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THE IMPACT OF INTERNATIONAL FINANCIAL REPORTING STANDARDS ON THE QUALITY OF FINANCIAL INFORMATION

(Summary)

The quality of financial information is becoming increasingly important in modern day economics. Accounting systems used in businesses are imperative to acquire financial information, but the quality of data gained through these systems is subject to multiple factors. Research suggests that these factors can be linked to the size of the reporting businesses, as well as other, broader conditions: macroeconomic, cultural, institutional, and legal factors. This study focuses on the financial data quality and its correlation between using the International Financial Reporting Standards (IFRS) as well as other business determinants.

Keywords: quality determinants; quality of financial results; financial reporting quality

Classification JEL: M40

1. Introduction

Modern, globalized economics is extremely dependant on information, and, even more so, the technology that supplies that information. Daniel Bell, in his work on the information society, posited that knowledge and information are the fuel for ever-changing strategies in civilization transformations¹. The 21st century is called the Information Age, and rightly so: data is essential to ensuring the proper functioning of all of society's constituents. Producing, transferring, and analyzing financial data has become a basic economic process for businesses. A deeper understanding of this process is vital for all participants of economic activity: the businesses, the consumers, and the governments; all these entities must be aware of the economic information flow so that modern

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¹ Z. Dobrowolski, *Koncepcja społeczeństwa informacyjnego Daniela Bella*, wydawnictwo elektroniczne Instytutu Informatyki i Studiów Bibliologicznych, UW, Warszawa 2016.

markets can function. The recent proliferation of communication economists among Nobel Prize winners in Economic Sciences² is a testament to how crucial communication mechanisms are in processing financial data. The information generated by accounting systems may differ in quality. The research problem becomes an identification of not only the potential factors that affect quality as a general category, but also the quality of individual reporting items. The methods to measure quality are also interesting.

In his research, the author focuses on the identification and impact of financial and social factors on the financial information presented in financial statements. He and Marcin Kędzior made an attempt to classify potential determinants, specifying and classifying potential factors and methods for their measurement³. In this work, the author focuses on the influence of legal regulations on generating financial information of different quality. The aim of the work is to identify a list of potential determinants of the quality of financial information in enterprises, with particular emphasis on the impact of the use of International Financial Reporting Standards (IFRS). The goal will be achieved by indicating the methods for measuring the quality of financial information, as well as reviewing and summarizing previous research. Lessons will be drawn to guide further research, indicating the relevance of potential factors.

2. The unique nature of financial information

Information as a concept itself is of significant relevance for this study in different scientific contexts: as a subject of human communication in psychology and sociology, as a processable entity in information engineering fields, and as means of storing subject matter in economic sciences. As Pindlowa⁴ points out, “the impact of scientific information on related fields is not easily visible as the researchers often mistake pure information science for computer science,

² **P. Deszczyński**, *Konceptualizacja pojęcia „Ekonomia Informacji” – paradygmat public relations*, *Studia Ekonomiczne. Zeszyty Naukowe Uniwersytetu Ekonomicznego w Katowicach* 2017/313, Katowice, pp. 51–60.

³ **M. Kędzior, B. Gołębiowski**, *The quality of the financial result and its determinants, the local and regional factor*, in: **T. Corejova** (ed.), *Rozvoj euroregionu beskydy XI – Vedecke poznanie spolocensko-ekonomickych javov v regionalnom protredi v období globalizacie*, Zilinska univerzita v Zilinie 2017, pp. 95–104.

⁴ **W. Pindlowa**, *Pole badań informacji naukowej – problemy zmienne i niezienne*, in: **B. Sośńska-Kalata, E. Chuchro, M. Luterek** (eds.), *Nauka o informacji w okresie zmian*, Nauka – Dydaktyka – Praktyka, Warszawa 2016.

or they obliviously use information engineering concepts created by the theoretical researchers of the field”⁵. Information engineering was appreciated by Dembowska⁶, who values its practical contributions to furthering scientific research. Saracevic⁷, another prominent scholar, put forward three aspects inherent to information science. By nature, it is an interdisciplinary field: as it fuels other areas of science, it grows and evolves, forming new relations and entities. Undeniably, rapid technological growth is a big factor in this process. Increased information flow velocity, as well as its depth and impact, contributes to creating better tools, allowing for improved analytics. Another aspect is the strong correlation between advancements in information science and the shape of the information society, making it a societal phenomenon. Sosińska-Kalata, in her study of information resources, lists over fifty distinct areas present in information science itself⁸, which proves the potential of the field and its metarelation with other sciences. One of the scientific fields listed in her research is information economics, which is a key notion for the basis of this paper.

The first step in the discussion of the role that information plays in the economy is to analyze the definition of information itself. As it might appear to be such a basic concept, it is often overlooked. Information can be perceived in numerous ways, depending on the context of the scientific field where one operates, as well as the purpose of the researcher.

The etymology of the word is clear; it comes from the Latin *informare*, which can be translated as “to shape something, to put an idea into form.” Skrzypek and Grela⁹ gathered works of researchers who extended that definition, and two approaches stand out in particular. The first comes from Mazur, who posited that information is “a transformation of one information association message into another message within that association”¹⁰. The second is Czyż’s approach, where information is “data processed for the purposes of making decisions”¹¹.

⁵ Translated for the purpose of this study.

⁶ **M. Dembowska**, *Nauka o informacji naukowej (informatologia). Organizacja i problematyka badań w Polsce*, IINTE, Warszawa 1991.

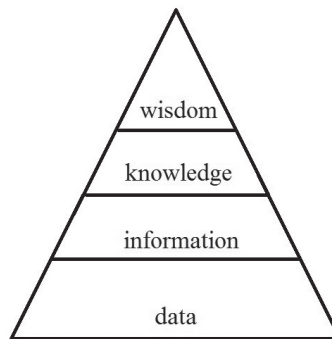
⁷ **T. Saracevic**, *Information Science*, Journal of the American Society for Information Science 1999/50 (12), pp. 1051–1063, in: **B. Sosińska-Kalata**, *Obszary badań współczesnej informatologii (nauki o informacji)*, ZIN Studia Informacyjne. Information Studies 2013/2 (102).

⁸ **B. Sosińska-Kalata**, *Obszary badań współczesnej informatologii (nauki o informacji)*, ZIN Studia Informacyjne. Information Studies 2013/2 (102), pp. 9–41.

⁹ **E. Skrzypek, G. Grela**, *Informacja jako zasób niematerialny w warunkach globalizacji*, *Annales Universitatis Mariae Curie-Skłodowska. Sectio H, Oeconomia* 2005/39, pp. 11–28.

¹⁰ **M. Mazur**, *Jakościowa Teoria Informacji*, WNT, Warszawa 1970.

¹¹ **E. Czyż**, *Znaczenie zarządzania informacją i wiedzą a controlling*, in: **E. Skrzypek** (ed.), *Materiały z konferencji naukowej Info2001*, Kazimierz Dolny, Lublin 2001.

FIGURE 1: *The DIKW model*

Source: M. Grabowski, A. Zając, *Dane, informacja, wiedza – próba definicji*, Zeszyty Naukowe Uniwersytetu Ekonomicznego w Krakowie 2009/798, pp. 99–116.

These definitions are more meaningful in a specific context; specifically, when put in relation to each other, as well as the broader system they both comprise, that is, the DIKW hierarchy: Data, Information, Knowledge, Wisdom. As the DIKW model is employed in numerous field, both scientific and non-scientific, the origins of the concept are uncertain. Kronios and Baskarada¹², Hey¹³, and Grabowski and Zając¹⁴ attribute the model to Zelezny¹⁵, Ackoff¹⁶, Cooley¹⁷, and Cleveland¹⁸, although it is said that its roots go back as far as T.S. Eliot's poetry from 1934. The DIKW hierarchy represents the differences and the dependencies between core concepts of data, information, knowledge, and wisdom. The consequential nature of their association emphasizes data as the source of information and information itself as the foundation of knowledge.

Information in economic sciences is mostly associated with information asymmetry, adverse selection, moral hazard, signaling, and screening¹⁹. To

¹² S. Baskarada, A. Koronios, *Data, Information, Knowledge, Wisdom (DIKW): A Semiotic Theoretical and Empirical Exploration of the Hierarchy and its Quality Dimension*, Australasian Journal of Information Systems 2013/18, pp. 5–24.

¹³ J. Hey, *The Data, Information, Knowledge, Wisdom Chain: The Metaphorical link*, 2004.

¹⁴ M. Grabowski, A. Zając, *Dane, informacja, wiedza – próba definicji*, Zeszyty Naukowe Uniwersytetu Ekonomicznego w Krakowie 2009/798, pp. 99–116.

¹⁵ M. Zeleny, *Management Support Systems: Towards Integrated Knowledge Management*, Human Systems Management 1987/7–1, pp. 59–70.

¹⁶ R.L. Ackoff, *From Data to Wisdom*, Journal of Applied Systems Analysis 1989/16, pp. 3–9.

¹⁷ M. Cooley, *Architecture or Bee?*, The Hogarth Press, London 1987.

¹⁸ H. Cleveland, *Information as a Resource*, The Futurist 1982, pp. 34–39.

¹⁹ K. Sączuk, *Wybrane zagadnienia ekonomii informacji a rynek pracy*, Bank i Kredyt 2003/5, pp. 25–36.

properly approach these concepts, it is essential to first give at least a brief analysis of the information economics itself. Oleński wrote excellent studies on the subject, putting forward the idea that information can be qualified as one of the branches of economic science simply on the basis of its attributes converging with other, well-established areas of economics. Producing, exchanging, and consuming information are all processes present in information markets, and they bear an uncanny resemblance to classic economic processes. To properly establish information as a branch of economics, one should classify its attributes within the frame of other categories of economic science. Oleński defines information as an economic resource as “all potentially useful sets of information and meta-information, gathered in a specific location or storage and maintained over time using technology by organizations who enable its use for economic agents”²⁰. For a piece of information to qualify as actual information within this definition, it must be a truthful reflection of reality and not just a simple layer for transporting data. It must be useful, accessible, easy to understand, and, most importantly, subject to quality standards. Information can also be qualified as a public good. In a market economy, public institutions are bound by law to provide information regarding their operations, as well as the state of the market, and current legal regulations. Markets cannot exist without information that meets these requirements.

Information is also often denoted as a factor of production, although not as a fully separate factor like land, labor, capital or technology, but a subset of each. The DIKW model emphasizes the role of information in the knowledge creation process, and knowledge is vital for the development of technology that enables labor. Ergo, one of the core elements that fuel increased production is information, and that actually makes it a factor of production²¹.

Information can also be treated as a product in itself, a result of a creative process; that process serves the agents to generate, gather, maintain, transfer, process, share, interpret, and employ information. Even though information products can manifest as either finished goods or services, their features are distinct enough to allow for a clear separation from the standard equivalents. Information is not a standalone entity as it requires a separate physical medium so it can be stored and transmitted; this enables the effortless production and distribution of information products, but it can also have unforeseen consequences, as the medium itself also shapes how information is received

²⁰ J. Oleński, *Ekonomika Informacji – podstawy*, PWE, Warszawa 2001, pp. 241–247.

²¹ *Ibidem*, pp. 271–274.

and perceived. Another key difference is that the quality of information can only be tested *ex-post*: the receiving party has no means of verifying whether the information is useful or reliable before they obtain it, which puts significant stress on the payment for the service.

To sum up, information can take the form of a product, a service, a finished, final, or trade good, and that unequivocally establishes it as an economic concept²². Following that conclusion, the paradigm where such information goods are circulated would be defined as the information market, where the processes of information production, exchange, and consumption take place²³. Information economics as a science deals with the phenomenon of information specifically within the bounds of that market.

It is important to remember the cost generated during each of the eight phases of the information production process. Naturally, there is also information demand and supply. While information demand is elastic, as it is often regulated by legal standards, supply can be either autonomous or directly correlated to demand. An example of supply independent of demand is a government-mandated product or service, for example, a public good. Information supply as a finished good intended for the general market is highly elastic as it is cheap to reproduce. When the consumer is a specific entity, supply becomes less flexible the more specialized the information needs to be, as the consumer is often bound by law or economic necessity to acquire the information. Such services are often monopolized, and, in consequence, more expensive in comparison to general information products²⁴.

The impact of acquiring quality financial information on the decision-making process of economic agents is also extremely important. The most prominent researchers of the subject, Stiglitz, Akerlof, and Spence, were awarded the Nobel Memorial Prize in Economic Sciences in 2001 for their analysis of asymmetrically informed markets. The discovery of this phenomenon is attributed to Akerlof. He studied the effect of information asymmetry on the price of product and buyer behavior patterns in markets for used cars²⁵. Several years later, Spence, in his job market analysis, proved adverse selection to be correlated to information asymmetry²⁶. The economic agent, to acquire meaningful profits, must convey credible information to the recipient (called the principal). This is called *signaling*.

²² *Ibidem*, pp. 274–323.

²³ **J. Oleński**, *Ekonomika Informacji – metody*, PWE, Warszawa 2003, p. 203.

²⁴ *Ibidem*, pp. 199–269.

²⁵ **G.A. Akerlof**, *The Market for “Lemons”: Quality Uncertainty and the Market Mechanism*, *Quarterly Journal of Economics* 1970/84/3, pp. 488–500.

²⁶ **M. Spence**, *Job Market Signaling*, *Quarterly Journal of Economics* 1978/87, pp. 283–306.

A very similar phenomenon was described by the financial market researcher Joseph Stiglitz, who studied the influence of financial information on the cost and availability of financial instruments such as bank loans²⁷.

The groundbreaking work of these scholars paved the way for further research on the impact of financial information. Numerous authors also point out the negative consequences brought by information science developments in economics, arguing that they lead to decreased numbers of optimal economic decisions, which, in turn, cause less effective resource allocation, as well as increased business risks²⁸. The significance of risks and benefits that quality financial information brings to the business shows just how important the accounting systems generating that information are.

3. Financial information quality in theoretical and empirical accounting studies

Plato defined quality as a degree of perfection. In terms of accounting being a concept of a universal system of information and control²⁹, quality can be perceived as a degree of usefulness through the economic benefits it brings. A piece of information can be qualified as useful when it meets a certain range of criteria³⁰. One of the IFRS components, *The Conceptual Framework for Financial Reporting*, defines such criteria in the following categories:

- fundamental qualitative characteristics:
 - relevance,
 - faithful representation,
- enhancing qualitative characteristics:
 - comparability,
 - verifiability,
 - timeliness,
 - understandability.

²⁷ **J.E. Stiglitz, A. Weiss**, *Credit rationing in markets with imperfect information*, The American Economic Review 1981/71, pp. 393–410.

²⁸ **A. Skowroński**, *Wpływ asymetrii informacji na decyzje finansowe przedsiębiorstw*, Ruch Prawniczy, Ekonomiczny i Socjologiczny 2005/LXVII/3, pp. 151–160.

²⁹ **B. Micherda**, *Analityczna funkcja rachunkowości*, Wydawnictwo Akademii Ekonomicznej w Krakowie, Kraków 2001, pp. 9–15.

³⁰ **A. Jaruga, M. Frenzel, R. Ignatowski, P. Kabalski**, *Międzynarodowe Standardy Sprawozdawczości Finansowej 2009. Najnowsze Zmiany*, SKWP, Warszawa 2009, pp. 7–18.

To determine whether a piece of information is useful, it is necessary to identify if it possesses the fundamental characteristics; only then can one approach the enhancing characteristics to gauge the degree of the information's usefulness. When determining usefulness, it is also important to remember materiality, a previously used characteristic of information usefulness. Information is material if its omission or distortion can influence the user's economic decision.

For a piece of information to be a faithful representation of reality, it must be complete, neutral, and free from error. The enhancing qualitative characteristics of information should be intensified to acquire the highest level of usefulness; nevertheless, one must remember the cost involved with acquiring information. It must be justified by the benefits of the obtained and presented information.

Information in accounting is mainly acquired through financial reporting. Subsequently, the quality of financial information is also a representation of a business's reporting quality, which represents their financial results. It can be deduced, then, that the quality of financial information is an implied quality of the financial results. Grabiński describes financial results as useful for a particular user group: stakeholders, government bodies, as well as academia³¹.

There are many instruments designed to measure and define high-quality financial information. Dechow, Ge, and Schrand posit that high-quality results bring information that is more useful because it is more relevant to users who make financial decisions³². This classification delineates characteristics crucial for identifying high-quality financial information: properties, market reaction, and intentional misstatements of financial results. Every characteristic contains concrete, measurable factors enabling proper analysis; the first characteristic includes the persistence of result, predictability, and income smoothing; the second is manifested through the market reaction factor, and the last characteristic is measured by accruals³³.

The persistence of financial results is a good measure of quality, as it shows the ability of a business to sustain its results. Predictability is also a plausible criterion, as it is a direct consequence of persistence. Financial gain acquired through the ability to estimate future revenue based on current cash flows, ROI, and financial results, brings economic information of the highest quality.

³¹ **K. Grabiński**, *Determinanty kształtowania wyniku finansowego w teorii i praktyce europejskich spółek giełdowych*, Wydawnictwo Uniwersytetu Ekonomicznego w Krakowie, Kraków 2016, pp. 47–48.

³² **P.M. Dechow, W. Ge, C. Schrand**, *Understanding earnings quality: A review of the proxies, their determinants and their consequences*, *Journal of Accounting and Economics* 2010/50/2–3, pp. 344–401.

³³ **K. Grabiński**, *op. cit.*, pp. 47–48.

Predictable results show that a business is employing accrual accounting to its full potential. The business's market valuation increases and share volatility decreases, forging a positive cause-effect relationship between persistence and market reaction factor. That correlation is based on the assumption that the state of the capital market reflects all the possibly available financial information in the share price. Financial results of higher quality bring milder reactions of the capital market³⁴.

The prime measures of results quality that I will refer to in this study are also widely used in empirical studies, that is, earnings smoothing and accruals. Earnings smoothing is a consequence of accrual accounting: higher intensity accrual practices lead to more useful results, and that equals better financial information. Earnings smoothing is measured on the basis of variance in financial results and cash flows. These indicators represent, respectively, the accrued (smoothed) and cash (unsmoothed) earnings measures; comparing the two allows for a proper representation of a business's fundamental effectiveness³⁵. The equation for calculating the earnings smoothing indicator is as follows (1).

$$WZ = \frac{\delta(EARN)}{\delta(CFO)} \quad (1)$$

where:

WZ – earnings smoothing metric;

$\delta(EARN)$ – financial result standard deviation;

$\delta(CFO)$ – standard deviation in Cash Flow from Operations.

Some approaches use accruals rather than earnings to calculate the smoothing indicator (2).

$$WZ = cor(\Delta ACC, \Delta CGFO) \quad (2)$$

where:

ΔACC – variation in accruals over the period of one year;

ΔCFO – variation in Cash Flows from Operations over the period of one year.

In the presented metrics, the sum of accruals is an exogenous variable, while in other approaches, they become an endogenous variable. Accruals are one of the most commonly used metrics in statistical analysis that apply to both the financial results as well as their influence on other economic and social factors. Non-discretionary accruals, also called “normal” accruals, reflect the business's fundamental performance; discretionary accruals (or “abnormal”)

³⁴ *Ibidem*, pp. 67–97.

³⁵ **J. Francis, P. Olsson, K. Schipper**, *Earnings Quality*, Foundations and Trends in Accounting 2006/1/4, p. 44.

make it possible to capture both intentional and unintentional errors present in the business's reporting process. In classic approaches, the ratio of both types of accruals brings negative connotations, as it is said that businesses with a high absolute value of accruals exhibit financial results of low quality, which means their financial information is also of poor quality³⁶.

The most popular models used for calculating the value of normal accruals are the Jones model³⁷ and the modified Jones model, also referred to as the Dechow model³⁸. The modified Jones model uses the following equation (3).

$$\frac{TA_{i,t}}{A_{i,t-1}} = \beta_{1i} \left[\frac{1}{A_{i,t-1}} \right] + \beta_{2i} \left[\frac{\Delta REV_{i,t} - \Delta REC_{i,t}}{A_{i,t-1}} \right] + \beta_{3i} \left[\frac{PPE_{i,t}}{A_{i,t-1}} \right] + \varepsilon_{i,t} \quad (3)$$

where:

$TA_{i,t}$ – total accruals over time t calculated as:

$TA_{i,t} = \Delta \text{assets} - \Delta \text{cash (and cash equivalents)} - \Delta \text{liabilities} + \Delta \text{short term debt} - \text{amortization}$

$A_{i,t-1}$ – total asset in previous operating year (year $t - 1$);

$\Delta REV_{i,t}$ – the difference between operating revenue over time t and operating revenue in time $t - 1$ for company i ;

$\Delta REC_{i,t}$ – the difference in receivables over time t and time $t - 1$ for company i ;

$PPE_{i,t}$ – company i 's fixed assets in time t ;

$\varepsilon_{i,t}$ – residuals.

Another model often used in global empirical research is the Kothari model³⁹ (4).

$$\frac{TA_{i,t}}{A_{i,t-1}} = \beta_{1i} \left[\frac{1}{A_{i,t-1}} \right] + \beta_{2i} \left[\frac{\Delta REV_{i,t} - \Delta REC_{i,t}}{A_{i,t-1}} \right] + \beta_{3i} \left[\frac{PPE_{i,t}}{A_{i,t-1}} \right] + \beta_{4i} \left[\frac{ROA_{i,t-1}}{A_{i,t-1}} \right] + \varepsilon_{i,t} \quad (4)$$

where:

$ROA_{i,t}$ – return on assets of company i over time t .

³⁶ K. Grabiński, *op. cit.*, pp. 68–97.

³⁷ J. Jones, *Earnings Management During Import Relief Investigations*, Journal of Accounting Research, 1991/29/2, pp. 193–228.

³⁸ P. Dechow, R. Sloan, A. Sweeney, *Detecting Earnings Management*, The Accounting Review 1995/70/2, pp. 193–225.

³⁹ S. Kothari, A. Leone, Ch. Wasley, *Performance Matched Discretionary Accrual Measures*, Journal of Accounting & Economics 2005/39, pp. 163–197.

Both these models are based on comparing total accruals with the factors that determine the way these accruals are created. Said factors can stem from different practices: normal factors are involved with standard accrual accounting methods, while abnormal factors are attributed to accounting errors or active earnings smoothing. Intentional earnings smoothing is thought to diminish the quality of a business's financial information. The amount of accruals is one of the determinants of financial result quality. Earnings management is said to decrease the quality of financial reporting, which leads to reduced quality of the resulting financial information. The regression equalization factor present in the modified Jones and Kothari models indirectly represents the value of accruals by complementing other determinants used for accrual calculation⁴⁰. Jones suggests that natural accruals are connected to two factors: amortization and sales revenue. Amortization in this context is represented by the fixed asset value, which is the basic accounting concept that differentiates the cash and accrual accounting methods. Change in sales revenue causes a change in non-cash working capital⁴¹.

Another group of scholars, Dechow, Sloan, and Sweeney, modified the Jones model and came to the conclusion that the change in sales revenue does not reflect only the natural accruals, as receivables collection might be subject to government manipulation. In such a scenario, the calculations might be erroneous, as it would mean that the discretionary accruals are bundled together with the non-discretionary accruals. Their proposed model aims at lowering the possibility of such errors by using the revenue change over time t equal to one year rather than the total revenue change⁴².

Kothari, Leone, and Wasley went further in their study: they proposed that the return on assets should also be included in the equation, as it represents the intensity of the business's capital management activity, which influences the value of natural accruals⁴³.

The presented models make it possible to estimate the quality of financial information exhibited in a business's financial reporting. They do not, however, include all the determinants important for evaluating financial information. One might suggest that the total financial information quality depends not only on the business-related determinants, but also on environmental factors. The research proposed in this paper aims at finding all the factors that shape the quality of financial information in Polish businesses.

⁴⁰ K. Grabiński, *op. cit.*, p. 139.

⁴¹ J. Jones, *op. cit.*, p. 210.

⁴² P. Dechow, R. Sloan, A. Sweeney, *op. cit.*, pp. 193–225.

⁴³ S. Kothari, A. Leone, Ch. Wasley, *op. cit.*, p. 172.

4. Financial information quality determinants and their correlation with International Financial Reporting Standards (IFRS)

The subject of financial information quality determinants is the focus of numerous economic studies all over the world. Francis, Olsson, and Shipper list the following factors as contributors to information quality: the size of the business, cash flow standard deviation, sales revenue standard deviation, business operational cycle (defined as the time sum of receivables collection and inventory rotation), the number of years with negative financial results, investing in non-material assets such as research and development or marketing, and fixed asset share in the final balance⁴⁴.

A different model, based on estimating earnings smoothing⁴⁵, can be used to determine the quality of financial information by comparing either the change in earnings, or the change in cash flow to numerous other factors: sales revenue, sales percentage change, stock price change, liability to equity ratio, total balance change, ratio of sales income to total asset value, cash flow value, the use of one of the Big Four audit firms (PwC, KPMG, E&Y, D&T) the number of stock markets where the business is listed, or various parameters recommended by Worldscope. These researchers also point out the importance of the country of operation and the type of industry.

Kędzior, in his research on business profitability, attempted to classify profitability determinants in the following categories: macroeconomic financial, macroeconomic non-financial, macroeconomic, and institutional; these categories capture factors such as the concentration of shares in a given industry, the opportunity for business growth, market share, or international operations, the level of stock exchange market development in the business's home market, the level of the banking sector, government effectiveness, the level of corruption, judiciary independence, and many more⁴⁶.

The results yielded from the research of Martinez-Ferrero confirm that the increase in earnings, the level of corruption in the home country, the use of IFRS and local legal regulations, as well as the economic cycle, all influence the quality

⁴⁴ J. Francis, P. Olsson, K. Schipper, *op. cit.*, p. 44.

⁴⁵ M. Barth, W. Landsman, M. Lang, *International Accounting Standards and Accounting Quality*, *Journal of Accounting Research* 2008/46/3, pp. 482–486.

⁴⁶ M. Kędzior, *Zależność rentowności przedsiębiorstw od czynników mikroekonomicznych, makroekonomicznych i instytucjonalnych w wybranych państwach Unii Europejskiej*, Wydawnictwo Uniwersytetu Ekonomicznego, Kraków 2016, pp. 236–238.

of financial reporting⁴⁷. Shiri and Roshandel demonstrated the relationship between the quality of earnings and the stock volatility risk in their study of businesses listed on the stock exchange in Tehran⁴⁸. Gajevszky, in his research based on businesses listed on the stock exchange in Bucharest, demonstrated the relation between the quality of financial reports and return on assets and cash flow; additionally, he proved that reporting quality was not affected by factors such as audit company size, business size, or profit per share⁴⁹.

Ole-Kristian, Wayne, and Dushyantkumar studied the relationship between the quality of financial reporting in privately held businesses and the quality of financial reporting in public enterprises in the US⁵⁰. Their empirical studies conclude that publicly held enterprises exhibit financial information of higher quality, as such firms are characterized by low variance in earnings, external funding, using the biggest auditing companies, and having internal strategic analysis departments.

Christensen, Lee, Walker, and Zeng studied the influence of using IFRS in German enterprises, but the results suggest that the quality of accounting did not improve in these companies⁵¹. On the other hand, the theoretical studies of Soderstrom and Sun put forward many arguments for potential reporting quality improvements gained after introducing IFRS to a business's standards⁵². Their thesis was confirmed by the research of Chen, Tang, Jiang, and Lin, who proved the increase in country-wide financial quality information after the mandatory IFRS introduction⁵³.

⁴⁷ **J. Martínez-Ferrero, I. Garcia-Sanchez, B. Cuadrado-Ballesteros**, *Effect of Financial Reporting Quality on Sustainability Information Disclosure*, Corporate Social Responsibility and Environmental Management 2015/22, pp. 45–64.

⁴⁸ **M. Shiri, M. Roshandel**, *The relationship between stock liquidity risk and financial information quality criteria in Tehran Stock Exchange*, Iranian Journal of Management Studies (IJMS) 2015/8–4, pp. 503–521.

⁴⁹ **A. Gajevszky**, *Assessing Financial Reporting Quality: Evidence from Romania*, Audit Financiar 2015/XIII/121, pp. 69–80.

⁵⁰ **H. Ole-Kristian, T. Wayne, V. Dushyantkumar**, *Financial Reporting Quality of U.S. Private and Public Firms*, The Accounting Review 2013/88/5, pp. 1715–1742.

⁵¹ **H. Christensen, E. Lee, M. Walker, C. Zeng**, *Incentives or Standards: What Determines Accounting Quality Changes around IFRS Adoption?*, European Accounting Review 2015/24/1, pp. 31–61.

⁵² **N. Soderstrom, K. Jialin Sun**, *IFRS Adoption and Accounting Quality: A Review*, European Accounting Review 2007/16–4, pp. 675–702.

⁵³ **H. Chen, Q. Tang, Y. Jiang, Z. Lin**, *The Role of International Financial Reporting Standards in Accounting Quality: Evidence from the European Union*, Journal of International Financial Management and Accounting 2010/21:3, pp. 220–278.

As more and more studies are conducted, it is apparent that the field of financial information quality is still in development. The models used for analysis keep evolving, studies yield varying, often inconclusive results. Conducting empirical studies using Polish businesses as sample data can further the field. Additionally, the benefits of such studies are not limited to just academic value; the resulting analysis could be applied by businesses to improve their accounting systems and, subsequently, improve their financial information quality.

Potential factors influencing the quality of financial information include the size of the company, debt value, share price fluctuation, capital intensity, the use of accounting systems compliant with IFRS, outsourcing audits to one of the Big Four firms, negative earnings, and whether the State Treasury is a part of the ownership structure.

Bigger enterprises can spend significantly more on accounting and management analytics. The size of the business also drives external investor attention, which encourages executives to disclose more financial information. The cost of such disclosures is regarded as degressive by researchers⁵⁴. Increased amounts of voluntarily disclosed financial information should generate a positive feedback loop, where the more information that is disclosed, the better its quality. Such is the expectation when businesses introduce IFRS to their reporting standards: wilful compliance with standards that encourage a higher frequency of information disclosure should lead to better quality information⁵⁵. Larger companies are also more inclined to outsource their financial processes⁵⁶. Auditors working for the Big Four firms recommend a higher frequency of financial information disclosure, as well as improving its credibility⁵⁷.

The balance structure of an enterprise also influences the quality of its reported financial information. High debt increases investor risk. The board can improve information transparency by reducing that risk⁵⁸. Capital intensity, marked as fixed assets in the final balance, can cause the number of voluntary

⁵⁴ **R. Cuijpers, W. Buijink**, *Voluntary Adoption of Non-local GAAP in the European Union: a Study of Determinants and Consequences*, *European Accounting Review* 2005/14 (3), pp. 487–524.

⁵⁵ **N. Soderstrom, K. Jialin Sun**, *op. cit.*, pp. 675–702.

⁵⁶ **K. Świetla**, *Outsourcing usług księgowych w świetle oczekiwań biur rachunkowych i ich klientów*, Wydawnictwo Uniwersytetu Ekonomicznego, Kraków 2014, pp. 93–106.

⁵⁷ **C. Bessieux-Ollier, E. Walliser**, *Why Firms Listed on an Unregulated Financial Market Comply Voluntarily with IFRS: An Empirical Analysis with French Data*, Montpellier Research in Management, Post print 2012.

⁵⁸ **Y. Senyigit**, *Determinants of Voluntary IFRS Adoption in an Emerging Market: Evidence from Turkey*, *Accounting and Management Information Systems* 2014/13, pp. 449–465.

financial information disclosures to diminish: businesses investing in fixed assets are characterized by lower risk, so they require less supervision. Unfortunately, lower frequency of information disclosure can lead to a deterioration of information quality⁵⁹.

Earnings quality can also be shaped by past performance: enterprises that lost revenue in past years will strive to improve their reporting quality in the hopes of lowering further risk by improving their public opinion⁶⁰.

Capital market reaction to financial information is reflected by the fluctuation in share prices. The share price of a business that presents financial reports of questionable credibility, assuming the given market is of average effectiveness, can change significantly in a short period of time, as opposed to a business trusted by investors. The high standard deviation of share prices might imply financial information of lower quality⁶¹.

Another curious factor that potentially impacts the accounting processes in a company is its ownership structure. While there is research that tackles the problems of international stakeholder structure, when it comes to local governments, the realities of the Polish economy beg the question whether the involvement of the National Treasury could negatively influence disclosed earnings result. The very presence of public capital in the company's balance puts additional stress on businesses, as they need to pay out annual dividends to satisfy the government budget. This could be exerting extra pressure to improve their financial results, as well as impede potential investments. Discretionary government involvement in earnings quality leads to lower cognitive value of disclosed information.

5. Summary

Information has become the lifeblood of modern economics, and its influence on economic processes is undeniable. Information asymmetry can lead to disastrous consequences in every area of business operations. To combat this phenomenon, it is essential to produce, consume, and process financial information of the highest quality. Accounting processes that generate accounting information depend on numerous factors of which legal regulations for financial reporting

⁵⁹ P. Andre, P. Walton, D. Yang, *Voluntary Adoption of IFRS: A Study of Determinants for UK Unlisted Firm*, In *Comptabilites et Innovation* 2012.

⁶⁰ J. Francis, P. Olsson, K. Schipper, *op. cit.*, pp. 319–352.

⁶¹ K. Grabiński, *op. cit.*, pp. 80–81.

is of the utmost importance. Despite the fact that studies suggest the financial results of businesses using local legal regulations and those using IFRS are highly comparable⁶², it is reasonable to conclude that there is a real need to normalize the legal requirements imposed on businesses on a national and international scale in Europe. Unifying legal regulations enforces the same rules for creating accounting information. This enables comparability of information on an international scale. The results of the research presented here indicate that regardless of the accounting systems used, the information generated is of similar quality, and it is reasonable to ensure the highest quality of this information. Creating a list of important factors that influence the quality of financial information enables its control, both by its recipients and the enterprises themselves. In addition, the factor's intensity can be interpreted as a measure of the risk of information about lower or higher quality, depending on the direction of correlation. The research indicates the possibility of the practical application of future research results, opening the field to further deepen the topic.

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⁶² **M. Kędzior**, *op. cit.*, s. 232.

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WPLYW STOSOWANIA MIĘDZYNARODOWYCH STANDARDÓW SPRAWOZDAWCZOŚCI FINANSOWEJ (MSFF) NA JAKOŚĆ INFORMACJI FINANSOWEJ

(Streszczenie)

Jakość informacji we współczesnej gospodarce nabiera coraz większego znaczenia. Jednymi z istotniejszych jej źródeł są systemy rachunkowości dostarczające informacji finansowej, której jakość zależy od wielu czynników. Badania naukowe wskazują na istnienie wielu determinant zarówno po stronie wielkości sprawozdawczych przedsiębiorstw, jak i po stronie cech charakterystycznych czy uwarunkowań makroekonomicznych, kulturowych oraz instytucjonalnych i prawnych. W pracy autor skupił się na wynikach badań wpływu stosowania MSR/MSFF oraz wykazaniu potencjalnych innych czynników, determinujących jakość informacji finansowej prezentowanej przez przedsiębiorstwa.

Słowa kluczowe: determinanty jakości; jakość wyniku finansowego; sprawozdawczość finansowa