

Unveiling the Weaknesses of Digital Financial Reporting: Rethinking XBRL Development in Indonesia

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ABSTRAK

Pelaporan keuangan digital tidak dapat diimplementasikan tanpa mempertimbangkan kapasitas logika komputer untuk memproses ruang lingkup informasi akuntansi yang luas dan sangat spesifik. Hal ini dicapai melalui pengembangan taksonomi yang mampu mengklasifikasikan data tentang data (metadata) secara akurat. Masalah muncul ketika emiten publik diizinkan untuk menentukan "apa yang harus dilaporkan" dan "bagaimana melaporkannya" di bawah akuntansi berbasis prinsip. Dalam konteks ini, taksonomi yang ditujukan untuk menstandarisasi pelaporan keuangan bertentangan dengan penerapan akuntansi berbasis prinsip, yang menekankan fleksibilitas dalam setiap aspek pelaporan.

Penelitian kami mempertanyakan asumsi mendasar yang dibuat oleh otoritas yang bertanggung jawab untuk menetapkan standar pelaporan keuangan digital. Otoritas ini berasumsi bahwa pengembangan taksonomi dan bahasa bisnis komputer seperti XBRL tidak akan mempengaruhi penerapan standar akuntansi. Namun, penelitian kami memprediksi bahwa pengembangan taksonomi dan XBRL memang berdampak pada standar akuntansi dengan memperkuat persepsi di antara pengguna bahwa pelaporan digital adalah kewajiban. Secara bersamaan, pengguna standar diizinkan untuk menentukan relevansi informasi yang diungkapkan berdasarkan akuntansi berbasis prinsip.

Pelaporan keuangan digital berperan aktif dalam penerapan standar akuntansi, menciptakan dilema bagi emiten publik ketika memilih antara memprioritaskan komparabilitas atau relevansi dalam mengungkapkan informasi kepada pemangku kepentingan.

ABSTRACT

Digital financial reporting cannot be implemented without considering the capacity of computer logic to process the vast and highly specific scope of accounting information. This is achieved through the development of taxonomies capable of accurately classifying data about data (metadata). Problems arise when public issuers are allowed to determine "what to report" and "how to report it" under principle-based accounting. In this context, taxonomies aimed at standardizing financial reporting conflict with the implementation of principle-based accounting, which emphasizes flexibility in every aspect of reporting.

Our research questions the fundamental assumptions made by the authorities responsible for setting digital financial reporting standards. These authorities assume that the development of taxonomies and computer business languages such as XBRL will not influence the implementation of accounting standards. However, our study predicts that the development of taxonomies and XBRL does impact accounting

standards by reinforcing the perception among users that digital reporting is an obligation. Simultaneously, standard users are permitted to determine the relevance of the information disclosed based on principle-based accounting.

Digital financial reporting plays an active role in the implementation of accounting standards, creating a dilemma for public issuers when choosing between prioritizing comparability or relevance in disclosing information to stakeholders.

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1. INTRODUCTION

Financial reporting standards are widely regarded as a bridge connecting practices, innovations, and social dimensions within the context of corporate governance. Trends over the past few years indicate that stakeholders have sought to thoroughly examine perspectives embedded within financial reporting standards (Robson et al., 2017). In this regard, the role of technology in corporate financial reporting processes has also gained significant attention. Public interest has been further heightened as capital market authorities and financial regulators have introduced various regulations requiring financial reporting in the XBRL (Extensible Business Reporting Language) format.

The adoption of XBRL in financial reporting has become increasingly popular and is perceived as a means to enhance the intensity of accounting information disclosure among public companies (issuers). XBRL is viewed as a form of financial reporting digitalization that aims to embody the principles and rules outlined in accounting standards. Notably, financial reporting digitalization appears to harmonize stakeholders' perspectives toward accounting standards (Himick & Brivot, 2018). Interestingly, this phenomenon seems to diverge from the primary principles advocated by the International Accounting Standards Board (IASB). The IASB encourages issuers to determine what to report to the public and how to report it, a concept known as principle-based accounting. This approach emphasizes the involvement of public exposure in the development of accounting standards to balance the perspectives of standard-setters and users within a dynamic accounting environment. However, financial reporting digitalization seems contrary to this principle, as it entails efforts to classify specific rules, potentially disregarding the unique circumstances of individual issuers.

In the context of public information disclosure, issuers' management is driven to seek representations for each significant decision made. Interestingly, this situation also provides management with the option to either comply with specific standards or reject them, citing differences in business phenomena compared to other issuers (Pollock et al., 2018). The Indonesia Stock Exchange (IDX), as the capital market authority in Indonesia, has made a fundamental assumption in developing its taxonomy for implementing XBRL reporting: that the development of the taxonomy and the adoption of XBRL will not significantly impact the financial reporting process of public issuers.

The assumption that taxonomy development and XBRL implementation have no impact on the financial reporting process raises several further questions. This is due to the inherent nature of digitalization, which requires standard-setters to consider adjustments that encourage issuers' compliance. In this scenario, taxonomy designers must not only account for the rules and standards to be complied with but also consider the principles and rules previously applied. This research seeks to explore the fundamental assumption made by the Indonesian capital market authority (Indonesia Stock Exchange) regarding the absence of impact on accounting standards when the IDX Taxonomy 2020 is implemented. Based on this assumption, our research question is: How does the digitalization of financial reporting have no impact on accounting standards and the financial reporting process to the public?

To answer this central research question, we aim to identify significant changes in issuers' reporting practices before and after the implementation of the IDX Taxonomy 2020. Our initial hypothesis is that digitalization plays an active role (contrary to the IDX's basic assumption) in determining whether issuers prioritize the disclosure of relevant information (principle-based) or maintain comparability with other issuers (rules-based) (Pollock et al., 2018). Given the foundational concept of taxonomy, it is evident that the IDX Taxonomy 2020 represents a universal codification prioritizing comparability over relevance (rules over principles). This study seeks to align the expectations of standard-setters, capital market authorities, public issuers, and financial report users in the context of the IDX Taxonomy 2020 development as a manifestation of financial reporting digitalization for public companies in Indonesia.

2. LITERATURE REVIEW

Our study seeks to expand the existing literature on financial reporting and its broader context, encompassing social, institutional, and technological dimensions. The current body of literature appears to have extensively discussed the social and institutional aspects of financial reporting practices by public companies (Jiang et al., 2018; La Torre et al., 2020). However, the technological element has gained attention only recently, following the mandate for publicly listed companies on U.S. stock exchanges to disclose information digitally. The digitization of financial reporting requires public companies to provide structured and human-readable information, encompassing text, numbers, and even sounds converted into binary digits. The process of converting information into binary language presents a novel challenge for the accounting profession, particularly in interpreting the meaning of information representations in financial reporting. Previously, public disclosures by issuers were typically made available in Portable Document Format (PDF). This practice has inherent limitations, such as a computer's inability to differentiate between "apple" as a fruit and "Apple" as a company. Digital financial reporting using XBRL addresses this issue by leveraging metadata, which automatically facilitates the extraction, transmission, and comparison of reports across issuers.

As its name suggests, XBRL classifies highly specific data in financial reports into metadata (concepts, accounting standard references, currencies, and other disclosures). This metadata plays a crucial role in transmitting data among stakeholders. In this context, metadata must be designed by regulators or standard-setters to accommodate various accounting models and principles. This design process, known as taxonomy, involves naming, defining, and classifying financial reporting disclosures in a structured format that is machine-readable (Bauguess, 2018). The universal nature of taxonomy presents a unique phenomenon for issuers. Corporate financial reporting inherently allows flexibility in disclosure methods and presentation of information. This flexibility arises from the principle-based accounting standards set by the IASB. Issuers can combine universally regulated disclosure approaches with those tailored to their specific circumstances. When issuers prioritize the relevance of the information disclosed to the public, metadata must identify and classify as many

highly specific accounting terms as possible. Digital financial reporting introduces challenges for principles-based accounting, creating a dilemma between prioritizing relevance or comparability.

As the world's leading accounting standard-setting organization, the IASB serves as a reference for similar authorities worldwide. This includes Indonesia, where the IDX shares a similar underlying assumption with the IASB: the development of XBRL taxonomy does not influence the application of accounting standards and practices. Upon closer examination, the IASB implicitly reminds the public that the accounting conceptual framework distinguishes between what information is reported (measurement and recognition) and how it is reported (disclosure and presentation). Taxonomy and XBRL development fall into the latter category. Consequently, XBRL-formatted financial reporting is merely viewed as a mechanism for public information dissemination. Academic research has responded to this assumption by "limiting" its scope to examining the capital market's reactions to taxonomy development and XBRL adoption in corporate financial reporting (Kaya & Pronobis, 2016).

Metadata is a collection of data often referred to as a data dictionary. Taxonomy essentially assists computers in classifying data into highly specific groups. However, problems arise when taxonomy overlooks terms or concepts unique to specific issuers. A straightforward analysis reveals that the classification process maximizes similarities in terms wherever possible. In other words, computer logic prioritizes uniformity of terms or concepts when classifying metadata (Mayernik, 2019). This contrasts with human classification, which incorporates dynamic considerations and judgments. The divergence between human and computer logic in classifying data creates variability in metadata formation. A quick solution to address this variability is to establish an "other/miscellaneous" category (Timmermans et al., 2017). While this solution is practical, it does not eliminate debates over the assumption that taxonomy development and digital financial reporting do not influence accounting standards. Classification, as part of metadata development, involves numerous social aspects, particularly when standard-setters allow "flexibility" in standard implementation. It is also essential to consider that standard-setters wield significant power in determining "what should be done next" by those governed by the standards. The flexibility offered by principle-based accounting standards can complicate the classification process, given the diverse interpretations of the standards.

Taxonomy enhances the specificity of information disclosed by issuers to the public through classifications, labels, tables, and rankings (Mehrpouya & Samiolo, 2016; Pollock et al., 2018). From the user's perspective, taxonomy also increases the validity of a regulation. Interestingly, this "clarity" elicits varying responses from issuers, ranging from compliance to resistance. Taxonomy is often perceived as a passive tool, prompting standard users to seek alternatives that better represent the actual phenomena. Our study aims to broaden theoretical frameworks that explain how taxonomy development and XBRL adoption influence accounting standards and their implementation. We will explore the extent to which compliance with financial reporting occurs in a digital environment. Furthermore, our research will investigate how metadata is utilized to develop corporate public reports in digital formats under applicable accounting standards.

3. METHODOLOGY

In order to obtain answers to the research questions, we conducted a literature review by categorizing studies related to the development and implementation of XBRL in Indonesia from 2013 to 2023. The time span of article selection from 2013 to 2023 was chosen based on the fact that the development and implementation of XBRL in Indonesia began around 2014. After exploring and selecting the articles, we performed an initial classification based on the research summaries, which will later form several main research themes. We identified scholarly articles published across various platforms such as Google Scholar, ResearchGate, and others. The number of studies related to XBRL in Indonesia is still relatively limited, so we did not impose specific keyword restrictions as

long as they contained elements of XBRL, financial reporting taxonomy, and digital financial reporting.

One of the minimal constraints in the literature exploration for this study was determining the scholarly articles based on a few types, including peer-reviewed journals, conference papers, and publications from professional organizations. We excluded other types of documentation such as news articles and public opinions, as they tend to lack a clear scientific argumentation stance. In general, three main themes discussed in this study are: (i) Taxonomy Design & Development; (ii) XBRL and Accounting Standards Conformance; and (iii) XBRL and Common Practices in Accounting. These themes adequately represent sub-themes in XBRL-based financial reporting research, such as corporate governance, capital market reactions, and the development of financial accounting standards. While the analysis in this study focuses on projects developed in Indonesia, additional analysis will be conducted based on the long-standing financial reporting digitization projects led by the Financial Accounting Standards Board (FASB) and the Securities and Exchange Commission (SEC) in the United States, as these projects have been implemented for various public companies, including multinational corporations.

The document analysis we conducted focuses on the timeline of the XBRL development project in Indonesia by IDX. Documents related to the development of digital financial reporting taxonomy in the United States were also analyzed to identify potential interactions between similar projects. A systematic document analysis was conducted to identify theme clusters, prior phenomena, and key issues holistically. We hope that the observations made will provide insights related to the dilemmas of XBRL implementation and principles-based accounting, which are perceived as not influencing each other. Finally, we will provide a theoretical framing of the theme clusters to generate a narrative structure that strengthens the research themes.

4. RESULTS AND DISCUSSION

The digitalization of financial reporting is set to expand the activities of issuers in public information disclosure. Previously, issuers focused only on applicable accounting standards; now, they must also consider taxonomy elements using the XBRL programming language. Before issuers adapt to this new reporting era, standard setters face the task of developing a financial reporting taxonomy tailored to companies' needs. This challenge arises from the long history of accounting standards built on a conceptual framework. While principle-based accounting standards allow issuers flexibility in addressing business phenomena, taxonomy integration adds complexity. Digital financial reporting is more than changing the format of reports. It exposes weaknesses in how accounting standards are developed and applied. While digital reports aim for a universal grouping of transactions, companies operate with diverse complexities. Requiring taxonomy coding for unique transactions risks diminishing comparability across reports. Standard setters plan to let issuers add elements to the taxonomy, aligning with the principle-based nature of financial reporting. However, this flexibility is difficult and costly due to business model diversity. In practice, issuers often comply with existing taxonomy codifications, limiting unique adjustments. Though accounting standards allow flexibility in transaction identification and reporting, taxonomy use narrows this flexibility.

Developing a financial reporting taxonomy involves accountants, financial professionals, and IT experts. Unlike the current national interventions in accounting and capital markets, the taxonomy is developed by XBRL International, with input from major accounting firms like Deloitte, PwC, EY, and KPMG. When first introduced in 2002, IT experts dominated its development. Accountants viewed digitalization as separate from standard-setting, leading to a narrow scope of required disclosures. Initially, authorities declared that XBRL's taxonomy could not be equated with international accounting standards. However, they simultaneously sought alignment between

taxonomy elements and accounting terms. This dual stance led to prohibiting taxonomy developments misaligned with standards. In contrast, U.S. authorities advocated for reforms to better meet public disclosure needs, expanding taxonomy elements but sacrificing report comparability. Integrating taxonomy with accounting standards faces challenges, including discretionary disclosure elements. These arise from the taxonomy's extensive list, influenced by practical experiences. To address this, the U.S. SEC encouraged issuers to reduce custom elements and adhere to taxonomy practices. This push for standardization extended internationally, with the SEC advising the IASB to align its taxonomy with accounting standards. When foreign companies listed in the U.S. were allowed to use IFRS, they were required to submit XBRL reports aligned with either IFRS or U.S. GAAP taxonomies.

The IASB's taxonomy faced criticism for being incomplete and unrepresentative. This led to adding element definitions to improve classification clarity. Consequently, the IFRS taxonomy began resembling a guide for reporting and even a standard itself. To incorporate practical elements, non-mandatory disclosure items—often inspired by Big Four practices—were added. This shifted the taxonomy from normative academic foundations to positivist accounting practices. By 2011, the IFRS taxonomy expanded to 200 accounts and 900 elements. As the IFRS taxonomy increasingly reflected accounting practices rather than standards, challenges emerged. Accounting practices are unpredictable, making classification boundaries difficult. Sectoral biases and geographic differences added complexity, with practices from countries like the UK and Australia dominating. Practices were included in the taxonomy only when consistently disclosed and compliant with standards, but identifying these was difficult due to business complexity and professional judgment. The diversity of issuer practices further complicated taxonomy development. XBRL teams review proposed elements internally, attracting criticism for insufficient issuer participation. While issuers can send representatives to the process, this increases complexity as perspectives vary. Despite criticisms, the IFRS taxonomy is seen as gaining constitutional power in public disclosures. The taxonomy's development began with case illustrations, which stakeholders treated as actual practice representations. The taxonomy's expansion, especially driven by U.S. regulators, highlighted new institutional powers representing standards. This prompted proposals for IASB's technical directorate to supervise the XBRL team. Additionally, accounting standard creation began incorporating metadata categorization, integrating digitalization into the standard-setting process.

Stakeholder support for integrating XBRL with accounting standards has been mixed. The ICAEW viewed XBRL as a mere reporting tool, but the IASB argued that integration avoids overlap and ensures compliance with digital reporting requirements. To solidify integration, the IASB formed the IFRS Taxonomy Consultative Group (ITCG), aligning taxonomy elements with standards. This move acknowledged the taxonomy's authority and compliance role while emphasizing the principle-based foundation of IFRS standards. This dual stance creates variability in digital reporting interpretations, with some treating the taxonomy as inseparable from standards and others as flexible for entity-specific conditions. Entities implement the taxonomy like account mapping, completing a checklist for disclosure. They first prepare reports based on practices and standards, then align them with taxonomy tags. This increases accountants' workload, as they must match report terms with taxonomy elements. Consequently, the taxonomy significantly influences report preparers, often being interpreted as the standard itself. Preparers tend to disclose only required information, further cementing the taxonomy's role as a regulatory tool. The debate centers on whether issuers should expand taxonomy elements based on practices or fully comply with existing taxonomies. Issuers often rationalize disclosure methods continuously. Full compliance, however, shifts reporting from practices to rigid rule adherence, forcing issuers to abandon traditional disclosures. Some view the taxonomy evaluatively, questioning its influence on preparers' information bases.

To simplify, issuers prefer full taxonomy compliance over adjusting practices. This elevates the taxonomy from a supportive tool to a rule-based standard. Such standardization conflicts with

the IASB's principle-based reporting approach, prioritizing comparability over flexibility and relevance. The digital taxonomy increasingly demands uniformity, shifting focus from "what is reported" to "what should be reported." In conclusion, the digitalization of financial reporting has transformed taxonomy into a central element of disclosure practices. While it enhances comparability, it challenges the flexibility and principle-based nature of financial reporting. Issuers face a complex landscape of balancing traditional practices with new taxonomy requirements, highlighting the ongoing tension between standardization and adaptation.

4.1 Taxonomy Design and Development

The development of financial reporting taxonomy in Indonesia is generally marked by the increasing urgency for public companies to disclose financial information through the internet. Meini et al., (2023) explain that internet-based financial reporting enhances transparency, efficiency, and accessibility for users. Furthermore, public companies adopting internet-based financial reporting tend to reduce reporting costs and improve flexibility in delivering information. According to this study, the development of financial reporting taxonomy in Indonesia has required alignment between internet-based reporting and internationally applicable accounting standards. This alignment is deemed crucial, as the integration of digital financial reporting with international accounting standards is considered capable of representing efficient communication and information dissemination to shareholders.

The taxonomy of financial reporting based on XBRL has undergone adoption and evaluation processes in various countries over the past two decades. In the case of Indonesia, XBRL adoption began around 2014 Muchlis et al., (2019) identified a decline in the use of XBRL around 2016. This has led many to question the relevance and suitability of XBRL as a digital financial reporting tool for public companies in Indonesia. The study connects the initial adoption of XBRL with the perceptions of financial report preparers concerning its relevance to accounting information, particularly regarding company earnings. Although XBRL is not intended for filtering or selecting information to be disclosed to the public, financial report preparers appear to emphasize the importance of earnings as a key performance indicator. This phenomenon is understandable, as such indicators influence overall management performance. If an entity achieves profits (which is generally the case for most Indonesian listed companies), management does not wish its role to be overshadowed by external factors such as technology and communication systems.

The integration of technology and information into public companies' financial reporting has raised various issues related to the distribution of information and data that tend to be more open. Although XBRL is considered to make the disclosure process more efficient, many entities feel unprepared to fully implement this integration. In this context, entities have suggested that the accounting profession in Indonesia incorporate specialized XBRL education into university curricula (Harahap et al., 2021). Wulandari & Ali, (2019) take a different approach by examining the importance of XBRL for students upon graduation and entry into the labor market. Their research applies the Technology Acceptance Model (TAM) to drive the integration of XBRL into university learning processes. Educators are expected to have high awareness of technological developments in accounting to bridge the gap between theoretical/standard knowledge and actual practice. Additionally, university learning processes are encouraged to integrate existing practices in companies with related business processes. Saragih et al., (2021) highlighted the importance of technical understanding of XBRL as a crucial aspect directly related to the utilization of financial reports.

Strong regulatory pressure from capital market authorities has also led to significant variations in compliance with XBRL-based reporting among entities. Just because technology generally offers process efficiency does not mean it can be easily aligned with existing accounting practices. This also indicates that future developments in financial reporting taxonomy will demand harmony between technological logic and principle-based accounting standards. This issue affects not only the preparers of financial reports but also their users. XBRL-based taxonomy encourages

the comparability of financial reports, while current accounting standards prioritize the relevance of disclosed information. Regulatory pressure to make XBRL mandatory for public issuers is partly driven by the phenomenon of tax avoidance. XBRL-based financial reporting taxonomy is predicted to enhance transparency in financial disclosures and ultimately reduce corporate tax avoidance cases. KOBBI-FAKHFAKH & ATHIE (2023) argue that XBRL implementation tends to impact large-scale companies due to the high compliance costs associated with digital financial reporting. By involving tax authorities in the financial reporting of public companies, the element of regulatory compliance becomes more apparent. Companies will face limitations in interpreting financial performance as they must adhere fully to established rules. Rahwani et al., (2019) conducted similar research, recommending that tax regulators in Indonesia ensure the quality of taxonomy reporting by incorporating elements of good corporate governance. XBRL is emphasized as a government-to-Government (G2G) system, with transparency demands primarily directed at regulators. However, the study also advocates for a unified reporting system for businesses operating in Indonesia. Using the backdrop of fraud prevention in corporate environments, the unified reporting system starkly contrasts with accounting standards that prioritize principle-based reporting over rigid rules.

4.2 XBRL and Accounting Standards Conformance

The primary objective of implementing XBRL is to enhance the quality and timeliness of financial reporting. XBRL adoption also offers significant benefits to businesses operating in rapidly evolving industries. Prioritizing investors' needs to track corporate financial performance in real-time, XBRL-based financial reporting is not without its fundamental challenges. Lestari & Musrady (2023) highlight that the quality of financial reporting in terms of timeliness varies significantly across industries, indicating that the implementation of XBRL impacts issuers differently. The study suggests that future research should focus on factors influencing XBRL adoption in Indonesia, including its relationship with prevailing accounting standards. The current inconsistency in financial reporting formats also emerges as a compelling issue. Utama & Ediraras (2004) explain in their study that while XBRL does not create accounting standards, it aims to optimize the usability of financial reports through structured taxonomy. However, a conflicting statement in their research describes XBRL as an open standard capable of increasing the efficiency of electronic financial information dissemination. This phenomenon is intriguing, as financial reporting taxonomy involves key financial statement components and aims to "standardize" financial reporting formats for all public companies in Indonesia. In this context, the initial assumption is that financial reporting taxonomy is unrelated to prevailing accounting standards.

Technological advancements in financial reporting are not new to accounting standards-setting authorities. The American Institute of Certified Public Accountants (AICPA) is one of the professional accounting organizations supporting XBRL development to improve the quality of public companies' financial reporting. A notable limitation of the previously used Hypertext Markup Language (HTML) is its inadequacy in representing business language and accounting standards. Simanjuntak (2017) notes that over the past decade, XBRL implementation has been predominantly focused on tax reporting. Although tax disclosure is based on corporate financial statements, the use of XBRL for annual financial reporting has only recently been promoted by the Indonesia Stock Exchange (IDX). For both tax and annual reporting purposes, XBRL and its taxonomy are expected to improve corporate compliance with public disclosure obligations. XBRL-based financial reporting combines business language and logic to provide meaningful insights to its users.

Investors increasingly demand a more structured information disclosure method that aligns with applicable accounting standards. However, industry diversity leads companies to adopt varied financial reporting approaches. The Indonesian Financial Accounting Standards (PSAK), being principle-based, encourages companies to disclose relevant information regardless of whether such disclosure is mandated. This makes XBRL adoption in Indonesia distinct from accounting standards. Companies face an apparent flexibility in disclosing financial information, as nearly every aspect of reporting must adhere to existing regulations. This condition enhances financial reporting quality in

terms of comparability, where companies achieve uniform reporting formats. On the other hand, the quality of financial reporting in terms of disclosure relevance is often compromised. Prasetyo & Apandi (2019) explored XBRL implementation in the banking sector, concluding that XBRL is more suitable for fully regulated industries. This finding is unsurprising, as the banking industry prioritizes regulatory compliance with minimal flexibility in information disclosure, necessitating uniform reporting across entities.

In addition to improving the quality of corporate financial reporting based on existing regulations, XBRL is also expected to encourage voluntary disclosures by public companies in Indonesia. While this approach may garner support from most public investors, it is challenging to implement across all companies listed on the Indonesia Stock Exchange. Voluntary disclosures require corporate management to manually input metadata relevant to the financial information they wish to disclose. Tanjung (2024) highlights the need for companies to develop their taxonomy to ensure financial reporting quality across various aspects. Management could develop modeling processes to create taxonomy for metadata input. However, the complexity of transactions and record-keeping across companies poses a significant obstacle to achieving this goal. Additionally, principle-based accounting standards tend to allow flexibility in financial information disclosure as long as it aligns with these standards. Thus, the effectiveness of XBRL as a reporting language depends on its integration with accounting standards, rather than being a standalone system.

XBRL-based financial reporting must ultimately provide a more detailed depiction of corporate financial performance. To achieve this, XBRL implementation has so far encouraged standardized financial reporting while allowing adjustments to align with the relevance of disclosed information. This condition contradicts the claim that XBRL is merely a tool separate from applicable accounting standards. Kesa (2022) notes that the Indonesia Stock Exchange (IDX) has developed an XBRL taxonomy to standardize corporate financial reporting. Additionally, it is suggested that IDX taxonomy can promote compliance with international accounting standards. Although XBRL is not expected to replace accounting standards in a revolutionary manner, its long-term development could involve discussions on accounting standards. In other words, the complexity of information disclosure (especially voluntary disclosures) may necessitate concurrent adjustments to accounting standards and XBRL taxonomy. Oswari & Januario (2017) share a similar view, emphasizing that XBRL is a technology that promotes uniform financial reporting formats across various sectors in Indonesia. This technology helps companies comply with principle-based accounting standards while enhancing financial reporting quality in terms of comparability.

4.3 XBRL and Common Practices in Accounting

Regardless of whether XBRL influences prevailing accounting standards, the ultimate outcome of this technological innovation is the corporate financial report. In addition to enhancing comparability, XBRL-based financial information disclosure is expected to ensure the timeliness of financial reporting. The assumption is that the check-and-balance process in the form of financial statement audits can also benefit from XBRL due to faster and higher-quality detection techniques. However, a study by Saputro & Achjari (2020) reveals the opposite, indicating that the complexity of XBRL requires auditors to invest more time and expertise compared to conventional reporting. This finding suggests a relationship between XBRL implementation and changes in accounting and auditing practices within companies. Moreover, companies have already adopted diverse accounting information systems, necessitating auditors to adjust their audit approaches to account for this technological diversity. A promising avenue for future research would be to explore whether timeliness quality declines in the long term or gradually improves over time.

The practice of public information disclosure by companies does not always elicit positive responses from stakeholders, particularly shareholders. Conventional financial reporting methods are fraught with barriers such as accuracy, accessibility, and data consistency. XBRL adoption is considered capable of reducing these barriers, ultimately benefiting shareholders. Tohang & Lusiana (2022) examined the impact of XBRL adoption on investment costs in Indonesia, finding that

in the short term, XBRL reduces investment costs for shareholders due to more transparent and higher-quality information processing. An interesting area for future research is whether these investment costs might increase gradually over the long term, possibly due to shareholders' exploration of "unique" disclosures, such as corporate debt. If XBRL were entirely unrelated to a company's accounting standards, shareholders should not need to worry about misleading information risks, as compliance with XBRL should be mandatory. MURDAYANTI et al., (2020) explain that shareholders of public companies prioritize the relevance of XBRL adoption concerning their investment value. Using governance as a moderating variable, their study finds that XBRL does not enhance value relevance for investors. This implies that XBRL may be perceived as a new standard to comply with, thus diminishing the perceived efficiency benefits of adopting this technology among investors.

XBRL is widely regarded as a standardization tool for financial data or information that provides users with high accessibility and accuracy. Since its promotion by Indonesian capital market authorities in 2015, XBRL adoption has predominantly been voluntary. Lestari et al., (2021) report that one noticeable improvement since its adoption has been the timeliness of financial reporting. Although timeliness was not the primary goal of XBRL implementation, this improvement offers optimism for investors and creditors seeking higher-quality public financial reports. A critical challenge ahead is determining how comparable financial reports can accommodate diverse disclosures from various issuers, given that current accounting standards prioritize principles over rigid rules. Future research should explore variations in the scope of information disclosure across companies. If disclosed information leads to diverse reader perceptions, the desired transparency may remain unachieved. Minan & Fahlevi (2021) emphasize that XBRL encompasses not only quantitative financial information but also non-financial qualitative data. This creates a more apparent conflict between technology and accounting standards. On the other hand, corporate management faces the arduous task of developing taxonomies to ensure disclosures are compatible with the programming language. Without a comprehensive master plan, XBRL implementation risks imposing an additional "burden" on all stakeholders.

If timeliness is considered the primary success indicator of XBRL implementation in Indonesia, then the closest qualitative characteristic to consider alongside it is the relevance of accounting information disclosure. Companies with a high degree of variation in disclosed information must provide metadata input to the taxonomy underpinning the programming language. In other words, all levels of corporate management, from the board of commissioners to directors, are indirectly involved in this effort. Kusumaningtyas & Triyanto (2022) address this phenomenon in their study, concluding that XBRL-based reporting and corporate leadership significantly influence the timeliness of public reporting. The study finds that a combination of the reporting entity and the tools used can expedite the completion of public financial statements. Unfortunately, the study focuses on a single industry, leaving the variation and relevance of financial information disclosure unexamined. Another study by Hamid et al. (2022) finds that XBRL adoption strengthens the relevance of earnings figures to firm value in investors' perceptions. This discussion is motivated by the complexity of corporate financial reporting, which now includes disclosures related to environmental, social, and governance (ESG) factors. The findings suggest that the increased relevance of earnings figures to firm value is contingent upon ESG factors remaining a moderating variable. In other words, XBRL is considered capable of enhancing relevance when grounded in general business values.

Beyond social and environmental considerations, XBRL adoption is also predicted to reduce information asymmetry, a key indicator of corporate governance success. Studies by Mahardika & Harahap (2018) and MURDAYANTI et al., (2020) using data from public companies listed in Asian countries such as South Korea, Japan, and Singapore, suggest that XBRL can reduce information asymmetry if governance elements successfully moderate its impact. These studies provide insights into XBRL implementation in Indonesia, where it is also expected to address the "distance" between

companies and their investors. By employing governance as the primary moderator, companies may once again sacrifice the quality of disclosure relevance in favor of comparability. This is because companies tend to prioritize general information that serves as a common benchmark, ensuring comparability across firms. Governance practices are likely to culminate in uniformity, a prerequisite for public information disclosure.

The aforementioned studies demonstrate that XBRL adoption inherently enhances the quality of information in corporate financial reporting. However, this information quality comprises various aspects and perspectives. The key takeaway is that companies cannot achieve all types of financial reporting quality simultaneously. Certain aspects must be compromised when agreeing to implement XBRL and its reporting taxonomy. In this context, the compromised aspect is the relevance of disclosures, which are highly heterogeneous across companies and over time. Moreover, XBRL-based information disclosure practices “compel” corporate management to work more intensively in developing financial reporting taxonomies tailored to the metadata needs of each industry group.

5. CONCLUSIONS

The research we conducted generally indicates that the implementation of XBRL represents a disruption to corporate financial reporting practices. The most significant impact of this implementation lies in the phenomenon where corporate management indirectly participates in allocating metadata in the form of taxonomy. The fundamental assumption held by regulators in promoting the implementation of XBRL is that there is no technological intervention in accounting standards, which serve as the primary basis for corporate financial reporting. Our research offers an alternative perspective, suggesting that the adoption of XBRL, which involves technological aspects, can influence issuers’ compliance with financial reporting practices. Those developing the taxonomy in XBRL are expected to create an accounting model that not only represents the actual condition of companies but also maintains universality and clarity.

To achieve an optimal balance under these conditions, the IASB develops taxonomy solely based on the disclosure requirements explicitly mandated by prevailing accounting standards. In the context of drafting international accounting standards, U.S. capital market regulators continue to wield significant influence, often pressuring institutions such as the IASB to adopt XBRL based on highly complex taxonomies. The large market capitalization of the U.S. capital market serves as a reference for other capital market authorities, including those with autonomous jurisdictions like Indonesia. Taxonomy development is driven to accommodate the complexity of practices across companies in various industries. This poses a dilemma for capital market authorities in developing countries like Indonesia, where public companies face substantial costs and efforts to comply with these requirements.

The IASB, as the international accounting standards-setting authority, has responded to this phenomenon by categorizing disclosures into mandatory elements, case illustrations, and commonly accepted practices. This categorization is expected to address the challenges faced by companies in dealing with the heterogeneity of information to be disclosed. This study highlights three critical elements in the implementation of XBRL for corporate financial reporting in Indonesia: (1) the design and development of taxonomy; (2) XBRL and compliance with accounting standards; and (3) XBRL and general accounting practices. Since the adoption of XBRL in 2014, its use began to decline, with a noticeable decrease starting in 2016. Many stakeholders have questioned XBRL's relevance in representing the actual performance of public companies and its flexibility in reporting earnings information. Numerous companies have expressed concerns about their readiness to implement XBRL programming comprehensively.

Nevertheless, capital market authorities continue their efforts to promote awareness and apply mild regulatory pressure to enhance corporate compliance with XBRL-based financial

reporting. Beyond taxonomy development, capital market authorities are also required to ensure that public company disclosures align with the latest available technologies. Using metadata, financial statement users expect comprehensive and comparable information across companies and over time. Simply put, the development of taxonomy and the implementation of XBRL will undoubtedly impact accounting standards and practices. However, capital market authorities assume that XBRL implementation is an independent element, primarily involving activities within the field of information systems. This assumption has sparked debates among practitioners and academics, as it contrasts with predictions that the expansion of financial disclosure requirements will eventually be recognized as a new standard, altering financial reporting practices themselves.

The debate over XBRL-based public financial information reporting methods has led to conflicts concerning the qualitative attributes of financial statements based on the conceptual framework of accounting standards. Indonesia, as one of the countries adopting principle-based accounting standards, encourages financial statement preparers to disclose specific information relevant to the company's conditions. Conversely, XBRL-based financial reporting prioritizes uniformity to enhance comparability across reports. Through taxonomy, companies are expected to adapt their financial reporting practices to the developed structure. Researchers, however, doubt that financial statement preparers will contribute to adding unique disclosure terms to the taxonomy. This reluctance is due to companies' inclination to adhere to existing disclosure methods to meet stakeholders' expectations regarding financial statements.

The primary assumption underlying XBRL-based financial reporting digitalization is that accounting standards are independent of XBRL programming language development. This assumption is less acceptable, as accounting standards must indirectly adapt to align with programming languages. For instance, the U.S. has successfully implemented XBRL as a programming language for financial reporting. However, most U.S.-based companies follow rule-based accounting standards (GAAP), minimizing conflicts between relevance and comparability. In this context, companies tend to share similar definitions for transactions deemed comparable. With rule-based standards, companies' flexibility to disclose information tailored to their specific needs and conditions is significantly reduced.

In Indonesia, the implementation of XBRL is often perceived as a form of financial reporting digitalization. This perspective is common because most stakeholders approach it from a technical viewpoint. In accounting, one of the fundamental assumptions that must be met is "substance over form." It is essential to further discuss whether this so-called digitalization is essentially a form of standardization. Over time, XBRL taxonomy may be regarded as the sole valid reporting format, eliminating opportunities for financial statement preparers and users to provide input. Consequently, information that was once relevant and significant to specific companies or industries risks being excluded due to "incompatibility" with the prevailing XBRL format. It is hoped that XBRL will eventually balance the relevance of disclosed information with the quality of reporting uniformity. Although this is no easy task, current weaknesses have been identified and can serve as a foundation for continuous constructive improvements.

REFERENCES

- Bauguess, S. W. (2018). The role of machine readability in an AI world. *SEC Keynote Address: Financial Information Management (FIMA) Conference*.
- Hamid, A., Angel Lorita, V., Ria Panggabean, R., & Hanita Rusgowanto, F. (2022). The Relevancy of Earnings on Post XBRL Adoption for Indonesia Firm Value with Environmental, Social and Governance (ESG) as Moderating Variable. *Proceedings of the 2022 5th International Conference on Data Storage and Data Engineering*, 97–101.
- Harahap, K., Rumondang, T., Putra, P. D., & Winata, J. A. (2021). Integrating XBRL Technology Into Accounting Curriculum: A Survey of Accounting Lecturers in Medan City. *International Conference on Strategic Issues of Economics, Business and, Education (ICoSIEBE 2020)*, 89–97.

- Himick, D., & Brivot, M. (2018). Carriers of ideas in accounting standard-setting and financialization: The role of epistemic communities. *Accounting, Organizations and Society*, 66, 29–44. <https://doi.org/10.1016/J.AOS.2017.12.003>
- Jiang, J. (Xuefeng), Wang, I. Y., & Wangerin, D. D. (2018). How does the FASB make decisions? A descriptive study of agenda-setting and the role of individual board members. *Accounting, Organizations and Society*, 71, 30–46. <https://doi.org/10.1016/J.AOS.2018.05.002>
- Kaya, D., & Pronobis, P. (2016). The benefits of structured data across the information supply chain: Initial evidence on XBRL adoption and loan contracting of private firms. *Journal of Accounting and Public Policy*, 35(4), 417–436. <https://doi.org/10.1016/J.JACCPUBPOL.2016.04.003>
- Kesa, D. D. (2022). XBRL: The new e-language of financial digital reporting in Indonesia. *Journal of Management Information and Decision Science*, 25(S1), 1–8.
- KOBBI-FAKHFAKH, S., & ATHIE, S. (2023). Digitalization of Financial Reporting through XBRL and Corporate Tax Avoidance: Evidence from Indonesia. *Asia Pacific Journal of Information Systems*, 33(4), 1016–1035.
- Kusumaningtyas, A. W., & Triyanto, D. N. (2022). The Influence of XBRL, Independent Commissioner, Management Ownership, and Operation Complexity on Timeliness of Financial Reporting: Evidence from Indonesian Energy Sector. *Proceedings of the 5th European International Conference on Industrial Engineering and Operations Management*, 2404–2414.
- La Torre, M., Dumay, J., Rea, M. A., & Abhayawansa, S. (2020). A journey towards a safe harbour: The rhetorical process of the International Integrated Reporting Council. *The British Accounting Review*, 52(2), 100836. <https://doi.org/10.1016/J.BAR.2019.100836>
- Lestari, T. U., & Musrady, R. A. F. (2023). The Impact of ERP And XBRL Implementation on The Accounting Information Quality. *Jurnal Ilmiah Manajemen, Ekonomi, & Akuntansi (MEA)*, 7(2), 373–393.
- Lestari, T. U., Putri, K. P., & Devi, M. C. (2021). The influence of XBRL adoption on financial reporting timeliness: evidence from Indonesian Banking Industry. *Jurnal Dinamika Akuntansi Dan Bisnis*, 8(2), 181–196.
- Mahardika, S. A., & Harahap, S. N. (2018). Analisis Pengaruh Adopsi Xbrl Terhadap Asimetri Informasi Dengan Corporate Governance Sebagai Pemoderasi (Analysis of Xbrl Adoption'S Impact on Information Asymmetry, With Corporate Governance As Moderating Variable). *Jurnal Akuntansi Dan Keuangan Indonesia*, 15(2), 6.
- Mayernik, M. S. (2019). Metadata accounts: Achieving data and evidence in scientific research. *Social Studies of Science*, 49(5), 732–757. <https://doi.org/10.1177/0306312719863494>
- Mehrpouya, A., & Samiolo, R. (2016). Performance measurement in global governance: Ranking and the politics of variability. *Accounting, Organizations and Society*, 55, 12–31. <https://doi.org/10.1016/J.AOS.2016.09.001>
- Meini, Z., Saleh, K., Tobing, L., Lantana, D. A., Digdownseiso, K., & Muhmad, S. N. (2023). THE IMPLEMENTATION OF INTERNET FINANCIAL REPORTING (IFR) IN INDONESIA: A SYSTEMATIC LITERATURE REVIEW. *Journal of Accounting Research, Utility Finance and Digital Assets*, 2(2), 755–760. <https://jaruda.org>
- Minan, K., & Fahlevi, M. (2021). Financial and corporate governance of XBRL adopters in Indonesia. *Journal of Research in Business, Economics, and Education*, 3(3), 1961–1967.
- Muchlis, F., Primadyan, M., Shauki, E. R., & Diyanty, V. (2019). Xamining xbrl early adopters: A study of determinants and value relevance. *Asia Pacific Business and Economics Conference (APBEC 2018)*, 267–274.
- MURDAYANTI, Y., Ulupui, I., PAHALA, I., INDRIANI, S., & Suherman, S. (2020). Corporate governance and value relevance in Indonesia manufacturing companies. *The Journal of Asian Finance, Economics and Business*, 7(11), 335–346.
- Oswari, T., & Januario, A. (2017). Extensible business report language (XBRL) implementation of financial reporting standard in Indonesian banking industry. *International Journal of Economic Research*, 14(5), 219–225.
- Pollock, N., D'Adderio, L., Williams, R., & Leforestier, L. (2018). Conforming or transforming? How organizations respond to multiple rankings. *Accounting, Organizations and Society*, 64, 55–68. <https://doi.org/10.1016/J.AOS.2017.11.003>
- Prasetyo, H., & Apandi, N. N. (2019). Does XBRL improve the quality of financial statements in the banking industry? *The International Journal of Business Review (The Jobs Review)*, 2(2), 143–164.
- Rahwani, N. R., Sadewa, M. M., Qalbiah, N., Mukhlisah, N., & Nikmah, N. (2019). XBRL based corporate tax filing in Indonesia. *Procedia Computer Science*, 161, 133–141.

- Robson, K., Young, J., & Power, M. (2017). Themed Section on Financial Accounting as Social and Organizational Practice: Exploring the work of financial reporting. *Accounting, Organizations and Society*, 56, 35–37. <https://doi.org/10.1016/j.AOS.2017.01.001>
- Saputro, B. R. W., & Achjari, D. (2020). Pengaruh Penggunaan XBRL Terhadap Audit Delay pada Industri Keuangan dan Non-Keuangan di Indonesia. *Jurnal Teknologi Dan Informasi*, 10(2), 153–169.
- Saragih, A. H., Soraya, A., & Hendrawan, A. (2021). A decade of XBRL research in accounting in Indonesia: a literature study. *The Indonesian Journal of Accounting Research*, 24(2), 163–208.
- Simanjuntak, P. N. M. (2017). ANALYZE TO THE ROLE EXTENSIBLE BUSINESS REPORTING LANGUAGE (XBRL) TO IMPROVE THE ACCURACY OF TAX REPORT. *The 3rd PIABC (Parahyangan International Accounting and Business Conference)*.
- Tanjung, H. (2024). Manfaat Potensial Pelaporan Keuangan Berbasis XBRL. *JURNAL RISET AKUNTANSI DAN PAJAK*, 1(1).
- Timmermans, S., Tietbohl, C., & Skaperdas, E. (2017). Narrating uncertainty: Variants of uncertain significance (VUS) in clinical exome sequencing. *BioSocieties*, 12(3), 439–458. <https://doi.org/10.1057/s41292-016-0020-5>
- Tohang, V., & Lusiana, S. (2022). Digitalization of financial reporting through XBRL and the cost of equity. *The Indonesian Accounting Review*, 12(1), 59–72.
- Utama, A. H., & Ediraras, D. T. (2004). Acceptance and implementation of extensible business reporting language in Indonesian companies: an empirical review. *Gunadarma University*.
- Wulandari, S. S., & Ali, S. (2019). Incorporating XBRL topics into the accounting curriculum: empirical evidence from Indonesia. *Accounting Education*, 28(6), 597–620.