effective. Specifically, they found that the probability of a loan being secured by collateral is higher for borrowers whose internal control has material weaknesses than for borrowers whose internal control is effective. The research also found that banks increase interest rates on loans after borrowers disclose that their internal control contains material weaknesses and that banks reduce loan rates after borrowers eliminate the previously reported material weaknesses in internal control. All the obtained results indicate that the quality of the financial reporting system plays an important role in defining lending conditions and that the information risk arising from weak internal control is not eliminated by the fact that the lender has access to insider information of borrowers.

The previously mentioned researches are focused on developed countries characterized by liquid and active financial markets. The question arises whether the conclusions reached in these studies can also be applied to developing countries where financial markets lack liquidity, and banks play the most important role in financing companies. In this regard, Guidara et al.[57] conducted a study on the impact of the quality of internal control on the cost of debt using the Tunisian setting. The research showed that the low

54 Schneider et al. (2008).
55 Dhaliwal et al. (2011).
56 Kim et al. (2011).
57 Guidara et al. (2016).

level of internal control quality, which is confirmed by the auditor's negative opinion on the effectiveness of internal control, increases the cost of debt.

El-Gazzar et al.[58] investigated the impact of internal control reporting on changes in the credit rating of a company. Their results showed that disclosure of information about weaknesses in internal control is associated with changes in credit rating. In particular, the results indicate that the disclosure of internal control weaknesses leads to a downgrade in the credit rating. Namely, the market perceives the information about internal control weaknesses as bad news, which is why credit analysts change the previous assessment of the reliability of the company's financial statements and the credit rating.

Crabtree and Maher[59] also examined the impact of internal control reporting on corporate credit ratings, credit rating changes, and the cost of debt. They reached the same results that were obtained in the previously mentioned research. The research has shown that companies that disclose weaknesses in internal control have a lower credit rating and a higher cost of debt compared to companies that disclose that their internal control is effective.

6. CONCLUSION

Internal control reporting is the topic of numerous discussions between regulatory bodies, practitioners (managers, accountants, auditors, etc.) and academic researchers. On the one hand, it is pointed out that fulfilling this obligation increases costs for companies. On the other hand, it is questioned whether benefits from the introduction of this obligation are realized. Empirical research confirms that, in general, reporting on internal control contributes to improving the quality of financial statements, while different requirements regarding reporting on internal control that is imposed in individual countries do not have the same effect on the quality of financial statements. It is certain that the disclosure of the external auditor's assessment of the effectiveness of internal control improves the quality of financial statements, while the disclosure of only the description of internal control, which is mandatory in most European Union member states, does not affect the quality of financial statements. Some studies have shown that the disclosure of management's assessment of the effectiveness of internal control also improves the quality of financial statements. However, some other research has shown that during the evaluation of the effectiveness of internal control, auditors discover a significant amount of internal control deficiencies that have not been identified or disclosed by managers. Therefore, it remains unclear to what extent the disclosure of management's assessment of the effectiveness of internal control contributes to improving the quality of financial statements.

The disclosure of information on internal control affects the behaviour of investors as well as the lending conditions and credit rating of the company. Investors consider information on the effectiveness of internal control when assessing investment risk. If a company discloses that its internal control contains material weaknesses, investors will assess that the risk of investing in that company is high. Due to the high investment risk, the inves-

58 El-Gazzar et al. (2011).

59 Crabtree (2012).

tor will be less interested in investing in that company, which will lead to a decrease in trading volume and a fall in the share price. They will also demand a higher premium for the risk they are exposed to, which will increase the cost of equity capital. The disclosure of material weaknesses in several consecutive years has a progressively greater negative impact on the cost of equity capital, while the market reacts positively to the partial elimination of material weaknesses.

Disclosure of information about internal control also affects the behaviour and decisions of lenders and credit agencies. The disclosure of material weaknesses in internal control negatively affects the assessment of creditworthiness and the probability of loan approval. Lenders charge a higher cost of debt and impose stricter non-price lending conditions on borrowers with material weaknesses in internal control than on borrowers whose internal control is effective. Also, disclosure of material weaknesses in internal control leads credit agencies to assess a higher credit risk due to the lack of confidence in the reliability of the company's financial statements.

Most of the previous research on this topic was done in developed countries. Further research should go in the direction of investigating the economic consequences of disclosing information on the effectiveness of internal control in developing countries and conducting a comparative analysis between developed and developing countries. Although it is evident that the introduction of the obligation to report on internal control has achieved certain benefits, it is necessary to more explicitly investigate the relationship between the benefits and costs of reporting on internal control. It would be interesting to investigate whether there are differences in the economic consequences of the disclosure of information about internal control depending on the company size, industry sector or ownership structure. Further research could go in the direction of investigating the impact of disclosure of information about the effectiveness of internal control on the dividend policy, the selection of accounting policies, the selection of auditor, etc.

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