International School of Economics

Sknarina Polina

Spartak Taukebay

Syzdykova Gaukhar

Window Dressing and Misleading of Investors Based on Lehman Brothers Case. Analysis From Different Perspectives

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Supervisor: Rysbekova Kuralay

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INTRODUCTION

The modern realities of the global financial system, represented by a rather rapidly developing economic crisis and, consequently, a rather predictable period of a further decline, geopolitical and technological catastrophes, as well as high-profile collapses and bankruptcies of large conglomerates, can be characterised as realities with a relatively high level of uncertainty directly affecting the process of business activities. This is particularly true for corporate management companies, or corporations whose success and profits are highly dependent on their ability to raise capital and allocate their resources efficiently.

However, an alternative view of the situation suggests a certain pattern of increasing change within the economic system itself. This involves the introduction of innovations that fundamentally transform business structures at a more basic level, implying their acceptance of the challenges presented by all the new, partially recent, economic changes. In a more detail, it has a direct impact on building a more effective system of company differentiation in the context of permanent competition.

Moreover, it is essential to mention the corresponding risks, which, in their turn, appear as a destabilising factor, pushing various business units to find more and more efficient management methods. After all, large investments in various projects and activities to enhance the effectiveness of the business operations are not always appropriate to mitigate, especially to eliminate, the risks associated with the various stages of a company's development (Stulz, 2008, p. 13). However, despite this, risk management and their regular monitoring is becoming increasingly important for modern organisations (Christoffersen, 2011, p. 4).

The significance of having a well-built risk management structure can be shown by the opposite example - the absence of such a structure for dealing with potential and tangible risks leads to quite detrimental consequences in the form of decline and bankruptcy, which can be seen through the examples of such giant companies from completely different fields as Enron (2001), WorldCom

(2002) and Tyco (2002), Adelphia Communications (2002) and Lehman Brothers (2008) (Ndekugri & Twum-Danso, 2019, p. 5).

Nevertheless, risk management has become quite an essential component not only among large and developed companies, but also within the finance industry in a more extended sense, which includes various banks, investment, and insurance companies and many other institutions. The mentioning of such structures is not accidental, since it is exactly here that there is an active circulation of monetary masses in rather large volumes, which are a high priority and key asset. The adoption of risk management as a basis of priorities by the mentioned organisations can be explained by the following circumstance - financial institutions are subject to both qualitative and quantitative assessment, represented by the use of mathematical calculations, financial modelling and forecasting of potential risks and losses for further operations with them (Ramona, 2011, p. 1107). Therefore, it can be stated that the risk management process in finance is much more developed and systematised than in other areas, or at least it can be observed at the theoretical level.

Continuing this narrative, it makes sense to mention the events of the year 2008 related to the financial crisis on a global level, the consequences of which can be observed up to this day. That period clearly demonstrated the significance of having an effective risk coordination system in companies and, moreover, the willingness of the top management of these very companies to do so.

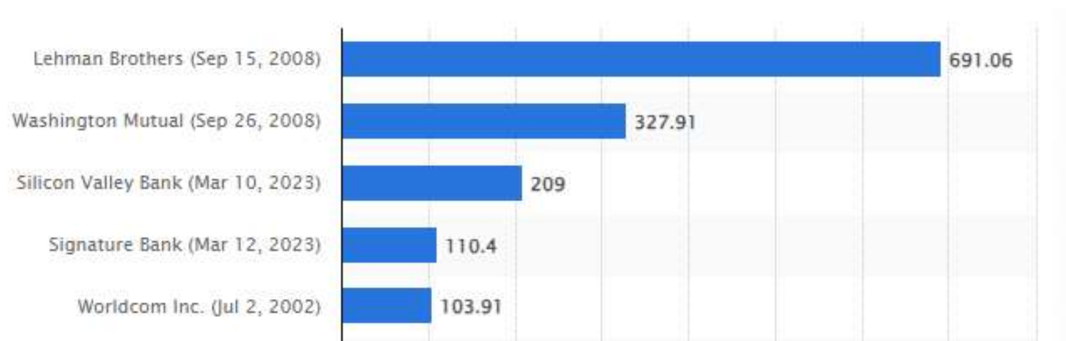
The case of Lehman Brothers Holdings Inc. is quite relevant in this regard - this example is of considerable interest from the perspective of an in-depth analysis of the operational activities performed by the corporation, which at some point led to a rather high-profile collapse. Moreover, the audit procedures performed by the independent auditors, represented by Ernst & Young, which theoretically should have foreseen and at least identified significant risks for the company, are also particularly valuable to study. Consequently, it can be concluded that the subject chosen within the framework of this thesis, which is determined by the field of research as a specific company Lehman Brothers, is quite relevant to examine and analyse.

JUSTIFICATION OF RELEVANCE AND SIGNIFICANCE & CASE CHOOSING CRITERIA

The choice of Lehman Brothers Holdings Inc. as the framework for analysis is not accidental.

In our understanding, the examination of the crisis events of 2008, their preconditions and consequences, is of a critical importance at the present moment. It is no exaggeration to say that the difficult period of 2008 had a crushing influence on world economy and global financial operations, the consequences of which can still be seen today (Dufour & Orhangazi, 2014, p. 3). Nowadays, there are also serious obstacles and challenges that can be faced, including the COVID-19 pandemic, armed conflicts in both the Russian-Ukrainian region and the Middle East, climate change and trade wars, which combined can lead to new economic shocks. Therefore, the analysis of the historical year 2008, its peculiarities and characteristic features, contributes to the understanding of the mechanisms of the potential crises' development, as well as to the predetermination of measures to overcome their outcomes. It allows using the past experience in the realities of the current market situation, modern financial institutions and available regulatory bodies, which will potentially minimise future risks and ensure full-fledged sustainable development of the world economy.

The events of those periods can best be explored by basing the analyses on the cases of specific companies that were central to the crisis. A relatively in-depth comparative review suggests that the decline of Lehman Brothers was the biggest and most widespread at the period. According to Statista (2024), Lehman Brothers had the highest ranking of the largest downfalls in the US on the date of February 2024 in terms of assets at the specific period of bankruptcy (in billions of US dollars). Accordingly, analysing this company gives an opportunity to have a deeper comprehension of the causes and effects of the 2008 crucial period, which is quite relevant at the moment, given the tense moments in both politics and economy.



Source: Statista (2024) - Largest bankruptcies in the United States as of February 2024, by assets at time of bankruptcy (in billion U.S. dollars);

In general, the main criteria for selecting a company are as follows:

1. *Significance and impact.* The Lehman Brothers case was one of the catalysts for emergence and development of the 2008 period crisis, which led to significant economic disruption, bankruptcies and takeovers of various financial institutions, rising unemployment rates and falling living standards in general (Chang, 2011, p. 54). Analysing such a significant event provides an opportunity to understand the nature of the impact of systemic risks on the industry and the economy in a broader sense, and to realise all the potential consequences. Moreover, a detailed review of the Lehman Brothers case allows us to formulate the preconditions for the emergence of crises of such magnitude and to understand the nature of measures and possible recommendations necessary to prevent such situations in the short- and long-term future.

2. *Complexity.* The collapse of the holding was caused by a multitude of factors of both quantitative and qualitative orientation. Speaking about quantitative factors, it is possible to name financial matters, namely various ratios, leverage indicators, complex financial instruments and repurchase agreements (Repo). Qualitative factors include corporate governance, internal controls and risk management. This multilevel and complexity makes the Lehman Brothers case ideal for studying and performing in-depth analyses to investigate the various factors affecting the company's operations. This, in turn, is an effective method of reflecting on the potential development strategies of various organisations.

3. *Access to the data and necessary information.* The choice of Lehman Brothers is also influenced by the circumstance of accessibility of materials and the degree of difficulty in obtaining them. The high-profile collapse was accompanied by multiple proceedings and investigations, during which a great deal of data, including financial statements, audit reports, and internal company documentation, was published in sources of free access, in particular Internet resources. Access to such a large amount of information allows for extensive analyses of the causes and consequences of bankruptcy, as well as tracing the impact of downfall on the industry and regulators. In addition, the availability of multiple sources facilitates a more objective and diverse assessment of the subject matter.

INDEPENDENT AUDITOR – PUBLIC & NON-PUBLIC ACCOUNTABILITY

Before beginning a direct discussion regarding the part of the independent auditor in examining the financial processes of an organisation, it is necessary to explain some of the concepts used in the further course of the discussion.

To begin with, due to the large number of explanations of the audit phenomenon, which has interpretations in absolutely different areas of activity, it makes sense to focus on the definition that is relevant for this research. It is necessary to refer to the International Organisation for Standardisation (ISO). According to ISO 19011 (2018), an audit is an “independent, systematised process of obtaining audit evidence and its objective evaluation”.

Also, it is essential to mention the main objectives of the audit. Referring to International Standards on Auditing (ISA), namely ISA 200, the primary goal of an audit of financial statements is to “express an opinion on whether the financial statements of a company are prepared in accordance with the available standards and regulations” that the same company adheres to (2009). Moreover, potential users of audit reports include both employees and senior management of the

organisations whose statements have been audited, as well as potential investors and the general public.

Conducted audits and issued audit opinions have their practical significance - the results of audit procedures can significantly influence the actions of various players on the financial market, including potential investors, business partners and creditors. Therefore, the competently constructed actions of auditors and their subsequent conclusions carry quite a lot of weight in the industry and society. In particular, competent auditor's opinions contribute to increasing confidence in the audited company, its financial statements and reported data, and in certain cases, to the stabilisation of the market as a whole.

When analysing the case of Lehman Brothers, it can be highlighted that it is a rather vivid example of how deficiencies in audit processes can affect an entire holding company and the market in general. Ernst & Young Global Limited (EY) were the independent auditors of Lehman Brothers from the time period of years 2001 until its bankruptcy filing in 2008 (Wiggins et al., 2014, p. 101). Accordingly, prior to its immediate collapse, the company relied on independent auditors from Ernst & Young (EY) to analyse the financial statements they issued and provide opinions on their credibility. Ernst & Young (EY) auditors were supposed to make efforts to detect fraud, recommend public disclosure, and report problems to Lehman Brothers' audit committee. However, throughout this time, they audited and approved the company's financial statements, providing in each case a recommended unqualified opinion. The lack of timely, objective audit procedures, led not only to misleading financial statements and misleading investors, but also to the bankruptcy of one of the largest companies of that period, with serious repercussions throughout the global financial field.

Therefore, based on all of the above, it can be stated that independent auditors are responsible both to their own clients, represented by the various companies to which they provide their services, and to the public, whose representatives also refer to the issued opinions.

LITERATURE REVIEW & RESEARCH GAP IDENTIFICATION

In order to gain a deeper comprehension of misrepresentation of financial statements and misleading investors, it makes sense to analyse the most key aspects of the business environment of companies, among which risks are one of the essential ones. The interpretation of risks in the context of business environment, which is relevant for this paper, is mentioned by Jaafari (2001), who characterises this phenomenon as the degree of a company's exposure to losses or profits multiplied by their respective magnitude (p. 89). At the current stage of development of both business and business processes science, the concept of risk has become quite widespread and, moreover, densely integrated into economic, financial, accounting and auditing discourse at a fundamental level. Recently, in international discourse, the more capacious concept of risk management, which contains the elements of analysis, assessment and management that arise in the routine operations of almost all organisations, is increasingly visible (Aven, 2016, p. 3).

As stated earlier, audit procedures are of particular importance in matters of company management. In particular, in creating an effective system of interaction between employees and departments. Moreover, a competent audit approach helps to prevent various forms of financial manipulation and fraud.

These offenses not only cause enormous financial losses but also harm the company's brand and the confidence of partners, investors, and customers. Moreover, according to Reurink (2019), they affect the economy as a whole by causing welfare losses, potentially damaging external relationships and disrupting resource allocation (p. 77). However, despite this, many companies underinvest in internal control systems because they consider them insufficiently effective and difficult to implement. (Biehl et al., 2023). Continuing this narrative, it is worth mentioning that auditors are not responsible for investigating financial crime as these matters are more dealt with by public authorities. Nevertheless, they play an important role in detecting and gathering potentially

compromising information by identifying possible irregularities in a company's accounting records and internal controls.

The Corporate Governance Code Guidance of the Financial Reporting Council (2024) contains the key elements required to establish an effective system of governance and control in organisations. In particular, Section 4, on internal controls, risk management and audit, shows how these elements interact to ensure accurate, reliable and transparent financial reporting. According to Corporate Governance Code Guidance (2024), audit is one of the primary controls in corporate governance designed to ensure the reliability and objectivity of a company's financial reporting. An audit involves a systematic review of financial information, internal processes and procedures, and an evaluation of the effectiveness of internal controls (Corporate Governance Code Guidance, 2024).

The main principles of the Corporate Governance Code Guidance are aimed at improving audit quality and reducing the risk of financial fraud:

Transparency and accountability

Companies should ensure that their own financial information is open and accessible to all stakeholders as an effective means of preventing hidden financial manipulation;

Independence of auditors

Auditors should be independent and objective in the performance of their direct duties and tasks to ensure unbiased and objective judgement in assessing a company's financial statements;

Risk assessment

Companies should conduct a systematic assessment of financial risks and develop strategies and appropriate measures to minimise them;

Strengthening the internal controls

Companies should continually improve their internal controls to detect and prevent potential fraud and error;

Staff training and development

A rather important aspect is the training of the company's staff and raising their awareness on the updated standards and procedures introduced;

Overall, Section 4 emphasises the importance of audit, risks and internal controls in preventing and detecting potential corporate fraud and financial manipulation. The effective functioning of these mechanisms contributes to enhancing investor confidence, protecting shareholder interests and ensuring the sustainability and stability of the corporate sector (Corporate Governance Code Guidance, 2024).

Another significant study that also highlights the current problem of fraud in the modern world is Occupational Fraud 2022: A Report to the nations (ACFE, 2022). The study focuses at a number of topics related to occupational fraud, such as its methods, scope, structure, and effects on businesses and society as a whole.

The Association of Certified Fraud Examiners (ACFE) analyses in detail the costs of occupational fraud, both tangible and intangible, and provides data on the financial losses of companies, the impact on brand reputation, and the negative impact on investor and consumer confidence (2022, p. 23). All these aspects are particularly important in the context of our chosen topic, as they demonstrate the need for effective audit procedures to minimise such financial risks.

Moreover, the study examines the various methods used by fraudsters and identifies the key vulnerable components of the company most exposed to various risks (ACFE, 2022, p. 22). This is quite important in understanding which particular aspects of the business require enhanced controls and detailed audit procedures to minimise the likelihood of financial manipulation and corporate fraud. In this way, the ACFE (2022) study serves as a valuable source of information for developing strategies to prevent and address financial crime in modern business.

Also, it is worth mentioning the study by Appelbaum et al. (2012, p. 291), which offers important insights into organisational crises and their effective management, covering both

theoretical aspects and practical examples. Based on a literature review and actual case studies, the authors identify the key steps required to manage and recover an organisation in crisis (Appelbaum et al., 2012, p. 287). This is essential in the context of this study due to the fact that a thorough understanding of organisational crises and their management can help companies identify and prevent potential cases of corporate fraud and financial manipulation.

Appelbaum et al.'s comparative analysis of the crisis management of two financial companies, Lehman Brothers and Paulson & Company, during the 2008 financial crisis provides valuable lessons and examples for practical application (2012, p. 300). Learning from their experience can be quite useful for other companies in improving their own crisis management systems as well as their preparedness to function in difficult situations. This further emphasises the importance of responding adequately to crises and taking effective measures to prevent and manage them, which has a direct impact on minimising the risks of financial manipulation and ensuring financial stability for the company.

Annual reports of Lehman Brothers Holdings Inc. for 2007 and the first quarters of 2008 are also important sources of information in analysing the misrepresentation of financial statements and misleading of investors. In the ‘Risk factors’ section of the financial statements, the company may have mentioned potential threats, including risks related to potential fraud and manipulation, which emphasises the importance of using effective audit mechanisms to protect financial interests (Lehman Brothers, 2007). Moreover, the ‘Controls and procedures’ section presents the methods adopted by Lehman Brothers to ensure proper internal controls, which again reflects the need to strengthen audit procedures to minimise the risks of financial manipulation and corporate fraud (Lehman Brothers, 2007).

Having made a fairly in-depth and detailed analysis of the relevant literature, it can be said that despite the availability of a large scope of information and sources regarding risk management issues and potentially misleading presentation of financial records in organisations, there are still a

number of aspects that require further research. In the literature available to date, there is some lack of a more inclusive and comprehensive understanding of the factors that contribute to the emergence of financial fraud in companies and, in particular, of the role of independent auditors in the context of detecting and preventing such manipulation. In particular, the situation with Lehman Brothers is one of the examples that clearly demonstrates the need for in-depth study and reflection on such events. A detailed analysis of this case provides an opportunity to better understand the reasons that underlie misleading financial practices and to identify potential improvements in accounting and auditing approaches.

Consequently, this paper focuses on filling the mentioned research gap by providing a more versatile analysis that includes a focus on both qualitative and quantitative type of data that together may have influenced both the collapse of Lehman Brothers and the actions of the independent auditors represented by Ernst & Young (EY). This approach allows for more information to be covered and a more diverse analysis to be made, thereby assessing not only certain technical issues, but also the impact of organisational culture, corporate governance model and ethics on preventing potentially unreliable financial reporting and subsequent misleading of investors. This paper thereby represents a synthesis of all the previously mentioned aspects and sets the foundation for future research in this area.

RESEARCH METHODOLOGY

This paper was written using mainly secondary data and qualitative methodology. The qualitative methodology is based on government articles, annual reports and auditing standards. The study also examines to varying degrees cases from the practices of different companies, focusing on the Lehman Brothers case, which emphasised the importance of conducting a fair and detailed audit.

In order to collect the articles, we needed, we conducted a structured literature search. The following characteristics were important to us: credibility, relevance, accessibility, quality and temporal relevance of the sources.

The competence and awareness of the authors was also taken into account. The authors chosen were those with specialised qualifications in auditing and accounting. In addition, when searching for corporate reports, it was important to find verified sources, as reporting is important for our research and is the basis for all analyses and calculations. The articles we selected were carefully studied and analysed - in them the necessary information to support or reject the hypotheses proposed was sought.

In addition, critical research tradition was applied in the research work. This approach is more focused on identifying socio-economic complexities and problems in the chosen audit context and misstatement of financial statements. It is through this method that it is possible to examine how audit practices may influence the occurrence of financial manipulation and misrepresentation of related parties, and to understand what social factors play a role in this process.

RESEARCH QUESTION

Having discussed the methodology of this research in detail, it makes sense to further define the research questions that act as a guide for the construction of further analyses. Each of the research questions is designed to detail certain aspects of the demise of Lehman Brothers, as well as further changes and updates in auditing and accounting standards and practices.

Research Question 1: What were the main reasons behind the collapse of Lehman Brothers?

This question involves analysing historical data, financials statements and other relevant sources of information and literature that are effective in identifying the major aspects that catalysed the bankruptcy of the company.

Research Question 2: What kind of changes to auditing and accounting standards were implemented after the Lehman Brothers case?

This question seeks to explore the changes that followed after the high-profile Lehman Brothers collapse scandal and to assess their impact on the financial industry and society at large.

Accordingly, the research questions put forward not only structure this study, but also become the basis for further work.

RESEARCH HYPOTHESIS

Once the research questions have been posed, it is possible to proceed to the formulation of hypotheses that will be tested in the subsequent construction of the analysis. Hypothesis formulation involves focusing the work on the key aspects of the research, as well as directing the course of the analytical work in the necessary direction.

Research Hypothesis 1: The main reasons for the crash of Lehman Brothers lie in the inadequate risk management, non-transparent financial transactions, and the lack of knowledge of the organisation's top management and senior executives regarding the details of certain operations, particularly those related to Repo 105.

This hypothesis suggests that the bankruptcy of Lehman Brothers was caused by a combination of a number of factors relating to both their historical accounting approach and the attitude of the company's management in various operational matters. A detailed examination of historical data, financial statements and related documentation, and other studies on topics related to bankruptcies to varying degrees will be conducted to test the validity of the hypothesis.

Research Hypothesis 2: The Lehman Brothers’ failure had a significant impact on changes in auditing and accounting standards, which in turn improved the transparency and accuracy of financial reporting of various companies.

This hypothesis implies that the reforms undertaken after the famous bankruptcy catalysed a significant change in the financial statements being issued in terms of the quality and reliability of the information provided. Testing of the hypothesis will consist of analysing updates and changes in accounting and auditing standards and their impact on established professional practice, the industry and society at large.

Accordingly, the hypotheses are the foundation of this paper, which prioritises a detailed understanding of the true causes of the collapse of Lehman Brothers and the further changes in the industry and society.

LEHMAN BROTHERS HOLDINGS INC. – COMPANY ESTABLISHMENT AND SUBSEQUENT COLLAPSE

Lehman Brothers Holdings Inc. has been among the biggest, most reputable, and steadily profitable Wall Street investment banking firms for 158 years running. The company began as early as 1850 - their long history started from a little convenience store to one of the largest banks in the United States (Adu-Gyamfi, 2015, p. 3). The final transition to banking and brokerage occurred in the early 1990s (Adu-Gyamfi, 2015, p. 5). There is enough evidence to suggest that throughout the entire period of existence, namely more than 150 years, Lehman Brothers was accompanied by a stable and active growth of operations.

It is safe to say that Lehman Brothers was one of the massive players in the international financial arena, and in addition to investment banking activities was engaged in asset management and securities trading. However, in 2008, the company declared bankruptcy in federal court and officially ended its 158-year existence (Ma, 2013, p. 1078). Lehman Brothers, once a symbol of financial strength and stability, became an icon of the financial crisis that left an indelible mark on the history of the global economy.

The financial performance of Lehman Brothers, according to Fleming & Sarkar (2014), was impressive throughout most of their existence and reflected a leading position in the financial services market (p. 175). As mentioned earlier, the company showed steady growth in revenues and profits and, moreover, significant amounts of assets under management - shortly before the bankruptcy, the asset line item was just over $600 billion (Statista, 2024). For decades, Lehman Brothers set new records and attracted investors' attention with their financial stability and reliability (Fleming & Sarkar, 2014, p. 176). However, the 2008 crisis was fatal to the company's financial performance - as residential property prices fell and mortgage insolvencies increased, Lehman Brothers faced serious problems. The company incurred huge losses due to loan defaults and insufficient liquidity, leading to a sharp deterioration in financial performance and eventual bankruptcy (Dosdall & Rom-Jensen, 2017, p. 197). The incident was a milestone in the history of the global financial system; its implications not only impacted the organization but also the industry at large, serving as one of the main causes of the global financial crisis.

One of the primary reasons for the crash was Lehman Brothers' substantial exposure to hazardous assets, such as subpar mortgage-backed securities connected to the US real estate market. The company invested heavily in higher-risk assets, expecting stable and high interest and capital gains. However, when the US residential property market began to lose its positions and property prices began to fall, the strategy pursued by the company led to an increase in mortgage defaults and significant losses (Dosdall & Rom-Jensen, 2017, p. 197).

Another problem that contributed to the famous bankruptcy was the high level of financial leverage of the company. Lehman Brothers was heavily leveraged and had a high level of debt relative to equity, which made it vulnerable to risks in the market and led to instability of its financial position (Appelbaum et al., 2012, p. 293).

Ultimately, the lack of liquidity and the inability to raise new additional capital led to Lehman Brothers being unable to cope with the relentless stream of losses and declared bankruptcy on 15

September 2008. This staggering fall was one of the worst periods in the history of the world economy and triggered a major crisis in financial markets around the world. (Johnson, & Mamun, 2012).

DOUBTFUL ACCOUNTING TECHNIQUES – REPO 105

The Repo phenomenon is a type of loan for the short-term period for financial securities dealers. A dealer in a Repo transaction sells government securities to an investor, usually for a short term, and then repurchases the same securities only at a higher price (Acharya & Oncu, 2011, p. 320). The implicit interest rate is reflected in the small price difference. Therefore, short-term capital is often raised through Repo transactions.

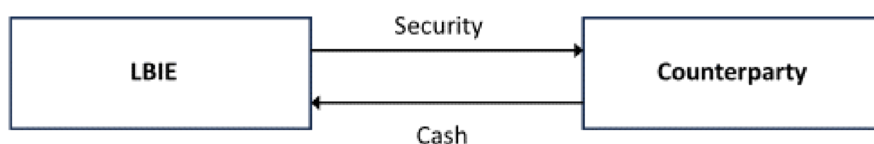
However, in the case of Lehman Brothers, Repo deals were used to show a better financial position than was actually the case (Chen, 2014, p. 128). In order to preserve its reputation and attract new investments, the company's employees decided to reflect these transactions in a non-typical way, and this decision subsequently became known as Repo 105. Since these transactions are mostly shown in the notes, Repo 105 is a misleading accounting method that does not reflect certain accounting transactions directly in the financial statements. The strategy was applied in this case, in order to eliminate doubtful debts and low-quality securities from the balance sheet, thereby improving the company's results.

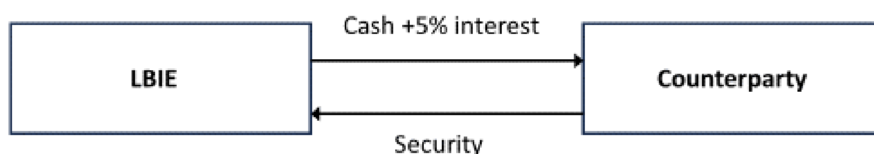
Jeffers (2011) defines Repo as a tool used by businesses to manage their short-term cash (p. 46). However, in the Lehman Brothers scenario, this transaction deviated from the norm and were aimed at artificially improving company's balance sheet. Typically, such arrangements involve an investment firm temporarily exchanging highly liquid securities for cash. Such transactions are treated like collateralised loans. If the investment company defaults, the lender can liquidate the collateral to recover its funds (Acharya & Oncu, 2011, p. 321).

Typically, the company repays the cash received with a moderate interest rate, which is usually 2%, at a later date to buy back the securities. Moreover, such transactions are usually treated as financial agreements between the parties, and in order to maintain its impeccable reputation, Lehman Brothers chose this traditional approach. However, instead of following the pre-existing practices, the company resorted to deceptive and unethical accounting methods called Repo 105. If we turn to the nature of this transaction, we can understand that the Repo 105 transaction manipulated the company's financial statements. Instead of showing this transaction in accounting as a short-term loan, the company preferred to reflect it as a sale in order to improve the company's performance.

Immediately before the reporting periods, Lehman Brothers consistently increased the volume of Repo operations 105 in order to improve the company's balance sheet and reduce net leverage. Although Lehman actually borrowed tens of billions of dollars as part of the 105 Repo deal, the company did not disclose information about the nature of these transactions. Lehman used the funds received to repay its obligations, but did not reflect the Repo 105 transaction as a short-term loan received, which led to a decrease in both total liabilities and assets reflected in the balance sheet, thereby manipulating the indicators and reducing the leverage ratio.

Below, illustrative diagrams have been created to explain the nature of the Repo transactions.





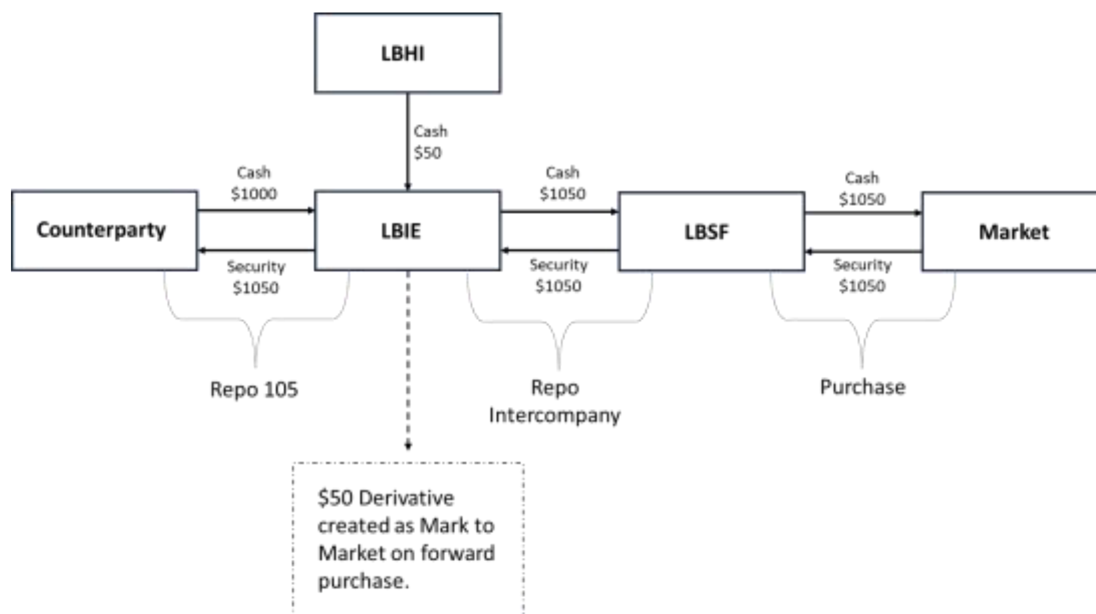
LBIE – Lehman Brothers International Europe;

The Repo 105 transactions were bilateral exchanges that were considered completed when the borrower repaid the loan and collected its collateral. Consequently, auditors were not required to record these transactions as incomplete because the company recognised them as sales. Two key attributes of these transactions that helped Lehman Brothers throughout the violations can be identified:

1. During the Repo 105 transaction, the cash received was recorded on the books as a sale, which increased short-term assets for a time, which in turn allowed Lehman Brothers to reduce the liability line item on the financial statements. Of course, in reality the situation with the indicators was different.

2. During the Repo 105 transaction, the securities were transferred to the counterparty for a certain period of time, and even though they continued to be recorded in accounting as a sale, in fact, the securities were still contractually owned by Lehman Brothers.

For a more visual representation, the following diagram may be presented.



LBIE – Lehman Brothers International Europe;

LBHI – Lehman Brothers Holding Inc;

LBSF – Lehman Brothers Special Finance;

Statements of Financial Accounting Standards (SFAS) 140 (n.d.), the primary framework for analysing repurchase agreements, required Lehman Brothers to obtain a legal conclusion of the sale in Repo transactions. Since there were difficulties in carrying out this procedure in the US, the company decided to conclude Repo 105 deals, obtain legal opinions through a subsidiary in the United Kingdom, Lehman Brothers International Europe (LBIE), so that everything would take place in accordance with US GAAP (Fernando et al., 2012, p. 245).

The company's numerous unethical actions in the area of financial investments have resulted in significant costs and complexities. If all departments, stakeholders and investors had addressed the issues at hand in a professional and timely manner, such manipulative actions could have been prevented. Moreover, the purpose of all these unethical practices was to conceal important information from Lehman Brothers' public investors. External auditors, senior management and the risk management department, as well as other parties played a substantial role in the misuse of transactions related to Repo 105 (Wiggins & Metrick, 2019, p. 167).

Ernst & Young auditors examined a large number of documents during their audit of Lehman Brothers' fiscal year 2007 financial statements (Wiggins et al., 2014, p. 111). Ernst & Young also examined the transactions, strategies and accounting methods of Repo 105 and, moreover, the relevant accounting treatments and various balance sheet netting procedures that the company used.

Although the audit firm was aware of the Linklaters law firm opinion letter, the auditors were unable to review it in detail or request more detailed and extensive information regarding Lehman Brothers' approach with respect to the accounting treatment of Repo 105 deals in accordance with SFAS 140 (Kershaw & Moorhead, 2013, p. 38). In addition, according to Kershaw & Moorhead (2013), Ernst & Young did not examine the nature of the increase in timing and volume on Repo 105 transactions (p. 59).

Although Ernst & Young should have been professionally sceptical and interested in unusual situations and transactions, which is considered a required function of auditors, they never

questioned Lehman Brothers' use of the Repo 105 approach, even though it was an unusually expensive method of raising money and it was widely known in the industry that similar investment banks had stopped using it.

Even if Lehman Brothers' accounting for Repo transactions complied with US GAAP and SFAS, Ernst & Young needed to perform procedures to determine whether misstatements existed in the financial statements. Industry experts concluded that the audit firm had failed to fulfil its obligations to the bankruptcy committee and, as a result, the external auditors could be sued for professional negligence for the following reasons: failure to disclose to the audit committee data concerning Lehman Brothers' appliance of Repo 105 methods and failure to object to Lehman Brothers' issuance of materially misstated financial statements (Caplan et al., 2012, p. 447).

To obtain a deeper understanding and comprehension of the nature of such transactions, it makes sense to analyse the Repo 105 phenomenon step-by-step. The following main steps of the process are presented below for the purpose of clarity:

1. Lehman Brothers buys government securities through its American division;
2. A few weeks before the end of the quarter, the U.S. branch transfers the securities to the balance sheet of another branch in London;
3. The London branch sells the assets for cash, agreeing a deal with the counterparty at the beginning of the next quarter. The funds received are at least 105% of the assets provided;
4. The company covers its own debts using previously received cash;
5. The company's reporting and risk ratios improved as a result of reducing liabilities, at the end of the quarter;
6. After providing outstanding financial results, the company approaches banks and investors for new loans;

7. Lehman Brothers subsequently buys back the assets from its London division at a five per cent premium to the original cost. The corporation's liabilities and assets will increase and reflect the true state of the business minus the five per cent interest paid.

As shown in the calculations below, which were computed by using data from the financial statements for the entire 2007 and early quarters of 2008, the financial leverage ratio begins to decrease when Repo transactions are used. The estimates show how the large number of Repo 105 transactions allowed Lehman Brothers to present a more improved balance sheet and significantly reduce its net leverage ratio. If the extensive use of Repo transactions, the associated sales accounting approach, and its effect on the financial leverage ratio were disclosed, the company would likely suffer an immediate decline in its credit rating and market confidence.

Date	Repo 105 Usage	Net leverage	Leverage Without Repo	Difference
Q4 2007	38,634	16.14	17.82	1.67
Q1 2008	49,102	15.44	17.35	1.91
Q2 2008	50,383	12.06	13.91	1.85

	Q2 2008	Q1 2008	Q4 2007
Total assets	639,432	786,035	691,063
Less:			
Cash and securities segregated and on deposit for regulatory and other purposes	(13,031)	(16,569)	(12,743)
Collateralized lending agreements	(294,526)	(368,681)	(301,234)
Identifiable intangible assets and goodwill	(4,101)	(4,112)	(4,127)
Net assets	327,774	396,673	372,959
Total Stockholder's Equity	26,276	24,832	22,490
Tangible Equity Capital	27,179	25,696	23,103
Leverage Ratio	24.34	31.65	30.73
Net Leverage Ratio	12.06	15.44	16.14
Repo 105 Usage	**50,383**	**49,102**	**38,634**
If Repos were used in place of Repo 105's:			
Leverage Ratio	26.25	33.63	32.45
% of increase over actual Leverage Ratio	0.08	0.06	0.06
Net Leverage Ratio	13.91	17.35	17.82
% increase over actual Net Leverage Ratio	0.15	0.12	0.10

Source: The Securities and Exchange Commission (SEC). Lehman Brothers Holdings Inc. Form 10-K (2007) & Form 10-Q (2008).

Therefore, the company exchanges its own assets for short-term cash borrowings. Then, even though the deal was secured by financing, the corporation presents it as a sale. As a result, the entity has more cash, fewer liabilities and dangerous assets at the financial reporting date, making the firm more attractive to investors and providing an opportunity to obtain additional financing.

Statements of Financial Accounting Standards (SFAS) 140 sets out the principles by which transfers of financial assets can be separated into financing and sale (n.d.). In the case of Lehman Brothers, to account for the Repo transaction as a sale, the company had to relinquish control of the financial assets, and to classify it under Statements of Financial Accounting Standards (SFAS) 140 (n.d.), all three conditions must be met simultaneously:

1. The transferred financial assets were isolated from the transferring party and are beyond the reach of the transferring party;
2. Each recipient has the right to exchange or pledge the received financial assets;
3. The party transferring the asset does not have the right to maintain effective control over the transferred financial asset;

Companies use financial leverage to both grow and expand operations. If a company earns a return on borrowing money that will surpass the cost of borrowed funds, it can be considered as a favourable financial leverage. Every shareholder is interested in the capital structure, namely the ratio of borrowed and own funds. The company's financial statements are of importance to shareholders. Where a high level of debt is indicated, it always means a high risk for shareholders. The management of financial leverage must be evaluated adequately as credit risk arises (Ghosh & Jain, 2000, p. 381). In our Lehman Brothers case study, in order to hide its unhealthy financial position, the company started neglecting the use of different kinds of derivatives. Mainly, an instrument called Repo 105 was used. To get a deeper understanding of how this type of derivative affects the financial statements, a hypothetical example can be constructed and illustrated to see the potential manipulation with this type of derivative.

A hypothetical scenario related to Repo 105:

Assume a non-existent company called AAA that transferred its assets to a counterparty for $100 million and in return received $100 million in cash. If this transaction was a Repo transaction, it would be recorded as a sale with a corresponding accounting entry.

Dr. Cash $100 million

Cr. Assets $100 million

In addition to this entry, another entry will appear and depending on the profit being made, a credit entry and if a loss is recognised, a debit entry.

The funds received through the use of REPO 105 were immediately used to repay the company's long-term obligations.

Dr. Long term loans/liabilities $100 million

Cr. Cash $100 million

Now it is reasonable to analyse these same transactions only in accordance with accounting rules. A regular Repo involves borrowing money and repurchasing assets over a short period of time, usually no more than 1 year or quarter. In this case, the company should have designated the operation as a short-term loan and disclosed the nature of the secured loan transaction in the notes.

Dr. Cash $100 million

Cr. Short term loan/note payable/security loan $100 million

Dr. Long term Note payable $100 million

Cr. Cash $100 million

To complete the picture, the balance sheet of the same hypothetical company is presented and illustrates three potential scenarios. In all cases, the net income is $20 million. The three balance sheet options will be categorised on the basis of the use of the derivative. The first balance sheet

will show the result of using Repo 105, the second balance sheet excludes the use of the derivative instrument Repo 105, the third balance sheet reflects the correct approach.

	Using Repo 105	**Not using Repo 105**	**The appropriate approach**
Current Assets	$100 mln (a. +100) (b. -100)	$100 mln	$100 mln (c.+100) (d. -100)
Long Term Assets	$ 900 mln (a. -100)	$ 900 mln	$ 900 mln
Total Assets	**$ 1000 mln**	**$ 1000 mln**	**$1000 mln**
Current Liabilities	$40 mln	$40 mln	$140 mln (c. +100)
Long Term Liabilities	$ 260 mln (b. -100)	$ 360 mln	$ 260 mln (d. -100)
Total Liabilities	**$ 300 mln**	**$ 400 mln**	**$ 400 mln**
Common Stock	$600 mln	$600 mln	$600 mln
Retained Earnings	$ 220 mln (e. +20)	$ 200 mln	$ 215 mln (f. +15)
Total Equity	**$ 820 mln**	**$ 800 mln**	**$ 815 mln (f. +15)**
Net Income	**$ 20 mln**	**$ 20 mln**	**$ 15 mln (f. -5)**

a) After the so-called sale of non-current assets, cash was received from the counterparty;

b) Now, company will use the cash received from the sale of the asset will be used to repay the non-current liabilities, thereby reducing the non-current and total liabilities;

c) If properly accounted for, the repurchase agreement should have created a short-term secured loan - there is a short-term liability to the counterparty with whom the derivative transaction was entered into;

d) The cash received in the transaction is used to settle a long-term liability;

e) It can be assumed that there has been an increase in retained earnings during operating activities;

f) The Repo 105 approach assumes that the counterparty will receive a 5% return during the transaction and for the other party this is represented as an additional cost in the form of 5% of the transaction amount of $100 million. In turn, this 5% expense will reduce the company's net income by an amount equal to the interest expense on the deal;

In addition, it is worthwhile to discuss the ethical aspect of the issue. In order to define the scale to which Lehman Brothers' actions were unethical, it is necessary to analyse the International Code of Ethics (ICE). This code is a set of ethical standards that can be invoked by managers who have been involved in such high-profile transactions. It offers a concise and straightforward rationale for the basic principles necessary to strategize actions in a company, the most important of which are competence, confidentiality, integrity and credibility. Lehman Brothers' actions are examined under the third and fourth standards, integrity and credibility.

According to the Integrity standard (Brewer et al., 2022), every employee is required (p. 11) to:

- Avoid conflicts of interest, and notify stakeholders of an impending conflict;
- Discontinue any activity that may compromise established ethical standards;
- Interrupt any activity that potentially discredits the profession;

According to Le Maux & Morin (2011), the company's investors were not notified about the manipulations associated with Repo 105 (p. 42). At the end of each period, they witnessed an improved picture hidden beneath the toxic assets and liabilities - this clearly misled both them, and the general public. Which ultimately caused to an inflation of the market value of the firm’s securities. Moreover, top management was able to receive bonuses and reimbursements due to the optimistic reporting they received (Bebchuk, 2010, p. 53). These actions clearly violate the International Code of Ethics (ICE) standard of Integrity.

Another Credibility standard, focusing on Brewer et al. (2022), states that (p. 11):

- Employees have a duty to provide information objectively and honestly;

- Information that may influence the course of the analysis, the development of an understanding of issues, and the formulation of recommendations should be made relatively easily accessible;
- Disclosure should be made of delays and deficiencies in both available data and internal controls as required by applicable law;

Lehman Brothers' financial statements did not fully disclose information relating to the Repo transactions, despite the fact that US GAAP (n.d.) require that all material events relevant to the company's financial statements be fully disclosed and addressed. The transactions relating to Repo 105 were obviously material and significant and, accordingly, should have influenced the choices, recommendations and judgements of potential stakeholders. Nevertheless, neither the public nor investors were informed of such manipulations. The company's employees had a duty to behave in the foremost favour of their clients and investors, but by their shady actions they breached the fundamental principle of the International Code of Ethics (ICE) regarding Credibility.

Consequently, it can be concluded that Lehman Brothers managers committed Repo 105 manipulations knowing that this was a violation of both ethical principles and the applicable laws and relevant accounting standards. This once again emphasises the need for stricter and more demanding criteria in relation to financial reporting, as well as increased responsibility of senior management and top management of companies in terms of compliance with ethical rules. More effective monitoring of such transactions is a very effective step to prevent similar scandals in the future.

RISKY FINANCIAL STRATEGIES – FINANCIAL INSTRUMENTS

Lehman Brothers, being a rather large and successful investment bank and market participant in general, used financial instruments quite actively in the course of its operating activities. Despite the fact that such instruments are quite a common source of income, they also represent quite high

risks for the company in the financial perspective (Neal, 1996, p. 16). Therefore, financial instruments and derivatives, varieties of financial instruments, should be analysed and reported in line with the commonly accepted accounting methods for the sake of ensure transparency and accuracy of accounting. Continuing the study, it makes sense to consider the nature of financial instruments, potential risks associated with their use, as well as their accounting treatment in accordance with two frameworks - IFRS and SFAS.

Derivative financial instruments, or derivatives, are financial instruments the value of which depends on more primary assets such as money, loans, stocks and bonds (Shaowen, 2015, p. 1). According to Shaowen (2015), the main feature of derivatives is the principle of financial leverage and credit transactions, which increases their potential returns along with the degree of risk (p. 2).

The importance of fair presentation in financial reporting, especially for financial instruments, is to provide senior management, creditors, the public and other viewers of financial documents reliable and correct data regarding the real financial situation of the company (Abdel-khalik, 2019, p. 677). This is very crucial in the context of derivative financial instruments as they can be complex and complicated enough to be understood by the general public.

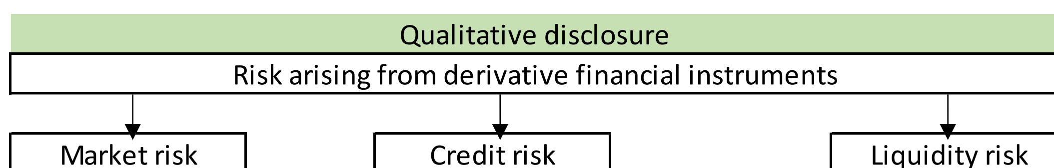
In addition, accurate and up-to-date financial reporting data is necessary for investors to make fundamental investment decisions - investors, both existing and potential, should be guided by relevant information. Focusing on Abdel-khalik (2019), the situation is partly more complicated in the situation of the matters analysed, as their fair value and related risks can have a significant impact on financial performance (p. 689).

Continuing with further research, it makes sense to turn to the IFRS framework - despite the main analysis built on the SFAS approach, the IFRS offer a deeper and broader understanding of the nature of financial instruments, given the universal perspective of international practice. This approach is effective in building a comparative assessment and identifying additional aspects of

derivatives, which is particularly important in developing an understanding of international companies.

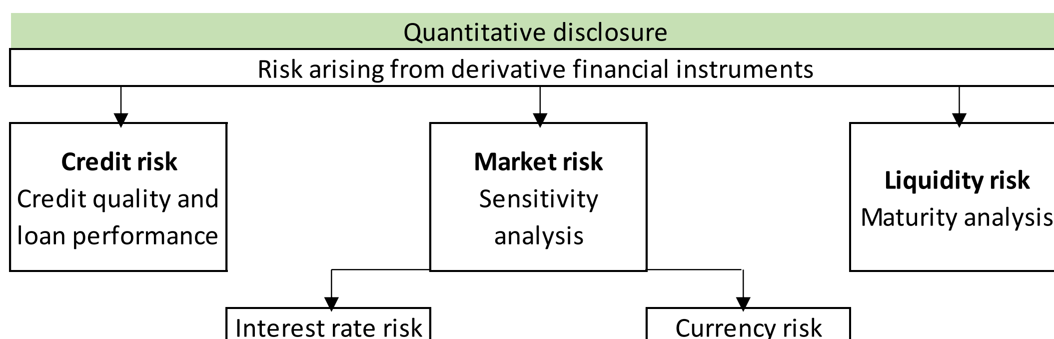
International Financial Reporting Standard (IFRS) 7 (n.d.), the primary standard for disclosure of financial instruments, requires entities issuing financial statements under IFRS principles to provide information about the financial instruments that are material to the entity and the nature and extent of risks directly associated with those instruments, both quantitatively and qualitatively.

Qualitative disclosures include information about the exposure of financial instruments to specific risks – market, credit and liquidity risks, and the methods used to measure those exposures. A more detailed diagram is provided below.



Source: International Financial Reporting Standards (IFRS);

In terms of quantitative disclosures, the standard recommends that the detailed numerical values of an entity's financial instruments be disclosed. This includes presenting the carrying amounts and fair values of the instruments at both the beginning and the end of the reporting period, with corresponding profit or loss data during the period. Detailed visualisations are also provided below.



Source: International Financial Reporting Standards (IFRS);

To determine the fair value of financial instruments, the common practice is to refer to SFAS 157 (n.d.), which discloses levels of valuation specified as the fair value hierarchy. Although financial instruments have previously been examined from the prism of the IFRS framework, the use of the SFAS approach in this context is justified by more detailed and extensive guidance that is widely applied in American financial practice. A detailed description of the fair value levels is shown in the following scheme.

Level 1	Inputs are observable and reflect quoted prices for identical assets or liabilities in active markets.
Level 2	Inputs are observable and reflect recent transactions prices or prices for similar assets or liabilities in active and inactive markets.
Level 3	Inputs are unobservable and have no similar assets or liabilities in active markets.

Source: Statements of Financial Accounting Standards (SFAS);

Prior to its immediate collapse, Lehman Brothers was a dynamic player in the market of derivatives and had a large number of derivatives-related transactions in its portfolio (Coudert & Gex, 2010).

In addition, the company had a fair amount of swaps in its books, particularly credit default swaps (CDS), collateralised debt obligations (CDO) and many other rather complex and layered instruments. It can be said that prior to its collapse, Lehman Brothers relied heavily on derivatives as a source of risk management capable of generating regular income. However, the use of such financial instruments made it difficult to assess the risks of their use. In particular, this meant that the company may have underestimated its own vulnerability to existing or prospective risks.

In 2008, prior to the immediate collapse, Lehman Brothers' over 40 billion US dollars of financial assets were classified as Level 3 assets (Summe, 2011, p. 6). The portfolio included credit default swaps (CDS), asset-backed securities (ABS), mortgage-backed securities (MBS) and synthetic collateralised debt obligations (CDOs), which at one point became nearly illiquid and exceeded the company's equity of $28 billion (Moran, 2008, p. 12). These toxic assets, in the face

of rapidly falling property prices and declining market trends, became the catalyst for massive losses for Lehman Brothers.

Proper and timely audit procedures could have been quite effective in anticipating and preventing the company's crisis. As stated earlier, audit procedures aimed at reviewing financial instruments are quite difficult and complex. It explains the relevance of analysing the auditors' actions in the context of these issues, considering also that the collapse of Lehman Brothers was associated with multiple derivative related losses. The main steps in auditing of the financial instruments in modern practice are as follows:

1. Initially, it is necessary to identify the risk associated with the sub-phase to which the audit matter relates. A sub-phase is the section to which the immediate audit issues belong. In general, financial instruments are often disclosed in the general Disclosures section. This is due to the fact that each component analysed as part of the financial instruments is dealt separately in the relevant documents.

If the risk is assessed as lower, the necessary preliminary procedures are performed, which include the following: verifying the accuracy of the client's disclosure and presentation of financial instruments, analysing the appropriateness of the risk assessment framework related to the relevant sub-phase, as well as verifying the balance sheet and fair value information according to the applicable standards. If risk is assessed to be higher, it is necessary to perform the previously mentioned audit procedures in a more extended format, including additional checks aimed at ensuring the reliability of the presentation of the financial instruments under discussion, such as assessing the effectiveness of internal control systems, as well as analysing the credibility of client sources of information.

2. Once the risk level of the financial instruments has been determined in the discussion of the company's activities, client's own disclosure on the financial instruments should be requested. Files with calculations, often Excel files, relevant contracts specifying the data used in the

computations, confirmation letters from third parties and, in general, everything that is directly required to understand how the client collects its own disclosure on financial instruments should be requested.

3. After receiving and analysing the client's files, auditors need to compile their own disclosure, focusing not on the client's calculations but on the relevant standards, rules and regulations set out for financial instruments.

4. Once the auditors collect their own disclosures, they should compare them with the client's files. If there are no discrepancies with the client's figures, auditors often agree with the client's position on the relevant issues. If there are differences, the principle of clear trivial threshold is applied. If the figures are less than the earlier calculated threshold, the difference is deemed immaterial and in most cases no adjustments to disclosures are proposed to the client. However, if the difference exceeds the threshold, the client's amounts are examined in closer detail and appropriate adjustments are proposed that are likely to affect the auditor's report issued.

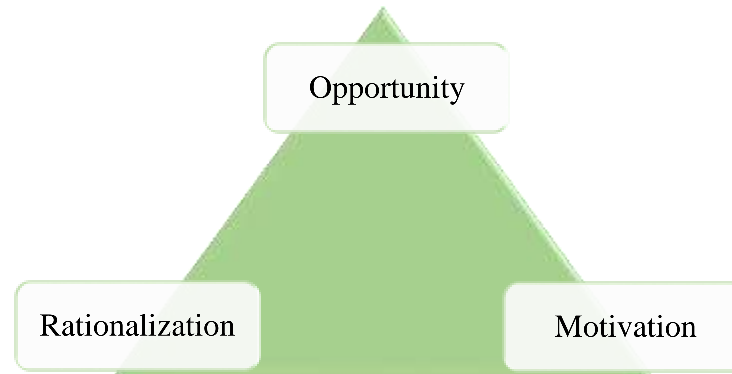
One of the most important lessons learnt from Lehman Brothers' experience with financial instruments is the importance of effective risk management practices. We can state that excessive credit risk, weak internal controls and complex derivatives transactions were factors that contributed to the company's downfall and, to some extent, misled investors. The collapse clearly demonstrated the need for a better method of risk assessment and mitigation strategies for different companies.

Continuing this discussion, certainly, it should be noted that derivatives are far from being the only factor that contributed to the downfall of Lehman Brothers. However, they can be said to be one of the key reasons that, taken together, led to the company's inability to continue its operations.

MANAGERIAL CRISIS – INTERNAL CONTROLS

Financial manipulation and fraud are the result of human factors.

Donald R. Cressey, a criminologist, developed the fraud triangle model, which depicts three elements that frequently encourage someone to engage in wrongdoing and fraud (Kassem & Higson, 2012, p. 192).



The fraud triangle;

If an employee has a chance to experience all three aspects - opportunity, motivation and rationalisation - the risk of manipulation and fraud is high. The company, in turn, can only influence two of them - opportunity and motivation. These two factors are directly dependent on internal controls and corporate governance systems. In organisations with a well-developed system of internal controls, there may be no preconditions for misconduct. Employees are motivated to engage in manipulative practices when every incentive, monetary or verbal, is not high enough. The psychological component, coming rather from the individual himself, is rationalisation. A person involved in fraudulent situations convinces himself of the appropriateness of his behaviour, thereby justifying it. It follows that an individual's personal motivations can influence the potential for fraud.

According to the Association of Certified Fraud Examiners (ACFE) (2022), half of the fraud cases occur for reasons related to corruption (p. 9). Corruption includes bribes, conflicts of interest and illegal rewards, all of which are possible when the factors of opportunity, motivation and rationalisation arise (ACFE, 2022, p. 9).

Therefore, internal control systems are an important component in ensuring that a company operates in an environmentally sound manner and helping to mitigate existing and potential risks.

According to the research conducted by the ACFE (2022), the purpose of internal controls is to guarantee that the information provided by the company is accurate, timely and reliable (p. 42). This is carried out by the management, board of directors, and other employees of the organisation, taking into account relevant laws, regulations, agreements and protocols.

For each risk, there is a specific list of procedures that help to minimise it or eliminate it completely. Risk management according to Collier et al. (2006, p. 2) is the identification and control of risks that an organisation will inevitably encounter when trying to achieve its objectives. The mentioned statement is the official interpretation used by the CIMA Institute.

The Risk Management Standard, which is relevant for mentioning in this paper, was created in 2002 by the Institute of Risk Management and consists of four parts - risk evaluation, risk treatment, risk reporting and risk assessment. Analysing and evaluating risks involves defining, characterizing, and assessing all the potential possibilities. This process is known as risk assessment. Determining the significance of risks associated with the company's activities is the main task of risk evaluation. In this way, the question of whether it is appropriate to take risks or whether there are appropriate remedies and solutions is addressed.

Risk treatment is the process of deciding what controls should be applied and implemented to deal with risks. This may include appropriate risk financing, risk transfer, risk avoidance and control. The final component, risk reporting, is the organization's regular reporting on its risk strategy and the assessment of the selected policy's effectiveness (Collier et al., 2007, p. 5).

For each specific position in the company, risks and procedures for dealing with them are defined. The procedures must be implemented in the process of the company's operational activities and should be consistent with the objectives set, while their performance should be directly monitored. Moreover, management must review compliance with these procedures on a regular basis, and certain sanctions must be in place for employees who fail to maintain the established routines. Staff training is also an important step - this measure will explain the purpose of the risk

mitigation and the importance of the implemented procedures. According to the Association of Certified Fraud Examiners, out of 2,110 fraud cases reviewed in 133 countries where the total amount of damage exceeded USD 3.6 billion, almost half of the cases were due to override of existing controls (20 per cent) and lack of internal controls (29 per cent) (ACFE, 2022, p. 8). All of the described has a direct relation to the system of internal controls in organisations, but in addition to this there is also the practice of independent audits conducted by external and unaffiliated auditors with sufficient qualifications.

During the external audit process, the auditors ask questions to the company's employees and conduct appropriate tests of internal controls. Often the auditors work with a specific sampling and test only some of the controls in the sample. After all procedures are completed, a financial report is prepared and an audit opinion is issued.

In major companies, there is also the position of an income auditor or internal auditor. The main task of the internal auditor is to monitor and evaluate the effectiveness of risk management and implement internal controls (Endaya & Hanefah, 2013, p. 92). Detecting potential risks can be quite considered as one of the outcomes of internal audit work. Moreover, 16% of fraud cases were detected by internal auditors and 12% by companies conducting managerial analysis, which proves the effectiveness of introducing this position into the firm's organisational structure (ACFE, 2022, p. 22).

The board of directors also has a huge impact on the organisation’s performance. Each board member has a specific task at the executive level and performs functions that help the company to succeed. In Lehman Brothers, the purpose of the BOD was to supervise management and ensure that the business was run in the favour of the shareholders (Klepczarek, 2017, p. 63).

To form a better understanding of the BOD of Lehman Brothers and their background, an illustrative diagram was created based on Klepczarek's (2017) research:

Name	Background
Richard S. Fuld, Jr.	Chairman and Chief Executive Officer of Lehman Brothers;
Michael L. Ainslie	Former CEO Sotheby's;
John F. Akers	Former Chairman of International Business Machines Corp.;
Roger S. Berlind	Theatrical Producer;
Thomas H. Cruikshank	Former CEO Haliburton;
Marsha Johnson Evans	CEO American Red Cross;
Sir Christopher Gent	Chairman GlaxosmithKline;
Jerry A. Grundhofer	CEO of U.S. Bancorp;
Henry Kaufman	Managing Director of Salomon Brothers;
John D. Macomber	Principal JDM Financial;

For the further course of the project, it is necessary to analyse the main functions of the BOD. According to the Organisation for Economic Cooperation and Development (OECD, 2023), among them are the following:

- Engaging and further evaluating the performance of the CEO;
- Establishing governance rules;
- Developing the vision of the company and defining strategies;
- Allocating resources and capabilities;
- Overseeing finances and making investment decisions;

The Board of Directors needs to build its working strategy in accordance with certain standards and practices that provide guidance on how to shape the composition of the unit and how to operate. The Board of Directors' function is governed by a code that was created by the OECD (2023). The most key takeaways are as follows:

1. *"The Board of Directors should consist predominantly of external individuals who are capable of holding senior management accountable as well as those who do not have managerial*

responsibilities in the company and who do not have material interests and financial ties to significant insiders" (OECD, 2023, p. 34).

2. *"In the Board of Directors, the position of CEO and Chairman should be held by different people. The CEO manages the company, while the Chairman leads the Board of Directors, sets the agenda for meetings and contacts with shareholders. The Chairman of the Board should be independent and should not be a former CEO of the company" (OECD, 2023, p. 36).* It is important to mention here that at Lehman Brothers, the Chairman and the CEO was one person, Richard S. Fuld, Jr. To put it in more detail, the management of the business and membership of the Board was in the hands of one person, which implies the existence of conflict of interest in the organisation. In addition, Henry Kaufman, who was also on the Board of Directors, chaired the finance and risk committee, which also forms a complication for the company.

3. *"Board members should have an appropriate level of knowledge and skills" (OECD, 2023, p. 38).* The average age of Lehman Brothers board members was 68.4 years. All board members had a variety of education and backgrounds, but the one characteristic they all had in common was a significant lack of experience in financial matters. Dennis K. Berman, The Wall Street Journal's editor responsible for covering international business issues, said the following about the composition of the company's board of directors: 'Nine of them are retired. Four of them are over 75 years old. One is a theatre producer, another a former Navy admiral. Only two have direct experience in the financial-services industry' (WSJ, 2008). This implies that the BOD formed was not qualified to manage a corporate giant like Lehman Brothers.

4. *"Director compensation should be sufficient to attract and motivate, and a significant portion of it should be performance-related and take into account industry pay levels" (OECD, 2023, p. 40).* Richard S. Fuld, Jr. was one of the highest paid CEOs in the country - some reports indicate that he received approximately $300 million in salary and bonuses in less than eight years (Bebchuk et al., 2010, p. 3). Despite the difficulties the company faced before bankruptcy, Lehman

Brothers management continued to receive material compensation in the form of increasing bonuses (Bebchuk, 2010, p. 53). Most financial observers attribute the collapse of Lehman Brothers to the unethical behaviour of the executives.

5. *"The Board of Directors should develop transparent policies and procedures to ensure the independence and effectiveness of the internal and external audit functions and to ensure the integrity and accuracy of the statements issued" (OECD, 2023, p. 41).*

6. *"The board of directors should provide a fair, defensible and understandable assessment of the company's position and prospects" (OECD, 2023, p. 41).*

7. *"The board should oversee internal controls and determine the nature and extent of the principal risks that the company is prepared to accept in order to achieve its long- and short-term strategic objectives" (OECD, 2023, p. 42).*

Therefore, it can be argued that corporate governance deficiencies were among the primary causes of the failure of Lehman Brothers. While constantly pursuing set expansion strategies and long-term goals, the company's management did not adhere to ethical rules and regulations, instead utilising a number of different doubtful mechanisms and unethical corporate practices (Caplan et al., 2012, p. 443). Lehman Brothers also had a conflict of interest in senior management that resulted in board members receiving increased bonuses before the immediate collapse of the company (Murphy, 2008, p. 66).

According to United States Bankruptcy Court & Valukas (2010), Lehman Brothers' management violated the company's previously established risk criteria for its commercial property projects, further confirming their involvement in the famous collapse (p. 810). It is also noteworthy that in July 2007 it came to light that top management had ignored thirty separate risk parameters approved by the company for property transactions (Summe, 2011, p. 17). Furthermore, there is hard proof that Lehman Brothers' liquidity pool was estimated at $42 billion just five days prior to filing for bankruptcy, which was obviously inflated by clearing house deposits and breached

regulatory guidelines (Le Maux & Morin, 2011, p. 40). The United States Bankruptcy Court & Valukas (2010) again indicate that the Securities and Exchange Commission (SEC) was informed of these violations, but no action was followed up during the Committee on Financial Services hearings (p. 17). It can be assumed that if such irregularities had been addressed earlier, significant losses in the property market would have been avoided.

It makes sense to put forward the following thesis regarding the direct employees of the company - Lehman Brothers employees had a significant amount of discretion because the system of internal controls was ineffective and failed to mitigate emerging and existing risks. This resulted in opportunities for financial manipulation as the company's management could not guarantee the implementation of controls in operations and failed to fulfil the necessary obligations and requirements to maintain them.

Analysing the relationship between the independent auditors and the company's senior management, it should be noted that there is no concrete evidence of collusion between the Board of Directors, other employees and Ernst & Young. However, all the previously mentioned irregularities suggest that corporate governance was unstable and subject to risks. Certainly, in this respect, the direct blame lies with the senior management of Lehman Brothers, as it is the direct responsibility of the directorate to implement and monitor internal controls. Although there is no direct evidence of collusion, it can be surmised that the company's senior management not only committed irregularities but also paid themselves huge bonuses in the course of their own activities. The analysis suggests two possible scenarios:

- Lehman Brothers management needed exceptionally high results, which required the highest degree of engagement from the company's employees, despite any external circumstances. Employees were performing well, but management was not aware of all internal practices and problems;

- Lehman Brothers management was aware of all the problems and difficulties, but took the position that they were solvable and relied on some existing plan for further action in the future. This approach was ineffective due to the fact that the problems required immediate solutions and they did not involve delayed action.

To summarise briefly, the senior management of Lehman Brothers played a key role in the bankruptcy of the company. The conducted research activities show that it is the weak corporate governance and lack of adequate internal controls that are among the main reasons for the collapse.

THE ROLE OF INDEPENDENT AUDITORS – ANALYSING THE INVOLVEMENT OF ERNST & YOUNG

The role of the independent auditors Ernst & Young in the downfall of the investment giant is still a topic of discussion.

Despite the experts' findings, the Security Exchange Commission (SEC) decided not to file a lawsuit against Ernst & Young after the publication of Lehman Brothers' accounts. According to a report published in May 2012, the Security Exchange Commission (SEC) staff completed its own investigation and concluded that charges against the independent auditors would likely not be filed (Gallu, 2012).

The insolvent holding company Lehman Brothers Holdings Inc. filed an arbitration claim against Ernst & Young on 28 January 2013, alleging breach of contract and unfair accounting practices determined by the firm's quarterly reviews and annual audit from 2001 to 2008 (Wiggins et al., 2014, p. 113). Lehman Brothers sought reimbursement for expenses incurred in entering into transactions regarding Repo, as well as fees paid to Ernst & Young. In the final decision issued in 2014, the arbitration panel stated that any wrongdoing related to the Repo transactions was overwhelmingly the responsibility of Lehman Brothers (Kirsiene & Miseviciute, 2017, p. 88).

In addition to lawsuits from its direct client, Ernst & Young has also faced litigation from Lehman Brothers investors, and in November 2013 announced a $99 million payment to settle one such case (Wiggins et al., 2014, p. 113).

The earlier analysis enables us to formulate the following findings. In our understanding, the role of independent auditors in the collapse of Lehman Brothers was as follows:

- Insufficient examining of the company's risks and, consequently, inadequate and incomplete auditing remedies taken place;
- Failure in appropriately evaluate the company's accounting policies - underestimation of questionable accounting practices, particularly those related to repurchase agreements;
- Lack of a deeper understanding of the industry and hence the potential risks and nuances possible;

However, continuing the narrative, it should be noted that independent auditors are as much market participants as other organisations and regulators. Therefore, while external auditors conduct audits of companies, they also face certain limitations in obtaining information in the course of their activities.

In this regard, it makes sense to outline the main steps that auditors take in the current practice of audit engagement:

1. At the very beginning it is necessary to determine the risk levels of audit matters. For this purpose, a preliminary assessment of potential threats is made and a plan of future procedures to be carried out in the course of the audit is prepared. If the risks of audit matters are determined to be low, the auditors perform general procedures, which include examining the accuracy of the financial disclosures collected, analysing the relevance of the risk assessment system and reviewing the data provided for compliance with existing norms and standards. When risks are assessed as elevated, auditors perform additional tests that focus on the examination of internal controls and the reliability of information sources.

2. Next, the necessary information is requested from the client. The auditors request the necessary documentation, which includes calculations, contracts, confirmation letters from related parties, and everything else that is needed for the audit. Client materials are a key component in developing an understanding of how the client collects and discloses relevant information.

3. After preliminary analyses, the auditors comprehend the information obtained and assemble their own disclosure in accordance with accepted standards, rules, and practices. This step is also inseparable from verifying the accuracy and validity of the data obtained.

4. Next stage can be called data comparison. Auditors compare their own disclosures of financial components with client data. If there are no significant differences, the auditors accept the client's position on the relevant issues and do not propose changes or additions to the statements. If differences are found, they are compared to the client's trivial threshold, an indicator that helps determine the degree of misstatement, generally calculated as a percentage of materiality. If the differences are material and exceed the clearly trivial threshold, adjustments are proposed to the client, which may subsequently affect both the financial statements and the auditor's report.

5. The final step following all audit procedures is the preparation of financial statements, formulation of the auditor's opinion, and the issuance of related documentation, which together reflect the results of the auditors' work.

These steps indicate that auditors should follow a structured and consistent approach in order to uphold the consistency and performance of the audit process. However, it should be noted that audit professionals may also encounter circumstances beyond their control that complicate and complicate the audit process (Baker et al., 1995, p. 31).

In the case of analysed company, we can suppose that the auditors representing Ernst & Young did not fully comply with all the previously mentioned steps and procedures. This could have been the result of an incomplete assessment of the company's potential and existing risks, as well as an incomplete and inaccurate audit. There was also a human factor - the auditors involved in

the project may not have been sufficiently qualified or experienced to comprehend the complexity of the company's operational processes. All of these reasons, both individually and in combination, may have influenced the issued Ernst & Young opinion, which by its nature did not reflect the full accuracy and completeness of Lehman Brothers' financial condition, which was a key event in exacerbating the crisis and subsequent collapse of the company.

Moreover, as mentioned earlier, the key purpose of a financial audit is the review of financial statements to ensure that they comply with certain standards and rules that govern the company being audited. Therefore, independent auditors are limited to only reviewing the company's reports and accounts and thus may not always be able to clearly detect certain irregularities and malpractices.

PREVENTIVE MEASURES

The occurrence of large-scale financial disasters such as the Lehman Brothers case may seem unpredictable, but their causes and circumstances can be analysed, providing some opportunities to prevent them, or at least to reduce their impact on prevailing economic realities.

Financial analysts have described the magnitude of the Lehman Brothers collapse as unprecedented for a global business, given the extent of its impact on businesses around the world as a result of the bankruptcy of a single firm (Mohammed, 2023, p. 315). The various financial models used to predict the sustainability of an organisation appear to have proved inadequate. For example, in general, in the current practice of analysing the financial health of a company, analysts consider factors such as liquidity, profitability, capital efficiency, creditworthiness and solvency.

Considering all the aspects mentioned earlier, the failure of the company was partly caused by the inefficiency of the audit process. It can be said that the huge disaster could have been avoided if the external independent auditors had disclosed all the necessary information about the alleged manipulation of the financial statements committed by Lehman Brothers in the audit report

(Summe, 2011, p. 21). The cash flows of the company are also given rather little attention. More detailed procedures performed by the external auditors during the audit could have been a crucial factor in taking timely action to scrutinise the cash flow figures.

Although a number of preventive measures were suggested by financial analysts, the downfall could have been averted with proper corporate governance procedures and financial support from the United States government. Summe (2011) argues that if the management of the company had adopted more proactive rather than reactive risk management strategies when the possibility of collapse threatened, timely and proper actions would have helped effectively in sustaining and saving Lehman Brothers.

IMPACT OF THE DEFAULT & FURTHER CHANGES IN THE INDUSTRY

The impact of the decline of Lehman Brothers is most effectively viewed from the following three prisms - the impact on relevant accounting and auditing standards, the impact on the finance and auditing industry, and the prism of the impact on culture and society as a whole.

Impact on accounting and auditing standards

Given all the questionable accounting approaches used by Lehman Brothers to misrepresent financial statements and mislead investors, the collapse of the company had a significant impact on updates and additions to existing accounting and auditing standards in the area of disclosures relating to the company's activities. One of the most key standards that was subjected to detailed analysis and revision was Statement of SFAS 157, mentioned earlier in this study, which relates to the measurement of fair value.

The bankruptcy of Lehman Brothers clearly demonstrated to other financial institutions and regulators that the existing approach in estimating the fair value of liabilities and assets, as well as related disclosures, was ineffective and insufficient to prevent financial catastrophes. As a result, Statements of Financial Accounting Standards (SFAS) 157 was duly revised and amended to

improve the transparency of the valuation framework, especially considering the possible degree of market volatility (Goh et al., 2015, p. 3). More stringent criteria and requirements were introduced in terms of disclosure of information on the financial models used for valuation, as well as the rationale for the introduction of certain valuation methods. It can be said that the introduced changes allowed to restore and increase investor confidence in the financial statements issued by various companies and, moreover, to improve the ability of organisations to carry out measures to assess both their own assets and liabilities and potential and existing risks.

Moreover, the Statements of Financial Accounting Standards (SFAS) 140, also mentioned earlier in the paper, which regulated the accounting and definition of the essence of control in the process of transferring certain assets in a transactional environment, was significantly modified. In response to all the existing deficiencies and inadequacies, the Financial Accounting Standards Board (FASB) issued revisions to SFAS 166 and SFAS 167, which included revisions to the accounting rules for asset transfers, as well as the introduction of more stringent rules regarding the disclosure of relevant information (Zhao & Forgione, 2021, p. 2). Specifically, the changes included more complex requirements for asset retirement obligations, which in the revised standard required more fundamental and irrefutable evidence of a definitive transfer of assets to the counterparty that are not subsequently returned or exchanged.

All the changes that occurred during this period combined to reduce the possibility of speculation and 'window dressing' to conceal the actual financial position of companies, which was precisely the issue that led to the collapse of Lehman Brothers.

Impact on the finance and audit industry

In addition, the Lehman Brothers situation significantly influenced the financial industry both in the United States and globally. New changes have been put forward in terms of regulating the process of the industry and financial markets.

One such change was the introduction of the Dodd-Frank Wall Street Reform Act, an act aimed at protecting customers, which was based on fundamental changes in the rules of business in the realities of modern financial institutions (Epstein & Montecino, 2015, p. 1). More specifically, the Dodd-Frank Act brought new requirements aimed at stricter regulation of the banking sector, limiting high-risk financial transactions, and the creation of the Consumer Financial Protection Bureau. All of this combined has improved the stability of financial establishments, along with reducing the risk of similar scandals in the future.

After the famous bankruptcy, various companies began to pay more attention to risk management and internal controls. More modern methods and approaches to dealing with risk in financial organisations have been developed, resulting in the financial industry acquiring fundamental aspects of resilience and preparedness for potential future economic shocks (Hazard & Riding, 2010, p. 5).

Impact on culture and public perception

The Lehman Brothers scandal also had a significant impact on culture and public perception. The events of those years demonstrated quite clearly the need to rethink approaches to corporate governance and business ethics. The consequence was that companies began to look more closely at the durability of their own processes for the wider public, the accountability of their business practices and the ethical dimension of their legacy. Various organisations began to think seriously about the principles of corporate social responsibility and, as a consequence, to introduce modern programmes and projects at management level to improve their own reputation and increase the trust of potential customers, creditors and investors. New internal policies have also been developed to prevent conflicts of interest and to maintain fairness in the course of business operations (McCall, 2008, p. 20).

Cultural influence is also related to the public perception of giant corporations, as Lehman Brothers once was. It can be reasoned with relative certainty that previously the prevailing part of

society was guided by the principle of ‘too big to fail’ when analysing such companies. However, the downfall of Lehman Brothers showed in a rather vivid and memorable example the reality of even such global companies going out of business, which radically changed the attitude of the general public towards corporate institutions (Jacobs, 2010, p. 7). In addition, the society, which also experienced in one way or another the negative effects of the crisis, has become more demanding of corporations with regard to the transparency of their operations and information broadcast. It can be said that in the long run this will encourage more ethical business practices and partly prevent similar situations in the future.

CONCLUSION

Conducting research on the collapse of one of the largest investment banking firms, Lehman Brothers, provided a deeper and broader understanding of the crisis events of 2008, as well as an insight into the changes that followed. In the course of conducting the analyses within this paper, a number of questions directly attributable to the underlying causes of the collapse and subsequent innovations in relevant auditing and accounting standards were put forward, each of which revealed quite important lessons for the future. Analysing both the formulated research questions and the research hypotheses put forward has contributed to gaining a more fundamental understanding of the cause-and-effect relationship of those processes and events that ultimately led to the biggest crisis in modern history.

The most key conclusion of the study is the following - the main reasons for the collapse of Lehman Brothers lay in questionable accounting methods, in particular the method called Repo 105, aggressive and risky investment strategies and weak systems of internal controls and corporate governance. Senior management was unable to properly assess the real state of the company's affairs and to understand its exposure to the risks and potential consequences associated with the financial transactions in question. Moreover, despite all the difficulties faced by the organisation,

both financially and organisationally, the Board of Directors continued to receive cash bonuses and all sorts of compensation, which added to the tension of the situation.

The role of independent auditors represented by Ernst & Young was also analysed in detail. It can be concluded from this work that the external auditors were unable to fully perform all the necessary procedures for a full and competent audit, which can be explained both by the lack of sufficient qualifications of the auditors present at the audit engagement and by the limitations of the audits in general. In this context, it is understood that the main objectives of financial audits are often limited to reviewing financial statements for compliance with certain sets of rules and standards, which limits the auditors' actions within the financial reporting components, thus not always allowing to identify all irregularities and questionable practices of a company.

The consequences of the collapse of Lehman Brothers also led to the introduction of significant changes and amendments to existing accounting and auditing standards. The updated rules, in their essence, were oriented towards increasing the transparency of information presented in financial statements. Such changes were an important step in preventing similar scandals in the future, and also helped to increase the general public's confidence in financial organisations and the data they release. In addition, the new standards were also aimed at improving the methods of assessment and approaches to risk management. Financial regulators around the world have started to implement the updated standards and regulatory rules to improve the efficiency of control over the activities of financial institutions and organisations.

In conclusion, we would like to say that the case of Lehman Brothers has become one of the fundamental lessons for the modern finance industry. It was the Lehman Brothers situation that showed the incredible importance of correct information presentation in the financial statements of companies, as well as the need for careful control over transparency mechanisms in the preparation of financial documentation. In addition, the events of 2008 in general indicate the crucial role of professional qualities such as responsibility and competence in the audit practice. Moreover, the

analysed case showed the relevance of eliminating window dressing and misleading of investors in order to ensure stability and sustainability of financial market components and the financial industry as a whole.

The analysed case study clearly demonstrates the need to develop effective corporate governance, as well as the importance of continuous development of practices and approaches both in the field of audit and accounting. Using the example of Lehman Brothers, it became quite obvious that it was the lack of developed management systems and internal controls within the company, as well as insufficiently complete and detailed checks by external auditors, that were of key importance in the window dressing and misleading of investors that led to the infamous bankruptcy.

REFERENCES

Abdel-khalik, A. R. (2019). Failing faithful representations of financial statements: Issues in reporting financial instruments. *Abacus*, *55*(4), 676-708. Retrieved from https://onlinelibrary.wiley.com/doi/pdf/10.1111/abac.12176

Acharya, V. V., & Oncu, S. (2011). The repurchase agreement (repo) market. *Regulating Wall Street*, 319-350. Retrieved from http://ndl.ethernet.edu.et/bitstream/123456789/14594/1/85-Viral%20V.%20Acharya.pdf#page=329

Adu-Gyamfi, M. (2015). The analysis of the collapse of Lehman Brothers. *Available at SSRN 2771615*. Retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2771615

Appelbaum, S. H., Keller, S., Alvarez, H., & Bédard, C. (2012). Organizational crisis: lessons from Lehman Brothers and Paulson & company. *International Journal of commerce and management*, *22*(4), 286-305. Retrieved from https://www.researchgate.net/profile/Steven-Appelbaum/publication/262970055_Organizational_crisis_lessons_from_Lehman_Brothers_and_Paulson_Company/links/557f2e2608aec87640ddf6e6/Organizational-crisis-lessons-from-Lehman-Brothers-and-Paulson-Company.pdf

Association of Certified Fraud Examiners (ACFE). (2022). Occupational fraud 2022: A report to the nations. Retrieved from https://acfepublic.s3.us-west-2.amazonaws.com/2022+Report+to+the+Nations.pdf

Aven, T. (2016). Risk assessment and risk management: Review of recent advances on their foundation. European journal of operational research, 253(1), 1-13. Retrieved from https://www.sciencedirect.com/science/article/pii/S0377221715011479

Baker, R., Robertson, N., & Farooqi, A. (1995). Audit in general practice: factors influencing participation. *BMJ*, *311*(6996), 31-34. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2550086/pdf/bmj00599-0035.pdf

Bebchuk, L. A. (2010). How to fix bankers' pay. *Daedalus*, *139*(4), 52-60. Retrieved from https://direct.mit.edu/daed/article-pdf/139/4/52/1829856/daed_a_00042.pdf

Bebchuk, L. A., Cohen, A., & Spamann, H. (2010). The wages of failure: Executive compensation at Bear Stearns and Lehman 2000-2008. *Yale J. on Reg.*, *27*, 257. Retrieved from https://dash.lib.harvard.edu/bitstream/handle/1/12025608/SSRN-id1513522.pdf?sequence=1&isAllowed=y

Biehl, H., Bleibtreu, C., & Stefani, U. (2023). The real effects of financial reporting: Evidence and suggestions for future research. *Journal of International Accounting, Auditing and Taxation*, 100594. Retrieved from https://www.sciencedirect.com/science/article/pii/S1061951823000733

Brewer, P. C., Garrison, R. H., & Noreen, E. W. (2022). *Introduction to managerial accounting*. McGraw-Hill. Retrieved from https://ebooks.papacambridge.com/directories/CAIE/CAIE-ebooks/upload/managerial%20accounting,%2016th%20edition.pdf

Caplan, D. H., Dutta, S. K., & Marcinko, D. J. (2012). Lehman on the brink of bankruptcy: A case about aggressive application of accounting standards. *Issues in Accounting Education Teaching Notes*, *27*(2), 33-49. Retrieved from https://www.researchgate.net/profile/Saurav-Dutta-7/publication/286091639_Lehman_on_the_Brink_of_Bankruptcy_A_Case_about_Aggressive_Application_of_Accounting_Standards/links/574d8bef08aec988526b7180/Lehman-on-the-Brink-of-Bankruptcy-A-Case-about-Aggressive-Application-of-Accounting-Standards.pdf?_sg%5B0%5D=started_experiment_milestone&origin=journalDetail

Chang, W. W. (2011). Financial crisis of 2007-2010. *Available at SSRN 1738486*. Retrieved from https://core.ac.uk/download/pdf/145741704.pdf

Chen, R. R., Chidambaran, N. K., Imerman, M. B., & Sopranzetti, B. J. (2014). Liquidity, leverage, and Lehman: A structural analysis of financial institutions in crisis. *Journal of Banking & Finance*, *45*, 117-139. Retrieved from https://faculty.fordham.edu/rchen/ccis.pdf

Christoffersen, P. (2011). *Elements of financial risk management*. Academic press. Retrieved from http://library.santhigiribschool.com/UploadedFiles/Books/Book_PDF_Elements%20of%20Financial%20Risk%20Management7_27_2022_3_16_37_AM.pdf

Collier, P. M., Berry, A. J., & Burke, G. T. (2006). *Risk and management accounting: best practice guidelines for enterprise-wide internal control procedures*. Elsevier. Retrieved from https://citeseerx.ist.psu.edu/document?repid=rep1&type=pdf&doi=28ffe72a3382095078d6715c1ce41d39e60b5547

Coudert, V., & Gex 1, M. (2010). The credit default swap market and the settlement of large defaults. *Économie internationale*, (3), 91-120. Retrieved from https://www.cairn.info/revue-economie-internationale-2010-3-page-91.htm

Dennis K. Berman. (2008). Where Was Lehman Board? Firm's External Directors Had Relied on Experiences of a Bygone Financial Era. *The Wall Street Journal.* Retrieved from https://www.wsj.com/articles/SB122170650964551167

Dosdall, H., & Rom-Jensen, B. Z. (2017). Letting Lehman go: Critique, social change, and the demise of Lehman Brothers. *Historical Social Research/Historische Sozialforschung*, 196-217. Retrieved from https://www.ssoar.info/ssoar/bitstream/handle/document/54645/ssoar-hsr-2017-3-dosdall_et_al-Letting_Lehman_Go_Critique_Social.pdf?sequence=1&isAllowed=y&lnkname=ssoar-hsr-2017-3-dosdall_et_al-Letting_Lehman_Go_Critique_Social.pdf

Dufour, M., & Orhangazi, Ö. (2014). Capitalism, crisis, and class: The United States economy after the 2008 financial crisis. *Review of Radical Political Economics*, *46*(4), 461-472. Retrieved from https://content.csbs.utah.edu/~mli/Economics%207004/Dufour%20and%20Orhangazi-WP341.pdf

Endaya, K. A., & Hanefah, M. M. (2013). Internal audit effectiveness: An approach proposition to develop the theoretical framework. *Research Journal of Finance and Accounting*, *4*(10), 92-102. Retrieved from https://core.ac.uk/download/pdf/234629587.pdf

Epstein, G., & Montecino, J. A. (2015). Banking from financial crisis to Dodd-Frank: Five years on, how much has changed. *PERI working paper*. Retrieved from https://citeseerx.ist.psu.edu/document?repid=rep1&type=pdf&doi=d1be5567580c5de17bdc3ad823db133b3cf19f09

Fernando, C. S., May, A. D., & Megginson, W. L. (2012). The value of investment banking relationships: Evidence from the collapse of Lehman Brothers. *The Journal of Finance*, *67*(1), 235-270. Retrieved from https://www.academia.edu/download/67898393/j.1540-6261.2011.01711.x20210706-13960-10zc10a.pdf

Financial Accounting Standards Board. (n.d.). Accounting for Transfers and Servicing of Financial Assets and Extinguishments of Liabilities – a replacement of FASB Statement No. 125. Retrieved from https://www.fasb.org/page/PageContent?pageId=/reference-library/superseded-standards/summary-of-statement-no-140.html&bcpath=tff

Financial Accounting Standards Board. (n.d.). Fair Value Measurements. Retrieved from https://www.fasb.org/page/PageContent?pageId=/reference-library/superseded-standards/summary-of-statement-no-157.html&bcpath=tff

Financial Accounting Standards Board. (n.d.). Presentation of Financial Statements. Retrieved from https://asc.fasb.org/205/showallinonepage

Financial Reporting Council. (2024). Corporate Governance Code Guidance. Retrieved from https://www.frc.org.uk/library/standards-codes-policy/corporate-governance/corporate-governance-code-guidance/#section.7eba31e6

Fleming, M. J., & Sarkar, A. (2014). The failure resolution of Lehman Brothers. *Economic Policy Review, Forthcoming*. Retrieved from https://elischolar.library.yale.edu/cgi/viewcontent.cgi?article=1368&context=ypfs-documents

Gallu, J. (2012). SEC Staff Ends Probe of Lehman Without Finding Fraud. Retrieved from https://elischolar.library.yale.edu/cgi/viewcontent.cgi?article=1432&context=ypfs-documents

Ghosh, A., & Jain, P. C. (2000). Financial leverage changes associated with corporate mergers. *Journal of Corporate Finance*, *6*(4), 377-402. Retrieved from https://citeseerx.ist.psu.edu/document?repid=rep1&type=pdf&doi=2847ed02ba1650d6859d5825dc884d83227a7428

Goh, B. W., Li, D., Ng, J., & Yong, K. O. (2015). Market pricing of banks' fair value assets reported under SFAS 157 since the 2008 financial crisis. *Journal of Accounting and Public Policy*, *34*(2), 129-145. Retrieved from https://ink.library.smu.edu.sg/cgi/viewcontent.cgi?article=1253&context=soa_research

Hazard, M., & Riding, F. (2010). Overcoming Too-Big-To-Fail. A Regulatory Framework to Limit Moral Hazard And Free Riding In The Financial Sector. Retrieved from https://www.researchgate.net/profile/Stefano-Micossi/publication/228201531_Overcoming_Too-Big-To-Fail_A_Regulatory_Framework_to_Limit_Moral_Hazard_and_Free_Riding_in_the_Financial_Sector/links/0deec525bc08e09a3e000000/Overcoming-Too-Big-To-Fail-A-Regulatory-Framework-to-Limit-Moral-Hazard-and-Free-Riding-in-the-Financial-Sector.pdf

International Financial Reporting Standards. (n.d.). IFRS 7 Financial Instruments: Disclosures. Retrieved from https://www.ifrs.org/issued-standards/list-of-standards/ifrs-7-financial-instruments-disclosures/

International Organization for Standardization. (2018). Guidelines for auditing management systems (ISO Standard No. 19011:2018). Retrieved from https://www.iso.org/standard/70017.html

International Standards on Auditing. (2009). Overall Objectives of the Independent Auditor and the Conduct of an Audit in Accordance with International Standards on Auditing (ISA Standard No. 200). Retrieved from https://www.iaasb.org/_flysystem/azure-private/publications/files/A008%202013%20IAASB%20Handbook%20ISA%20200.pdf

Jaafari, A. (2001). Management of risks, uncertainties and opportunities on projects: time for a fundamental shift. International journal of project management, 19(2), 89-101. Retrieved from https://www.academia.edu/download/51054285/s0263-7863_2899_2900047-220161225-3513-klo7ru.pdf

Jacobs, T. A. (2010). Changing Market Perceptions of Who is ‘Too Big to Fail’ During the Financial Crisis of 2007-2008. *Available at SSRN 1656172*. Retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1656172

Jeffers, A. (2011). How Lehman Brothers used Repo 105 to manipulate their financial statements. *Journal of Leadership, Accountability and Ethics*. Retrieved from https://digitalcommons.montclair.edu/cgi/viewcontent.cgi?article=1008&context=acctg-finance-facpubs

Johnson, M. A., & Mamun, A. (2012). The failure of Lehman Brothers and its impact on other financial institutions. *Applied Financial Economics*, *22*(5), 375-385. Retrieved from https://www.tandfonline.com/doi/abs/10.1080/09603107.2011.613762

Kassem, R., & Higson, A. (2012). The new fraud triangle model. *Journal of emerging trends in economics and management sciences*, *3*(3), 191-195. Retrieved from https://citeseerx.ist.psu.edu/document?repid=rep1&type=pdf&doi=fe1a782d11ce64537763eeb60c3a2721ba5fc3ab

Kershaw, D., & Moorhead, R. (2013). Consequential responsibility for client wrongs: Lehman Brothers and the regulation of the legal profession. *The Modern Law Review*, *76*(1), 26-61.

Retrieved from https://www.academia.edu/download/83538689/1468-2230.1200120220409-3729-cfgh66.pdf

Kirsiene, J., & Miseviciute, G. (2017). Comparative analysis of liability cases for bankruptcies of financial institutions. *Montenegrin Journal of Economics*, *13*(3), 85-99. Retrieved from https://pdfs.semanticscholar.org/67bf/c81afb1421d96d32744ae93f79ae3aa8a62d.pdf

Klepczarek, E. (2017). The importance of the board of directors. Lessons from Lehman's failure. *Ekonomia i Prawo. Economics and Law*, *16*(1), 59-73. Retrieved from https://www.ceeol.com/search/article-detail?id=521280

Le Maux, J., & Morin, D. (2011). Black and white and red all over: Lehman Brothers' inevitable bankruptcy splashed across its financial statements. *International Journal of Business and Social Science*, *2*(20). Retrieved from https://ijbssnet.com/journals/Vol_2_No_20_November_2011/6.pdf

Ma, Z. (2013). Financial analysis of Lehman Brothers' bankruptcy. In *2013 International Conference on Advances in Social Science, Humanities, and Management (ASSHM-13)* (pp. 1077-1081). Atlantis Press. Retrieved from https://www.atlantis-press.com/proceedings/asshm-13/10778

McCall, B. M. (2008). Learning from Our History: Evaluating the Modern Housing Finance Market in Light of Ancient Principles of Justice. *SCL Rev.*, *60*, 707. Retrieved from https://scholarcommons.sc.edu/cgi/viewcontent.cgi?article=3881&context=sclr

Mohammed, A. F. A. (2023). The impact of the Fraud Examiners on Fraud Risk Management in Lehman Brothers Inc. in the financial crisis in the United States. *Ijrsp*, *4*(47), 309-336. Retrieved from https://www.ijrsp.com/pdf/issue-47/9.pdf

Moran, J. M. (2008). The Federal Reserve and the Decision to Let Lehman Brothers Fail. *Berkeley Undergraduate Journal*, *4*(1). Retrieved from https://journalpub.escholarship.org/our_buj/article/6230/galley/3731/download/

Murphy, A. (2008). An analysis of the financial crisis of 2008: causes and solutions. *An Analysis of the Financial Crisis of*. Retrieved from https://our.oakland.edu/bitstream/handle/10323/7844/17_financial_crises.pdf?sequence=1&isAllowed=y

Ndekugri, A., & Twum-Danso, E. (2019). Curbing corporate scandals for global business success. *Journal of Finance, Accounting and Management*, *10*(1), 1-8. Retrieved from https://gsmi-ijgb.com/wp-content/uploads/JFAM-V10-N1-P01-Alhassan-Ndekugri-Global-Business-Success.pdf

Neal, R. S. (1996). Credit derivatives: New financial instruments for controlling credit risk. *Economic Review-Federal Reserve Bank of Kansas City*, *81*, 15-28. Retrieved from http://masters.donntu.ru/2002/fem/andropova/diss/art1.pdf

Ramona, S. E. (2011). Advantages and disadvantages of quantitative and qualitative information risk approaches. *Chinese Business Review*, *10*(12). Retrieved from https://www.davidpublisher.com/Public/uploads/Contribute/555d6fdde07cc.pdf

Reurink, A. (2019). Financial fraud: A literature review. *Contemporary topics in finance: A collection of literature surveys*, 79-115. Retrieved from https://pure.mpg.de/rest/items/item_2281585_5/component/file_2281583/content

Shaowen, S. (2015). Effect of derivative financial instruments on the financial risk of enterprises. *International Journal of Simulation--Systems, Science & Technology*, *16*. Retrieved from https://ijssst.info/Vol-16/No-2B/paper5.pdf

Spina, J. (2013). The Failure of Lehman Brothers. *Available at SSRN 2337124*. Retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2337124

Stulz, R. M. (2008). Rethinking risk management. In *Corporate Risk Management* (pp. 87-120). Columbia University Press. Retrieved from https://citeseerx.ist.psu.edu/document?repid=rep1&type=pdf&doi=dd1dcf20e950dbb429f7ac456ef03ea70fc243a0

Summe, K. (2011). An Examination of Lehman Brothers’ Derivatives Portfolio Post-Bankruptcy and Whether Dodd-Frank Would Have Made Any Difference. *Resolution of Failed Financial Institutions: Orderly Liquidation Authority and a New Chapter*, *14*, 3-28. Retrieved from https://www.hoover.org/sites/default/files/kimberly-summe-dodd-frank-20110421.pdf

Summe, K. (2011). Misconceptions about Lehman Brothers' bankruptcy and the role derivatives played. *Stan. L. Rev. Online*, *64*, 16. Retrieved from https://elischolar.library.yale.edu/cgi/viewcontent.cgi?article=1660&context=ypfs-documents

The Organization for Economic Cooperation and Development (OECD). (2023). Principles of Corporate Governance. Retrieved from https://www.oecd-ilibrary.org/docserver/ed750b30-en.pdf?expires=1716458117&id=id&accname=guest&checksum=D8C5A64B83D8C11DB0702F46E9A7A9C5

The Securities and Exchange Commission (SEC). (2007). Lehman Brothers Holdings Inc. Form 10-K. Retrieved from https://www.sec.gov/Archives/edgar/data/806085/000110465908005476/a08-3530_110k.htm

The Securities and Exchange Commission (SEC). (2007). Lehman Brothers Holdings Inc. Form 10-Q. Retrieved from https://www.sec.gov/Archives/edgar/data/806085/000110465908045115/a08-18147_110q.htm

United States. Bankruptcy Court (New York: Southern District), & Valukas, A. R. (2010). *In Re Lehman Brothers Holdings Inc., Et Al., Debtors: Report of Anton R. Valukas, Examiner*. United States Bankruptcy Court, Southern District of New York. Retrieved from https://web.stanford.edu/~jbulow/Lehmandocs/VOLUME%203.pdf

Wiggins, R., Bennett, R. L., & Metrick, A. (2014). The Lehman Brothers Bankruptcy D: The Role of Ernst & Young. *Yale program on financial stability case study*. Retrieved from https://elischolar.library.yale.edu/cgi/viewcontent.cgi?article=1003&context=journal-of-financial-crises

Wiggins, R. Z., & Metrick, A. (2019). The Lehman Brothers Bankruptcy G: The Special Case of Derivatives. *Journal of Financial Crises*, *1*(1), 151-171. Retrieved from https://elischolar.library.yale.edu/cgi/viewcontent.cgi?article=1006&context=journal-of-financial-crises

Zhao, Q., & Forgione, D. A. (2021). The Association of SFAS 166/167 And Cost Of Equity Capital: Evidence From Banks. *Journal of Financial Management, Markets and Institutions*, *9*(01), 2150001. Retrieved from https://www.worldscientific.com/doi/pdf/10.1142/S2282717X21500018