International Journal of Innovative Research and Scientific Studies, 8(3) 2025, pages: 5070-5085

IJIRSS
International Journal of Innovative Research & Scientific Studies

ISSN: 2617-6548

URL: www.ijirss.com

Comparative analysis of financial statement distortion detection: Insights from Kazakhstan and Japan

Oksana Yu. Kogut[1], Anar I. Kidirmaganbetova[2*], Anna Bagieńska[3], Zhanar Oralbayeva[4]

[1]*Finance and Accounting Department. Higher School of Economics and Business, Al-Farabi Kazakh, Kazakhstan.*
[2]*Finance and Accounting Department, Higher School of Economics and Business, Al-Farabi Kazakh National university, Almaty, Kazakhstan.*
[3]*Faculty of Engineering Management, Bialystok University of Technology, Poland.*
[4]*Department of Finance and Accounting Al-Farabi Kazakh National University, Almaty, Kazakhstan.*

Corresponding author: Anar I. Kidirmaganbetova (*Email: cg.anar.ik@gmail.com*)

Abstract

To present and compare the financial reporting control situation between Kazakhstan and Japan, and to disclose methods of detecting and preventing distortions in financial statements that can be used to ensure the integrity and accuracy of doing business. A literature study using bibliometric analysis, including the identification of causes, ways, and methods to minimize distortions in companies' financial statements, a case study of companies in financial distress in Kazakhstan and Japan, and the use of the Beneish model for early identification of potential risks. The topics of scientific research on distortions in financial statements cover many aspects. Similar methods of assessing financial statements for distortions, as well as the Beneish model, can be applied in Kazakhstan and Japan. The main differences used in the internal assessment of reports include a different approach to the internal control system and the transparency system of financial data. Although it may still be challenging and somewhat unfair to compare two countries due to differences in economic development and systemic internal controls, there are shared methods for detecting financial statement misstatements used by companies in both. One such method is the Beneish M-Score, which has demonstrated its applicability in analyzing companies from both countries. The article outlines how to identify distortions in financial statements and take measures to prevent them using internal control methods, the influence of third-party factors, and the Beneish methodology.

Keywords: Audit, Internal control, Distortion detection, Financial statement, Management, Misstatement, Reliability.

DOI: 10.53894/ijirss.v8i3.7707
Funding: This study received no specific financial support.
History: Received: 21 April 2025 / **Revised:** 23 May 2025 / **Accepted:** 27 May 2025 / **Published:** 10 June 2025

Competing Interests: The authors declare that they have no competing interests.
Authors' Contributions: All authors contributed equally to the conception and design of the study. All authors have read and agreed to the published version of the manuscript.
Transparency: The authors confirm that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.
Publisher: Innovative Research Publishing

1. Introduction

Financial statements are a key tool for assessing an organization's financial position and performance. Properly prepared corporate financial statements are based on information provided by accounting systems and processes. The scope of the financial statements includes several elements such as the balance sheet, profit and loss account, cash flow statement, and statement of changes in equity. All these elements are required for companies and are determined by national or international regulations [1, 2]. However, there can be little assurance that this information is complete, accurate, and honest. Misstatements in financial statements can arise for a variety of reasons, including incorrect accounting or dishonest behavior. These misstatements can be a serious threat to an organization, including a loss of investor confidence, reputational risk, and financial loss.

The *relevance of the topic* shows that today, the identification of misstatements in financial statements is an important process for verifying the accuracy of the information presented in the accounts. The basic principles of preparation and presentation of financial data in the report are truthfulness, accuracy, relevance, and completeness. However, the fundamental assumption of financial reporting is the assumption of going concern, which is the basis for the valuation of assets and liabilities [3]. The auditor, to assess the risk of material misstatement of the financial statements at the first stage, gets acquainted with the functioning of the entity, its business model, development strategy, and operation of internal controls. Then, they begin the procedures for auditing the financial statements. Professional knowledge and experience are the basis for gathering sufficient and appropriate evidence and issuing an opinion on the financial statements [4].

The purpose of the article is to discuss and contrast the financial reporting control circumstances between Kazakhstan and Japan, as well as to disclose methods for identifying and avoiding distortions in financial statements that can be used to assure the accuracy and reliability of conducting business.

The article gradually *shows* the literature review, the research methodology, the main discussion and the conclusion of the work.

The literature highlights various causes of financial statement distortion. These include intentional fraud on the part of management, errors in accounting and reporting, as well as deficiencies in transparency and completeness of information [5]. The intentional fraud may include understatement or overstatement of financial figures, misrepresentation of debts and liabilities, concealment of income or assets, and other mechanisms aimed at distorting the reality of a company [6, 7]. At the same time, errors in accounting and reporting may arise for various reasons, such as incorrect application of accounting rules, incorrect valuation of assets and liabilities, errors in the consolidation of financial statements, etc [8]. These errors may lead to distortions in financial performance, although they are not intentional. Researcher Knechel W. underlines how crucial it is to provide prospective investors with accurate information about the accounting system and financial statements to evaluate business development for long-term profitability. Thus, a lack of transparency and incompleteness of information may also cause distortions in financial reporting. For example, companies may fail to disclose information about their financial instruments, risks, or dependencies on specific customers or markets, which may lead to inadequate risk assessment by investors and other stakeholders [9]. This issue distinguishes between intentional and unintentional misrepresentation of financial accounting information.

The reliability of financial statements is highly valued by both local and foreign investors, which emphasizes the need for an independent audit conducted in accordance with established rules, internal protocols and country laws. If the assessment procedure is illiterate, the company's management may be in trouble if the statements are found to be misleading [10]. Similarly, if the auditor fails to identify significant risks to the company's business continuity in a timely manner, it will be detrimental to the audited company and its investors [11]. In this case, the accountant and the auditor are critical components of the company's internal control system. Ensuring the accuracy and truthfulness of financial statements is the responsibility of the accountant. The accountant directly generates financial statements based on current legislation, established accounting policies, but also in accordance with the ethics of the profession and his experience for the company's management and other users [12]. In response, the auditor independently reviews the company's financial statements to ensure that they are accurate and in compliance with accounting rules and standards [13]. The auditor verifies the financial statements using various methods, including employee interviews, document review, financial ratio analysis, data comparison and many others. The audit report helps to identify deviations and inaccuracies in the financial statements and provides recommendations to improve the internal control system and the reporting procedure [14].

As a result, the auditor and the accountant are key actors in managing and detecting misstatements in a company's financial statements. They are professionals whose actions serve to reduce the risks of fraud and accounting errors, ensuring that the financial statements of businesses are accurate and reliable [15]. Although international auditing standards state that auditors are not required to detect financial fraud in audited companies, they must ensure that the risk of fraud does not affect the audit opinion [16].

Users of financial statements rely on the information contained in the report when making business decisions. Therefore, it is important that, regardless of the country in which the business is conducted, a company's financial statements should contain reliable data and be free from material irregularities and misstatements.

Therefore, the aim of the study is to present and compare the financial reporting control situation between Kazakhstan and Japan, and to disclose methods of detecting and preventing distortion in financial statements that can be used to ensure the integrity and accuracy of doing business. The study will be conducted using examples of troubled companies in Kazakhstan and Japan. As a result, ways of identifying misstatements that are acceptable for the regions of both countries will be identified. This goal involves solving the following research tasks:

- To reveal the relevance of the reliability of financial statements;

- To study cases of financial reporting distortions in Kazakhstan and Japan;
- To reveal the causes and problems of distorted information in the accounting system;
- To identify ways and methods of identifying data distortions in financial statements;
- To emphasize the importance of auditing financial statements.

The results of the article will be relevant to business practice, as well as to investors and other stakeholders.

2. Literature Review

The correct financial statement is an important part of any company's work because it is a document that reflects the financial condition of the organization and its activities over a certain period. However, due to various reasons, financial statements may contain misstatements, which may lead to negative consequences for the company and its investors. Yamamoto defines financial statement misstatement as a representation of illegal or distorted representations of a company's financial condition that may mislead creditors, investors, or other interested parties [17].

Bibliometric analysis was used to identify the area of our future research. A review of the literature from the Scopus database (the phrase 'financial statement' and 'misstatement' or 'fraud' or 'distortion' - 742 documents) showed a growing interest among researchers in this topic, particularly in recent years (from 30 articles in 2015 to 84 in 2023).

The initial process of analyzing the text data in VOSviewer, including the title, keywords, and abstract text, generated 119,369 total terms. Then, all words that occurred less than ten times were excluded. Only 619 links met this threshold. Using the relevance ratings in VOSviewer, calculations were established for the level to which a particular term is informative. Figure 1 shows the generated terms and their co-occurrence network. Seven clusters were identified in the study using the VOSviewer tool, which are marked with contrasting colours.

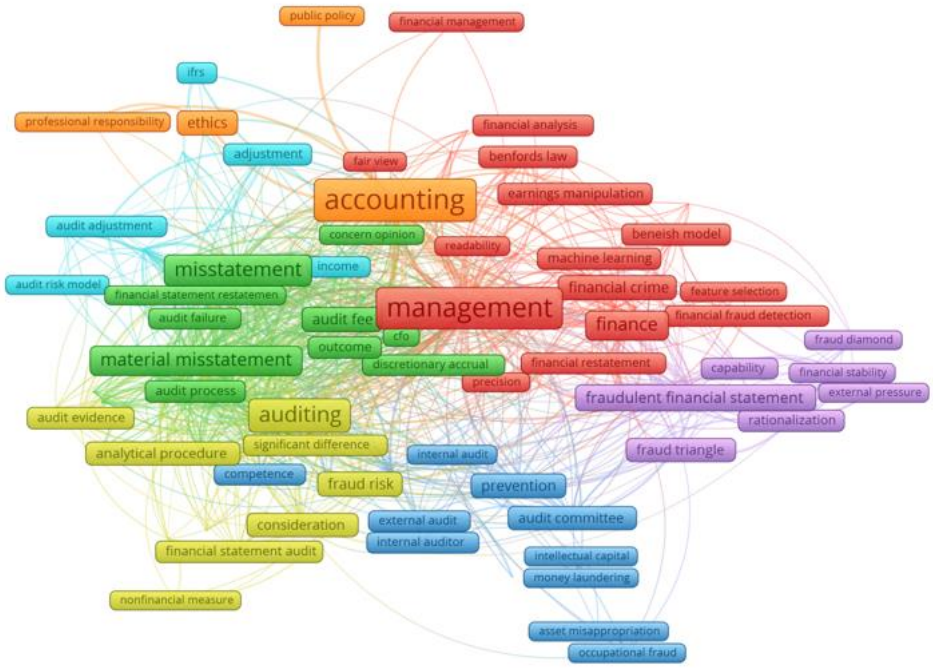

Figure 1.
A network of clusters on a term linkage map.

The identified clusters are as follows:

- Red - was identified as *management versus financial statement misstatements*. This cluster contains 37 phrases concerning care for the correct preparation of financial statements (accuracy, precision, readability, fair view), methods of evaluating figures (prediction, Benford's law, Beneish M-score model, financial fraud detection), creation of intentionally distorted statements (creative accounting, earnings manipulation, taxation), and responsibility for data falsification (crime, fraudulent activity, false financial statements).
- Green - *auditor and financial statement accuracy* - 33 items that relate to the auditor's work and professional characteristics of the auditor (audit risk, audit fee, audit firm, engagement, professional scepticism, conservatism, judgement), and the process involved in forming an opinion on financial statements (audit process, material misstatement, material weakness, audited financial statements, audit opinion, audit report).
- Dark blue – *prevention* - (16 items) - this cluster includes opportunities to prevent misstatements through internal and external auditing of the report (internal audit, external audit, audit committee), adequate competence and independence of the auditor (accounting profession, independence, expert, competence, intellectual capital), and appropriate policies (policymaker).
- Yellow - *auditing* - (16 items) - in this cluster the results on obtaining evidence in the audit process (auditing, audit evidence, fraud risk assessment), the methods and procedures used (analytical procedure, audit procedure,

consideration, significant difference, financial statement analysis), and auditing standards (professional standard, ISA, AICPA) are combined.

- Purple - *fraud - capacity and effects* - the cluster contains 12 terms related to fraud (capability, external pressure, rationalization, financial performance, financial target) and threats (financial stability, fraud triangle).
- light blue – *audit adjustments* (10 items) - in this case, the audits include obligations to correct errors identified by the auditor (adjustment, accounting misstatement) to demonstrate a fair view of the company (fair value) in accordance with international standards (IFRS).
- Orange - *the role of accounting in the proper preparation of financial statements* - (4 items) - in this cluster attention is paid to the accounting process and the responsibility of accounting staff for the accuracy of financial data (accounting, ethics, professional responsibility) and the relevant legal environment (public policy).

A study using the bibliometric method showed that misstatements in financial statements are studied in many aspects. These include, for example, internal causes of the misstatements [18], management's influence on the preparation of financial statement data [19] effects on investors [20]. In addition, it can be noted that the optimal formation of budget funds for competent management accounting [21, 22].

Messier and his co-authors present a wide range of possible financial frauds, including aspects such as asset valuation, earnings management, hiding debts, understatement of expenses, manipulation of revenues, falsification of documents through financial statements, and forgery of accounting documentation, etc [23]. There are several possible sources of misstatements in the financial statements. One is intentional misstatement, which could be made to improve financial reporting or to conceal negative results. Another possible source of misstatement is the incompetence or unprofessionalism of accountants and financial analysts. In other words, financial statements can be made more transparent by economic factors, including innovations, expert training and human resources, and a well-established communication system between the company's management and investors [24].

An important group is publications on methods of identifying misstatements and audit evidence according to IAS [25]. Research by Kahyaoğlu focuses on using data analytics techniques to find hidden trends, patterns, and anomalies in companies' financial data. The integration of analytics speeds up the audit process and provides deeper information about compliance and financial health [26, 27]. Analysts use techniques such as relative performance analysis, peer comparisons, trend analysis, etc., to identify unusual or incorrect financial ratios that may be indicative of misstatements in the financial statements [28].

Hrosova explores global practices in creative accounting, focusing on detection methods such as the Beneish M-Score. The study highlights how effective this model is in investigating financial fraud and shows how it helps uncover patterns of manipulation in the global economy [29].

Another important aspect in the research is the use of internal audit in the prevention of misstatements. Contemporary research indicates that internal audit plays a very important role in reducing the misrepresentation or falsification of financial statements. Moreover, internal audit contributes significantly to reducing fraud. Audit's role is key in preventing and detecting fraud; it should act as a strong, internal, independent control function [30]. The auditor's experience, as well as professional skepticism, plays an important role in report verification [31].

The literature review in the study demonstrates the variety of methods and strategies available to detect financial statement fraud. In general, the identification of misstatements in financial statements is an important task to ensure the transparency and credibility of a company's financial statements. This fact requires the use of various analysis and auditing techniques, as well as ensuring that accountants, managers, and financial analysts are well-qualified.

It appears from the analysis of the literature that audit methods in different countries have not been compared in terms of law and culture. To fill this research, gap our research focuses on methods and ways to detect distortions in the financial statements and compares their application in two culturally and legally different countries – Kazakhstan and Japan.

3. Research Methods

In this paper, we explored the possibilities of detecting misstatements in financial statements using various research methods. The study employed qualitative research approaches, such as inference and description. The term "misstatement of financial statements" is defined by our work as an incorrect representation of the assets and financial standing of the company, the outcomes of economic activity, and the preparation of reports that do not adhere to the standards of accuracy and dependability.

This study examined statistical data from past studies and analyzed the cases of companies that were once subject to financial misrepresentation. This approach distinguishes our research from others.

According to the Association of Certified Fraud Examiners' 2022 report, falsification of financial statements is the 4th most common professional fraud scheme in the Central Asian region [32]. In this study, we conducted a comparative analysis and made the main conclusion of the differences in approaches to finding and distortions in the financial statements of the two countries, Kazakhstan and Japan. Kazakhstan and Japan have different laws and financial reporting requirements. Japan, for example, has the J-SOX (Japanese Sarbanes-Oxley Act) system, which was created to improve the quality of financial reporting and prevent fraud in companies [33]. Kazakhstan does not have such a system, and financial reporting requirements in general are less stringent. Kazakhstan is in Central Asia. This region has a high proportion of financial misrepresentation cases, as shown in Figure 2.

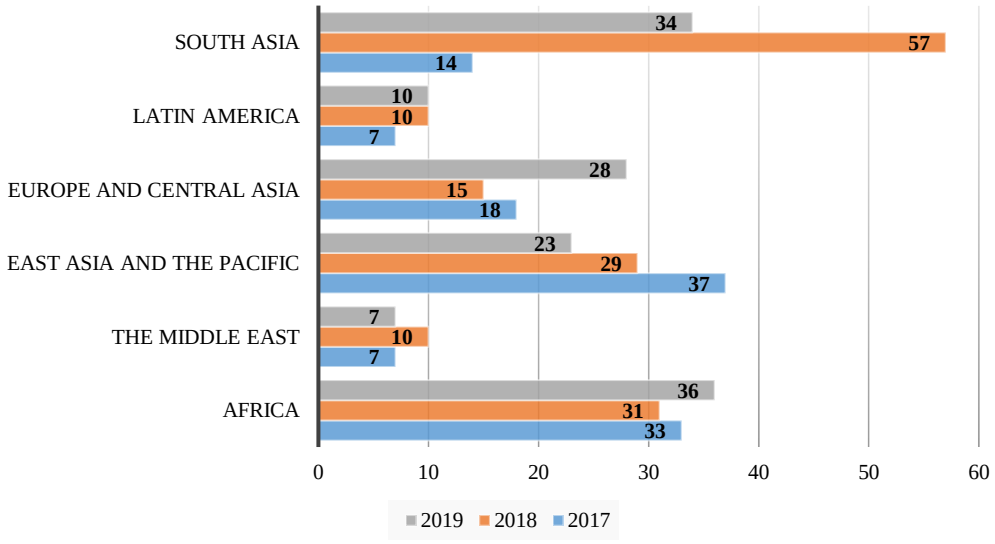

Figure 2.
The number of proceedings because of accounting fraud

In 2018, numerous investigations were conducted in South Asia (57 cases), indicating a high level of violations detected. The decrease in 2019 (34 cases) may indicate that the measures taken have begun to improve the quality of reporting or reduce fraud.

Improving the reliability of the role of internal control and audit systems has stabilized the number of fraud cases in Europe and Central Asia (28 in 2019). As part of the region, Kazakhstan is actively reforming the financial reporting system, which makes its approach necessary for analyzing the effectiveness of modern technologies.

Also, a uniform growth of dubious schemes can be noticed in East Asia. In 2017, many investigations (37 cases) indicated strict control. The gradual decrease by 2019 (23 cases) indicated that the reporting control processes had stabilized. As a country with high standards of financial regulation in the region, Japan is important for research on fraud prevention methods.

Comparing methods for identifying misrepresentations in financial reporting between Kazakhstan and Japan offers useful insights for researchers looking to assess the effectiveness of different analytical approaches in varied economic and regulatory contexts. Japan is a prime example to examine the use of technology like artificial intelligence, big data analysis, and anomaly detection models in the context of lowering fraud in East Asia [34]. Being in the process of integration with international financial standards, the country faces challenges related to financial reporting distortions, which makes its approaches and efforts to use technologies (for example, the Beneish model) interesting for analysis.

Using the secondary research method, we analyzed previously collected statistical data from various case studies of situations faced by Kazakhstani and Japanese companies. By comparison, we identified which methods are more promising for companies and how each factor of the research object can affect the identification of distortions in financial statements.

In our article, we have collected real cases and showed which methods are more popular in the regions and which companies have been manipulated by the financial indicators of the accounting report in Kazakhstan and Japan. Additionally, we present Beneish method results suitable for companies in both countries.

In the next part of this article, we take a closer look at each of these methods and their application to detect misstatements in companies' financial statements. Therefore, to achieve the results of the study, we used the following research methods: comparative analysis of data from financial reports, secondary analysis of statistical data, synthesis and analysis, as well as studies in cases of companies that are examples of financial data distortion. This multidimensional approach allows us to cover different aspects of the problem and provide the most comprehensive insight into the possibilities for detecting misstatements in financial reporting.

4. Research Results

4.1. Methods and Tools for Reducing the Risk of Misstatements in Financial Statements

One of the factors for choosing the comparison of cases of financial reporting misstatement detection between Japan and Kazakhstan was the fact that Kazakhstan represents a country with an emerging economy, where reporting standards have recently begun to be implemented, and control mechanisms are still being formed. Japan, on the other hand, is a country with strict regulation of financial reporting and a developed corporate governance system as a member of the "G7" - Group of Seven countries of the world [35]. A comparison of mature and emerging economies reveals the most effective reporting controls in different environments.

Another factor was well-known cases, stories of companies that have faced manipulation and misrepresentation of financial statements in the past. For example, scandalous cases in Japan (Olympus, Toshiba) demonstrate problems with internal audits and manipulation of reporting despite strict control over processes. Another case, the KazAgro case in

Kazakhstan, revealed serious financial management irregularities. Studying such cases will help to understand more effective audits and financial controls to prevent such misstatements.

Japanese cultural influences that have propelled Japan into an economic powerhouse also impact the business culture, posing challenges to the detection of fraud. Differences in attitudes towards ethical behavior between Japanese and Western cultures further complicate this matter. De Mente notes that for the typical Japanese individual, concepts of right and wrong are not solely defined by an unchanging, universal code of ethics or principles, but are also influenced by factors such as time, location, the individuals involved, and other contextual considerations. This perspective differs from that of Westerners, who typically equate sincerity with truthfulness and honesty [36].

An additional component for both regions is the legality of accounting documents, which always remains relevant, since they serve as the basis for the financial statements of the organization and are used for tax, legal and auditing purposes. Compliance with accounting laws and standards is important for financial transparency and the prevention of legal problems. Therefore, checking financial statements and identifying misstatements are an important part of financial management and ensuring transparency and honesty in business.

The research shows that Japan has its own methods of control and supervision of financial statements of companies, which differ from the practices of other countries. Table 1 presents several Japanese features of control methods.

Table 1.
Japanese features of financial reporting control methods.

No.	Method	Specification
1.	Fundamental analysis	Japanese financial regulators and investors usually rely on fundamental analysis of companies, which means that they take a closer look at the financial performance and long-term prospects of companies.
2.	Long-term relationships	In Japan, there is a tradition of long-term business relationships between companies and banks. This may mean that investors and regulators pay great attention to the financial stability of companies and their ability to pay off debts.
3.	The role of auditors	Auditors in Japan play an important role in verifying the financial statements of companies. They should be independent and strictly monitor compliance with standards.
4.	Excessive accounting influence	In Japan, there is sometimes a phenomenon known as "excessive accounting influence" (zaitech), when companies value their assets above their current market value. This can make it difficult to analyze financial statements.
5.	Supervision and Regulation	Financial regulators, such as the Financial Services Agency of Japan (FSA), play a key role in overseeing financial reporting and financial markets in the country.

Source: Renou, et al. [37] and Kimani [38]

To reduce the risk of misstatements in financial statements, we selected the following methods to identify misstatements in financial information.

1. Outlier analysis - this method is based on outlier analysis, which identifies unique sample elements that are significantly different from the rest of the sample elements. If there are unusual values in the company's financial statements, it may indicate possible misreporting.

2. Volatility analysis - this method is based on measuring the level of variability in a company's financial performance over time. If there is an unusually high or low change in the company's financial statements, it may indicate a possible misreporting [39].

3. Correlation and regression analysis is a method used to identify the relationship between a company's financial performance. If there are unusual relationships between indicators in a company's financial statements, that may indicate possible misreporting [40].

4. Combination of methods - in this case, it is recommended to use a combination of different methods and approaches to improve the accuracy of identifying possible misstatements in reporting and to compare the results. In addition, when applying these methods, the specifics of a particular company and its industry should be considered.

Table 2 provides examples of approaches for spotting distortions in financial statements in Japan and Kazakhstan.

Table 2.
Analytical methods for detecting distortions in financial statements.

№	Method	Interpretation/Example	Countries using the methods
1	Analysis of the development of a company's key financial indicators	Users can analyse changes in a company's revenues, compare them with changes in revenues of other companies in the industry, analyse changes in profits, losses, net assets, and other indicators.	Japan and Kazakhstan: Investors, analysts, and financial institutions typically conduct thorough financial analyses on Japanese and Kazakhstani companies, particularly those that are substantial. And the company's management and investors can make well-informed judgments concerning strategy and financial management with the aid of such analysis.

2	Analysis of the structure and composition of a company's assets and liabilities	Users might analyse a company's receivables as a proportion of its total assets and compare that proportion with other companies in the industry. The structure of liabilities can also be analysed to identify potential risks associated with over- or under-delivering on assets.	Japan and Kazakhstan: In Japan, this method is called balance sheet analysis, and in Kazakhstan, it is called accounting analysis. Decisions on financing, investments, strategic planning, and other facets of financial management are heavily influenced by this kind of study.
3	Analysis of the ratios of various company indicators	It is possible to conduct a profit-to-revenue ratio analysis, a debt-to-total-asset ratio analysis, a receivable-to-revenue ratio analysis, and so on. These ratios can help discover potential biases, such as overstating profits or understating assets.	Japan and Kazakhstan: In both countries, a similar name is used as a financial indicative analysis. Similar methods of analyzing indicators may be used in Japan and Kazakhstan, but the specifics of their use may vary depending on the characteristics of the economic environment, accounting standards and other factors.

Source: Kidirmaganbetova, et al. [41]

As we can see, there are comparable techniques used in both nations to determine whether financial accounts are accurate. The precise calculation of each indicator and side of the balance sheet in the financial statements is the fundamental concept of these analytical techniques. In addition, we suppose there are cultural and legal peculiarities that may affect the approach to financial analysis in different countries.

Tests on the initial methods of identifying fraud in Asian countries in 2022 indicate that TIP is the most important method of prevention. All methods are summarized in Figure 3.

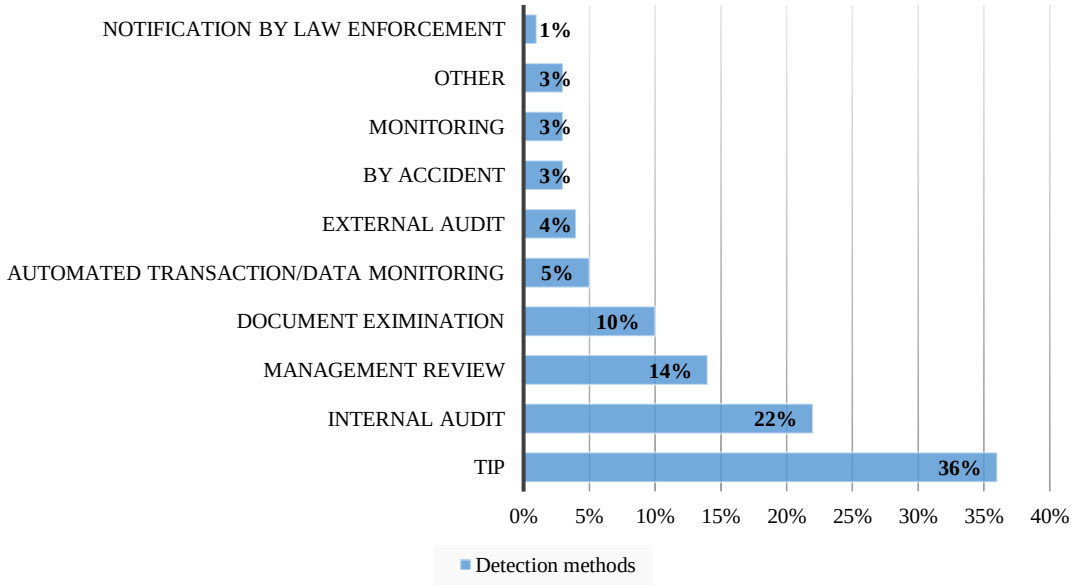

Figure 3.
Methods of detecting falsification of information in Western/Central Asia.

Tips can be a key tool for detecting fraud and starting an investigation, provided by an employee, a third party, or another source. They are followed by internal audit and management analysis. These methods allow all interested parties, such as managers, auditors, and employees of the company, to participate in the process of detecting errors in the accounting system.

Another way is to use machine learning to identify distortions in financial statements. Machine learning algorithms can be used to create models that can identify outliers in financial reporting and identify potential distortions [42]. Using Textual Tone Analysis, it is possible to determine how a corporation thinks about certain trends and occurrences that may have an impact on its financial results [43]. If a business seems optimistic about its future, this might be a sign that projected sales have been overstated. Network graph analysis allows companies to identify the links between them and their partners, customers, and suppliers. This analysis can help identify potential conflicts of interest or hidden financial transactions that could lead to misreporting [44]. In general, the use of information technology and data analysis can improve audit efficiency and identify possible misstatements in the financial statements of companies. It can be seen that the percentage of using this method is minimal (5%) (Figure 2).

In addition to the audit and management review methods, it is possible to use the method of Expert analysis and Risk assessment. The company's survey should be carried out by specialists for audit and financial management, who have sufficient experience and knowledge in detecting misstatements in financial statements [45]. Thus, the use of information technology and data analysis should not replace expert analysis and risk assessment but should serve as an additional tool to improve audit effectiveness and identify possible misstatements in financial reporting.

In summary, the use of statistical and accounting techniques to identify misstatements in the financial statements of companies is an important tool to protect the interests of investors and other interested market participants.

4.2. Kazakhstan And Japan - A Comparative Analysis Based on a Case Study

Comparing the ways of finding misstatements in financial reporting between Kazakhstan and Japan can help researchers better understand which methods of analysis are most effective in different contexts and how they can be applied to improve the quality of financial reporting in various countries.

Please find below some examples of falsification of information from these two countries.

1. In Kazakhstan, there are cases of misrepresentation in companies' financial statements. The main types of distortions are overstating or understating financial indicators, concealing debts or other liabilities, and misreporting company revenues and expenses.

a) One case is the scandal in 2012 with BTA Bank. Reporting was overstated by more than 5 billion USD, which led to the bank going bankrupt and losing investors' confidence. The reason was dishonest treatment and deliberate falsification of reporting information by Bank staff and stakeholders who were complicit in the unscrupulous withdrawal of money [46]. This scandal led to an investigation and a change in the bank's management.

b) A significant producer of paper and packaging products in Kazakhstan, Kazakhstan Kagazy JSC, had financial issues and accusations of accounting fraud in 2017. In addition to the allegations pertaining to questionable financial operations and inconsistent data in reports, the corporation was facing bond default. The significance of stringent oversight of financial transactions and truthful information disclosure in corporate reporting was brought to light by this case [47]. Result: Limited action has been taken by the firm; more corporate inspections are being conducted; and management now faces criminal culpability.

2. In comparison, we present some Japanese cases and solutions below.

a) One of the most high-profile cases of falsified financial statements in Japan occurred in 2015 with Toshiba. An investigation found that the company had overstated profits for several years by improperly reallocating costs and reporting projects late [48].

To conceal the reporting misstatements, the company used several methods, including flattening research and development costs, inappropriately reallocating costs between reporting periods and overstating revenues from asset sales. These actions allowed the company to present a false picture of its financial situation, which led to a fall in its reputation and market share.

b) Another example of false financial reporting in Japan was the case of Olympus in 2011. An investigation found that the company had inflated asset values and reduced losses through improper financial transactions, including hiding losses on investments in low-yielding assets [49, 50].

One of the methods the company used to hide losses involved using low-yielding investment funds to buy loss-making assets. Instead of recognizing losses on these assets, the company delayed their recognition and created fictitious provisions. This fact allowed the company to inflate its profits and hide its financial performance.

From the examples presented, it can be seen that Japanese and Kazakh companies have an identical outcome in the form of a loss of investor and customer confidence and a drop in market share.

Based on the case studies presented, we will attempt to identify distortion methods in two countries and propose strategies for optimizing the control system in Table 3.

Table 3.
Comparison of detection methods between Kazakhstan and Japan

Comparison criteria	Kazakhstan	Japan
Detection methods	- Analysis of financial statements: Financial statement analysts can use various methods of analysis to identify possible misstatements in the accounts. For example, analysing the relationships between different financial indicators, such as current assets and non-current liabilities, can help to identify inconsistencies between data in different parts of the accounts. (*BTA Bank research results*). - Analysis of changes in accounting records: Analysts can analyse changes in accounting records to identify unusual transactions or changes that may indicate misstatements in the accounts. In the second incident, pension funds, as bondholders, suspected the corporation of misrepresenting the company's assets and obligations. A Kazakh newspaper reported the trial proceedings. Additionally released was the record of findings from the National Bank of the Republic of Kazakhstan's audit of the business financial statement. (*Kazakhstan Kagazy research results*)	- Detailed investigation of projects: To identify such misstatements in the accounts, the experts pointed out inconsistencies between the financial indicators and the actual performance of the company, as well as recurring trends in reporting changes between years. A detailed investigation of some of the company's projects and transactions was carried out. (*Toshiba research results*) - The mixed method: The investigators used various methods to uncover false reporting, including financial analysis, comparisons with other sources, analysis of internal documents and interviews with company employees. The investigation revealed that the company had used improper methods to conceal losses on assets over several years. *(Olympus research results)*
Optimisation paths / Outcome	Optimization of the solution: In our opinion it is necessary to strengthen control by audit firm, the National Bank, and investors. Increased requirements for transparency and objectivity in company reporting, as well as control of internal firm communication, are needed. Moreover, it is necessary to strengthen the selection of candidates for work in the company. Furthermore, the National Bank claims that the corporation broke the law "On the Securities Market"; therefore, further administrative fines are required for businesses that do business in the securities market.	Optimization of the solution: In our opinion, to prevent such cases of falsification of financial statements in Japan, it is necessary to take measures to tighten the regulation of the employee's work process and set higher requirements for transparency and objectivity of company reporting. In addition, it would be worthwhile to strengthen the monitoring and supervision of companies by regulatory authorities to prevent false reporting.

Source: National Bank Report of the Republic of Kazakhstan [51].

The table's conclusions highlight the necessity of keeping an eye on and reporting the company's dependability from both external and internal sources. One aspect of Kazakhstani accounting practices is the display of data from the nation's National Bank report, which serves as the foundation for inferences on instances of accounting fraud. This information is not as readily available in the public domain, though. In contrast, local reports on violators in financial statements and other firm activities are openly published by Japanese data.

4.3. Application of the Beneish M-Score Model to Assess the Risk of Financial Statement Manipulation

The next stage of the study is to apply the Beneish M-Score model to assess the risk of manipulation. The Beneish M-Score is a statistical model used to identify potential frauds in companies' financial statements. It is based on several financial indicators and assesses the likelihood of misstatement of financial statements. The Beneish M-Score interpretation of the result presented below [52].

- M-Score > - 1.78: red flag; probable income manipulation; high probability that the firm will be a manipulator; serious manipulation.
- 2.22 < M-Score < -1.78: yellow flag; possible manipulation of earnings; but the company has more reliable reports than when the m-score is above -1.78; small manipulations.
- M-Score < -2.22: green flag; unlikely profit manipulation; the company is unlikely to be a manipulator.

This model is probabilistic, so it cannot identify companies manipulating profits with 100% accuracy. It cannot be applied to financial companies (banks, insurance companies) [52, 53].

Based on this finding we can say that the Method is suitable for a Kazakh company like Kazakhstan Kagazy but not suitable for BTA Bank.

The Beneish M-Score method is not an official or standard method used by Japanese financial regulators or supervisory authorities. Nevertheless, this method was developed to identify potential fraud in the financial statements of companies that we have provided below.

However, nothing prevents investors, analysts, or researchers from using the Beneish method to analyze the financial data of Japanese and Kazakhstani companies or companies from other countries. This method can be a useful tool for identifying the likelihood of misstatement of financial statements, regardless of the country.

A list of Japanese companies from the official financial analytics and investment website GuruFocus with M-Score was selected as a case study [54]. To interpret the results, we calculated the average value of the companies' indicator for 2018-2023.

It is a bit more complicated with Kazakh companies, as the same portal offers other economic indicators for investors, but there is no possibility of finding ready-made M-Score results. As an example, we selected two companies and independently calculated financial statement data for 2017-2018 using the Beneish method. According to news sites with information about the dubious success of the National Holding KazAgro [55], we decided to confirm or deny the information about the presence of manipulation of financial indicators of the joint stock company, using the Beneish method (Company X). Since the company was reformed in 2019, the indicators were selected for the last two years of the holding company's existence with the presentation of financial statements. For comparison, for the same period, the data of the Unified National Pension Fund of the Republic of Kazakhstan (Company Z) were selected.

In this paper, we consider in detail the Beneish method based on data from the company "X" and "Z" presented in Table 4.

Table 4.
The calculated indicators of financial statements.

Financial statement indicator	Values (mln. KZT)		Growth rate	Values (mln. KZT)		Growth rate
	2018	2017		2018	2017	
Accounts receivable	65 234.16	82 214.03	0.79	6 729.41	1 831.43	3.67
Revenue	47 704.28	18 121.69	2.63	60 076.68	46 779.33	1.28
Cost price	36 924.76	15 046.01	2.45	8 192.79	17 158.69	0.48
Assets	1 627 238.07	1 198 128.11	1.36	136 411.57	103 154.00	1.32
Short-term assets (current)	1 023 254.78	575 431.92	1.78	124 278.31	97 919.08	1.27
Fixed assets	8 329.75	9 096.96	0.92	2 465.37	1 609.60	1.53
Depreciation	6 059.54	6 227.11	0.97	1 692.84	1 370.52	1.24
Implementation costs	12 231.17	7 385.13	1.66	924.17	772.44	1.20
Administrative expenses	10 128.93	9 118.21	1.11	12 225.88	12 178.99	1.00
Long-term obligations	1 351 170.43	843 466.39	1.60	1 610.97	1 263.69	1.27
Short-term liabilities	83 012.36	98 676.83	0.84	621.93	10 610.71	0.06
Cash	737 831.74	255 353.85	2.89	7 572.85	27 434.00	0.28
Income tax arrears	78.83	37.49	2.10	302.09	1 081.08	0.28

The variables are built using information from the financial statements of the business to produce an M-Score that indicates the extent of earnings manipulation. The model consists of 8 indicators, which we interpret based on the calculation results in Table 5.

Table 5.
Calculation of M-Score indicators.

No.	Model indicators	2018	2017	Standard rate	Impact of deviation from the standard rate
1.	Days Sales in Receivables Index (DSRI) DSRI = (Net Receivablest / Salest) / (Net Receivablest-1 / Salest-1)	1.37	4.54	< 1.031	The likelihood of inflating profits because of quicker revenue recognition. Modifying the credit policy to allow for more postponed payment to boost sales.
2.	Gross Margin Index (GMI) GMI = [(Salest-1 - COGSt-1) / Salest-1] / [(Salest - COGSt) / Salest]	0.23	0.17	< 1.014	-
3.	Asset Quality Index (AQI) AQI = [1 - (Current Assetst + PP&Et + Securitiest) / Total Assetst] / [1 - ((Current Assetst-1 + PP&Et-1 + Securitiest-1) / Total Assetst-1)]	0.37	0.51	< 1.039	-
4.	Sales Growth Index (SGI) SGI = Salest / Salest-1	2.63	0.57	< 1.134	Growth in sales in year t relative to year t-1 prior. Fast-growing organizations are more inclined to conduct financial fraud to preserve the illusion of large sales, although high sales growth alone does not imply profit manipulation.

5.	Depreciation Index (DEPI) DEPI = (Depreciationt-1/ (PP&Et-1 + Depreciationt-1)) / (Depreciationt / (PP&Et + Depreciationt))	0.42	0.41	1	A slight deviation
6.	Sales General and Administrative Expenses Index (SGAI) SGAI = (SG&A Expenset / Salest) / (SG&A Expenset-1 / Salest-1)	0.47	0.91	1	A slight deviation
7.	Leverage Index (LVGI) LVGI = [(Current Liabilitiest + Total Long Term Debtt) / Total Assetst] / [(Current Liabilitiest-1 + Total Long Term Debtt-1) / Total Assetst-1]	0.88	0.79	< 1	-
8.	Total Accruals to Total Assets (TATA) TATA = (Income from Continuing Operationst - Cash Flows from Operationst) / Total Assetst	X	X	About 0,018	-

Source: Beneish, et al. [52].

Following formula 1, we identified the indicator of the model.

$$M-score = -4.84 + 0.92 \times DSRI + 0.528 \times GMI + 0.404 \times AQI + 0.892 \times SGI + 0.115 \times DEPI - 0.172 \times SGAI + 4.679 \times TATA - 0.327 \times LVGI \quad \textbf{(1)}$$

Result on Company X:

M-Score 2018 = - 4.84 + 0.92 x 1.37 + 0.528 x 0.23 + 0.404 x 0.37 + 0.892 x 2.63 + 0.115 x 0.42 – 0.172 x 0.47 + 4.679 x (-0.004) – 0.327 x 0.88 = -1.3;

M-Score 2017 = -4.84 + 0.92 x 4.54 + 0.528 x 0.17+ 0.404 x 0.51+ 0.892 x 0.57 + 0.115 x 0.41 - 0.172 x 0.91 + 4.679 x (-0.004) – 0.327 x 0.79 = -0.25.

Result on Company Z:

M-Score 2018 = -3.16;

M-Score 2017 = -3.23.

According to our calculations, the results for company X showed that with a large deviation from the previous year, the -1.3 index for 2018 entered the yellow zone, which indicates the presence of financial reporting manipulation. The index for 2017 showed a critical effect at all. The results for two years have shown that the company resorts to manipulating financial statements. In 2017, the index showed a high value, but in 2018, the index has a large deviation.

Company Z has an M-score of -3.16, indicating no manipulation, according to the Benesch model calculation. The result showed high values in 2017, but there was a slight deviation in 2018. Overall, the organization's composite indices for the two periods show moderate results below the critical limits, which means that there is no manipulation in reporting.

As a result, in Table 6, we presented the results of statistical data on average for Japanese companies for 2018-2023 and Kazakhstani companies for 2017-2018, which used the M-Score method.

Table 6.
Comparison of detection methods between Kazakhstan and Japan.

Company	Country	Beneish M-score
Japan Electronic Materials	Japan	-2.70
Takebishi Corp	Japan	-2.33
SAMCO Inc.	Japan	-1.28
KazAgro	Kazakhstan	-0.78
Pension Fund (SAPF)	Kazakhstan	-3.19

The data in Table 6 shows that the method is applicable to companies in both countries. Based on it we analyzed which companies are subject to manipulation of financial indicators in financial statements and presented in Figure 4.

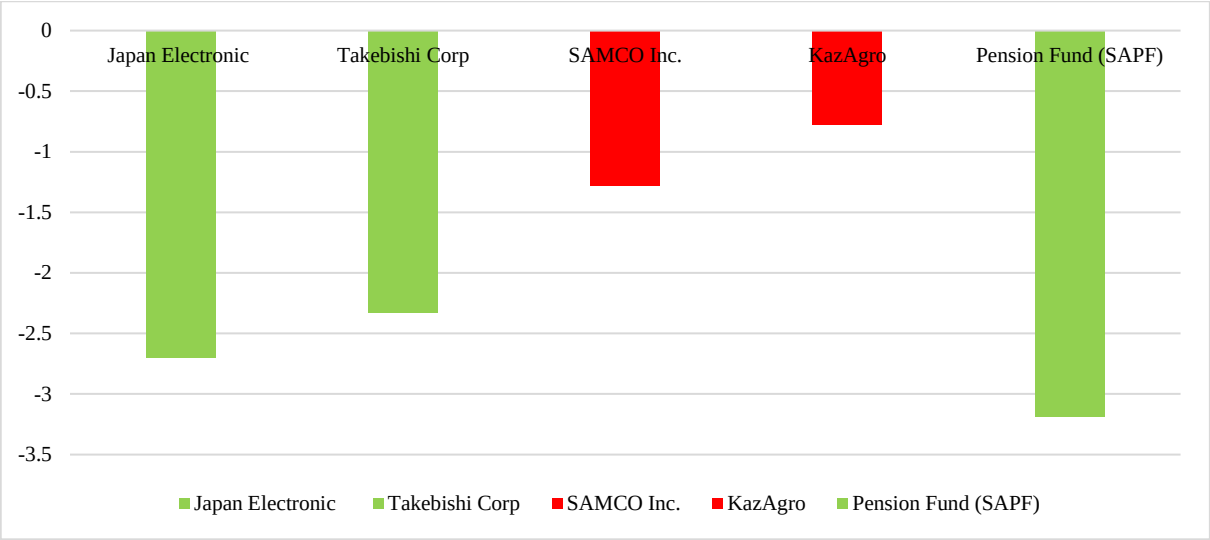

Figure 4.
Range of Beneish M-Score.

Based on the described frequency of the Beneish method segment, it can be concluded that companies such as Samco Inc. and KazAgro fall under the danger zone with a high probability of manipulation of financial statements by their responsible persons. The other three companies, both from Kazakhstan and Japan, show a good working trend. The results of the latest companies prove their honesty and competent accounting and financial reporting.
What to consider when using the chosen model:

- The M-score model allows to detect deficiencies only in the annual reports.
- The method focuses on companies that overstate their financial results, and when financial results are understated, the possibility of issuing an accurate audit result is markedly reduced. This is explained by the fact that the model was originally designed to check the financial statements of American companies that were trying to improve their financial performance to attract additional investment.

Additionally, by studying different sources we emphasized the importance and difference of the internal control system of the two countries.

The company's internal control system plays a particularly important role in identifying misstatements of financial statements and competent preparation of financial statements. To do this, it is advisable to have an internal control system for distorted financial statements in Kazakhstan and Japan, considering the following factors in Table 7.

Table 7.
Comparison of the internal control system of distorted financial statements between Kazakhstan and Japan

Comparison criteria	Kazakhstan	Japan
Legislative framework	Kazakhstan has legislation on transparency and accountability norms. However, compliance is not always monitored and penalised	In Japan, there is a relatively strict legal framework that requires companies to comply with transparency and accountability standards
The role of auditors	Role of auditors in controlling financial reporting not always effective	Auditors play an important role in the process of auditing the financial statements of companies and detecting misstatements. Auditors have wide access to financial data and monitor compliance with standards
The culture of transparency	Such culture of transparency is only starting to develop	Japan has a high culture of transparency and openness in business, which promotes more honest reporting
The internal control system	Internal control systems are at an early stage of development and do not always effectively control misstatements in financial reporting	Companies have a more developed system of internal control, including procedures for verification and validation of financial data
The influence of the Beneish model	M-Score provides additional information to investors, lenders, and analysts to make decisions about investing funds or granting loans to the company. It can be used together with other financial indicators to assess the overall financial situation of the company and its prospects.	The approach might be used by auditors and regulatory agencies to save inquiry costs and increase the precision of their findings.

Source: Mikryukov [56] and Mingzi, et al. [57]

In general, the M-score is useful for checking the financial statements of Kazakhstani and Japanese companies, as it helps to identify financial fraud, identify financial problems, and provide additional information for decision-making. However, like any model, the M-score has limitations and must be considered in the context of other information and analysis. In both countries, the Beneish M-Score system helps in decision-making, but in Japan, it is integrated more effectively to optimize regulatory processes and reduce investigation costs. In addition, Japan's advanced system requirements are more effective in detecting distortions compared to Kazakhstan's less developed practices.

Thus, we can conclude that Japan has a more effective system of control over misstatements in financial reporting due to a more rigorous legal framework, the role of auditors, a high culture of transparency, and a more developed system of internal controls. However, Kazakhstan is just beginning to develop such a system and may improve its performance in this area in the future.

5. Discussion

This study has several important findings for both the theory and practice of corporate management. Firstly, this study found that financial statements play a key role in presenting the company's financial performance and achievements to stakeholders. Therefore, ensuring the accuracy of the information presented in the report is crucial. Detecting and preventing financial statement fraud is essential to maintaining the credibility and integrity of financial reporting. This is consistent with the findings of Blanco et al. [58], which indicate that the detection of fraud improves the quality and comparability of financial statements. Examples of falsification of financial statements in Kazakhstan and Japan presented in the article led to serious consequences for the company and investors. In a similar way, the effects of false reporting have been assessed by other researchers [59]. Thus, the need to implement appropriate methods and tools to prevent inaccuracies in annual reports should be emphasized, particularly where this practice is not common.

Secondly, this study also confirms that it is necessary to use several methods and tools to detect misrepresentations. The combination of methods for investigating inaccuracies, the implementation of machine learning and IT tools can help to identify errors that have occurred. Similar conclusions are drawn from the Achakzai and Peng research [60]. It was shown that problems with the falsification of financial statements exist in both Asian countries. Thus, it is important to use all possible methods and tools to detect misstatements in financial reporting to reduce risks for investors and to ensure that decisions are made correctly. Efforts should also be made to develop new methods and models using IT tools or artificial intelligence.

Thirdly, the implementation of transparency in corporate financial reporting has a positive impact on the quality of financial information. In Japan, it has been noted that great attention is paid to the transparency of financial information. Openness to stakeholders translates into a more accurate presentation of financial information and better quality. In Kazakhstan, on the other hand, a culture of transparency towards the external environment is only just developing. This is a limiting factor for accountants and management to take care of the quality of the presentation of financial data.

In addition, it should be emphasized that legal conditions play an important role in preventing data unreliability. The Accounts Committee for the Control of Execution of the Republican Budget is the highest authority for financial control in Kazakhstan, in addition to business self-regulation. In Japan, along with the self-regulation of enterprises, the bodies of state control over financial reporting are the Japan Financial Services Agency (FSA), the Tokyo Stock Exchange (TSE), as well as the National Securities and Exchange Commission (SEC) [61]. However, despite the existing solutions regulating financial reporting, there are cases of data falsification. Both countries have corporate financial reporting regulations and controlling institutions.

It is important to stress that, irrespective of the legal or cultural background, independent internal and external auditing is a possible solution to prevent errors in the financial statements. In both countries, there is a mechanism for auditing financial statements, which is carried out by auditing companies. Auditors assess the legality and reliability of companies' accounts and report any problems to the company bodies. Nevertheless, audits do not always detect all cases of falsification. A properly functioning internal control system plays a very important role in preventing fraud, errors and improving efficiency [30]. According to our findings in Japan, the internal control system is much better developed and applied. In Kazakhstan, the use of internal control on a larger scale is only just developing.

In this article, the possibilities for detecting misstatements in financial reporting were examined. Various methods and tools used to detect such distortions, such as financial performance analysis, auditing, and independent valuation of company assets, were reviewed. The most effective way to identify falsification of financial statements using quantitative methods is to analyze deviations from expected results and analyze financial indicators [62]. To do this, it is necessary to evaluate the balance sheet data, as well as compare the company's current results with historical results, with market standards and with the results of competitors. If the company's results differ significantly from expectations, a more detailed analysis should be carried out. Thus, detecting falsification of financial statements is a complex process requiring intensive analysis and the use of various methods. It is important to consider both internal and external factors, including regulators and auditors. Only a comprehensive approach identifies misstatements in financial reporting and prevents possible consequences for businesses and investors. The analyses of the companies show that the Beneish model can be an effective tool for the initial identification of financial data manipulation. A relatively small group of entities was analysed, since information about violations in financial statements is not readily available, but studies in companies in another region also indicate that manipulation can be detected using the Beneish model [63, 64].

It was shown that although financial statements are the main source of information about the financial condition of a company, they can contain distorted information that can lead to incorrect conclusions and decisions. The use of appropriate methods in the practice of enterprises will protect them from errors and negative consequences.

6. Conclusion

The problem of poor data reliability is intrinsically linked to financial reporting. In the public mind, it usually appears in financial scandals, as in the Toshiba case, but it cannot be limited to financial fraud alone. Manipulation of results on a smaller scale can lead to suboptimal investment decisions and have equally negative consequences for the efficiency of the financial system. Hence, the topic of research in this area is still relevant.

Different countries have different reporting and transparency laws and practices. In practice, a company can use appropriate tools and methods to minimise inadvertent errors. These include an effective internal control system, guidance from employees, internal audit. Intentional and unintentional distortions, on the other hand, are detected by an independent external audit. Theory and practice point to a variety of methods and possibilities for auditing the financial statements.

The application of several methods, supported by computer technology, can facilitate the search for inaccuracies. More attention is also being paid to the use of artificial intelligence in this process [65, 66]. Developing methods that are appropriate for all companies would make it easier for investors to assess a company.

Previous studies have shown that the topic is very relevant in all countries. However, it can be seen that there is a need to expand the knowledge in this study with modified methods for detecting misstatements and manipulations in financial statements. These methods will increase efficiency and reduce the time for auditing company reports.

This article has shown that both countries have their own methods of identifying misstatements in financial statements. The applied Beneish M-Score method on the example of companies showed that it can be applied in both Kazakhstan and Japan. However, it is still difficult to compare cases from the two countries, as Japan is far ahead in the development of its economy and internal control system. Finally, it should be noted that the process of identifying distortions in financial statements in both countries requires experience, expertise, and careful analysis.

References

[1] IAS 1, "International accounting standard No. 1," Presentation of Financial Statements. https://www.iasplus.com/en/standards/ias/ias1.22, n.d.

[2] Z. Sabatian and F. M. Hutabarat, "The effect of fraud triangle in detecting financial statement fraud," *Jurnal Akuntansi*, vol. 10, no. 3, pp. 231-244, 2020. https://doi.org/10.33369/j.akuntansi.10.3.231-244

[3] Conceptual Framework for Financial Reporting, "Conceptual framework for financial reporting," Retrieved: https://www.iasplus.com/en/standards/other/framework. [Accessed 2018.

[4] ISA 315, "Identifying and assessing the risk of material misstatement, IAASB," Retrieved: https://www.pibr.org.pl/assets/meta/6422,IAASB-ISA-315-first-time-implementation-guidance.pdf, 2022.

[5] J. Welc, *Reading between the lines of corporate financial reports: In search of financial misstatements*. Springer. https://doi.org/10.1007/978-3-030-61041-8, 2020.

[6] M. P. Sari, N. Pramasheilla, T. Suryarini, and I. D. Pamungkas, "Analysis of fraudulent financial reporting with the role of KAP big four as a moderation variable: Crowe's fraud's pentagon theory," *International Journal of Financial Research*, vol. 11, no. 5, pp. 180-190, 2020.

[7] S. Sunardi and M. N. Amin, "Fraud detection of financial statement by using fraud diamond perspective," *International Journal of Development and Sustainability*, vol. 7, no. 3, pp. 878-891, 2018.

[8] How to correct accounting errors—and 7 of the most common types, "FreshBooks," Retrieved: https://www.freshbooks.com/hub/accounting/correcting-accounting-errors, 2023.

[9] W. R. Knechel and M. A. Salterio, "Auditing: Assurance and risk." USA: South-Western College, 2016, p. 704.

[10] J. V. Carcello, M. Eulerich, A. Masli, and D. A. Wood, "Are internal audits associated with reductions in perceived risk?," *Auditing: A Journal of Practice & Theory*, vol. 39, no. 3, pp. 55-73, 2020. https://doi.org/10.2308/ajpt-19-036

[11] Q. Xu and R. Kalelkar, "Consequences of going-concern opinion inaccuracy at the audit office level," *Auditing: A Journal of Practice & Theory*, vol. 39, no. 3, pp. 185–208, 2020. https://doi.org/10.2308/ajpt-18-050

[12] A. Rogošić and I. Perica, "Affective professional commitment and accounting ethics principles: Examining the mediating role of the code of ethics," *Economic Research*, vol. 36, no. 1, pp. 480-498, 2023. https://doi.org/10.1080/1331677X.2022.2077791

[13] M. Safipour Afshar, O. Pourheidari, B. Al-Gamrh, and A. Afshar Jahanshahi, "Audit management, need for closure and detection of misstatements," *Journal of Accounting in Emerging Economies*, vol. 9, no. 2, pp. 237-250, 2019. https://doi.org/10.1108/JAEE-08-2018-0092

[14] ISA 570, "International standard on auditing 570: Going concern, IFAC," Retrieved: https://www.ifac.org/_flysystem/azure-private/publications/files/ISA-570-(Revised).pdf, n.d.

[15] C.-E. Grigoras-Ichim, O.-M. Bordeianu, and L. Morosan-Danila, "The importance of the financial audit in the identification of fraud and errors recorded by companies," *Management*, vol. 43, no. 2, pp. 225-240, 2024. https://doi.org/10.4316/EJAFB.2024.12106

[16] L. A. Iamandache, A. Horaicu, R. A. Stoica, A. Iacob, M. Zuca, and V. Munteanu, "The importance of the financial audit in preventing accounting errors and fraud," *Annals – Economy Series, Constantin Brâncuși University, Faculty of Economics,* vol. 6, pp. 373–385, 2023.

[17] K. Yamamoto, "Legislative issues of various lawsuits in bankruptcy cases," *Bankruptcy and Litigation, note*, vol. 21, p. 484, 2013.

[18] A. Mandal and A. S, "Preventing financial statement fraud in the corporate sector: Insights from auditors," *Journal of Financial Reporting and Accounting*, vol. 23, no. 1, pp. 56-80, 2025. https://doi.org/10.1108/JFRA-02-2023-0101

[19] Q. R. Peng, P. Sivadasan, and R.-Z. R. Zhang, "Executive compensation horizon incentives, performance targets, and auditor risk assessment," *Journal of Accounting and Public Policy*, vol. 42, no. 6, p. 107121, 2023. https://doi.org/10.1016/j.jaccpubpol.2023.107121

[20] E. Du Toit, "The red flags of financial statement fraud: A case study," *Journal of Financial Crime*, vol. 31, no. 2, pp. 311–321, 2024. https://doi.org/10.1108/JFC-02-2023-0028

[21] O. Y. Kogut, Y. Kogut, and A. Arystambaeva, "International experience of mechanisms for the development of management accounting for inventory management and its application in Kazakhstan," *Accounting, Finance, Sustainability, Governance and Fraud*, pp. 39–53, 2024. https://doi.org/10.1007/978-981-97-4351-3-3

[22] V. Nazarova, M. V. Shtiller, I. V. Selezneva, O. Y. Kohut, and G. Seitkhamzina, "Budgeting systems in the strategic management accounting," *Indian Journal of Science and Technology*, vol. 9, no. 5, pp. 1-11, 2016. https://doi.org/10.17485/ijst/2016/v9i5/87602.

[23] W. F. Messier, W. F. Nichols, and D. A. Wilkins, "Auditing and accounting cases: Investigating issues of fraud and professional ethics." USA: McGraw-Hill Education, 2018, p. 944.

[24] R. S. Barros and A. M. D. S. d. C. Ferreira, "Management control systems and innovation: A case study grounded in institutional theory," *Journal of Management Control*, vol. 34, no. 1, pp. 109-133, 2023. https://doi.org/10.1007/s00187-023-00351-4

[25] M. Subedi, "Principles based accounting standards, audit fees and going concern: Evidence using advanced machine learning," *International Journal of Accounting & Information Management*, vol. 32, no. 2, pp. 308-344, 2024. https://doi.org/10.1108/IJAIM-02-2023-0026

[26] S. B. Kahyaoğlu, "An evaluation of accounting and auditing framework within the quantum perspective," *Southern African Journal of Accountability and Auditing Research*, vol. 25, no. 1, pp. 1-5, 2023.

[27] N. Shabani, A. Munir, and S. P. Mohanty, "A study of big data analytics in internal auditing," in *Intelligent Systems and Applications: Proceedings of the 2021 Intelligent Systems Conference (IntelliSys), Volume 2, Springer International Publishing, 2022, pp. 362–374*, 2022.

[28] Y. Zhang, "Detection of financial statement fraud: The role of financial ratios and analysis," *Journal of Business and Economic Studies*, vol. 24, no. 2, pp. 85–106, n.d.

[29] L. Hrosova, "Ways of detection of creative accounting in a global economy," presented at the In SHS Web of Conferences (Vol. 129, p. 03012). EDP Sciences, 2021.

[30] P. Lois, G. Drogalas, A. Karagiorgos, and A. Parcha, "Financial statement misrepresentation: the role of internal and external audit," *Global Business and Economics Review*, vol. 26, no. 3, pp. 334-352, 2022. https://doi.org/10.1504/gber.2022.122391

[31] S. Rahim, H. Ahmad, A. Widya, and J. Junaidi, "Auditors' experience in financial statement fraud detection: the role of professional scepticism and idealism," *Management & Accounting Review (MAR)*, vol. 22, no. 3, pp. 202-222, 2023.

[32] Occupational Fraud 2022: A Report to the Nations, "Association of certified fraud examiners," Retrieved: https://acfepublic.s3.us-west-2.amazonaws.com/2022+Report+to+the+Nations.pdf, 2022.

[33] Internal Control – Integrated Framework: Executive Summary, "COSO," Retrieved: https://www.coso.org/Documents/990025P-Executive-Summary-final-may20.pdf, 2013.

[34] T. Knauer, N. Nikiforow, and S. Wagener, "Determinants of information system quality and data quality in management accounting," *Journal of Management Control*, vol. 31, no. 1, pp. 97-121, 2020. https://doi.org/10.1007/s00187-020-00296-y

[35] Y. Hosoya, "Japan and the challenge of G7 leadership: Toward an inclusive, rules-based world order," Nippon.com," Retrieved: https://www.nippon.com/en/in-depth/d00903/, 2023.

[36] L. B. De Mente, *Japan: Understanding & dealing with the new Japanese way of doing business*. Essex, VT: Phoenix Books, 2012.

[37] T. Renou, R. Carraz, and T. Burger-Helmchen, "Japan's corporate governance transformation: convergence or reconfiguration?," *Administrative Sciences*, vol. 13, no. 6, p. 141, 2023. https://doi.org/10.3390/admsci13060141

[38] B. Kimani, "Influence of accounting information systems (AIS) on financial reporting accuracy," *American Journal of Accounting*, vol. 6, no. 1, pp. 37-47, 2024. https://doi.org/10.47672/ajacc.1787

[39] Financial reporting: Demystifying financial reporting with the Big Four, "FasterCapital," Retrieved: https://fastercapital.com/content/Financial-Reporting--Demystifying-Financial-Reporting-with-the-Big-Four.html#The-Importance-of-Accuracy-in-Financial-Reporting, 2023.

[40] O. S. Agboola and C. A. Oroge, ""Correlation between environmental information and financial performance in manufacturing industry," *International Journal of Advanced Academic Research: Social and Management Sciences*, vol. 5, no. 8, 2019.

[41] A. I. Kidirmaganbetova, O. Y. Kogut, K. Czerewacz-Filipowicz, and L. A. Bimendiyeva, "An international perspective on the misstatements and reliability of financial statements," *International Journal of Innovative Research and Scientific Studies*, vol. 8, no. 2, pp. 4158–4169, 2025. https://doi.org/10.53894/ijirss.v8i2.6250

[42] Y. Sun, X. Zeng, Y. Xu, H. Yue, and X. Yu, "An intelligent detecting model for financial frauds in Chinese A-share market," *Economics & Politics*, vol. 36, no. 2, pp. 1110-1136, 2024.

[43] S. Li, G. Wang, and Y. Luo, "Tone of language, financial disclosure, and earnings management: A textual analysis of form 20-F," *Financial Innovation*, vol. 8, no. 1, p. 43, 2022.

[44] S. Chen, "Detection of fraudulent financial statements using the hybrid data mining approach," *SpringerPlus*, vol. 5, no. 1, p. 89, 2016.

[45] M. Papik and L. Papikova, "Detection models for unintentional financial restatements," *Journal of Business Economics and Management*, vol. 21, no. 1, pp. 64-86, 2020.

[46] The Ablyazov case: Chronology of events, "Sputnik Kazakhstan," Retrieved: https://ru.sputnik.kz/20170607/delo-ablyazova-hronologiya-sobytij-2458232.html, n.d.

[47] M. Kazachkov, "Newspaper – time article," Time.kz," Retrieved: https://time.kz/articles/strana/2015/11/18/a-karton-to-golij, 2016.

[48] J. W. Carpenter, "Toshiba's accounting scandal: How it happened (OTCBB: TOSBF)," Investopedia," Retrieved: https://www.investopedia.com/articles/investing/081315/toshibas-accounting-scandal-how-it-happened.asp, 2021.

[49] A. R. Morgan and C. Burnside, "Olympus corporation financial statement fraud case study: The role that national culture plays on detecting and deterring fraud," *Journal of Business Case Studies (Online)*, vol. 10, no. 2, p. 175, 2014.

[50] S. K. Dutta, D. H. Caplan, and D. J. Marcinko, "Blurred vision, perilous future: Management fraud at Olympus," *Issues in Accounting Education*, vol. 29, no. 3, pp. 459-480, 2014. https://doi.org/10.2308/iace-50787

[51] National Bank Report of the Republic of Kazakhstan, "National bank report of the republic of Kazakhstan," Retrieved: https://nationalbank.kz/ru/sanction/sankcii-i-mery-vozdeystviya/export?page=5, 2023.

[52] M. D. Beneish, C. M. Lee, and D. C. Nichols, "Earnings manipulation and expected returns," *Financial Analysts Journal*, vol. 69, no. 2, pp. 57-82, 2013.

[53] R. Siregar, L. Lores, W. P. Sari, I. C. Sagala, and F. Saragih, "The applicability of the beneish m-score method for detecting financial statement fraud in manufacturing companies during the covid-19 pandemic," *Journal of System and Management Sciences*, vol. 13, no. 6, pp. 622-634, 2023.
[54] Japan Electronic Materials (TSE:6855) Beneish M-Score, "Japan electronic materials (TSE:6855) beneish M-Score," Retrieved: https://www.gurufocus.com/term/mscore/TSE:6855, n.d.
[55] A. Bektenova, "The birth and death of KazAgro, Turanpress.kz," Retrieved: https://nomad.su/?a=4-202106070029, 2021.
[56] T. Mikryukov, "The concept of the internal control system in training centers," Retrieved: https://unecon.ru/sites/default/files/diss_mikriukovtv.pdf, 2020.
[57] S. Mingzi, N. Oshiro, and A. Shuto, "Predicting accounting fraud: Evidence from Japan," *The Japanese Accounting Review*, vol. 6, no. 2016, pp. 17-63, 2016.
[58] B. Blanco, S. Dhole, and F. A. Gul, "Financial statement comparability and accounting fraud," *Journal of Business Finance & Accounting*, vol. 50, no. 7-8, pp. 1166-1205, 2023.
[59] R. R. Carnes, D. M. Christensen, and P. E. Madsen, "Externalities of financial statement fraud on the incoming accounting labor force," *Journal of Accounting Research*, vol. 61, no. 5, pp. 1531-1589, 2023.
[60] M. A. K. Achakzai and J. Peng, "Detecting financial statement fraud using dynamic ensemble machine learning," *International Review of Financial Analysis*, vol. 89, p. 102827, 2023.
[61] Financial Reporting and Audit Task Force, "SEC," Retrieved: https://www.sec.gov/spotlight/fraud/commission-financial-reporting-audit-task-force, 2021.
[62] A. Masiulevičius and V. Lakis, "Application of qualitative characteristics to evaluate misstatements in financial statements: evidence from factual audit data," *Ekonomika.*, vol. 101, no. 2, pp. 6-21, 2022.
[63] E. Kara, M. Ugurlu, and M. Korpi, "Using Beneish model in identifying accounting manipulation: An empirical study in BIST manufacturing industry sector," *Journal of Accounting, Finance and Auditing Studies*, vol. 1, no. 1, pp. 21–39, 2015.
[64] M. Erdoğan and E. O. Erdoğan, "Financial statement manipulation: a Beneish model application," Emerald Publishing Limited. https://doi.org/10.1108/S1569-375920200000102014, 2020, pp. 173-188.
[65] R. Archna and N. Bhagat, "Artificial intelligence challenges and its impact on detection and prevention of financial statement fraud: A theoretical study," in Demystifying the Dark Side of AI in Business: IGI Global, 2024, pp. 60-80.
[66] L. V. Ermolina, A. N. Shiryaev, E. V. Alekina, and O. Y. Kogut, "Networking as a modern approach to managing business development in the digital era," presented at the In International Scientific Conference “Digital Transformation of the Economy: Challenges, Trends, New Opportunities” (pp. 191-198). Cham: Springer Nature Switzerland, 2024.