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Harmonising Sustainability:
Assurance for
Accountability and
Transparency

25 & 26 September 2024

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Conference Proceedings

5th International Conference on Accounting & Management (ICAM 2024)

Harmonising Sustainability: Assurance for Accountability and Transparency

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Table of Contents

	Page
Conference Preamble	1
Paper ID 008 Homestay Business Sustainability in Selangor and Perlis: Ministry Of Tourism, Arts and Culture (MOTAC) Perspectives	2
Paper ID 010 Converting Chalkboards to Keyboards: Boosting Digital Skills for Gen X Lecturers	7
Paper ID 011 ESG Activities and Banking Efficiency: A Comparison between Islamic and Conventional Banks	9
Paper ID 012 Corporate Governance and Corporate Sustainability Performance in Malaysia	12
Paper ID 015 Dissecting The Post-Investigation Actions on Money Mule Cases in Banking Financial Crime Compliance	14
Paper ID 017 Online Shopping and Customer Satisfaction: A Study about Security and Product on Selected Government Employees	18
Paper ID 018 Fraud Experience: How Far It Could Affect Internal Auditor’s Judgment Performance	21
Paper ID 023 Stakeholder Value Creation and Its Relationships with Environmental, Social And Governance (ESG) Practices: A Systematic Review	24
Paper ID 024 Economic Level as Moderator between Isomorphic Pressure and XBRL Adoption: Meta-Analysis Study	27
Paper ID 027 The Mediating Role of Self-Efficacy and The Influence of Auditor Professional Skepticism in Detecting of Financial Statement Fraud	30
Paper ID 032 To Determine the Factors Influencing Micro, Small, And Medium-Sized Enterprises’ (MSMEs) Financial Accessibility in Brunei Darussalam	35
Paper ID 035 Dissecting Wage Theft Susceptibility Factors in Malaysian Airlines Industry	39



Paper ID 037 Impact Of Audit Firm and Partner Characteristics on KAM Reporting	42
Paper ID 042 Building Sustainable Future: Strategies for Financial Health in Higher Education Institutions	46
Paper ID 043 Green Innovation as a Lever for Financial Efficiency: Mediating Effects of Corporate Reputation and Risk Management on Capital Costs	48
Paper ID 047 The Challenges to the Implementation of Lean Six Sigma in Malaysia Plantation Company	51
Paper ID 048 Bridging The Gap: Institutional Practices, Asset Misappropriation and Good Governance of the Malaysian Public Sector Asset Management	55
Paper ID 049 Does Green Financing Matter?	58
Paper ID 051 Voluntary Disclosure and Tax Amnesty: A Recent Significant Systematic Review	62
Paper ID 052 A Systematic Review on the Influence of Board Governance and Sustainability Reporting	65
Paper ID 053 Tax Incentives and Environmental, Social and Governance Performance	69
Paper ID 055 The Influence of Board of Director Factors and Whistleblowing Policies Disclosure: Evidence from Top 100 Malaysian Public Listed Companies	71
Paper ID 057 Green Finance Trends in Malaysian Commercial Banks: Listing, Ownership and Banking Type Analysis	76
Paper ID 061 Effectiveness of Prevention Mechanisms on Fraudulent Incidents: Evidence from Malaysian Public Sector	79
Paper ID 062 Identifying Factors Influencing Compliance of Malaysian Public Sector Accounting Standard (MPSAS) by Federal Statutory Bodies (FSBS)	83
Paper ID 066 Sustainable Development Goals and Business Performance: A Bibliometric Analysis	88



Paper ID 067 Sustainability Reporting Disclosure and M-Score Performance of Islamic Banks in Malaysia and Indonesia	92
Paper ID 068 Neo-Smfri Index Ranking for Single Motherpreneurs Facing Covid-19 Pandemic Among 13 States in Malaysia: Financial Knowledge Perspective	95
Paper ID 069 Ownership Structure and Firm's Financial Performance: Analysing Government, Family and Foreign Ownership Relationship	99
Paper ID 072 Predicting Ethical Judgment of Prospective Accountants based on Ethical Ideology, Emotional Intelligence and Religiosity	103
Paper ID 075 Factors Affecting Unethical Behaviour of the Malaysian Family Takaful Agents	107
Paper ID 076 Is the Academic Use of Generative AI Sustainable? A TAM and UTAUT-Based Model of Student Outcomes	111
Paper ID 078 The Relationship between Corporate Governance Mechanisms, Innovation and Strategic Management Accounting Disclosure: The Moderating Role of Board Gender Diversity	114
Paper ID 079 General Insurer's Financial Resilience towards Catastrophe Risk: A Conceptual Framework	118
Paper ID 081 Role of Internet Banking in Facilitating Likelihood of Money Laundering Occurrence in Malaysia Commercial Bank Branch	124
Paper ID 082 Enhancing Corporate Crisis Resilience: An Exploration of Critical Attributes	127
Paper ID 084 Unlocking Business Success: The Power of Cognitive Skills for Small and Medium Enterprise	131
Paper ID 085 Targeted Cyber Attacks on Health Data Amid the Covid-19 Outbreak	134
Paper ID 086 Digitalising Business Model for Tahfiz Institutions Sustainability: An Integrated Reporting Framework Approach	138



Paper ID 087 Designing a Comprehensive Integrated Reporting Capital Framework for Private Tahfiz Institutions	142
Paper ID 088 Carbon Pricing in the Context of Economic, Social and Environmental Factors: A Bibliometric and Content Analysis	147
Paper ID 089 Evaluating the Integration of SDGs in Malaysian Higher Education: A Comprehensive Analysis of Online Disclosure Practices	150
Paper ID 091 Institutional Effects on ESG and Financial Performance in ASEAN-5 Firms	154
Paper ID 092 The Dynamic of Transfer Pricing Practice in an Indonesian Mining Company: A Case Study	157
Paper ID 094 The Role of Competition Commission of Pakistan (CCP) In Measuring the Level of Competition Over Time and Across Industries in Pakistan	162
Paper ID 099 Intention to Adopt AI among Malaysian Public Sector Accountants	166
Paper ID 100 Trailblazing Tangible Heritage Asset Disclosure Index for the Malaysian Public Sector	170
Paper ID 101 Evaluating ESG Information Disclosure Quality: A Review of ESG Performance Impact on Firm Value	173
Paper ID 102 Exploring AI Integration in Malaysian Public Accounting: Qualitative Insights on User Readiness	177
Paper ID 103 Financial Technology Innovation Impact on Trade-Based Money Laundering from Environmental Crimes: A Gravity Model Approach	181
Paper ID 104 Macroeconomic Factors that Affect the House Price Index in Malaysia Using Multiple Linear Regression	184
Paper ID 108 Role of ESGD in Enhancing Long-Term Firm Performance: Evidence from Southeast Asia's Emerging Markets	187



Paper ID 109 Leadership Styles and Employee Work Performance During the Covid-19 Pandemic: The Case of Accounting Workers in The Klang Valley	190
Paper ID 113 The Nexus between Audit Partner Attributes and Anti-Corruption Disclosure Practices	193
Paper ID 115 Employability Dilemma of Accounting Graduates: A Global Perspective	196



About the Conference

The 5th International Conference on Accounting and Management (ICAM) 2024, themed "Harmonizing Sustainability: Assurance for Accountability and Transparency," will be held on 25-26 September 2024. This conference is the output of synergized commitment between the research clusters of Audit, Forensic and Criminology (AFC) and Public and Corporate Accounting Reporting (PCAR), under the auspices of the Faculty of Accountancy, UiTM Selangor Branch. This conference serves as a critical platform for professionals, academics, and industry leaders to explore the evolving intersection of accounting, management, and sustainability. As businesses and organizations increasingly recognize the importance of sustainable practices, the need for rigorous assurance mechanisms to ensure accountability and transparency has become paramount. ICAM 2024 will address these challenges by fostering discussions on the latest research, innovative practices, and regulatory frameworks that drive sustainable business strategies. Participants will have the opportunity to engage with leading experts, share insights, and collaborate on solutions that enhance the credibility and reliability of sustainability reporting. The conference will also highlight the role of accounting and management professionals in promoting sustainable development goals, ensuring that economic growth aligns with environmental stewardship and social responsibility. By bringing together diverse perspectives, ICAM 2024 aims to advance the discourse on sustainability assurance, ultimately contributing to a more transparent and accountable global business environment. The conference website can be accessed via: <https://icam.uitm.edu.my/>

Conference Tracks

The participants of ICAM 2024 share their research findings through research paper submission under the following tracks but not limited to the following areas:

- Green and Sustainable Performance
- Digitalisation and Sustainability
- Social and environmental accounting
- Governance and regulation
- Regulation of corporate social and environmental behaviour
- Governmental influences on corporate accountability
- Ethical issues in accounting and financial reporting
- Environmental Management Accounting
- AI and Big Data in Accounting and Finance
- Financial Criminology
- Forensic Accounting

All accepted extended abstracts are published in this conference proceedings.

Conference Participants and Partners

This hybrid conference is jointly organized by the Faculty of Accountancy, UiTM Selangor Branch, Universitas Brawijaya (Indonesia), Universiti Islam Sultan Sharif Ali (Brunei) and Rangsit University (Thailand), in collaboration with Savitribai Phule Pune University (India), K.J. Somaiya College of Arts, Commerce and Science (India), Universitas Muhammadiyah Purwokerto (Indonesia) and University of Portsmouth (United Kingdom). The conference brings together academics, researchers, industry professionals, and postgraduate students to discuss and share their research findings on an international level.

HOMESTAY BUSINESS SUSTAINABILITY IN SELANGOR AND PERLIS: MINISTRY OF TOURISM, ARTS AND CULTURE (MOTAC) PERSPECTIVES

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ABSTRACT

This paper examines the pivotal roles played by the Ministry of Tourism, Arts and Culture (MOTAC) in assisting homestay business owners to sustain their operations, focusing on the context of Perlis and Selangor, Malaysia. Homestays represent a significant component of the tourism industry, offering unique cultural experiences and contributing to local economies. However, ensuring the sustainability of homestay businesses requires concerted efforts from government agencies such as MOTAC. Through a comprehensive review of the literature and empirical evidence, this study elucidates the multifaceted roles undertaken by MOTAC in supporting homestay business owners. These roles include cultural preservation, community engagement, promotion of responsible tourism practices, and policy support. MOTAC organises training programs, workshops, and seminars to enhance the skills and knowledge of homestay business owners, promoting sustainable practices. Furthermore, MOTAC collaborates with local communities to preserve cultural heritage and foster social cohesion while advocating for supportive policies and regulations that create an enabling environment for homestay businesses. By interviewing six MOTAC officials from the Selangor and Perlis regions, this paper highlights MOTAC's interventions in enhancing the sustainability of homestay businesses. This paper also highlights the issues and challenges MOTAC faces in ensuring the sustainability of homestay operations. By fostering environmental stewardship, cultural authenticity, community involvement, and responsible tourism, MOTAC plays a critical role in ensuring the long-term viability and resilience of the homestay sector in Perlis and Selangor. The findings underscore the importance of holistic and collaborative approaches in supporting sustainable tourism development, with MOTAC serving as a critical facilitator in this endeavour.

Keywords: Homestay, Kampung Stay, Malaysia, MOTAC, Sustainability, Tourism

1. INTRODUCTION

Malaysia offers various homestay establishments that epitomise the country's tourism. These homestays provide an exceptional opportunity for tourists to experience the local culture and hospitality firsthand. These establishments' accommodations vary from traditional Malay village homes to contemporary urban structures. Above accommodation, homestay establishments expose tourists to authentic links with their communities, including experiencing traditional cuisines, cultural festivals, and village-based activities. Whether it is discovering the beautiful scenery of Sabah highlands, wandering through the ancient alleys of Georgetown, or relaxing on the white sandy beaches of Lumut (Pusiran & Xiao, 2013), Malaysia offers a variety of destinations to explore. However, this study will focus on two distinct Malaysian states, Selangor and Perlis, each with unique characteristics, cultures, and attractions. The homestay offerings in Selangor and Perlis exhibit different characteristics. The uniqueness of homestays in Selangor and Perlis as tourist attractions lies in their authentic cultural experiences and diverse activities. In Selangor, Homestay Haji Dorani provides tourists with a chance to immerse themselves in the local lifestyle, participate in traditional activities like cultural dances, and enjoy musical performances. On the other hand, Perlis offers Homestay Teluk Ketapang, where they can engage in activities such as making traditional handicrafts, learning about local customs, and enjoying outdoor experiences. Both homestays showcase the rich cultural heritage

of Malaysia, allowing tourists to live like locals, savour traditional dishes, and witness the unique traditions of each community (Pusiran & Xiao, 2013; Perlis Homestay, Feb 5, 2019).

The Ministry of Tourism, Arts, and Culture (MOTAC) plays a crucial role in ensuring the sustainability of homestay businesses in Malaysia. MOTAC is responsible for overseeing and regulating the homestay industry, promoting community-based tourism, and supporting the development of sustainable tourism practices. By working closely with homestay business owners, MOTAC aims to enhance the quality of homestay experiences, promote local communities' economic opportunities, and safeguard tourism's cultural and environmental aspects (Supian, 2023). Hence, exploring the issues and challenges MOTAC faces is vital, as it focuses on its role in homestay business sustainability in Selangor and Perlis. The remainder of this article is structured as follows. The following section briefly reviews the literature. The following section describes the research methodology. The study's interview analysis is then given, and the final section presents the conclusions and implications of the study.

2. LITERATURE REVIEW

MOTAC plays a significant role in ensuring the sustainability of homestay businesses in Malaysia. They are responsible for overseeing and regulating the homestay industry, promoting community-based tourism, and supporting the development of sustainable tourism practices. By working closely with homestay business owners, MOTAC aims to improve the quality of homestay experiences, boost local communities' economic opportunities, and safeguard tourism's cultural and environmental aspects (Zamzuki et al., 2023). The homestay programme is a community-based initiative that emphasises interaction between business owners and tourists, enabling them to learn about the culture and lifestyle of the local community. MOTAC's role in the homestay industry includes providing guidelines and standards for homestay operators to meet, ensuring the quality and safety of homestay accommodations, and promoting homestay tourism as a sustainable tourism product. The ministry also collaborates with other agencies, such as the Ministry of Rural and Regional Development (MRRD) and the Institute for Rural Advancement (INFRA), to provide training and capacity-building for rural communities involved in homestay operations (Muslim et al., 2017).

The homestay industry in Malaysia has played a significant role in boosting the country's economy and tourism. However, sustainable business practices, effective marketing strategies, and promotion policies are essential to ensure the industry's long-term success and sustainability. Therefore, MOTAC, the government, and other relevant stakeholders must collaborate to address homestay business owners' challenges and ensure their growth and sustainability. This can be achieved by implementing consistent enforcement mechanisms and providing adequate training to improve ICT competency. Developing sustainable marketing practices and promoting the industry can also help improve its performance and ensure long-term success.

3. RESEARCH METHODOLOGY

This study employs a qualitative approach to investigate the roles of MOTAC towards the issues and challenges related to the sustainability of homestay businesses in Selangor and Perlis, Malaysia. During the data collection, six officials from MOTAC were interviewed: two (2) from Selangor and four (4) from Perlis. All the participants were interviewed for one (1) to two (2) hours. The interviewees were asked to deliberate on the following factors:

- Overview of the homestay business in Selangor and Perlis
- The roles of MOTAC officials
- Issues and challenges faced by MOTAC
- Factors contributed to the sustainability of the homestay businesses

Notes were also taken as a backup if the recording did not work well. The recorded interviews were transcribed and summarised thematically into roles, issues and challenges and homestay business sustainability.

4. RESULTS AND DISCUSSION

4.1. Homestay Business Sustainability in Selangor

4.1.1 Overview of Homestay in Selangor

There are approximately 50 clusters and 225 participants registered for this homestay program. Each cluster comprises a minimum of 10 registered homestay owners. Regrettably, it is imperative to ascertain whether the remaining 250 participants are still interested in participating in the Malaysian homestay experience program. According to the guidelines established by MOTAC, two accommodation categories are available for tourists: homestay and kampung stay (village stay). The former category refers to an arrangement where the tourist resides in the same dwelling as the homestay proprietor, albeit in separate rooms. Conversely, the latter category entails the tourists occupying separate lodgings from the homestay participants.

4.1.2 The roles of MOTAC Selangor

MOTAC supports and regulates the tourism industry, including homestay businesses. In some cases, MOTAC may offer financial assistance or incentives to homestay business owners to improve their facilities, upgrade infrastructure, or participate in tourism development projects. This support can help homestay owners enhance their competitiveness and sustainability in the tourism market. As indicated by the MOTAC officer:

As part of its efforts to promote industrial development, MOTAC only assists those registered with them. This includes initiatives such as Visit My Village and Holidays to Homestay Selangor, where they organise programs in rural areas and invite guests such as students or tourists to participate. Supporting homestay business owners in increasing their income, even if it is just a small amount, can be very helpful. Some homestay business owners also own their restaurants. This kind of support can benefit those who rely solely on income generated in their village. Notably, most homestay business owners in the village are 60 years or older and are retired. Therefore, they tend to carry out work associated with rural living.

4.1.3 Issues and challenges faced by MOTAC officials in Selangor

Ensuring homestay business owners' compliance with all the regulations and standards set forth by the government can be challenging. Homestay business owners may need to be more aware of the legal requirements or encounter difficulties meeting them due to limited resources or infrastructure. As such, it is essential to consider and understand their challenges while striving to comply with the government's regulations and standards. It is also crucial to investigate why some homestay business owners in Malaysia have yet to register with MOTAC. These unregistered business owners may assume that avoiding registration would enable them to operate their homestay business without any interference from government agencies. However, by registering, they would benefit from government incentives offered through MOTAC. Another possible reason for their lack of registration could be that locals prefer to stay in secluded villages rather than homestays due to the perception that they need more privacy.

4.1.4 Factors contributing to the sustainability of homestay businesses in Selangor

MOTAC aims to support homestay businesses by promoting community involvement and collaboration between the local community and homestay business owners. Tourism Malaysia and Tourism Selangor are currently conducting promotions, while MOTAC is for registering homestays. Engaging in the community fosters a sense of ownership and ensures the authenticity of guest experiences. Sustainable tourism development that benefits local communities promotes long-term support for homestay businesses. Local product businesses for the community are under the Ministry of Urban Development and are responsible for improving the community economy. Additionally, homestay business owners receive support from different sources, depending on their requirements and preferences for progress.



Homestays are an essential and significant part of Malaysian tourism, and the Asia Standard program requires homestays in every state to participate.

4.2 Homestay Business Sustainability in Perlis

4.2.1 Overview of Homestay in Perlis

Homestays in Perlis are a unique lodging option where tourists and guests can stay on residential property owned by residents. This provides a more personalised and culturally immersive experience than traditional hotels or resorts. Homestays are usually located in rural or semi-urban areas, giving guests an authentic glimpse into the local lifestyle and surroundings. They can be found in villages, near paddy fields, or natural attractions such as forests or rivers. Accommodation in Perlis homestays varies from simple rooms within a family home to standalone cottages or guesthouses. Some homestays may have traditional Malay-style architecture, reflecting the local culture and heritage, where tourists or guests can stay with the host and enjoy the traditional legacy of the homestay. Forty-two (42) participants registered with MOTAC for the homestay program, which was divided into four clusters. The clusters included Ujong Bukit Homestay, Paya Guring Homestay, Felda Mata Ayer Homestay, and Nakawan Homestay. Nakawan Homestay comprised five villages, with 19 homestay business owners, while the other homestays had only one village, with roughly eight to nine homestay business owners.

4.2.2 Issues and challenges faced by MOTAC officials in Perlis

MOTAC Perlis, like any other government agency that supports the tourism industry, faces several challenges in assisting homestay business owners. The main issue is the presence of unregistered homestay businesses that often need to comply with local regulations, zoning laws, safety standards, and taxation requirements. This creates unfair competition for registered homestay businesses that have invested time and resources in meeting regulatory requirements. It has become a concern regarding unregistered homestays with a kampung stay concept that operates alongside registered ones. Furthermore, whether MOTAC has taken any measures against these unregistered homestay business owners is still being determined.

4.2.3 Factors contributing to the sustainability of homestay businesses in Perlis

MOTAC Perlis also advocates for responsible tourism practices that balance economic development with social and environmental considerations. Through its promotional activities, MOTAC encourages tourists or guests to choose homestay accommodations, prioritising sustainability, cultural authenticity, and community engagement. By raising awareness among guests and promoting responsible travel behaviour, MOTAC contributes to the long-term sustainability of homestay businesses in Perlis. This setup has resulted in a visually appealing homestay, where a new group of homestay business owners owns half of the houses. The Nakawan Homestay is a reassuring exception despite concerns about unregistered homestay operators. Operated by young business owners, this homestay demonstrates a proactive approach to the challenges faced by this industry. Their homestay has three rooms and follows the concept of an annexe homestay. In the first month of operation, they earned more than RM6,000, which shows the business's potential. In June last year (2023), their income was RM12,000, which is a testament to their success.

5. CONCLUSION

In conclusion, the MOTAC in Perlis and Selangor play a pivotal role in assisting the sustainability of homestay business owners. Through their diligent efforts in providing support, guidance, and resources, they are vital pillars in nurturing and enhancing the homestay industry in these states. In Perlis, MOTAC officials contribute to the sustainability of homestay businesses by facilitating training programs, fostering partnerships, and promoting the region's unique cultural heritage. By leveraging their expertise and networks, they empower homestay owners with the necessary skills and knowledge to thrive in the competitive tourism landscape. Similarly, in Selangor, MOTAC actively engages with homestay operators to address challenges, capitalise on opportunities, and promote

responsible tourism practices. Through initiatives such as marketing campaigns, capacity-building workshops, and regulatory assistance, they create an enabling environment for homestay businesses to flourish sustainably.

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REFERENCES

- Muslim M.H.F., Numata, S., & Yahya, N. A. (2017). Development of Malaysian Homestay Tourism : A review. *International Journal of Tourism Sciences*, 10, 65–74.
- Perlis Homestay. (Feb 5, 2019). The Malaysian Kampung Homestay Experience. Retrieved from: <https://perlishomestay.my/2019/02/05/the-malaysian-kampung-homestay-experience/>
- Pusiran, A. K., & Xiao, H. (2013). Challenges and Community Development: A Case Study of Homestay in Malaysia. *Asian Social Science*, 9(5), 1-17. <https://doi.org/10.5539/ass.v9n5p1>
- Salleh, M., Othman, H.N., Nordin, R., Mohd Idris, N., Shukor, S.H., Md Shafiin. (2014). The homestay program in Malaysia: Motivation for Participation and Development Impact. *Tourism: An International Interdisciplinary Journal*, 62, 407-421
- Supian, K. (2022). Community-Based Homestay Activities: Sustainable or Perishable Tourism? *European Proceedings of Multidisciplinary Sciences*, 1–11.
- Zamzuki FA, Lola MS, Aruchunan E, Muthuvalu MS, Jubilee RVW, Zainuddin NH, Abdul Hamid AAK, Mokhtar NA, Abdullah MT. (2023). Assessing the sustainability of the homestay industry for the East Coast of Malaysia using the Delphi approach. *Heliyon*, 9(11), 1-19.

CONVERTING CHALKBOARDS TO KEYBOARDS: BOOSTING DIGITAL SKILLS FOR GEN X LECTURERS

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ABSTRACT

This study investigates the digital skills gap among Generation X (Gen X) lecturers in the context of online education. Gen X, comprising individuals born between the early 1960s and mid-1980s, faces unique challenges in adapting to digital technology, which affects their effectiveness in online teaching. The research aims to identify factors contributing to this skills gap and formulate strategies to enhance technology integration in education. Despite positive responses to basic digital knowledge, Gen X lecturers often struggle with more advanced technological applications, impacting their teaching quality. The study utilizes qualitative interviews with Malaysian public university lecturers to explore their experiences and consequences. The participants comprised of five lecturers representing Gen X at a public university in Malaysia. Findings reveal significant implications for support, behavior, and health, highlighting the necessity for comprehensive training and support systems. Addressing these issues is crucial for improving online education quality and bridging the digital competence gap, thereby benefiting the education system, society, and industry by fostering a more technologically adept teaching workforce. The anticipated results involve the identification of primary obstacles in online instruction, the consequences for mental well-being and behaviour, and the necessity for educational support. The study's findings could help educational institutions figure out how to best support online instructors so that their students learn better. Furthermore, this study enhances the advancement of knowledge in the subject of online education by addressing the obstacles encountered by the elderly population in relation to technology and digital instruction.

Keywords: Generation X, higher education, online class, technology, implication

1. INTRODUCTION

This study aims to investigate the lack of digital skills among Generation X (Gen X) lecturers and those older in the context of online education. Born between the early 1960s to the mid-1980s, Gen X is known for its distinctive cultural and technological experiences. The objective of the study is to identify the factors contributing to their lack of digital skills and to develop strategies for improving technology integration in teaching and learning. Addressing this issue is crucial as digital education continues to grow in importance.

According to Rima et al. (2023), while Gen X teachers respond positively to basic technology, they struggle with more advanced applications. This issue is not confined to Malaysia but is observed globally. Despite initiatives to enhance technological use in education, the lack of digital skills among older lecturers remains a significant barrier. Malaysia, for example, faces pressure to transform its educational system in line with changing industry demands.



2. LITERATURE REVIEW

Since the COVID-19 pandemic, online learning has become commonplace, requiring lecturers, particularly those from Generation X, to make significant efforts to ensure a satisfactory learning experience for their students. Tech-savvy educators are crucial for engaging students in online education, making techno-pedagogical skills essential for enhancing communication and instruction. Gen X, born between 1960 and 1980, is characterized by its adaptability and coordination skills (Bugnos et al., 2022).

3. METHODOLOGY

This study aims to gain in-depth information on the challenges faced by Gen X lecturers in using technology for online classes and to understand the implications of its use. A qualitative approach was employed, involving interviews with Gen X lecturers at a public university in Malaysia.

4. RESULTS AND DISCUSSION

The findings of this study are organized into three main implications faced by Generation X lecturers in online teaching: support, behavioral changes, and health impacts.

5. CONCLUSION

This study identifies the implications faced by Generation X lecturers in adapting to online teaching. The implications are mainly behavioral and health-related. Generation X lecturers, in particular, have faced numerous challenges, including technological adaptation, increased workload, and heightened stress. Despite these difficulties, there is an opportunity for growth and improvement through enhanced support systems, continuous training, and mental health resources. By leveraging these strategies, Gen X lecturers can effectively contribute to the education of future generations, ensuring that they are well-equipped to navigate the evolving landscape of virtual education.

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REFERENCES

- Bugnos, J. D., Protacio, A. V, Billanes, E. P., Caman, K. E., Diego, S. S., Formacion, C. P., Galamay, N. B., & Molato, M. A. (2022). *TRADITIONALIST TO PROGRESSIVIST: LIVED EXPERIENCES OF GENERATION X TEACHERS IN THE NEW NORMAL*. 12(1), 90–94.
- Rima, Andriani, Sari., Made, Hery, Santosa., Ni, Nyoman, Padmadewi., Ni, Made, Ratminingsih., Putu, Kerti, Nitiasih., I, Gede, Budasi. (2023). Readiness of Gen-X English High School Teachers in Integrating Teaching with Technology. *Journal of education technology*.

ESG ACTIVITIES AND BANKING EFFICIENCY: A COMPARISON BETWEEN ISLAMIC AND CONVENTIONAL BANKS

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Keywords: Islamic banks; Conventional banks; Bank Efficiency; ESG; Data Envelopment Analysis (DEA)

1. INTRODUCTION

In today's world, the long-lasting impacts of climate change, market uncertainties, and volatilities in financial markets and various imbalances in the regions are an important concern requiring immediate attention. United Nation Adopted for 2030 Agenda for Sustainable Development also called for solutions of these problem highlighting Environment, social, and governance (ESG) factors. ESG factors play a positive role in enhancing Sustainable Development Goals (SDGs) in their respective economies. Many studies investigated the impact of ESG factors on firm performance. However, less work is being done to investigate the impact of ESG factors on firm's efficiency (Tasnia et al.,2021). Moreover, the literature is scarcer to investigate the impact of ESG factors on financial firms, especially the banking sector. Similarly, the literature on the impact of ESG on the efficiency of Islamic bank is even more scarce (Alam et al.,2021). Therefore, to fill this gap in the literature, our current study aims to investigate the impact of ESG factors on banking efficiency. In addition, we also aim to compare the impact of ESG factors on the banking efficiency of both Islamic and conventional banks of GCC countries.

2. LITERATURE REVIEW

Previous studies like Cui et al., (2018) found that firms investing more in the Corporate social respectable activities may lead to improve their image in the eyes of investors and general public. Similarly in another study Xie at al., (2019) emphasized firms making efforts to increase their ESG disclosure help them to enhance their efficiency. The financial institutions especially banks possess more liquid assets and general public is concerned about their banks' social activities as well. Iazzolino et al., (2023) examined the impact of ESG activities financial efficiency of a sample of European firms. The banking efficiency was measured using Data Envelopment Analysis (DEA). Their findings showed that ESGs impact is different on different sectors. Di Tommaso and Thornton (2020) examined whether ESG scores of European banks impact on their risk-taking behavior and on bank value. They found that high ESG scores help the banks in reducing their risk-taking activities.

Similarly, Cao et al. (2024) examined the impact of ESG activities on bank efficiency on Commercial banks of China. Their results indicated that Environmental and governance elements increase bank efficiency while social elements decrease bank efficiency. They also identified that efforts must be carried out by the policymakers and regulators to enhance the fintech adoption which results in the increase in the relationship between ESG activities and bank efficiency. Same results are claimed by Azmi et al., (2021) as well. In another study, Zhou et al (2022) found that more green loans may help to reduce the vulnerabilities of climate risk and increasing banking efficiency. Similarly, Fukuyama and Tan (2021) identified that availability of endowments funds may increase non-interest expense of banks and thus reduce banking efficiency.



With the maturity of internet banking, banking sector may also increase the impact of ESG activities on their efficiency by using disrupting technologies including fintech adoption. Therefore, in this study we make an effort to include fintech adoption as a moderator to investigate its impact on the relationship between ESG activities and

banking efficiency. The previous studies like Zhan and Jing (2022) that fintech adoption and the usage of advance technologies like data mining, big data help the banks in enhancing their efficiency and customer experience. Various studies including Seele and Schultz (2022) and Vergara and Agudo(2021) also suggested that usage of more advanced disruptive technologies including AI technologies may help the banks to increase their efficiency. Mixed results are available in the literature. Some studies including Forgione et al., (2020) found that ESG activities may lead to decrease the banking efficiency. Shair et al., (2021) found that despite that banks make efforts to reduce carbon emissions still their efficiency is negatively related to the banking efficiency. Similar results were also claimed by Veltri et al.,(2023).

3. METHODOLOGY

The sample of our study includes 25 conventional and 14 Islamic banks from 11 emerging economies. ESG scores and financial data of banks is obtained from Thomson Reuters Datastream. The country level data is obtained from World Development Indicators. The control variables used in our study are total assets, equity, deposits and short-term funding, loans, and capital adequacy. The country level data in the study includes country-wise GDP growth rate, inflation, and unemployment rate. We calculated banking efficiency using DEA. DEA is a non-parametric method used in business and economics to estimate production efficiency of decision-making units (DMUs). In our study, each bank represents one single DMU. Following Alam et al (2022) we use bank loans, earning assets, and operating income as bank outputs. On the other hand, we use total deposits and short-term funding, fixed assets, and staff expenses as bank inputs. The results of DEA lies between 0 to 1. Once DEA results are calculated, panel regression is used to estimate the impact of ESG factors on banking efficiency using following two econometric models.

$$\text{Efficiency}_{it} = \alpha_0 + \alpha_1 [\text{ESG scores}]_{it} + \alpha_2 [\text{Control variables}]_{it} + \alpha_3 [\text{Country variables}]_{it} + \alpha_4 [\text{fintech adoption}]_{it} + \epsilon_{it} \quad \text{eq(1)}$$

$$\text{Efficiency}_{it} = \beta_0 + \beta_1 [(\text{ESG scores} * \text{fintech adoption})]_{it} + [\beta_2 (\text{Control Variables} * \text{fintech adoption})]_{it} + [\beta_3 (\text{Country level variables} * \text{fintech adoption})]_{it} + e_{it} \quad \text{eq(2)}$$

4. RESULTS AND DISCUSSION

The findings prove that Environmental(E), and Governance(G) enhances banking efficiency while Social (S) reduces banking efficiency in conventional banks. The results of Islamic banks proves that social factors did not have significant relationship with the efficiency. The results also prove that increase in the fintech adoption strengthens the relationship between ESG and banking efficiency.

5. CONCLUSION

The findings of this study recommends that Islamic banks must increase their efforts on increasing the awareness of the benefits of ESG factors and pay attention to improve their overall and dimension-wise ESG scores with a goal to improve their banking efficiency. Moreover, it is also recommended that the relationship between ESG factors and efficiency is strengthened by fintech adoption. The impact of ESG activities on banking efficiency

may also vary in different ownership structure of banks. Therefore, this study may be extended to various ownership style of banking sector.

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REFERENCES

- Azmi, W., Hassan, M. K., Houston, R., & Karim, M. S. (2021). ESG activities and banking performance: International evidence from emerging economies. *Journal of International Financial Markets, Institutions and Money*, 70, 101277.
- Cao, Q., Zhu, T., & Yu, W. (2024). ESG investment and bank efficiency: Evidence from China. *Energy Economics*, 133(1), 107516.
- Chueca Vergara, C., & Ferruz Agudo, L. (2021). Fintech and sustainability: do they affect each other?. *Sustainability*, 13(13), 7012.
- Cui, Y., Geobey, S., Weber, O., & Lin, H. (2018). The impact of green lending on credit risk in China. *Sustainability*, 10(6), 1-16
- Di Tommaso, C., & Thornton, J. (2020). Do ESG scores effect bank risk taking and value? Evidence from European banks. *Corporate Social Responsibility and Environmental Management*, 27(5), 2286-2298.
- Forgione, A. F., Laguir, I., & Staglianò, R. (2020). Effect of corporate social responsibility scores on bank efficiency: The moderating role of institutional context. *Corporate Social Responsibility and Environmental Management*, 27(5), 2094-2106.
- Fukuyama, H., & Tan, Y. (2021). Corporate social behaviour: Is it good for efficiency in the Chinese banking industry?. *Annals of Operations Research*, 306(1), 383-413.
- Iazzolino, G., Bruni, M. E., Veltri, S., Morea, D., & Baldissarro, G. (2023). The impact of ESG factors on financial efficiency: An empirical analysis for the selection of sustainable firm portfolios. *Corporate Social Responsibility and Environmental Management*, 30(4), 1917-1927.
- Seele, P., & Schultz, M. D. (2022). From greenwashing to machinewashing: a model and future directions derived from reasoning by analogy. *Journal of Business Ethics*, 178(4), 1063-1089.
- Shair, F., Shaorong, S., Kamran, H. W., Hussain, M. S., Nawaz, M. A., & Nguyen, V. C. (2021). Assessing the efficiency and total factor productivity growth of the banking industry: do environmental concerns matters?. *Environmental Science and Pollution Research*, 28(16), 20822-20838.
- Tasnia, M., Syed Jafaar Alhabshi, S. M., & Rosman, R. (2023). Corporate social responsibility and Islamic and conventional banks performance: A systematic review and future research agenda. *Journal of Sustainable Finance & Investment*, 13(4), 1711-1731.
- Veltri, S., Bruni, M. E., Iazzolino, G., Morea, D., & Baldissarro, G. (2023). Do ESG factors improve utilities corporate efficiency and reduce the risk perceived by credit lending institutions? An empirical analysis. *Utilities Policy*, 81, 101520.
- Xie, J., Nozawa, W., Yagi, M., Fujii, H., & Managi, S. (2019). Do environmental, social, and governance activities improve corporate financial performance?. *Business Strategy and the Environment*, 28(2), 286-300.
- Zhan, W., & Jing, H. (2022). Does fintech development reduce corporate earnings management? evidence from China. *Sustainability*, 14(24), 16647.
- Zhou, X. Y., Caldecott, B., Hoepner, A. G., & Wang, Y. (2022). Bank green lending and credit risk: an empirical analysis of China's Green Credit Policy. *Business Strategy and the Environment*, 31(4), 1623-1640



CORPORATE GOVERNANCE AND CORPORATE SUSTAINABILITY PERFORMANCE IN MALAYSIA

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ABSTRACT

This paper aims to provide a review on the relationship between corporate governance and corporate sustainability performance. This research used the literature review method and delved into the effectiveness of corporate governance mechanisms such as board independence, gender diversity and ethnic diversity in achieving corporate sustainability performance in the Malaysia setting. This study contributes to the existing literature by exploring the revisions in the Malaysian Code of Corporate Governance (MCCG) 2021, particularly focusing on enhancing board supervision and incorporating sustainability into corporate strategy and operations. This study offers insightful conclusions and recommendations aimed at informing investors and companies about the role of corporate governance in economic, social and governance (ESG) performance, thereby contributing to the green and sustainable development of the Malaysian publicly listed firms.

Keywords: Corporate Governance; Corporate Sustainability Performance; MCCG 2021

1. INTRODUCTION

As outlined in the 11th Malaysian Plan, sustainability has become one of the guiding principles for national development initiatives in Malaysia (Shaharudin et al., 2022). Malaysia is one of the 192 nations that have ratified the 2030 Agenda for Sustainable Development, which aims to advance the 17 SDGs through the ESG aspects of sustainable development (Joseph et al., 2021). This transformative agenda addresses critical global challenges that threaten the future, including poverty, inequality, climate change, environmental degradation, and the pursuit of peace and justice. It entails an integrated approach (Leal Filho et al., 2020; Shaharudin et al., 2022). Prior research has examined the determinants of firms' corporate sustainability performance (CSP) primarily from the perspective of developed countries or in a multinational context. Nevertheless, research in emerging markets has received less attention (Kalash, 2023). Specifically, the effects of determinant factors of CSP, such as the internal governance mechanisms based on the revision of Malaysian Code of Corporate Governance (MCCG) 2021 are rarely investigated within the context of a developing country, particularly Malaysia.

2. LITERATURE REVIEW

2.1. Corporate Governance Mechanisms

The board of directors is a vital element in a firm 's corporate governance (CG) system (Ng et al., 2022). Effective governance mechanisms, such as board diversity, contribute to enhancing decision-making and risk management (Bernile et al., 2018). The latest MCCG was released in 2021, addressing the board's role in championing ESG within boardrooms. The sustainability requirements of MCCG 2021 highlight the responsibility of boards and management to establish specific expectations for determining the firm's sustainability strategies, priorities, and targets (MCCG, 2021). These governance features not only boost the company's financial performance but also enhance its reputation and social capital (Dong et al., 2017).

2.2. Corporate Sustainability Performance

Sustainability activities have become an important agenda for companies to address environmental, social and governance issues in their business operations. Despite being a costly and mandatory endeavor (Quah, 2023), many firms engage in corporate sustainability activities which are disclosed through sustainability reporting. This practice is acknowledged for acquiring and sustaining legitimacy within the business realm (Ahmad et al., 2017).

3. DISCUSSION AND CONCLUSION

Companies should uphold CSP through ESG activities as it provides long-term benefits to the stakeholders, specifically the governance aspect in ESG components. Good corporate governance is pivotal in this context, serving as the organizational system of checks and balances. This underscores the critical role of strong corporate governance with an enhanced oversight responsibilities of the board of directors to ensure that firms conduct their CSP activities with integrity and accountability (Bae et al., 2018 and Aman et al., 2022).

REFERENCES

- Ahmad, N. (2017), "Board independence and corporate social responsibility (CSR) reporting in Malaysia", *Australasian Accounting, Business and Finance Journal*, Vol. 11 No. 2, pp. 61-85.
- Aman, Z., Wahyu Sakina Ahmad Sanusi, S., & Suriana Awaludin, N. (2022). The Relationship between Corporate Governance and Corporate Sustainability Performance in Malaysia Hubungan antara Tadbir Urus Korporat dan Prestasi Kelestarian Korporat di Malaysia. In *Journal of Management & Muamalah*.
- Bae, S., M, Masud., M. A. K., Kim, J. D. (2018). A cross-country investigation of corporate governance and corporate sustainability disclosure: A signaling theory perspective. *Sustainability* 10: 2611.
- Bernile, G., Bhagwat, V. and Yonker, S. (2018), "Board diversity, firm risk, and corporate policies", *Journal of Financial Economics*, Vol. 127 No. 3.
- Dong, Y., Girardone, C. and Kuo, J.-M. (2017), "Governance, efficiency and risk taking in Chinese banking", *The British Accounting Review*, Vol. 49 No. 2, pp. 211-229.
- Joseph, C., Sawani, Y., Janggu, T., Hossen, R., & Atan, P. (2021). Development of a Sustainable Development Goals Disclosure Index (SDGDi) for Malaysian Local Authorities. *IPN Journal of Research and Practice in Public Sector Accounting and Management*, 11(01), 61–79.
- Kalash, I. (2023). Corporate sustainability performance in the emerging market of Turkey: the role of accounting information quality and firm risk. *Journal of Economic and Administrative Sciences*.
- Katmon, N., Mohamad, Z.Z., Norwani, N.M. and Farooque, O. Al. (2019), "Comprehensive board diversity and quality of corporate social responsibility disclosure: evidence from an emerging market", *Journal of Business Ethics*, Vol. 157 No. 2, pp. 447-481.
- Leal Filho, W., Wolf, F., Lange Salvia, A., Beynaghi, A., Shulla, K., Kovaleva, M., & Vasconcelos, C. R. P. (2020). Heading towards an unsustainable world: some of the implications of not achieving the SDGs. In *Discover Sustainability* (Vol. 1, Issue 1).
- Ng, D. C. Y., Chang, Y. W., Cheng, L. S., & Ching, V. N. Z. (2022). Globalizing the Boardroom among Family-Controlled Companies on Bursa Malaysia: The effects of corporate governance on firm performance. *Environment-Behaviour Proceedings Journal*.
- Quah, E. (2023). Experts express importance of ESG reporting. *The Star*.
- Securities Commission Malaysia. (2021). Malaysian Code on Corporate Governance. <https://www.sc.com.my/api/documentms/download.ashx?id=239e5ea1-a258-4db8-a9e2-41c215bdb776>
- Shaharudin, M. R., Hamid, N. Z. A., Abdullah, D., Ahmad, N., Hassam, S. F., & Fauzi, N. H. H. A. (2022). Factors affecting social sustainability performance amongst Malaysian manufacturing companies. *International Journal of Business and Society*, 23(3), 1874–1887.
- Shahbaz, M.; Karaman, A.S.; Kilic, M.; Uyar, A. (2020), Board attributes, CSR engagement, and corporate performance: What is the nexus in the energy sector? *Energy Policy*, 143, 111582.

DISSECTING THE POST-INVESTIGATION ACTIONS ON MONEY MULE CASES IN BANKING FINANCIAL CRIME COMPLIANCE

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ABSTRACT

Money mule constitutes a major financial crime risk to the banks and financial institutions. It is apparent that money mule problem continues to plague Malaysia, which is resonated by the authority. This article elaborates the actions needed to be enforced by anti-money laundering analyst after completing transaction monitoring investigation. Aligned with the obligation to protect the bank, money mule must be subjected to STR filing, exit relationship and watchlisting. Each action has its purpose and the underlying reason is justified.

Keywords: exit relationship, financial crime compliance, money mule, money mule syndicate, suspicious transaction report, watchlisting.

1. INTRODUCTION

The on-going problem of money mule threat in Malaysia has taken an unprecedented shape, placing the country into a crisis that exhorts urgent intervention. According to Royal Malaysia Police, Malaysia is turning into a money laundering hub largely due to easy access to mule accounts and individuals who have no qualms to offer the service (Nawawi & Mohd Noor, 2024). The service is encouraged by ubiquitous money mule job advertisement, promoting “easy job scope with little requirement” with promises of substantial payment. The availability to exercise money mule recruitment and some removal of stringent account opening procedures have not helped to eradicate the problem. By granting waiver on some important documents that are deemed irrelevant to client due diligence (CDD), proliferation of money mule accounts in the market has become more conspicuous (Aziz, 2024). Stretching back on the tremendous relaxing of account opening rules, the recruited money mules are pressured to open bank accounts as many as possible, without any scruple of lending all of them to the money mule syndicate.

The structure of this article is erected into three different post-investigation actions based on the money mule transaction monitoring outcome by financial crime compliance. These post-investigation actions are namely suspicious transaction report (STR), exit relationship and watchlisting. Each action shall be discussed in detail and how it would assist in mitigating the money mule risks. Figure 1 illustrates the post-investigation actions mandated on money mule case that need to be performed by AML analyst.

2. SUSPICIOUS TRANSACTION REPORT

Banks and designated non-financial business and professions (DNFBPs) are required to submit suspicious transaction report when the economic sense of a particular banking transaction could not be established (Ping, 2005; Rahman, 2013). Section 14 of Anti-Money Laundering Act, Terrorism Financing and Proceeds of Unlawful Activity Act (AMLATFPUAA 2001) directs financial institution to promptly report any activity that shall pose the threat of financial crime risk (AMLATFPUAA, 2001). The information made available to the authority would be useful to synthesize the contemporary money laundering trend, combat the threat and devise actions to curb the criminal



activities from getting into a deeper cataclysm. Some of the reported cases can be extensive and intrusion of justice, requiring eloquent law enforcement investigation and potentially prosecution (Axelrod, 2017; Brzezińska, 2016). This could not be achieved at the financial crime compliance unit level, and thence must be escalated to the Financial Intelligence Unit (FIU) via STR.

In the course of transaction monitoring investigation, anti-money laundering (AML) analyst must be able to skillfully conclude if the account activities are within the anticipated behavior by analyzing the account holder's Know-Your-Customer (KYC), CDD and source of fund. The reporting to FIU is on the basis of "clear subject of suspicion", or "having a ground to be suspicious", and thus deviant red flags should raise a call for further forensic accounting investigation (Chaikin, 2009). The chief requirement here is when the reviewed account has undoubtedly encroached into transactions that mechanically deviated from what it is expected to exhibit. At the point when the bank is able to identify red flags of money mule activities, its compliance officer without delay must submit the STR. The obligation to file STR is to protect the integrity of financial system, while keeping the submission confidential and without fear of civil or criminal liability.

3. EXIT RELATIONSHIP

The typical exit relationship is when client is no longer interested in maintaining patronage with the bank. Several reasons could be the prime excuse, such as poor relationship management and revision of bank charges. This occurs when account holder walks into the domicile branch and close whatever products held with the bank, and remaining funds will be repatriated to the competitor bank. However, the relationship cessation could also be initiated by the bank out of defense from money laundering, terrorism financing and sanction risk.

Account closure and freeze are practical actions widely discussed in targeting criminal organizations from furthering the illicit funds into deeper layering (Forman, 2006; Ramos & Coelho, 2023). Cross-border fund remittance is much faster than cash smuggling and hawala to transport money, making money mule network enormously indispensable. Some pre-existing laws and enactments mandated banks to close bank accounts which are found to carry fraudulent transactions, and specific prohibition is stated from tipping off the account holder. The account freeze and closure keep the fund stranded in the account, whereby withdrawal is only permitted after account holder steps into the bank to verify the legitimacy of the account activities (Bernama, 2022).

4. WATCHLISTING MONEY MULES

The watchlisting also helps branch staffs and relationship managers to identify high-risk clients before processing the application (Alkhalili et al., 2021). By identifying the money mule, the branch officer is able to observe any incredulous behavior such as restlessness during account opening conversation, or accompanied by stranger who possibly be the syndicate recruiter. The money mules are influenced by the recruiter to apply as many accounts as possible with different banks, and surrender the ATM cards to the syndicate for criminal activities (Kruisbergen et al., 2019). These peculiar encounters need to be escalated to financial crime compliance department and STR filing to regulator must be submitted, although the applicant is yet to be bank's client (Rahman, 2013). Hence, watchlisting helps to challenge the process of account opening by money mule syndicate by preparing a database that frontliners can refer to.

Existing account holders who are subjected to STR filing should undergo enhanced due diligence review. This is to align with the requirement applied by Financial Action Task Force (FATF), recommending a more routine monitoring on clients who have elevated money laundering risks (Financial Action Task Force, 2014). The enhanced due diligence review entails deep analysis into reported transactions, counterparties and turnover. The review task by CDD analyst goes to great length of screening the counterparties against the watchlist (Sultan & Mohamed, 2023). If the account holder is detected to regularly transact with counterparty suspected to be money mule, there is a high likelihood that the reviewed account holder is a party of money mule network. As such, a revisit

on account holder's investigation by AML analyst should be launched to establish the purpose of transaction and if a new money mule suspicion is established, the same money mule reporting process applies.

5. CONCLUSION

To protect the financial system by money mule network, AML analyst ought to understand the necessary actions after investigation is completed. Money mules must be prevented from entering the financial system to remit the illicit funds through layers of bank accounts and banking products. To summarize, the importance of STR filing, banking relationship exit and watchlisting depict three mandatory post-investigation actions required to disrupt the money mule syndicate. It is also suggested that these actions are incorporated into AMLATFPUAA 2001 to stop the criminals from abusing the bank account as intermediary to cleanse dirty funds.

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REFERENCES

- Alkhalili, M., Qutqut, M. H., & Almasalha, F. (2021). Investigation of applying machine learning for watch-list filtering in anti-money laundering. *iEEE Access*, 9, 18481-18496. <https://doi.org/10.1109/ACCESS.2021.3052313>
- Anti-Money Laundering Act, Terrorism Financing and Proceeds of Unlawful Activity Act (2001). Bank Negara Malaysia. <https://www.bnm.gov.my/-/anti-money-laundering-anti-terrorism-financing-and-proceeds-of-unlawful-activities-act-2001-act-613->
- Axelrod, R.M. (2017). Criminality and suspicious activity reports. *Journal of Financial Crime*, 24(3), 461 – 471. <https://doi.org/10.1108/JFC-03-2017-0019>
- Aziz, I.H. (May 13, 2024). Mule accounts, unethical financial institution officials a challenge for MACC. *New Straits Times*. <https://www.nst.com.my/news/crime-courts/2024/05/1049949/mule-accounts-unethical-financial-institution-officials-challenge>
- Bernama (May 11, 2022). Keldai akaun akan disenarai hitam daripada buka akaun bank. *Harian Metro*. <https://www.hmetro.com.my/mutakhir/2022/05/840823/keldai-akaun-akan-disenarai-hitam-daripada-buka-akaun-bank>
- Brzezińska, J. (2016). Money Laundering Phenomenon: Economic of the Suspicious Transaction Reports: The French Experience. *Eurasian Studies in Business and Economics*, 305–316. https://doi.org/10.1007/978-3-319-46319-3_19
- Chaikin, D. (2009). How effective are suspicious transaction reporting systems?. *Journal of Money Laundering Control*, 13(2), 238-253. <https://doi.org/10.1108/13685200910973628>
- Financial Action Task Force (October 2014). Guidance for a risk-based approach: The banking sector. <https://www.fatf-gafi.org/content/dam/fatf-gafi/guidance/Risk-Based-Approach-Banking-Sector.pdf>
- Forman, M. M. (2006). Combating terrorist financing and other financial crimes through private sector partnerships. *Journal of Money Laundering Control*, 9(1), 112-118. <https://doi.org/10.1108/13685200610645265>
- Kruisbergen, E. W., Leukfeldt, E. R., Kleemans, E. R., & Roks, R. A. (2019). Money talks money laundering choices of organized crime offenders in a digital age. *Journal of Crime and Justice*, 42(5), 569-581. <https://doi.org/10.1080/0735648X.2019.1692420>



- Nawawi, M.H. & Mohd Noor, H.H. (March 28, 2024). Ease of access to mule accounts turning Malaysia into a hub for money laundering. *New Straits Times*.
<https://www.nst.com.my/news/nation/2024/03/1031675/ease-access-mule-accounts-turning-malaysia-hub-money-laundering>
- Ping, H. (2005). The suspicious transactions reporting system. *Journal of Money Laundering Control*, 8(3), 252-259. <https://doi.org/10.1108/13685200510620948>
- Rahman, A.A (2013). The impact of reporting suspicious transactions regime on banks: Malaysian experience. *Journal of Money Laundering Control*, 16(2), 159-170. <https://doi-org.uitm.idm.oclc.org/10.1108/13685201311318502>
- Ramos, V. C., & Pereira Coelho, D. (2023). Defending victims of cross-border fraud in the EU – A Portuguese view, including the use of preventive “freezing” of bank accounts under anti-money laundering legislation. *New Journal of European Criminal Law*, 14(3), 397-420.
<https://doi.org/10.1177/20322844231173913>
- Sultan, N. & Mohamed, N. (2023). Challenges for financial institutes in implementing robust customer due diligence in Pakistan. *Journal of Money Laundering Control*, 26(5), 926-946.
<https://doi.org/10.1108/JMLC-06-2022-0095>

ONLINE SHOPPING AND CUSTOMER SATISFACTION: A STUDY ABOUT SECURITY AND PRODUCT ON SELECTED GOVERNMENT EMPLOYEES

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ABSTRACT

This study aims to understand and identify the relationship between online shopping and customer satisfaction among government employees in Kuala Terengganu. Factors that influence customer satisfaction in this study are safety and product. Questionnaires were given to 133 respondents among government employees in Kuala Terengganu. The data were analysed using SPSS. According to the finding and conclusion, all the variables have relationships, and the hypothesis of all variables is also positive. From the findings, it was discovered that respondents choose online shopping as it is convenient for them. What gives them more satisfaction is safety. They are very particular and concerned about the safety of conducting online shopping. Secondly, the respondents choose the types of products offered online. In addition, hypotheses results show that online payment systems significantly impact online shopping regardless of the products offered and how convenient and easily accessible the shopping experience is.

Keywords: customer satisfaction; security; product quality; online shopping; government employees

1. INTRODUCTION

E-commerce has become a necessity in the global retail framework, where the world has transformed the internet with digitalization. With the current modern circulatory conditions, users worldwide continue to benefit from online transactions and enable their access. Scotchmer (2020) stated that internet usage has increased rapidly around the world hence, the number of digital shoppers has continued to increase over the years. Online shopping today is a simple solution for a busy life and has become a common practice in today's society around the world, especially with the use of the internet in daily life. It is interesting to see the relationships between online shopping and these two factors of security and product among local Terengganu respondents.



2. LITERATURE REVIEW

Karim (2013), in his study tried to understand the reasons for motivations and inhibitions that respondents use the internet to purchase products online in relation to Customer Satisfaction, found out that they believe it is convenient for them. The convenient terms include elements such as time saving, information availability, opening time, ease of use, website navigation, less shopping stress, less expensive, and shopping fun. In contrast, respondents' mindsets, online payment security, personal privacy and trust, unclear warranties and returns policies, and lack of personal customer service are the foremost barriers of online shopping. Furthermore, the result of the hypotheses established that even though online shopping is convenient to all consumers, online payment systems and privacy or security anxieties have a significant impact on online shopping. This result definitely rhymes with the findings of this study, as one could see later, even when there are two totally different geographical and cultural types of respondents.

3. METHODOLOGY

The study uses primary data and quantitative research to understand and examine the relationships between Online shopping (Security and Product) and Customer Satisfaction among Government Agency Kuala Terengganu employees.

4. RESULTS AND DISCUSSION

The data show that respondents mostly do online shopping monthly, and most of them prefer to buy women's and men's clothes. The result also examines that Price has significance with customer satisfaction and the level of Price correlation strongly correlates with customer satisfaction. For the ANOVA testing, the dependent variable is a regression between independent variable of security and customer satisfaction. The result of the security based on the model summary referring to R Square is 0.562 and a significant p-value at 0.00, which is greater than 0.05. Part of that, the result shows that Security has a moderate correlation with customer satisfaction, and a Pearson correlation value of Security is moderately correlated.

5. CONCLUSION

The government could curb traders who run businesses that violate the set rules. They can detect and block the misuse of trade transactions by traders and customers. Nevertheless, it is beneficial to online business owners to research and be more alert to customers' online purchasing behavior, as customer satisfaction is crucial. Business owners can also improve their services, especially regarding security and products.

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REFERENCES

- Abdirada, M., & Krishna, K. (2020). *Customer satisfaction assessment by online shopping service: A case study of Serbia*. 27(5), 1631–1637. <https://doi.org/10.17559/TV-20180116163213>
- Ekasari, R., Agustya, D., Yucha, N., Arif, D., Darno, Retnowati, D., Ayu Mandasari, A., Ratnasari, E., Nur Husnul Yusmiati, S., & Puji Lestari, L. (2019). Effect of Price, Product Quality, and Service Quality on Customer Satisfaction on Online Product Purchases. *Journal of Physics: Conference Series*, 1175(1), 0–6. <https://doi.org/10.1088/1742-6596/1175/1/012287>
- Kalia, P., Kaur, N., & Singh, T. (2017). Customer satisfaction in e-shopping: An overview. *Indian Journal of Economics and Development*, 13(2a), 569. <https://doi.org/10.5958/2322-0430.2017.00132.9>
- Karim, Rashid Al. (2013) Customer Satisfaction in Online Shopping: a study into the reasons for motivations and inhibitions. *IOSR Journal of Business and Management (IOSR-JBM) e-ISSN: 2278-487X, p-ISSN: 2319-7668. Volume 11, Issue 6 (Jul. - Aug. 2013)*, PP 13-20 www.iosrjournals.org
- Koo, D.M., Kim, J.J. & Lee, S.W. (2008). Personal values as underlying motives of shopping online. *Asia Pacific Journal of Marketing and Logistics*, 20(2), pp 156-173.
- Mascarenhas, J. B. (2018). *Customer satisfaction in online shopping - Retail industry*. 1–111. https://esource.dbs.ie/bitstream/handle/10788/3658/mba_mascarenhas_j_2019.pdf?sequence=1&isAllowed=y
- Merugu, D. P., & Mohan, D. V. K. (2020). Customer satisfaction towards online shopping with reference to Jalandhar City. *International Journal of Management*, 11(2), 36–47. <https://doi.org/10.34218/IJM.11.2.2020.005>
- Rahman, M. A., Islam, M. A., Esha, B. H., Sultana, N., & Chakravorty, S. (2018). Customer buying behavior towards online shopping: An empirical study on Dhaka city, Bangladesh. *Cogent Business & Management*, 5(1), 1514940. <https://doi.org/10.1080/23311975.2018.1514940>
- Scotchmer, S. (2020). *Statista*. http://socrates.berkeley.edu/~scotch/digitalmarkets/%5Cnhttp://josephhall.org/papers/jhall-phd.pdf%5Cnhttp://kuznets.harvard.edu/~athey/position.pdf%5Cnhttp://mpr.ub.uni-muenchen.de/20780/1/MPRA_paper_20780.pdf%5Cnhttp://people.ischool.berkeley.edu/~hal/
- Suchánek, P., & Králová, M. (2019). Customer satisfaction, loyalty, knowledge and competitiveness in the food industry. *Economic Research-Ekonomska Istraživanja*, 32(1). <https://doi.org/10.1080/1331677X.2019.1627893>
- Tran, V. D. (2020). The Relationship among Product Risk, Perceived Satisfaction and Purchase Intentions for Online Shopping. *The Journal of Asian Finance, Economics and Business*, 7(6), 221–231. <https://doi.org/10.13106/jafeb.2020.vol7.no6>

FRAUD EXPERIENCE: HOW FAR IT COULD AFFECT INTERNAL AUDITOR'S JUDGMENT PERFORMANCE

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ABSTRACT

The capacity of internal auditors to make solid judgements is crucial for providing audits of high quality. The role of auditor experience, which is a crucial aspect in this process, has been thoroughly examined, yielding conflicting findings. This study investigates the potential impact of internal auditors' experience with fraud on their judgement performance. A comprehensive literature study was undertaken, specifically examining internal audits, auditor's fraud experience, and audit judgement. External audits and Big 4 firms were deliberately excluded from the analysis. Analysed data from pertinent studies indicates that having general audit experience alone may not improve judgement performance. However, it is the particular experiences, such as fraud detection, that have a substantial influence on auditors' capacity to make accurate judgements. These findings indicate that future study should prioritise in-depth experiences rather than overall length of service in order to have a better understanding of their impact on audit judgements.

Keywords: Internal Auditor's Fraud Experience; Audit Judgment.

1. INTRODUCTION

Internal Auditor making sound judgment is crucial to ensure high quality audits can be delivered (Sarens, De Beelde, & Everaert, 2009). This encompasses the internal auditor's responsibilities of establishing the audit focus area, recognising the risk of fraud, drawing findings on the efficacy of internal control, and offering suitable advice. The efficacy of their judgements is impacted by their professional skepticism and expertise in dealing with instances of fraud. This study investigates the impact of different degrees of fraud experience on the judgement performance of internal auditors. Prior studies emphasise the significance of professional skepticism and the ability to identify red flags, although there is a limited comprehension about the precise function of fraud experience. The objective of this research is to bridge this gap, providing insights to improve the training and development of internal auditors.

2. LITERATURE REVIEW

Audit experience, as described by Chung and Monroe (2000), refers to the unique knowledge, skills, and abilities that auditors acquire via their professional auditing practices. This experience enhances auditors' capacity to assimilate relevant information, perform comparative evaluations of various courses of action, initiate following activities, and improve the efficiency and effectiveness of decision-making. Additionally, it encompasses the preservation of essential data using a dependable memory and the application of precise judgement when carrying out audit responsibilities. As stated by Badara and Saidin (2013), audit experience is the process of gaining skills



by participating in audit tasks that are relevant to audit standards, accounting guidance, and experiences connected to errors, such as financial misstatements. These experiences significantly influence the execution of audit tasks and the overall effectiveness of audits. Auditors must possess professional skepticism, which is essential for establishing a mentality of inquiry and critical evaluation of audit evidence. In their study, Carpenter, Durtschi, and Gaynor (2002) discovered that the presence of professional skepticism greatly improves the auditor's judgment and their ability to identify fraud. Pretnar (2014) highlighted the importance of skepticism in mitigating the likelihood of false financial reporting (Carpenter, Durtschi, & Gaynor, 2002; Pretnar, 2014). Auditors' proficiency in fraud detection is enhanced via their fraud experience in auditing, enabling them to effectively recognise abnormalities and red flags. Dewi, Yasa, and Subiyanto (2022) propose that auditors with more fraud experience possess superior abilities to identify these signs. Hussin, Saleh, and Al-Smady (2019) provide inconclusive findings about the moderating effect of fraud experience on the influence of professional scepticism. Some findings suggest that skepticism without sufficient fraud experience may not significantly enhance fraud detection.

3. METHODOLOGY

For this research, a research question has been set which is "Do internal auditor's experience with fraud affect the internal auditor's judgment performance?" Once set, a predetermined search strategy is developed with inclusion and exclusion. Inclusion comprises of internal audit, auditor's fraud experience, and audit judgment, whereas exclusion comprises of external audit and Big 4. These keywords have been entered into several databases (e.g., Google Scholar, Scopus) to find past studies. Lists of past studies are generated by the search engine and are reviewed to ensure that only relevant studies are included. Data from relevant past studies are extracted and analysed in this research.

4. RESULTS AND DISCUSSION

Previous research undertaken on experience has solely focused on the quantity of experiences of internal auditors. Badara and Saidin (2013) contend that possessing auditing skills does not automatically provide the ability to detect instances of fraudulent behaviour. Nevertheless, it is the specific personal experience of the individual in the subject of fraud detection that grants them the capability to distinguish instances of fraudulent activity. Agustia et al. (2018) similarly hold the same perspective, as their research findings indicate that audit experience has a detrimental effect on the auditor's judgement performance. A study conducted by Rosé (2007) has demonstrated that auditors who possess greater experience in detecting fraudulent activities exhibit superior judgement when compared to auditors with limited or no experience in fraud detection. The direct impact of fraud experience on risk judgment performance was nuanced. Experienced auditors demonstrated better judgment in complex scenarios, but the overall effect was modest, suggesting that experience alone is insufficient without continuous learning and reflective practices. Experience moderated the relationship between professional skepticism and risk judgment performance to some extent. Auditors with high skepticism and extensive fraud experience exhibited the best performance, indicating a synergistic effect (Carpenter, Durtschi, & Gaynor, 2002; Dewi, Yasa, & Subiyanto, 2022; Hussin, Saleh, & Al-Smady, 2019).

5. CONCLUSION

Past research on internal auditor's experience has resulted in contradictory findings on the impact it has on audit judgments. Generalizing the experience by the number of years working of one auditor to another auditor without looking further deep on the actual experience that the auditor gains from working might be the factor for such findings. The study concludes that while professional skepticism is essential for effective fraud detection, the role of fraud experience is more complex. Experience enhances risk judgment performance but is significantly amplified when combined with high levels of professional skepticism. Therefore, training programs for internal auditors should focus on building professional skepticism and providing exposure to various fraud cases to



develop practical experience. Continuous professional development and reflective practices are recommended to sustain and enhance internal auditors' effectiveness in managing risks.

REFERENCES

- Agustia, D., Mustarikah, A., & Qomariya, A. (2018). The Importance of Professional Skepticism as a Mediating Factor of the Influence of Audit Experience on an Auditor's Ability to Detect Fraud. *Strategic Alliance Between AGBA and NIDA*, 15(1), 12–20.
- Badara, M. S., & Saidin, S. Z. (2013). The Relationship between Audit Experience and Internal Audit Effectiveness in the Public Sector Organizations. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 3(3), 329–339.
- Carpenter, T., Durtschi, C., & Gaynor, L. M. (2002). The role of experience in professional skepticism, knowledge acquisition, and fraud detection. Retrieved February, 17(2012), 89.
- Chung, J., & Monroe, G. S. (2000). The effects of experience and task difficulty on accuracy and confidence assessments of auditors. *Accounting and Finance*.
- Dewi, N. L. P. W. K., Yasa, I. B. A., & Subiyanto, P. (2022). Experience Moderating the Effect of Professional Scepticism and Red Flag on Auditor's Ability to Detect Fraud at Public Accountant Firm in Bali Province. *Repositori Politeknik Negeri Bali*.
- Hussin, S. A. H. S., Saleh, N. M., & Al-Smady, A. A. (2019). Auditor demographic factors and dimensions of auditors' skepticism in Jordan. *Asian Journal of Accounting and Governance*, 11(1), 39-48.
- Pretnar, A. S. (2014). Professional skepticism of auditors and risk of fraudulent financial reporting. *Journal of Accounting and Management*, 4(1), 1-16.
- Rosè, J. M. (2007). Attention to Evidence of Aggressive Financial Reporting and Intentional Misstatement Judgments : Effects of Experience and Trust. *Behavioral Research in Accounting*, 19(1), 215–229.
- Sarens, G., De Beelde, I., & Everaert, P. (2009). Internal audit: A comfort provider to the audit committee. *The British Accounting Review*, 41(2), 90-106.

STAKEHOLDER VALUE CREATION AND ITS RELATIONSHIPS WITH ENVIRONMENTAL, SOCIAL AND GOVERNANCE (ESG) PRACTICES: A SYSTEMATIC REVIEW

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ABSTRACT

This study systematically examines the relationship between ESG Practices and Stakeholder value creation in firms. The SALSA framework, which is a widely employed approach for conducting systematic research review and synthesis was deployed by the study. EGS practices from most of the past studies reviewed were found to have a significant and positive impact on corporate values created for stakeholders. Also, most of the studies found environmental and social practices to have significant and positive impact on value creation, while governance practices were found by most of the reviewed studies to demonstrate an insignificant and negatively association with stakeholder value creation. Corporate executives will be guided in their corporate planning and decision-making pertaining to promoting ESG initiatives such that it will drive value for key stakeholders. It will deepen knowledge in the academic community with respect to ESG practice and its deployment as a strategy to pursue value creation for stakeholders of the firm.

Keywords: Stakeholder Value, Environmental Practices, Social Practices, Governance Practices, Systematic Review.

1. INTRODUCTION

In recent times, there have been a changing expectation in the firm' responsibility of creating corporate value. In the past, corporate entities were expected to focus on maximization of shareholders' wealth (i.e., shareholder value creation) as their primary objective. However, this expectation is shifting towards a more long-term focus which is geared towards maximizing wealth creation for all stakeholders of the firm (Zumente & Bistrova, 2021). This growing changing expectation in the firm' responsibility of creating corporate value makes it pertinent for companies to look inwards to identify the factors or activities that could influence their corporate value created for stakeholders. Scholars have recently directed their attention towards the economic, social, and governance practices (ESG) of firms as a noteworthy business activity due to its association with value creation (Kong et al., 2023; Fang et al., 2023).

The interactions of value creation for stakeholders and ESG practices from past studies have shown divergent views and outcomes. While some scholars believe there exists a relationship, some others have reached a contrary position. Wang et al. (2023) and Fang et al. (2023) found a significant relationship between ESG and value creation, while Signori et al. (2021) found an insignificant relationship. Tampakoudis et al. (2021) found a negative relationship, while Fuente et al. (2022) found a significant relationship for the environmental and social pillars, and an insignificant relationship for governance pillar. This divergent outcome motivates the need to undertake a

systematic review study to improve interpretation and strengthen understanding of the ESG and value creation relationship. The study will equally go a long way to contribute to closing the research gap, and there by assisting the business and academic communities in developing a deeper grasp of value creation as driven by ESG practices and encourage companies to actively engage in ESG initiatives.

2. LITERATURE REVIEW

The Resources-based theory and the Stakeholder theory are amongst the widely accepted theories that have been associated with ESG practices and value creation for stakeholders. According to Freeman et al. (2007), stakeholder theory is a concept that emphasises the creation of value. It argues that a corporation achieves the most value when it prioritises value creation for all stakeholders, without unfairly benefiting one group at the expense of another. The resource-based view postulated that a firm would perform maximally when it possesses a competitive edge that enables it to create value for the organisation and its stakeholders. Wernerfelt (2012), supported this view by asserting firms that possess, manage, and make use of significant strategic assets will perform well as a corporation and win in the marketplace. ESG practices when viewed through the strategic lenses of the resources-based and the Stakeholder theories, have the potential to impact the creation of corporate value when they are developed and executed through a cooperative approach that includes all important stakeholders.

3. RESEARCH METHODOLOGY

With the intention to achieve the study objective and reach appreciable conclusions, we deployed the guidelines proposed in a recent study (Liu & Wu, 2023) which utilised the framework of Search, Appraisal, Synthesis, and Analysis (SALSA). The SALSA framework is a widely employed approach for conducting systematic research review and synthesis. The search was conducted on the databases of Web of Science, ScienceDirect, and Scopus. Key words such as ESG, ESG practices, value creation and stakeholder value were found to be essential. However, two key words combinations searches were finally employed to ensure the most relevant and closely related records were gotten. These included “ESG practices and Stakeholder value creation”, and “ESG and Value creation for stakeholders”. The initial search was comprehensive to get an overview of all relevant literature, but was restricted to recent records of interest, and thus only covered the period 2020 to 2024.

4. RESULTS AND DISCUSSION

Our systematic review process, which narrowed down to a comprehensive assessment of the 63 selected articles, examined the impact of the environmental, social and governance practices on the corporate value created for stakeholders. This investigation revealed varying findings and postulations by the different scholar’s publication between the period 2020 to 2024.

Fang et al. (2023) and Kong et al. (2023) in their quantitative studies, all found that ESG practices will significantly and positively enhance corporate value created by firms. A qualitative study was equally conducted by Salihi, et al. (2024) and Zumente & Bistрова (2021). They recognised that the more business organisations appreciate the need for ESG practices, the higher their chances of creating value for the firm and its stakeholders. On the contrary, in the study carried out by Mishra et al. (2024), they found a negative relationship between ESG and corporate value. A further divergent result was also obtained by dos Santos & ucá (2024), in their separate study, which found that ESG practices have no impact on corporate value created for stakeholders. With respect to the environmental practices, Shahrin et al., (2023) found it to have positive impact on firm value, which is consistent with the findings of Mutiah & Rusmanto (2023). Similarly, Mutiah & Rusmanto (2023) found a significant relationship between social practices and value creation for stakeholders, with the exception of the study Shahrin et al., (2023) which found an insignificant negative relationship. Governance practices was found by a couple of the reviewed studies to be insignificant and negatively associated with corporate value created for stakeholders (Shahrin et al., 2023; Kong et al., 2023). However, Wu, et al. (2023) found a positive and significant impact for governance practices.

5. CONCLUSION

The study recognises that it is difficult to outline a single measure that will capture value created for all stakeholder groups in the firm, as the creation of value for stakeholders can differ among the different stakeholder groups given their vary expectations from the firm. EGS practices from most of the studies reviewed was found to have a significant and positive impact on corporate values created for stakeholders. However, a few studies revealed a divergent finding of either insignificant or negative relationship. Further, most of the studies found environmental and social practices to have significant and positive impact on value creation, while governance practices were found by most of the reviewed studies to demonstrate an insignificant and negatively association with stakeholder value creation.

REFERENCES

- dos Santos, V. P., & Jucá, M. N. (2024). The Impact of Sustainable Practices on Creating Value for Banks in Emerging Countries. *Revista de Gestao Social e Ambiental*, 18(4), Article e04687.
- Fang, X., Zhang, W., & Ghoreishi, M. (2023). Does ESG Performance. Affect Corporate Economic Value? Evidence From China's A-Share Listed Companies. *Trans. in Bus and Econ*, 22(3), 977-1002.
- Freeman, R. E., Harrison, J. S., & Wicks, A. C. (2007). *Managing for stakeholders: Survival, reputation, and success*. New Haven, CT: Yale University Press.
- Fuente, G. D. L., Ortiz, M., & Velasco, P. (2022). The value of a firm's engagement in ESG practices: Are we looking at the right side? *Long Range Planning*, 55(4), Article 102143.
- Kong, L., Akbar, M., & Poulova, P. (2023). The Role of ESG Perf. in Shaping Corporate Current and Future Value: The Case of Global Tech Leaders. *Sustainability*, 15(17), 13114.
- Liu, C. & Wu, S.S. (2023), Green finance, sustainability disclosure and economic implications *Fulbright Review of Economics and Policy*, 3(1), 1-24
- Mutiah, S., & Rusmanto, T. (2023). Impact ESG Disclosures on Firm Value: Study of 5 ASEAN Countries. *Economic Affairs*, 68(3), 1433-1439.
- Salihi, A. A., Ibrahim, H., & Baharudin, D. M. (2024). Environmental governance as a driver of green innovation capacity and firm value creation. *Innov. and Green Development*, 3(2), 100110.
- Shahrin, N. S. B., Ramasamy, S., & Yen, Y. Y. (2023). The effect of environmental, social and governance criteria on the corporate value of listed companies in Malaysia. *Asian Economic and Financial Review*, 13(5), 338-352.
- Signori, S., San-Jose, L., Retolaza, J., & Rusconi, G. (2021). Stakeholder value creation: Comparing ESG & value added in European companies. *Sustainability*, 13, Article 1392.
- Tampakoudis, I., Noulas, A., Kiosses, N., & Drogalas, G. (2021). The effect of ESG on value creation from mergers and acquisitions. What changed during the COVID-19 pandemic? *Corporate Governance*, 21(6), 1117-1141.
- Wang, N., Pan, H., Feng, Y. & Du, S. (2023). How do ESG practices create value for businesses? Research review and prospects. *Sustainability Accounting, Management and Policy Journal*, Vol. ahead-of-print No. Ahead-print.
- Wernerfelt, B. (2012) The resource-based view of the firm. *Journ. of Mangt. Inquiry*. 21(1), 124.
- Wu, Z., Lin, S., Chen, T., Luo, C., & Xu, H. (2023). Does effective corporate governance mitigate the negative effect of ESG controversies on firm value? *Econ. Anal. and Pol.*, 80, 1772-1793.
- Zumente, I. & Bistrova, J. (2021). ESG Importance for Long-Term Shareholder Value Creation: Literature vs. Practice. *J. Open Innov. Technol. Mark. Complex*, 7(2), 127.



ECONOMIC LEVEL AS MODERATOR BETWEEN ISOMORPHIC PRESSURE AND XBRL ADOPTION: META-ANALYSIS STUDY

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ABSTRACT

The objective of this research is to present meta-analysis results examining the relationship between isomorphic pressures and XBRL adoption, with economic level as a moderating variable. Previous studies have shown mixed results regarding the influence of isomorphic pressures on XBRL adoption. Meta-analysis offers a systematic and efficient approach to derive robust conclusions from these inconsistent findings. This study synthesizes a total of 99 outcomes from articles published between 2014 and 2024. The findings indicate that isomorphic pressures significantly enhance XBRL adoption, with mimetic pressure exhibiting the largest effect size among the three dimensions of isomorphic pressure. Additionally, the economic level moderates this relationship, with developing countries showing a stronger effect size compared to developed countries. Grounded in institutional theory, this research provides practical implications for policymakers and organizations aiming to implement XBRL, emphasizing the need to consider the varying impacts of isomorphic pressures across different economic contexts. The originality and value of this study lie in its comprehensive synthesis of existing research, offering nuanced insights into the differential effects of isomorphic pressures and the role of economic context in XBRL adoption.

Keywords: Isomorphic pressures; XBRL adoption; Economic Level; Meta-Analysis

1. INTRODUCTION

The adoption of eXtensible Business Reporting Language (XBRL) has gained significant attention in recent years as organizations strive to enhance the transparency, efficiency, and accuracy of their financial reporting. Despite its potential benefits, the adoption of XBRL has been uneven across countries and organizations (Borgi & Tawiah, 2022). This inconsistency raises questions about the factors influencing XBRL adoption. Prior research have examined the influence of isomorphic pressures on XBRL adoption (Tawiah & Borgi, 2022; Slehat, 2018). These pressures include coercive forces from regulatory bodies, normative influences from professional networks, and mimetic tendencies to imitate successful peers. However, existing studies have reported inconsistent findings regarding the relative impact of these isomorphic pressures on XBRL adoption (Sassi et al, 2022; Lakovic et al., 2019). Furthermore, there is a significant research gap in understanding how a country's economic level may moderate the relationship between isomorphic pressures and XBRL adoption. The economic context can shape the strength and nature of these pressures, as well as the resources and incentives available for adopting new reporting standards (Jadil et al., 2032). Therefore, the objective of this research is to present meta-analysis results examining the relationship between isomorphic pressures and XBRL adoption, with economic level as a moderating variable, to provide robust and nuanced insights.

2. METHOD

The study adhered to PRISMA guidelines (Liberati et al., 2009) for a systematic search conducted from 2014 to 2024 using Dimension and Google Scholar with a Boolean search strategy. Recognizing the limitations of relying

solely on computerized databases (Cooper et al., 2019), a thorough approach was taken to organize articles into a comprehensive file containing relevant details. The search term and study selection process is shown in Figure 1. The meta-analysis synthesizes a total of 99 outcomes from 34 articles published that examined isomorphic pressures and XBRL adoption in different economic contexts. Effect sizes were calculated and random-effects models used to estimate the overall effects and moderating role of economic level, while accounting for heterogeneity (Borenstein et al., 2009).

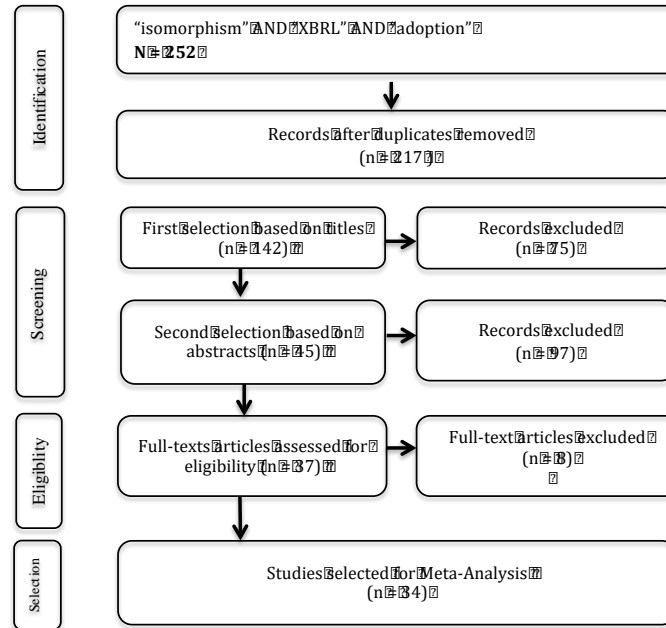


Figure 1. Search Term and Study Selection Process

3. FINDINGS

The findings indicate isomorphic pressures significantly enhance XBRL adoption ($ES = 0.232$; $p < 0.001$), with mimetic pressure exhibiting the largest effect size among the three dimensions ($ES = 0.345$; $p < 0.001$), followed by coercive pressure ($ES = 0.298$; $p < 0.001$) and normative pressure ($ES = 0.169$; $p < 0.001$). This aligns with institutional theory's notion of mimetic isomorphism, where organizations imitate successful peers (Borgi & Tawiah, 2022). The relatively stronger mimetic effect suggests that XBRL adoption may be driven more by organizations following industry leaders and competitors, rather than solely regulatory mandates or professional guidelines. Additionally, economic level significantly moderates this relationship ($Q = 17.205$; $p < 0.001$), with developing countries showing a stronger positive association ($ES = 0.349$; $p < 0.001$) between isomorphic pressures and XBRL adoption compared to developed countries ($ES = 0.067$; $p = 0.614$). This aligns with institutional theory's notion that organizations face varying isomorphic pressures and respond differently based on their institutional environments (Rees et al., 2022). The stronger effect in developing economies suggests they may be more susceptible to coercive, normative, and mimetic forces in adopting new reporting standards like XBRL, likely due to weaker institutional frameworks compared to developed nations. These findings highlight the critical role economic contexts play in shaping organizational responses to institutional pressures during the diffusion of innovations.

4. CONCLUSION AND SUGGESTION

This meta-analysis reveals the significant role of isomorphic pressures in driving global XBRL adoption and how this relationship depends on a country's economic level. Coercive, normative, and mimetic pressures all positively

influence XBRL implementation, with mimetic pressures from peer adoption having the largest effect. The influence of these pressures is notably stronger in developing countries, supporting the idea that institutional environments shape organizational behavior. For policymakers in developing economies, leveraging coercive and normative pressures can drive XBRL adoption, while in developed economies, fostering normative and mimetic pressures through industry collaborations and success stories may be more effective. Organizations should consider their institutional environments and isomorphic pressures when implementing XBRL, focusing on regulatory and peer influences in developing contexts and organizational legitimacy in developed ones. Future research should examine additional moderators like industry characteristics, organizational size, and corporate governance, and qualitative studies could offer deeper insights into how isomorphic pressures affect XBRL adoption in different economic settings.

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REFERENCES

- Borenstein, M., Hedges, L. V., Higgins, J. P., & Rothstein, H. R. (2009). *Introduction to meta-analysis*. John Wiley & Sons.
- Cooper, H., Hedges, L.V., & Valentine, J.C. (2019), *The handbook of research synthesis*. Russell Sage Foundation.
- Rees, J., Taylor, R., & Damm, C. (2024). Opening the ‘black box’: Organisational Adaptation and Resistance to institutional isomorphism in a prime-led employment services programme. *Public Policy and Administration*, 39(1), 106-124.
- Jadil, Y., Rana, N.P. & Dwivedi, Y.K. (2021), A meta-analysis of the UTAUT model in the mobile banking literature: The moderating role of sample size and culture, *Journal of Business Research*, 132, 354–372.
- Borgi, H., & Tawiah, V. (2022). Determinants of eXtensible business reporting language adoption: an institutional perspective. *International Journal of Accounting & Information Management*, 30(3), 352-371.
- Lakovic, T., Rondovic, B., Backovic-Vulic, T., & Ivanovic, I. (2019). The determinants of xbrl adoption: An empirical study in an emerging economy. In *Information Systems: 15th European, Mediterranean, and Middle Eastern Conference, EMCIS 2018, Limassol, Cyprus, October 4-5, 2018, Springer International Publishing, Proceedings 15*, 532-546.
- Liberati, A., Altman, D.G., Tetzlaff, J., Mulrow, C., Gotzsche, P.C., Ioannidis, J.P.A., Clarke, M., Devereaux, P.J., Kleijnen, J. & Moher, D. (2009), The PRISMA statement for reporting systematic reviews and meta-analyses of studies that evaluate health care interventions: explanation and elaboration, *Journal of clinical epidemiology*, 62(10), e1–e34.
- Sassi, W., Ben Othman, H., & Hussainey, K. (2023). The determinants of eXtensible Business Reporting Language (XBRL) adoption: a cross-country study. *International Journal of Disclosure and Governance*, 1-18.
- Tawiah, V., & Borgi, H. (2022). Impact of XBRL adoption on financial reporting quality: a global evidence. *Accounting Research Journal*, 35(6), 815-833.
- Slehat, Y. (2018). Affecting factors on extensible business reporting language (XBRL) adoption among public listed companies in Amman stock exchange. *Australian Journal of Basic and Applied Sciences*, 12(6), 36-40.

THE MEDIATING ROLE OF SELF-EFFICACY AND THE INFLUENCE OF AUDITOR PROFESSIONAL SKEPTICISM IN DETECTING OF FINANCIAL STATEMENT FRAUD

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ABSTRACT

Internal auditors play a crucial role in detecting and preventing financial statement fraud. By evaluating and monitoring the company's internal control systems, internal auditors can identify weaknesses that could be exploited to commit fraud. This study aims to examine the relationship between auditors' professional skepticism, self-efficacy, and the detection of financial statement fraud among auditors of public companies in Indonesia. This research employs a quantitative approach, with data collected through a questionnaire using a Likert scale of 1-5 from a sample of 182 auditors. Data analysis was conducted using Structural Equation Modelling (SEM) with the SmartPLS 4 software. The results of the study indicate that auditors' professional skepticism significantly influences self-efficacy and the detection of financial statement fraud. Self-efficacy was also found to have a significant effect on the detection of financial statement fraud. Additionally, self-efficacy was proven to mediate the relationship between auditors' professional skepticism and the detection of financial statement fraud.

Keywords: Internal Auditor, Professional Skepticism, Self-Efficacy, Detection of Financial Statement Fraud

1. INTRODUCTION

Fraud in financial statements can result in the presentation of misleading information, which in turn can harm investors and erode public confidence in the financial markets. Internal auditors play a crucial role in detecting and preventing financial statement fraud. According to Ghani et al. (2019), by evaluating and monitoring the company's internal control systems, internal auditors can identify weaknesses that could be exploited to commit fraud. Internal auditors' expertise in identifying risks and deeply analyzing data to detect early signs of fraud is essential (Maharani et al., 2024). Moreover, the application of professional skepticism and high self-efficacy can enhance effectiveness in detecting fraud. Skeptical auditors will not readily accept information at face value and will continue to question and evaluate the available evidence (Rustiarini et al., 2021). Meanwhile, high self-efficacy makes auditors more confident and persistent when facing challenges and conflicts, which can enhance diligence and resilience in performing audits (Syed Mustapha Nazri et al., 2023).

Professional skepticism helps auditors to not readily accept information from company management without further verification, thereby enhancing the ability to detect potential fraud. Ningsih & Kusumawati (2022) indicate that strong professional skepticism can help auditors identify and explore potential indicators of financial statement fraud. By applying professional skepticism, auditors are more likely to delve deeper and conduct more comprehensive testing, which can uncover fraud that might be hidden behind seemingly normal financial data (Djaddang & Lysandra, 2022). Therefore, it is important to further investigate the extent to which professional skepticism influences auditors' self-efficacy and its impact on the ability to detect financial statement fraud. High self-efficacy, combined with professional skepticism, can enhance auditors' confidence in facing complex and

difficult situations, and strengthen their resilience in finding and reporting fraud (Hussin et al., 2019; Chen et al., 2023).

According to Fitri (2022), self-efficacy plays a crucial role in guiding an individual's behavior and efforts, and it can significantly impact how confident internal auditors are in their ability to detect fraud in financial statements. In the context of auditing, high self-efficacy can enhance an auditor's motivation and perseverance when facing the challenges and complexities associated with fraud detection. Amlayasa & Riasning (2022) explore the role of self-efficacy in improving auditors' ability to detect fraud, showing that auditors with high levels of self-efficacy tend to be more persistent and creative in seeking the necessary evidence to uncover fraud. Auditors confident in their abilities do not give up easily and are more courageous in facing pressure from management or other difficult situations (Basri & Almutairi, 2023).

This study introduces an important novelty by investigating the role of self-efficacy as a mediating factor. The aim of this study is to analyze the impact of auditors' professional skepticism and self-efficacy on the detection of financial statement fraud, as well as to examine the mediating effect of self-efficacy in the relationship between auditors' professional skepticism and the detection of financial statement fraud.

2. LITERATURE REVIEW

This study is based on the application of Social Cognitive Theory (SCT) to understand and examine the factors involved in the detection of financial statement fraud (Angraini & Siswanto, 2019). According to Djaddang & Lysandra (2022), self-efficacy refers to an individual's belief in their ability to succeed in specific tasks or situations. Professional skepticism and self-efficacy are two distinct yet interrelated concepts in the context of auditing or other professional work. Self-efficacy, or an individual's confidence in their ability to perform tasks or face challenges, can influence attitudes and behaviors in the workplace (Bernawati & Saputra, 2020). High levels of self-efficacy tend to encourage individuals to adopt the skeptical and critical attitudes necessary for performing tasks carefully and meticulously.

Agustina et al. (2021) revealed that professional skepticism plays a crucial role in detecting fraud. When auditors have high levels of skepticism, they tend to question all aspects of financial information and conduct thorough investigations, increasing the likelihood of identifying fraudulent activities. Maintaining a skeptical attitude helps auditors not to accept information at face value but to apply critical thinking and carefully evaluate evidence. Previous research has also explored the components and influences of professional skepticism. Putra & Dwirandra (2019) indicated that delaying judgment affects auditors' skepticism, where auditors who are more diligent in examining financial accounts exhibit higher levels of skepticism. Thus, professional skepticism is a critical attribute for internal auditors to effectively assess evidence, detect fraud, conduct ethical evaluations, and use sound judgment in their auditing roles. It encompasses a skeptical attitude, critical thinking skills, and meticulous examination of financial information to ensure the accuracy and integrity of financial reporting (Fitri, 2022).

Atmaja & Sukartha (2021) highlight the importance of self-efficacy in auditors' behavior regarding fraud disclosure. Auditors with high levels of self-efficacy tend to be more courageous and confident in reporting fraud within the organizational environment. This confidence stems from their belief in their professional abilities as auditors. Auditors with high self-efficacy value their professional reputation and have a strong belief in their skills and knowledge, which can effectively identify and report fraud (Rafnes & Primasari, 2020; Amlayasa & Riasning, 2022). This attitude is supported by a commitment to professional ethics, which encourages them not only to detect but also to disclose encountered fraud. In this context, self-efficacy not only enhances auditors' courage to act but also strengthens their integrity and ethical responsibility in performing audit tasks (Rustiarini et al., 2021). Thus, self-efficacy plays a crucial role in ensuring that auditors are not only competent in detecting fraud but also committed to reporting it with high integrity and responsibility (Noch et al., 2022). Therefore, the hypotheses proposed in this study are as follows:



- H1. Auditor professional skepticism has a positive influence on self-efficacy
- H2. Auditor professional skepticism has a positive influence on the detection of financial statement fraud
- H3. Self-efficacy has a positive influence on the detection of financial statement fraud
- H4. Self-efficacy mediation has a positive effect on the relationship between auditor professional skepticism and detection of financial statement fraud

3. METHODOLOGY

This study uses a quantitative approach to examine the relationship between auditors' professional skepticism, self-efficacy, and the detection of financial statement fraud. Data were collected through a questionnaire using a Likert scale from 1 to 5, where 1 represents strongly disagree and 5 represents strongly agree. The respondents of this study are auditors working in public companies in Indonesia, with a sample size of 182 auditors. This research focuses on three main variables: auditors' professional skepticism, self-efficacy, and the detection of financial statement fraud. Auditors' professional skepticism refers to a critical attitude and always questioning the audit evidence obtained. Self-efficacy measures the auditor's belief in their ability to perform audit tasks. Detection of financial statement fraud relates to the auditor's ability to identify fraud in the audited financial statements. Data analysis was conducted using Structural Equation Modeling (SEM) operated through SmartPLS 4 software.

4. RESULTS AND DISCUSSION

The analysis was conducted in several stages, including outer loading tests, reliability tests, and validity tests, as well as hypothesis testing to determine the extent of the influence of the relationships between variables.

Table 1. Reliability and validity

Variable	Cronbach's Alpha	Composite Reliability	AVE
Auditor Professional Skepticism	0.884	0.914	0.681
Self-Efficacy	0.929	0.946	0.778
Detection of Financial Statement Fraud	0.944	0.957	0.818

The results of the reliability test show that all variables in this study have Cronbach's Alpha and Composite Reliability values well above the threshold of 0.7, indicating that all three variables have excellent reliability.

The results of the validity test show that all variables in this study have Average Variance Extracted (AVE) values greater than 0.6, indicating that all three variables are valid. For the Auditors' Professional Skepticism variable indicates that the indicators used to measure Auditors' Professional Skepticism can explain more than 68.1% of the variance of the construct, indicating that this variable has very good validity. For the Self-Efficacy variable indicates that the indicators for Self-Efficacy can explain about 77.8% of the variance of the construct. This shows that the Self-Efficacy variable has high validity, with its indicators' ability to comprehensively represent the construct. Meanwhile, for the Detection of Financial Statement Fraud variable indicates that the indicators used to measure the Detection of Financial Statement Fraud can explain more than 81.8% of the variance of the construct. This indicates that this variable has very high validity, with its indicators' ability to represent the construct very well.

The results of the hypothesis testing in Table 2 show that all hypotheses proposed in this study are accepted. This is evidenced by the T Statistics values being greater than 1.96 and the P Values being less than 0.05 for all relationships tested.

Table 2. Hypothesis Testing

Hypothesis	T Statistics	P Values	Information
Auditor Professional Skepticism -> Self-Efficacy	6.066	0.000	Significant
Auditor Professional Skepticism -> Detection of Financial Statement Fraud	2.363	0.019	Significant
Self-Efficacy -> Detection of Financial Statement Fraud	6.945	0.000	Significant
Auditor Professional Skepticism -> Self-Efficacy -> Detection of Financial Statement Fraud	4.834	0.000	Significant

Practically, these results underscore the importance of developing professional skepticism and self-efficacy among auditors. Companies and audit institutions should conduct training focused on enhancing professional skepticism and auditors' confidence. This training could include critical audit techniques, analytical thinking, as well as competency and confidence development through simulations and case studies. Additionally, these findings highlight the importance of a supportive work environment for auditors. An environment that fosters skepticism and boosts auditors' confidence can help in more effective fraud detection.

Theoretically, this study adds to the understanding of the mechanism through which professional skepticism influences fraud detection via self-efficacy. It demonstrates that increasing professional skepticism can lead to increased self-confidence, which in turn enhances fraud detection capabilities. Thus, these findings can be utilized to design human resource development strategies in auditing, focusing on enhancing professional skepticism and self-efficacy to improve the quality and effectiveness of audits in detecting financial statement fraud.

5. CONCLUSION

The findings of this study indicate that auditors who are more skeptical tend to have higher confidence in their ability to perform audit tasks. Moreover, the research findings also suggest that more skeptical auditors are better able to detect fraud in financial statements. Furthermore, auditors with high self-efficacy are more effective in detecting fraud. Self-efficacy significantly mediates the relationship between auditors' professional skepticism and the detection of financial statement fraud. This indicates that professional skepticism enhances fraud detection through the improvement of auditors' self-efficacy.

REFERENCES

- Agustina, F., Nurkholis, N., & Rusydi, M. (2021). Auditors' professional skepticism and fraud detection. *International Journal of Research in Business and Social Science (2147-4478)*, 10(4), 275-287.
- Amlayasa, A. A. B., & Riasning, N. P. (2022). The role of emotional intelligence in moderating the relationship of self-efficacy and professional skepticism towards the auditor's responsibility in detecting fraud. *International Journal of Scientific and Management Research*, 5(11), 1-14.
- Anggraini, F. R. R., & Siswanto, F. A. J. (2019). Ethical leadership for internal auditor: An examination of social cognitive theory. *Jurnal Akuntansi dan Keuangan Indonesia*, 16(2), 3.
- Basri, W. S., & Almutairi, A. (2023). Enhancing Financial Self-efficacy through Artificial Intelligence (AI) in Banking Sector. *International Journal of Cyber Criminology*, 17(2), 284-311.
- Bernawati, Y., & Saputra, R. S. (2020). The effect of individual factors, subjective norms, and self-efficacy on the intention of whistleblowing. *Public Management and Accounting Review*, 1(1), 20-31.
- Chen, Y. H., Wang, K. J., & Liu, S. H. (2023). How Personality Traits and Professional Skepticism Affect Auditor Quality? A Quantitative Model. *Sustainability*, 15(2), 1547.
- Djaddang, S., & Lysandra, S. (2022). Self-efficacy, professional ethics, and internal audit quality. *Jurnal Ekonomi dan Bisnis*, 25(2), 401-414.

- Fitri, Y. (2022). The Effect of Self-Efficacy, Seriousness Level of Violation, Professional Commitment, and Self-Awareness on Whistleblowing Intention. *Journal of Accounting Research, Organization and Economics*, 5(1), 58-67.
- Ghani, E. K., Respati, H., Darsono, J. T., & Yusoff, M. M. (2019). The influence of professional scepticism, self-efficacy and perceived ethical climate on internal auditors' ethical judgment in public sector management. *Polish Journal of Management Studies*, 19.
- Maharani, E., Fitrijanti, T., & Mulyani, S. (2024). Pengaruh Pengendalian Internal, Akuntansi Forensik, dan Audit Investigasi terhadap Pencegahan Fraud Pada Bank dalam Pengawasan BPK Ri. *Jurnal Pendidikan Tambusai*, 8(1), 753-764.
- Ningsih, N., & Kusumawati, A. (2022). Roles of Professional Skepticism and Whistleblowing on the Influence of Task Complexity on Auditor's Ability to Detect Fraud. *European Journal of Business and Management Research*, 7(6), 276-280.
- Noch, M. Y., Ibrahim, M. B. H., Akbar, M. A., Kartim, K., & Sutisman, E. (2022). Independence And Competence On Audit Fraud Detection: Role Of Professional Skepticism As Moderating. *Jurnal Akuntansi*, 26(1), 161-175.
- Putra, G. S. A., & Dwirandra, A. A. N. B. (2019). The effect of auditor experience, type of personality and fraud auditing training on auditors ability in fraud detecting with professional skepticism as a mediation variable. *International research journal of management, IT and social sciences*, 6(2), 31-43.
- Rafnes, M., & Primasari, N. H. (2020). Pengaruh Skeptisisme Profesional, Pengalaman Auditor, Kompetensi Auditor Dan Beban Kerja Terhadap Pendeteksian Kecurangan. *Jurnal Akuntansi dan Keuangan*, 9(1), 16-31.
- Rustiarini, N. W., Yuesti, A., & Gama, A. W. S. (2021). Public accounting profession and fraud detection responsibility. *Journal of Financial Crime*, 28(2), 613-627.
- Syed Mustapha Nazri, S. N. F., Zahba, I. H., Zolkafil, S., & Zainuddin, N. (2023). The influence of professional skepticism on fraud detection: the case of malaysian non-big 4 auditors. *Management and Accounting Review (MAR)*, 22(1), 205-232.



TO DETERMINE THE FACTORS INFLUENCING MICRO, SMALL, AND MEDIUM-SIZED ENTERPRISES' (MSMES) FINANCIAL ACCESSIBILITY IN BRUNEI DARUSSALAM

ID: 032

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ABSTRACT

This study investigates the factors influencing financial accessibility for Micro, Small, and Medium Enterprises (MSMEs) in Brunei Darussalam, an essential issue for the country's economic diversification away from oil and gas dependency. This study focuses on human capital, social capital, and financial literacy, analyzing data from 337 MSMEs in the Brunei-Muara district using one-way ANOVA and multiple linear regression analysis. Contrary to expectations, human capital did not significantly impact access to finance, echoing previous studies. Similarly, social capital had an insignificant yet positive correlation with financial access. In contrast, financial literacy was a significant determinant, highlighting the need for MSME managers to develop financial knowledge to effectively navigate financial systems, make informed decisions, and improve access to financing. These findings offer valuable insights for policymakers, MSMEs, and financial institutions to craft targeted strategies, actions, and protocols, and guide future evaluations of government support initiatives.

Keywords: MSMEs; Access to Finance; Human Capital; Social Capital; Financial Literacy.

1. INTRODUCTION

MSMEs in the ASEAN region heavily depend on banks for financing but they often face restricted access to credit due to insufficient information and other factors like early-stage status and limited experience, along with small cash flows and negative credit history. In Brunei, MSMEs struggle with underdeveloped capital markets and a heavy reliance on the oil and gas industry, which hampers financing for the non-oil businesses. As a result, many resort to borrowing from family and friends (Musa et al., 2020). Adding to the revelations, despite comprising about 97% of Brunei's businesses, MSMEs contribute only 44% to employment and 35% to GDP, the lowest among ASEAN nations (Asian Development Bank, 2020). Therefore, this study aims to explore MSMEs' barriers to financial accessibility, focusing on human capital, social capital, and financial literacy, which are significant impediments identified in previous research. More specifically, lower education levels often lead MSME owners to prefer internal financing, as they lack social capital and insufficient financial literacy to be able to secure external funds.

2. LITERATURE REVIEW

This section will explore the theoretical and empirical studies related to the financial accessibility of MSMEs,



focusing on human capital, social capital, and financial literacy.

2.1. Human Capital

Human capital theory posits that entrepreneurs with more human capital are more successful (Becker, 1964; 1975). Investors prioritize human capital when evaluating credit applications, aiding business owners in obtaining financial resources (Fatoki, 2015). High-quality human capital facilitates bank interactions and negotiations (Hj Talip & Wasiuzzaman, 2023). In this study, human capital is measured by the education level of the MSME owner or financial manager, with education indicating superior human capital (Cetindamar et al., 2011).

2.2. Social Capital

Social capital is the networks of relationships among people who live and work in a particular society, enabling that society to function effectively. In the context of MSMEs, it includes formal and informal networks that provide access to resources, information, and support (Segher et al., 2012). Entrepreneurs benefit from relationships with important people and organizations by accessing confidential information (Segher et al., 2012). Ties decrease knowledge gaps for potential investors and improve funding contributions (Shane & Cable, 2002).

2.3. Financial Literacy

Financial literacy refers to the information and skills required to manage funds and make sound financial decisions (Hj Talip & Wasiuzzaman, 2023). It also refers to the ability of an individual to make educated judgments and take appropriate decisions regarding the use and management of money. According to the KBV, financial literacy is a type of knowledge that contributes to the sustainability of MSMEs (Ye & Kulathunga, 2019). Consequently, financial literacy is an essential for business owners.

3. METHODOLOGY

Quantitative methods were employed to examine the factors influencing financial accessibility for MSMEs in Brunei. Businesses were randomly sampled to ensure diversity, and an introductory section in the survey instrument was initially utilized to invite participation while ensuring anonymity. The survey was conducted online using Google Forms, incorporating validated instruments and established scales. Statistical analysis, including one-way ANOVA and multiple linear regression, assist in identifying significant factors, correlations, and patterns affecting MSMEs' ability to secure external financing. Data was presented in tables using SPSS v20, with descriptive analysis covering details such as proprietors' demographics and business characteristics.

4. RESULTS AND DISCUSSION

4.1. Human capital and Access to finance

To assess if MSME owners with higher education levels have easier access to finance, a one-way ANOVA was conducted (Table 1). Participants were divided into five education levels: No formal education, Primary/Secondary education, A Levels/Diplomas, Bachelor's degrees/Professional certificates, and Master's/PhDs.

Table 1: ANOVA - Education and Access to Finance

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2.904	4	.726	1.267	0.283
Within Groups	190.272	332	.573		
Total	193.176	336			

The ANOVA results ($F = 1.267$, $p = 0.283$) indicate no statistically significant difference in access to finance across different education levels. This finding suggests that higher education levels do not significantly affect MSMEs' access to finance, aligning with Abdesamed and Wahab (2012), who also found no major impact of education on

financial accessibility. Other studies (Fatoki, 2015; Kira, 2013) argue for a significant impact, indicating mixed evidence on this topic.

4.2. Social capital and Financial Literacy on Access to finance

A regression analysis examined the relationship between social capital, financial literacy, and access to finance (Table 2).

Table 2: Regression of Social capital and Financial Literacy on Access to finance

Model		Standardized Coefficients Beta	T-Value	Sig.
	(Constant)		9.026	.000
1	Financial Literacy	.247	4.378	.000
	Social Capital	.002	.038	.970

The results demonstrate that financial literacy has a significant positive effect on access to finance (Beta = .247, $p = .000$), while social capital does not (Beta = .002, $p = .970$). The model's R-square is 0.061, indicating that 6.1% of the variance in access to finance is explained by these variables. The hypothesis that social capital positively affects access to finance is not supported, consistent with Shane and Cable (2002). These studies suggest that while social capital can enhance knowledge and reduce information asymmetry, it does not guarantee financing. Informal networks may offer insights but do not consistently lead to direct financial aid (Jenssen & Koenig, 2002). Conversely, financial literacy significantly affects access to finance, supporting the hypothesis. Financial literacy helps MSME owners make informed decisions and manage complex financial products, improving their access to finance (Hj Talip & Wasiuzzaman, 2023). This highlights financial literacy as a crucial asset for securing competitive advantage and navigating financial challenges.

5. CONCLUSION

This study concludes that while social capital and human capital do not significantly impact MSMEs' access to finance, financial literacy plays a crucial role in enhancing financial accessibility. This finding underscores the importance of financial education for MSME owners in developing economies. Future research should explore the long-term effects of financial literacy and investigate other contextual factors such as cultural and institutional influences on access to finance across different regions and industries.

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REFERENCES

- Abdesamed, K. H., & Wahab, K. A. (2012). Do experience, Education and Business plan influence SMEs start-up Bank loan? The Case of Libya. *Australian Journal of Basic and Applied Sciences*, 6(12), 234-239.
- ADB Asia. (Asian Development Bank, 2020). *Asia Small and Medium-Sized Enterprise Monitor Volume 1: Country and Regional*. Asian Development Bank. Retrieve from: <https://data.adb.org/dataset/2020-adb-asia-sme-monitor-vol1-country-regional-reviews>
- Becker, G.S. (1964), *Human Capital: A Theoretical and Empirical Analysis with Special with Special Reference to Education*, The University of Chicago Press, Chicago.

- Cetindamar, D., Gupta, V.K., Karadeniz, E.E. and Egrican, N. (2012), “What the numbers tell: the impact of human, family and financial capital on women and men’s entry into entrepreneurship in Turkey”, *Entrepreneurship and Regional Development*, Vol. 24 Nos 1-2, pp. 29-51, doi: 10.1080/08985626.2012.637348.
- Fatoki, O. (2015), “The effect of human and social capital on the knowledge of financing alternatives by new small business owners in South Africa”, *Corporate Ownership and Control*, Vol. 13 No. 1, pp.840-850, doi: 10.22495/cocv13i1c8p4.
- Haji Talip, S. N. S. H., & Wasiuzzaman, S. (2023). Influence of human capital and social capital on MSME access to finance: assessing the mediating role of financial literacy. *International Journal of Bank Marketing*, 42, 3, 458-485.
- Jenssen, J.I. and Koenig, H.F. (2002), “The effect of social networks on resource access and business start-ups”, *European Planning Studies*, Vol. 10 No. 8, pp. 1039-1046, doi: 10.1080/0965431022000031301.
- Kira, A.R. (2013), “The evaluation of the factors influence the access to debt financing by Tanzanian SMEs”, *European Journal of Business and Management*, Vol. 5, pp. 1-24.
- Musa, S. F. P. D., Idris, P. S. R. P. H., & Basir, K. H. (2020). Exploring the entrepreneurial motivations and barriers of agripreneurs in Brunei Darussalam. In *Economics, Business, and Islamic Finance in ASEAN Economics Community*, 31-56. doi: 10.4018/978-1-7998-2257-8.ch003.
- Okello Candiya Bongomin, G., Ntayi, J.M., Munene, J.C. and Malinga, C.A. (2017), “The relationship between access to finance and growth of SMEs in developing economies: financial literacy as a moderator”, *Review of International Business and Strategy*, Vol. 26 No. 1, pp. 1-24.
- Seghers, A., Manigart, S. and Vanacker, T. (2012), “The impact of human and social capital on entrepreneurs’ knowledge of finance alternatives”, *Journal Of Small Business Management*, Vol. 50 No. 1, pp. 63-86, doi: 10.1111/j.1540-627x.2011.00344.x.
- Shane, S. and Cable, D. (2002), “Network ties, reputation, and the financing of new ventures”, *Management Science*, Vol. 48 No. 3, pp. 364-381, doi: 10.1287/mnsc.48.3.364.7731.
- Ye, J. and Kulathunga, K.M.M.C.B. (2019), “How does financial literacy promote sustainability in SMEs? A developing country perspective”, *Sustainability (Switzerland)*, Vol. 11 No. 10, pp. 1-21, doi: 10.3390/su11102990.

DISECTING WAGE THEFT SUSCEPTIBILITY FACTORS IN MALAYSIAN AIRLINES INDUSTRY

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ABSTRACT

The crime of wage theft occurs when an employer fails to provide appropriate endowment of wages to the employees as mandated by the federal, state, and local laws. The airlines industry is among the most susceptible to wage theft, and the Covid-19 pandemic has further pressured for cost savings that triggered airlines operators to cut wages cost. This study examines factors contributing towards wage theft susceptibility in the Malaysian airlines industry, focusing to examine the influence of employee awareness, gender differences and employer coercive power on susceptibility of wage theft by employer. A questionnaire was used to gather responses from 115 employees from two airlines operators, and the data was analysed using Statistical Package for Social Science (SPSS) software. The results significantly prove that employees are more exposed as a victim of wage theft if their awareness on this matter is lacking. The results also demonstrate significant relationship between employer coercive power and wage theft susceptibility. However, there is no significant difference for the employees to fall victim to wage theft regardless of their gender. The study highlights that issues relating to compliance with law and justice will always be highly problematic, for myriad reasons. The findings indicates that power imbalances, social and cultural factors often exacerbate employees' susceptibility to exploitation and theft. Future studies could consider other factors in influencing wage theft susceptibility such as residency status, overtime violation, and illegal deduction or broader approach towards other industry which could provide further evidence on wage theft susceptibility.

Keywords Wage theft; airlines industry; employee awareness; gender difference; employer coercive power

1. INTRODUCTION

Typically, wage theft happens when the employer fails to pay his employees the salaries owed for work done, which tends to impact communities around the world. Unethical bosses deprive employees of billions of dollars every year in the form of wage theft (Clibborn, 2020). When the Covid 19 pandemic hit the world, the airlines industry was one of the most affected business sectors. As travel restrictions and lockdowns led to a dramatic decline in passenger numbers, airlines faced unprecedented financial pressures, resulting in widespread layoffs, wage cutbacks and reduced working hours. In cutting further costs, some airlines resorted to practices that effectively constituted wage theft, such as requiring employees to work off the clock, withholding overtime pay, and failing to compensate for mandatory training sessions. The pandemic highlighted significant vulnerabilities in labor protections within the airlines industry, underscoring the need for stronger regulatory oversight and enforcement to protect workers' rights in times of crisis. The chaotic environment created by the pandemic made it easier for wage theft to go unnoticed and unreported (Galvin, 2016). With many employees working remotely or under less direct supervision, enforcing labor laws became even much more challenging then.



2. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

This study examines three factors that could influence wage theft susceptibility of the employees in the Malaysian airlines industry – employee awareness, gender difference and employer coercive power. Review of previous literature and arguments in developing the related hypotheses are presented in the next sections.

2.1. Employee awareness and wage theft susceptibility

Employees' lack of awareness on wage theft occurs when an individual's environment does not allow them to determine if an action is ethical. This can apply to individuals in the sense that employees are unable to ascertain whether or not they are the victims of wage theft crimes. At times employees do not take those actions from employers as a crime as it has been a norm in their workplace (Dombrowski, Garcia & Despard, 2017). The employees did not know that it was illegal to be in such a situation of being at disadvantaged in their employment terms. Based on this discussion, it is hypothesized that:

H1. The less aware the employee is, the more likely for the employee to fall victim to wage theft susceptibility.

2.2 Gender difference and wage theft susceptibility

Gender difference is one of the perceived factors of gender discrimination in the airline industry, which plays a role in wage theft susceptibility. A study found that women experience a relatively high rate of minimum wage and overtime violations than men and end up losing even more of their income to wage theft as well (Petrescu-Prahova and Spiller, 2016). The study also found that high percentages of part-time work, temporary work, and unincorporated self-employment exerts significant positive effects on gender wage inequality. Based on this discussion, it is hypothesized that:

H2. The more feminine the gender of the employee is, the more likely for the employee to fall victim to wage theft susceptibility.

2.3 Employer coercive power and wage theft susceptibility

Coercive power refers to the ability of a manager to compel an employee to comply with an order by threatening the employee with disciplinary action if the employee does not adhere to the instruction. According to Weil (2018), an example of the exercise of coercive power includes threatening to dismiss an employee or removing them from crucial tasks. Employees who are subjected to coercive power have a sense of helplessness and there is a high degree of dependence on supervisors, concern about meeting the manager's needs, and a continuous focus on one's responsibilities and performance reviews. Based on this discussion, it is hypothesized that:

H3. The more coercive power the employer possesses, the more likely for the employee to fall victim to wage theft susceptibility.

3. RESEARCH METHODOLOGY

This research employs a quantitative approach through the distribution of a questionnaire to the targeted respondents. The responses from randomly selected participants were gathered through the use of a questionnaire. Individual employees working in the Malaysian airline industry are represented as the study's unit of analysis in this study. Only two major airlines operators in Malaysia were chosen for this study: Malaysia Airlines Berhad and

Air Asia Berhad. The questionnaires were distributed to 200 target employees and a total of 115 responses were usable, and subsequently analyzed using Statistical Package for Social Science (SPSS) software.

4. RESULTS AND DISCUSSIONS

This study provides further understanding on the factors that could influence wage theft susceptibility amongst the employees in the airline industry. The study shows that employee awareness is the most important knowledge in terms of awareness towards wage theft susceptibility, which is the more aware the employees are on the cause and effect of the wage theft crime, the less likely will they fall victim to the crime. The insignificant influence of gender difference shows that most of the respondents are being treated fairly regardless of gender. The gender of the employee does not contribute to the likelihood of employee falling victim to wage theft. The employer coercive power is the biggest factor that contributes to wage theft susceptibility. In many instances, the coercive power by employers are to train and discipline the employees, but it could also lead to initiating the crime if employers when the power is seen as an opportunity to commit wage theft crime. Based on the findings, it shows that employees do face intense pressure from employer coercive power.

5. CONCLUSIONS

This findings of the study on wage theft susceptibility can provide other potential for future research, which is needed to further establish and enhance academic knowledge of concepts and aspects impacting wage theft susceptibility. On the other hand, it is worth noting that the laws and regulations from the relational perspective of policymakers would be able to educate employees from the airline industry on their rights on wage theft crime.

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REFERENCES

- Clibborn, S. (2020). Australian industrial relations in 2019: The year wage theft went mainstream. *Journal of Industrial Relations*, 62(3), 331–340.
- Dombrowski, L., Garcia, A. A., & Despard, J. (2017). Low-wage precarious workers' sociotechnical practices working towards addressing wage theft. *Conference on Human Factors in Computing Systems - Proceedings, 2017-May*, 4585–4598. <https://doi.org/10.1145/3025453.3025633>
- Galvin, D. J. (2016). Deterring Wage Theft: Alt-Labor, State Politics, and the Policy Determinants of Minimum Wage Compliance. *American Political Science Association*.
- Petrescu-Prahova, M., & Spiller, M. W. (2016). Women's Wage Theft: Explaining Gender Differences in Violations of Wage and Hour Laws. *Work and Occupations*, 43(4), 371–400.
- Weil, D. (2018). Creating a strategic enforcement approach to address wage theft: One academic's journey in organizational change. *Journal of Industrial Relations*, 60(3), 437–460.

IMPACT OF AUDIT FIRM AND PARTNER CHARACTERISTICS ON KAM REPORTING

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ABSTRACT

This research investigates the effect of audit firm and partner characteristics on Key Audit Matters (KAM) reporting. The study focuses on the characteristics of audit firms, namely the Big-4 firms, audit fees, busy season, firm specialisation industry, and partner features such as gender, tenure, and specialisation industry. The aim is to investigate the relationship between these characteristics and the number of KAM identified. The study's sample comprises 948 observations of companies listed on Bursa Malaysia from 2017 to 2019. The results of panel data analysis showed that audit fees, firm industry specialists, and partner tenure significantly and positively impact the number of KAM. The effect of the Big-4 and the partner's gender are significant and negative, implying that companies audited by the Big-4 and female partners tend to disclose a lower quantity of KAM. In conclusion, the outcomes of this study reveal that the variability of audit firm and partner characteristics significantly influences KAM reporting, as ISA 701 is a principle-based standard that requires higher professional judgement from auditors. This study also adds to the current academic literature by presenting noteworthy findings that enhance the understanding of KAM disclosures, benefiting auditors, users, and policymakers.

Keywords: Key Audit Matter, KAM, ISA 701, Audit Firm and Audit Partner

1. INTRODUCTION

Audit firms will inevitably differ in how they interpret and apply the quality control requirements and standards based on ISA 701 principles, which communicate Key Audit Matters (KAM) in the auditor's report. Moreover, the implementation of ISA 701 permits auditors to customise audit reports by incorporating data that can improve users' comprehension of the audit process (Smith, 2023). As a result, the quality of KAM reporting may be impacted by the different traits of audit firms and partners. Previous findings show that various attributes of firms and auditors will affect the characteristics of KAM (Shao 2020). The two main factors that affect the quality of its disclosure are the capacity of auditors to identify significant KAM and the competence and independence to disclose these issues adequately (He, 2021). Studies have revealed that organisations that sustain superior transparency are frequently linked to the Big Four (Big- 4) audit firms. This is because these firms typically follow more stringent and extensive guidelines to preserve their impartiality and protect their standing (Kamolsakulchai, 2015). Furthermore, it has been discovered that disclosing audit partners' identities improves auditor accountability, transparency, and audit quality overall (Carcello and Santore, 2015). Therefore, it is crucial to investigate how audit firm and partner attributes may have an impact on KAM disclosure.



2. LITERATURE REVIEW

The number of KAM disclosed is influenced by specific characteristics of audit firms, such as their size, audit fees, and specialisation. This has been supported by various studies conducted by Almulla & Bradbury (2022), Dubois et al. (2023), Hussin et al. (2022), Özcan (2021), Rahaman et al. (2023), Shao (2020), and Wuttichindanon & Issarawornrawanich (2020). Nevertheless, this research yielded mixed outcomes. This could be attributed to the variability across audit firms, as different firms and partners demonstrate unique characteristics and qualities that differentiate them. Further research is needed to understand the impact of audit firm and partner characteristics on KAM, as current findings are inconclusive.

3. METHODOLOGY

This study utilises panel regression models to examine the correlation between the audit firm and partner and the quantity of KAM. This study's sample comprised data from 316 organisations over three years (2017–2019). The dependent variable was determined using the number of KAM used in previous literature (Shao, 2020; Wuttichindanon and Issarawornrawanich, 2020). The audit firm attributes were the independent variables, which included the Big Four (BIG4), audit fees (FEES), busy season (BUSY), firm specialisation industry (FSPEC), and partner features such as tenure (TENURE), gender (GENDER) and specialisation industry (PSPEC). Following past researchers, the company-related control variables comprised profitability (PROFIT), leverage (LEVERAGE), and total asset (SIZE). This study also controlled for audit committee-related factors, such as size (ACSIZE), expertise ratio within the audit committee board (ACEXPERT), the ratio of independent directors on the audit committee board (ACIND) and meeting frequency (ACMEET). Data on audit firm and partner attributes, as well as control variables, were acquired from corporate annual reports and websites. Finally, the financial information was collected from the Thomson Reuters Datastream database.

4. RESULTS AND DISCUSSION

Table 4.1 shows the panel regression results for the association between audit firm and partner characteristics and KAM disclosures, focusing on the number of KAM (KAMNUM). The correlation coefficient between BIG4 and KAMNUM was -0.675, indicating a significant negative relationship ($p \leq 0.01$). This finding contradicts the results reported by Ferreira and Morais (2020) and Wuttichindanon and Issarawornrawanich (2020). Meanwhile, findings in this study suggested that higher FEES resulted in more KAMNUM disclosures. Revealing important information in the audit report improves the quality of the audit since it motivates auditors to put in more work, as seen by the additional fees they incur. The findings of this study confirm the significant correlation between audit fees and KAMNUM, as previously established in prior research (Pinto and Morais, 2019; Maroun and Duboisée de Ricquebourg, 2023).

Contrary to previous studies that suggested a significant negative correlation between the workload of audit partners and the quality of audits, the busy season did not significantly impact the disclosure of KAMNUM.

The FSPEC variable showed a significant positive association with the KAMNUM, with a coefficient value of 0.260 ($p\text{-value} \leq 0.05$). Therefore, the outcomes of this study indicate that organisations evaluated by FSPEC tend to reveal a higher number of KAMNUM disclosures. In contrast to the results reported by Bepari et al. (2022), this study suggests that the firm's industry expertise has a more significant influence than the partner's expertise. GENDER, representing female audit partners, exhibited an unexpected negative correlation with KAMNUM, with a coefficient of -0.206 ($p\text{-value} \leq 0.10$). The findings directly contradicted the results observed in samples gathered in Australia by Bepari et al. (2022) and Abdelfattah et al. (2021) in the United Kingdom. The coefficient for TENURE was 0.0415, with a $p\text{-value} < 0.05$, suggesting a significant positive connection with KAMNUM. According to Shao (2020), partners who have been auditing longer have an advantage in reporting more KAM due to the knowledge they have gathered over the years.

Table 4.1: Panel Regression Results for KAMNUM

Variables	Coefficient	t-Statistic	Prob.
BIG4	-0.675***	-5.890	0.000
FEES	0.280***	3.530	0.000
BUSY	-0.105	-1.160	0.246
FSPEC	0.260**	2.200	0.028
GENDER	-0.206*	-1.690	0.090
TENURE	0.042**	2.040	0.042
PSPEC	-0.066	-0.460	0.648
ACMEET	0.306	1.590	0.112
ACSIZE	-0.041	-0.810	0.416
ACIND	-0.182	-0.820	0.410
ACEXPRT	-0.049	-0.300	0.762
SIZE	0.150***	2.750	0.006
PROFIT	-1.406**	-2.040	0.042
LEVERAGE	0.058**	2.120	0.034
Constant	19.785*	1.920	0.055
Observations	948		
R-squared	0.2594		
N	316		

*, ** and *** represent significance at $p < 0.10$, < 0.05 and < 0.01 , respectively.

5. CONCLUSION

The findings indicate that audit fees, firm specialisation, and audit partner tenure positively and significantly affected the number of KAM. Moreover, a robust association exists between the Big- 4 auditing firms, female audit partners, and the quantity of KAM. Nevertheless, it is crucial to recognise that the observed correlations directly oppose the expected results according to agency theory. However, depending exclusively on the quantity of KAM may not be the conclusive measure of a high-quality KAM disclosure. This discovery suggests that the Big- 4 firms may give more importance to the quality of the KAM content rather than the quantity to improve the value of the information provided by KAM. Hence, future studies should examine the quality content of KAM descriptions and link it with the audit firm and partner attributes to uncover the reason behind these contradicting results.

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REFERENCES

- Abdelfattah, Elmaghoub, M. and Elamer, A.A. (2021) 'Female Audit Partners and Extended Audit Reporting: UK Evidence', *Journal of Business Ethics*, 174(1), pp. 177–197.
- Almulla, M. and Bradbury, M.E. (2022) 'Auditor, Client, and Investor Consequences of the Enhanced Auditor's Report', *International Journal of Auditing*, 26(2), pp. 134–150.



- Bepari, M.K. et al. (2022) 'Determinants of Accounts Level and Entity Level Key Audit Matters: Further Evidence', *Accounting in Europe*, 19(3), pp. 397–422.
- Carcello, J. V. and Santore, R. (2015) 'Engagement Partner Identification: A Theoretical Analysis', *Accounting Horizons*, 29(2), pp. 297–311.
- Ferreira, C. and Morais, A.I. (2020) 'Analysis of the relationship between company characteristics and key audit matters disclosed', *Revista Contabilidade e Financas*, 31(83), pp. 262–274.
- He, L.J. (2021) 'Does Industry Specialist Auditor Provide More Insights in Their audit report? An Empirical Study of Key Audit Matters Section', *Journal of Applied Finance & Banking*, 11(5), pp. 69–94.
- Hussin, N. et al. (2022) 'The Influence of Audit Firm Attributes on KAM Disclosures in FTSE100 in Malaysia', *Management and Accounting Review (MAR)*, 21(2), pp. 239–262.
- Kamolsakulchai, M. (2015) 'The Impact of the Audit Committee Effectiveness and Audit Quality on Financial Reporting Quality of listed company in Stocks Exchange of Thailand', *Bus. Econ. Res. Online*, 4(2), pp. 2304–1013.
- Maroun, W. and Duboisée de Ricquebourg, A. (2023) 'How auditors identify and report key audit matters - An organizational routines perspective', *The British Accounting Review*, 56(2), p. 101263.
- Özcan, A. (2021) 'What Factors Affect the Disclosure of Key Audit Matters', *International Journal of Management Economics and Business*, 17(1), pp. 149–162.
- Pinto, I. and Morais, A.I. (2019) 'What matters in disclosures of key audit matters: Evidence from Europe', *Journal of International Financial Management and Accounting*, 30(2), pp. 145–162.
- Rahaman, M.M., Hossain, M.M. and Bhuiyan, M.B.U. (2023) 'Disclosure of key audit matters (KAMs) in financial reporting: evidence from an emerging economy', *Journal of Accounting in Emerging Economies*, 13(3), pp. 666–702.
- Shao, X. (2020) 'Research on Disclosure Status and Influencing Factors of Key Audit Matters', *Modern Economy*, 11(03), pp. 701–725.
- Smith, K.W. (2023) 'Tell Me More: A Content Analysis of Expanded Auditor Reporting in the United Kingdom', *Accounting, Auditing and Accountability Journal*, 108, p. 101456.
- Wuttichindanon, S. and Issarawornrawanich, P. (2020) 'Determining factors of key audit matter disclosure in Thailand', *Pacific Accounting Review*, 32(4), pp. 563–584.

BUILDING SUSTAINABLE FUTURE: STRATEGIES FOR FINANCIAL HEALTH IN HIGHER EDUCATION INSTITUTIONS

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ABSTRACT

This study, titled "Building a Sustainable Future: Strategies for Financial Health in Higher Education Institutions," conducts an extensive review and analysis of the existing literature on financial sustainability in Malaysian higher education institutions. By uncovering predominant strategies, evaluating the effectiveness of current practices, and identifying key challenges, this paper provides a comprehensive understanding of financial sustainability in this context. The review was carried out using relevant academic journals to identify prevalent themes, successful approaches, and significant obstacles, while also highlighting research gaps and offering recommendations for future studies and practical applications. The findings contribute to the academic discourse by synthesizing current knowledge, proposing actionable insights for policymakers and university administrators, and supporting the development of robust financial strategies to ensure the long-term viability and success of higher education institutions in Malaysia.

Keywords: Financial Sustainability; Higher Education Institutions (HEIs)

1. INTRODUCTION

The Malaysian Education Blueprint, a comprehensive long-term plan by the Ministry of Education (MOHE), envisions a modernized education system equipping citizens with the skills necessary for a high-income economy and propelling Malaysia towards developed nation status. A cornerstone of this vision lies in financially sustainable Higher Education Institutions (HEIs) (Kuzmina, 2021). However, Malaysian HEIs currently face a confluence of challenges jeopardizing their financial well-being.

Globally, public funding for HEIs is on the decline (Di Carlo et al., 2019) placing pressure on institutions to identify alternative revenue streams while simultaneously addressing the escalating demand for enhanced services (Mamat et al., 2021). Traditionally reliant on government grants, Malaysian HEIs must adapt to a new reality that necessitates greater financial independence (Nik Ahmad et al., 2019). This shift is paramount to ensuring long-term financial viability and reducing dependence on potentially volatile government support (Abdul Kadir & Cotter, 2019). The recent COVID-19 pandemic further highlighted the critical role of financial resilience in enabling universities to weather economic downturns (Kapustian et al., 2021).

Financial sustainability for HEIs transcends mere revenue generation. It encompasses a holistic approach to resource management that fosters long-term stability. Financial distress can be detrimental for HEIs, hindering their ability to deliver quality education (Kalomo & Chama-Chiliba, 2022). Conversely, achieving financial sustainability allows universities to generate income exceeding their operational expenditures, contributing to a cycle of continuous growth and reinvestment (Musiega et al., 2021). Furthermore, financial sustainability fosters accountability and performance management by striking a balance between internal financial objectives and external stakeholder expectations (Parker, 2013).



2. LITERATURE REVIEW

The concept of financial sustainability for Higher Education Institutions (HEIs) has transcended its original focus on merely covering operational costs. As posited by Kuzmina (2021) it now encompasses the effective management of financial resources to ensure the long-term viability of the institution. Traditionally, the emphasis was placed on efficient resource utilization. However, the definition has undergone an evolution to encompass the crucial need for securing sustainable income streams that not only support operational expenses but also contribute to the institution's core educational mission (Hasbullah & Ab Rahman, 2021). This broadened definition underscores the paramount importance of financial sustainability for HEIs. It equips them to navigate the complexities of financial challenges, adapt to a continuously evolving educational landscape, and contribute to broader sustainability goals. By implementing sound financial management practices, diversifying revenue sources, and establishing robust performance measurement and management systems, HEIs can cultivate long-term financial resilience and enhance their competitive edge within the higher education sector.

3. DISCUSSION AND CONCLUSION

In essence, achieving financial sustainability necessitates a holistic approach encompassing revenue generation, cost reduction, and efficiency improvements. HEIs that can effectively implement these strategies will be better positioned to weather financial challenges and ensure their long-term viability in the dynamic landscape of higher education. Further research is warranted to explore the effectiveness of these strategies in diverse institutional contexts and to identify additional approaches that can contribute to the financial sustainability of HEIs globally.

REFERENCES

- Abdul Kadir, M. R., & Cotter, C. D. (2019). *Performance on the Initiatives Taken Toward Financial Sustainability of Public Universities in Malaysia. 1*, 3607–3611. <https://doi.org/10.35940/ijeat.A2697.109119>
- Di Carlo, F., Modugno, G., Agasisti, T., & Catalano, G. (2019). Changing the accounting system to Foster Universities' financial sustainability: First evidence from Italy. *Sustainability (Switzerland)*, *11*(21).
- Hasbullah, N. A., & Ab Rahman, A. (2021). Endowment and Waqf Funds in Malaysian Higher Education: a Conceptual Study. *Jurnal Syariah*, *29*(1), 127–154. <https://doi.org/10.22452/js.vol29no1.6>
- Kalomo, C., & Chama-Chiliba, C. (2022). Assessing the Internal Financial Capacity of the University of Zambia for Financial Sustainability. *Open Journal of Business and Management*, *10*(04), 2115–2126. <https://doi.org/10.4236/ojbm.2022.104107>
- Kapustian, O., Petlenko, Y., Ryzhov, A., & Kharlamova, G. (2021). FINANCIAL SUSTAINABILITY OF A UKRAINIAN UNIVERSITY DUE TO THE COVID-19 PANDEMIC A CALCULATIVE APPROACH. *Investment Management and Financial Innovations*, *18*(4), 340–354. [https://doi.org/10.21511/imfi.18\(4\).2021.28](https://doi.org/10.21511/imfi.18(4).2021.28)
- Kuzmina, J. (2021). Financial Sustainability of Higher Education Institutions. *SOCIETY. INTEGRATION. EDUCATION. Proceedings of the International Scientific Conference*, *6*, 324–335. <https://doi.org/10.17770/sie2021vol6.6399>
- Mamat, S., Nik Ahmad, N. N., & Mohd Said, J. (2021). Financial sustainability in Malaysian public universities: coping with or embracing change? *Journal of Public Budgeting, Accounting and Financial Management*, *33*(5), 599–617. <https://doi.org/10.1108/JPBAFM-09-2020-0157>
- Nik Ahmad, N. N., Ismail, S., & Siraj, S. A. (2019). Financial sustainability of Malaysian public universities: officers' perceptions. *International Journal of Educational Management*, *33*(2), 317–334. <https://doi.org/10.1108/IJEM-06-2017-0140>
- Parker, L. D. (2013). Contemporary University Strategising: The Financial Imperative. *Financial Accountability and Management*, *29*(1), 1–25. <https://doi.org/10.1111/faam.12000>

GREEN INNOVATION AS A LEVER FOR FINANCIAL EFFICIENCY: MEDIATING EFFECTS OF CORPORATE REPUTATION AND RISK MANAGEMENT ON CAPITAL COSTS

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ABSTRACT

Against the backdrop of increasing emphasis on sustainable development and growing awareness of environmental protection around the world, green innovation has become a key strategy for companies to enhance competitiveness and fulfill their social responsibility, especially in terms of capital cost management, showing significant potential. This study aims to explore how green innovation affects the cost of capital of listed companies by enhancing corporate reputation and optimizing corporate risk management, and to further analyze the role of two mediating variables, corporate reputation and corporate risk management, in the process. The study uses structural equation modeling (SEM) to analyze data related to listed companies in China's A-share market between 2018 and 2022. The results show that green innovation significantly enhances corporate reputation and effectively reduces corporate risk. Green innovation significantly reduces the cost of capital through the dual mediating role of corporate reputation and risk management. These findings highlight the importance of green innovation in reducing the cost of capital and enhancing financial efficiency, and emphasize that firms should take into account the long-term benefits of green innovation investments and their positive impact through improved corporate reputation and risk management when making strategic decisions.

Keywords: Green innovation; corporate reputation; risk management; cost of capital; structural equation modeling.

1. INTRODUCTION

Sustainable development is now a global concern. In response to this issue, the Chinese Government has implemented a "peak carbon and carbon neutral" policy to accelerate the construction of a green and low-carbon economic system and to promote the transformation of economic development. Investors, especially small and medium-sized investors, have become a key force in promoting these activities by focusing on listed companies to promote green technological innovations. Consumers tend to support companies that implement environmentally friendly policies. More and more companies are integrating environmental management into their business development considerations,

In terms of practice, environmental regulations increase corporate's compliance costs and operational complexity for businesses. Green innovation increase costs in the short term but enhance resource efficiency and economic benefits in the long term. Firms investing in green innovation may face financing challenges due to the long payback period and high risk of green projects. At the same time, the high cost of green innovation may complicate the capital structure and increase financial costs and risks.

In terms of the literature, while the impact of green innovation on financial performance has been widely studied, research on its direct impact on the cost of capital is relatively limited. Research on how corporate reputation acts as a mediating variable between green innovation and the cost of capital remains insufficient. Research on the specific mechanisms by which green innovation affects the cost of capital through improved risk management remains scarce. There are fewer systematic studies on how green innovation, corporate reputation, and risk management work together to influence the cost of capital. In addition, emerging market firms face different

institutional environments and market conditions, further in-depth research on the relationship between green

innovation and the cost of capital is particularly important, while existing mediation effect studies mostly rely on descriptive statistics and lack advanced analysis such as structural equation modeling.

In summary, although there is a certain research foundation, there is still a significant lack of research in systematically analyzing the combined impacts of green innovation, corporate reputation, risk management and cost of capital, the specific mechanisms of the mediating effects and their applications in emerging markets, which provides a broad space for future research to explore.

2. LITERATURE REVIEW

Green innovation has been widely studied as a central part of corporate sustainability strategies. The existing literature's result shows that green innovation not only helps firms to meet increasingly stringent environmental regulations, but also improves corporate reputation and market competitiveness and reduces operating costs.

A good corporate reputation can reduce the cost of financing and increase consumer trust, thereby enhancing the competitiveness of firms. However, the specific mechanisms through which green innovation affects the cost of capital through corporate reputation have not been fully explored.

Effective risk management strategies can significantly reduce the cost of capital and enhance corporate stability. Existing research has focused on traditional risk management models, such as the COSO and ISO 31000 frameworks, but there has been less research on the practical implications of combining green innovation with risk management. In addition, the specific mechanisms of how green innovation changes the cost of capital by influencing risk management have not been fully explored.

Existing literature has extensively explored the multiple factors that influence the cost of capital of firms. Research suggests that green innovation can reduce the cost of capital by improving corporate reputation and reducing operational risk. However, research on how green innovation specifically affects the cost of capital through corporate reputation and risk management is still limited.

While existing research has addressed the impact of green innovation on capital cost, there is still insufficient research on how it affects the cost of capital through corporate reputation and risk management in an integrated manner. Future research could further explore the differences in the role of these mediating effects across industries, as well as explore the long-term economic impacts of green innovation to provide more customized strategic recommendations for different industries.

3. METHODOLOGY

3.1. Sample selection

A sample of 500 Chinese A-share listed companies is selected for the period from 2018 to 2022. Data sources include corporate annual reports, social responsibility reports and third-party data sources such as CSMAR and Wind database.

3.2. Variables definition

The dependent variable is the cost of capital, measured by the weighted average cost of capital (WACC). The independent variable is green innovation (GIN), measured by the number of green patents obtained by the firm. Of the two mediating variables, corporate reputation is measured by product and service competitiveness and CSR score. According to the proxy defined by Andersen (2008), the construct of corporate risk management (CRM) is calculated as the coefficient of variation of firm sales divided by the coefficient of variation of firm ROA. The control variables include corporate size (SIZ), capital structure (LEV) and market conditions (MV). Corporate size is used to account for the corporate size affects a corporate's cost of capital, which is measured as the natural logarithm of total assets. Capital structure, particularly the level of debt, directly affects the firm's cost of capital. Debt financing may reduce a firm's cost of capital by bringing in tax credits, but it also increases financial risk.

In highly volatile markets, market conditions (like the market volatility) may have a significant impact on a firm's cost of capital. It is measured by market volatility indicators (use share price volatility)

4. RESULTS AND DISCUSSION

The results show that green innovation has a significant positive effect on corporate reputation. There is a significant negative relationship between corporate reputation and the cost of capital, Green innovation has a positive impact on risk management effectiveness. Improved risk management significantly reduces the cost of capital. Corporate reputation and risk management play an important mediating role between green innovation and the cost of capital. Corporate reputation has a positive effect on the effectiveness of risk management. Improved risk management has a significant positive effect on corporate reputation.

Green innovation not only directly enhances a firm's market reputation, but also indirectly reduces the cost of capital through improved risk management. This emphasize the need for firms to consider the multiple benefits of green innovation when making strategic decisions. Improved corporate reputation not only directly reduces the cost of capital, but also enhances a firm's ability to manage risk. The effectiveness of risk management has a direct impact on a firm's cost of capital and reputation, suggesting that firms need to continuously invest in optimizing and innovating their risk management systems. Policies that encourage green innovation and improved risk management capabilities of firms may have the dual benefit of helping to reduce environmental risks throughout the economic system, contributing to the goal of sustainable development, and enhancing the market competitiveness and financial stability of firms, thereby attracting more investment and lowering the cost of capital.

5. CONCLUSION

The study highlights the critical role of green innovation in enhancing corporate reputation and improving risk management, which collectively contribute to reducing the cost of capital for listed companies. Future research should explore the application of green innovation across different industries and evaluate the impact of various green technologies on financial performance and risk mitigation.

REFERENCES

- Andersen, T. J. (2008). The performance relationship of effective risk management: Exploring the firm-specific investment rationale. *Long range planning*, 41(2), 155-176.
- Bromiley, P., McShane, M., Nair, A., & Rustambekov, E. (2015). Enterprise risk management: Review, critique, and research directions. *Long range planning*, 48(4), 265-276.
- Chang, C. H. (2011). The influence of corporate environmental ethics on competitive advantage: The mediation role of green innovation. *Journal of business ethics*, 104, 361-370.
- Khan, A., Rehman, Z. U., Khan, M. I., & Badshah, I. (2024). Does corporate risk management lead to risk mitigation and firm performance? Evidence from Asian emerging markets. *Management Research Review*, 47(3), 329-352.



THE CHALLENGES TO THE IMPLEMENTATION OF LEAN SIX SIGMA IN MALAYSIA PLANTATION COMPANY

ID: 047

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ABSTRACT

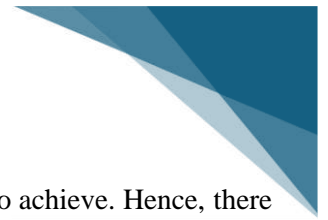
Lean Six Sigma (LSS) integrates both approaches to enhance speed, customer satisfaction, and cost efficiency. LSS has been increasingly applied in multinational corporations (MNCs) around the world to enhance performance and maximize value-added time. Despite the benefits of LSS implementation, it also presents challenges. The objective of this research is to explore the challenges of LSS implementation in a Malaysian plantation company. A qualitative method through a case study was adopted for the data collection process. Thematic analysis was used to understand the challenges of LSS implementation. The findings highlight significant themes associated with the challenges, including employee resistance towards change, buy-in from top management and employees, failed projects, measurement issues and higher cost of training. These challenges need to be addressed to ensure the successful implementation of LSS. The findings of this study enhance the current literature on the challenges of LSS implementation in Malaysian plantation company and provide insights to policymakers and organizations, especially in the plantation sector, on implementing LSS.

Keywords: Lean Six Sigma; Malaysia Plantation; Challenges

1. INTRODUCTION

In Japan, a new approach known as The Toyota Production System, Ohno (1988), which later became known as Lean Manufacturing, was developed to enhance process performance. Known as the continuous improvement strategy, Lean aims to minimize waste and decrease variability, Shah and Ward (2007) suggest maximizing the so-called "value-added time" as a component of the overall lead time. Different types of waste can be found in a business process such as unnecessary waiting time, overproduction, defects, inefficient transportation, unutilized talent, over-processing of information, and lack of utilization of talents and knowledge (Gardner, 2013). Meanwhile, the Six Sigma (SS) approach is executed by projects with a strategic project selection process, performed in structured techniques and supported by improvement specialists and engaged leaders using a massive set of tools including advanced statistical tools in improving quality (Schroeder et al., 2008).

Snee and Hoerl (2007) state that while Lean focuses on enhancing the flow between processes, SS primarily focuses on process improvement. Basu (2009) defines Lean Six Sigma (LSS) as an approach to problem-solving that maximizes efficiency. In addition, LSS is an approach that aims to maximize shareholder value by rapidly improving speed, customer satisfaction, and quality while reducing cost and invested capital (Akkucuk, 2014). Another advantage of LSS is that it helps in decreasing the operational costs, by reducing the amount of waste emitted from the production process, and the costs incurred to produce products are also reduced (Gardner, 2013).



Even though LSS has provided enormous advantages, proper implementation is difficult to achieve. Hence, there is a lack of studies on the challenges of implementing LSS in developing countries, particularly in the plantation company. Thus, this study examines the challenges of implementing LSS in Malaysia Plantation company. The objective of the study is to explore the challenges of the implementation of LSS in Malaysia Plantation company. To accomplish the research objective, the research question has been constructed as follow: What are the challenges of the implementation of LSS in Malaysia Plantation company? Therefore, this study examines the challenges of implementation of LSS, and the data gathered from practitioners at Malaysia Plantation company. A thorough grasp of the primary challenges will allow management to make informed judgments about initiatives for quality enhancement.

2. LITERATURE REVIEW

Successful LSS implementation has offered huge benefits to organizations worldwide; yet Nordin et al. (2010) and Balle (2005) stated that few corporations are not successful in deploying this system. Thus, the success or failure of the LSS implementation based on the organization, is dependent on the presence of several factors outlined below.

2.1 Employees' resistance to the change

One of the successful large firms in Korea identified resistance as a challenge to implementing LSS (Blitz, 2017). The resistance derived from the Research and Development (R&D) department, who are highly knowledgeable specialists, resist working together with the manufacturing teams. Therefore, the firm motivates employees to work together by establishing a clear vision with specific goals of the organization and the firm initiates team-building events to break down the resistance (Blitz, 2017).

2.2 Lack of senior management commitment

There is similar evidence found from the study of Antony and Cudney (2016) that, there is a lack of support and commitment from the senior executive teams upon implementing LSS. Many senior executive teams are not clear with the LSS vision, which then leads to poor communication between departments and faculties and leads to poor understanding of LSS (Antony & Cudney, 2016). Thus, to clearly understand the LSS, in an organization, it is important to identify the challenges and the difficulties that may occur during the implementation of LSS.

3. METHODOLOGY

Qualitative researchers are interested in how people make sense of their surroundings and interpret, and experience various events and the goal of qualitative research is to understand the meaning (Hignett & McDermott, 2015). Although qualitative data sources are numerous and diverse, there are three primary types: spoken (interviews), visual (observations), and written (documents) and the sampling approach for every research effort should be justified in terms of the sample's suitable (or logic) to the intellectual topic (Hignett & McDermott, 2015). Thus, this study used primary sources as a data collection approach, focusing on individuals interviewed as semi-structured interviews for a thorough understanding of the challenges of LSS implementation, and used non-probability sampling to collect data from 13 LSS practitioners who were directly involved in the LSS implementation at one of Malaysia Plantation company.

The semi-structured interviews were recorded with an electronic device. The data was then transcribed and organized into themes. According to Ryan and Bernard (2003), the most important aspect of qualitative research is identifying the theme. The method of determining themes relies on word recurrence. The data was manually transcribed into Microsoft Excel. Then, some of the recorded material was translated into English (since several respondents responded in Bahasa Melayu). Furthermore, the transcription was divided into themes and categorized according to word repetition. Examples of themes include challenges, resistance to change from employees and

senior management, buy-in from top management and employees, failed projects, measurement issues, and higher cost of training. The material was interpreted according to the themes and codes. The results were then compared to earlier research, and conclusions were reached.

4. RESULTS AND DISCUSSION

This research revealed the challenges in implementing LSS in the Malaysia Plantation company. During this study occurred, there are five main categories of challenges were discovered. The challenges are resistance to change, buy-in, failed projects, measurement issues, and the higher cost of training employees.

4.1 Resistance towards change

The data collected in this case study records the resistance that took place by the early implementation of LSS into one of the Plantation divisions. LSS was initially seen as a distraction. The early resistance was reduced within the years of the study. A non-executive emphasized:

“The major challenge is the resistance towards change because it is not very easy to change one perception towards the current process so at least we need to give them a greener pasture and try to influence and persuade them to invest some money to better future benefits”.

Later, this LSS methodology improved processes, products, and services. The capability to eliminate errors has helped divisions to increase profitability, productivity, and customer satisfaction. However, what is vaguely revealed are the hurdles that stand in the way of implementing the LSS.

4.2 Buy-in from top management and employees

Later, the challenge faced in implementing the LSS is to buy into the LSS process from the employees. Hence, the buy-in process involved the top management to the bottom down. The top management brings in resistance from other employees in the finance department since they view it as not their idea but rather the idea of the organization. This is evident from Executive 1 who stated:

“A major challenge is the buy-in from anyone. People are sometimes resistant to change. Sometimes they need to see the proven results first before they are going to invest effort in it. There has been always a challenge because to do an LSS project, you need to have a collaborative effort from the company... That’s why we need a proven financial record because this is how it helps to implement LSS. From there, when you see the total savings then, the buy-in will be ease”.

4.3 Failed project

Another challenge is wrong data, or a failed project chosen. Many LSS projects appeared to present challenges, however, in most of the cases, the project team could successfully work using the SS tools Define, Measure, Analyse, Improve and Control (DMAIC) tools and approach to complete the project objectives. Executive 8 emphasized:

"Let's say we already get enough project data but then once we check it through the SS system throughout Minitab software, the bell curve shows the project data is invalid, so then what we can do is to collect again all the project data back. Sometimes, the bell curve will have some external causes which as we can't solve the data of the project such as an example of Mother Nature problem and human... Once this data is not valid, then we must cancel the projects and then start again to collect new data and start again on the new projects..."



4.4 Measurement issues

Traditional shift responses based on logic and experience were reduced in priority as resources were diverted to data collection using the LSS approach. Employees found that they wasted less time in collecting data and using the appropriate measurement to improve the working environment. Another Executive 6 who respond to it:

"At the end of the process in mills, we still have the palm oil fruits in the place of assembly, but based on the senior people who will estimate how many tonnes. So, they don't have the measurement tools only estimation based on experience".

5. CONCLUSION

This comprehensive research sheds light on the challenges of the implementation of LSS in the Malaysia Plantation company. This research finding aligns with the literature review in terms of employee's resistance to change and the higher cost of implementing LSS. Meanwhile, there are additional findings from this study such as buy-in from top management and employees, failed projects, and measurement issues. Overall, the challenges of the implementation of LSS are a game-changer for any organization that prioritizes cost and profitable efficiency. This research enhances the current literature on the challenges of the implementation of LSS in Malaysia Plantation company and provides some insight to policymakers and organizations especially Plantation organizations.

REFERENCES

- Akkucuk, U. (2014). Application of Lean Six Sigma Methodology in Design and Improvement of Financial Services, Globalization of Financial Institutions, 151-164
- Antony, J., & Cudney, E. A. (2016). Lean Six Sigma journey in a UK higher education institute: Challenges, projects, and key lessons learned. In 2016 ASEE Annual Conference and Exposition. *American Society for Engineering Education*, 25-32
- Balle, M. (2005). Lean attitude-lean application often fail to deliver the expected benefits but could the missing link for successful implementations be attitude? *Manufacturing Engineer*, 84, 2, 14-19
- Basu, R. (2009). *Implementing Six Sigma and Lean: A practical guide to tools and techniques*. Elsevier Butterworth-Heinemann.
- Blitz, A. (2017). Lessons from the steel industry: if you can't compete on price, innovate your way to value-added differentiation, *Strategy and Leadership*, 45, 5, 26-32
- Gardner, K. (2013). *How to successfully implement lean six sigma: The lean six sigma deployment roadmap*. Pinnacle Press, Saline, Michigan.
- Hignett, S., & McDermott, H. (2015). Qualitative methodology. *Evaluation of human work*, 119-138
- Nordin, N., Md Deros, B., & Wahab, D.A. (2010). A survey on lean manufacturing implementation in Malaysian automotive industry. *International Journal of Innovation, Management and Technology*, 1, 4, 374-380
- Ohno, T. (1988). *Toyota Production System: Beyond Large-scale Production*. Productivity Press, Portland, Oregon, USA.
- Ryan, G., & H. R. Bernard (2003). Techniques to identify themes. *Field Methods*, 15, 1, 85-109
- Schroeder, R.G., Linderman, K., Liedtke, C., & Choo, A.S. (2008). Six Sigma: Definition and underlying theory. *Journal of Operations Management*, 26, 4, 536-554
- Shah, R., & Ward, P.T. (2007). Defining and developing measures of lean production. *Journal of Operations Management*, 25, 4, 785-805
- Snee, R.D., & Hoerl, R.W. (2007). Integrating lean and Six Sigma – a holistic approach. *Six Sigma Forum Magazine*, 6,3, 15-21



BRIDGING THE GAP: INSTITUTIONAL PRACTICES, ASSET MISAPPROPRIATION, AND GOOD GOVERNANCE OF THE MALAYSIAN PUBLIC SECTOR ASSET MANAGEMENT

ID: 048

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ABSTRACT

Despite the existence of comprehensive policies and regulations, the Malaysian public sector continues to grapple with recurring issues in asset management, as highlighted by the Auditor-General's reports. This article explores the relationship between institutional practices, asset misappropriation, and the role of good governance principles in addressing the persistent challenges faced in managing public assets. Incorporating insights from institutional theory, fraud triangle theory, and stewardship theory, this study investigates how institutional practices and asset misappropriation, coupled with good governance principles, influence asset management performance. Through a survey encompassing 152 respondents from Malaysian government agencies and employing Smart Partial Least Square (PLS-SEM) analysis, the research examines eight hypotheses. The findings underscore the pivotal role of institutional practices in ensuring compliance with asset management standards and regulations, thereby enhancing asset management performance. However, despite the existence of robust policies, instances of asset misappropriation persist, indicating a disconnect between policy formulation and implementation. Furthermore, the study reveals the moderating effect of good governance principles on the relationship between institutional practices and asset management performance, highlighting the need for their effective integration. This article offers crucial insights and recommendations by elucidating the gap between policy intent and operational reality within Malaysian public sector asset management. It emphasizes the imperative of bridging this divide through the effective application of good governance principles, ultimately fortifying the integrity and efficacy of asset management practices in the public sector.

Keywords: Asset Management Performance; Institutional Practices; Asset Misappropriation; Good Governance Principles; Malaysian Public Sector.

1. INTRODUCTION

The public sector plays a critical role in society by providing essential services such as education, healthcare, and infrastructure, which are vital for economic growth and social justice (Bourgon, 2007; Saleh & Al-Nawfali, 2022; Shah, 2005). Despite significant reforms under New Public Management (NPM) to enhance asset management (AM), Malaysian government agencies still face persistent issues in AM, as highlighted by recurring findings in Auditor-General reports. These issues include non-compliance, ineffective usage, and asset misappropriation, undermining the public sector's ability to deliver optimal services and maintain public trust.

This study examines the relationship between institutional practices, asset misappropriation, and good governance principles and their impact on AM performance within the Malaysian public sector. Drawing on institutional theory, fraud triangle theory, and stewardship theory, the research aims to uncover how these factors interplay to influence AM effectiveness. The findings will be instrumental for policymakers and public administrators in addressing the gap between policy intent and operational reality, ultimately enhancing the

2. LITERATURE REVIEW

Asset Management (AM) comprises several processes aimed at maintaining an asset's function to ensure it performs effectively, with controlled costs and risks, thereby accomplishing the objectives and ensuring service delivery by agencies (TAMM, 2021). Efficient asset management enables an organization to create, enhance, and sustain its operations. However, a critical challenge in achieving effective AM practice is aligning asset objectives while managing multiple actors with differing interests (Schraven et al., 2011). AM has evolved from a mere maintenance function to a strategic organizational aspect, crucial for maximizing value and service delivery. It focuses on managing an asset's life cycle, from acquisition to usage, maintenance, and disposal. The emphasis should not solely be on the revenue it generates but also on the results, risks, and costs to improve performance.

AM performance is a construct used by government agencies to measure the outcomes of AM activities based on the concept of the 3Es: economy, efficiency, and effectiveness (Buang, 2011). According to Mihaiu et al. (2010), effectiveness is gauged by the ratio of achieved outcomes to the configured goals. Efficiency measures the results of efforts made, indicating the relationship between the economic and social consequences of activities and the struggle to fund them.

Institutional practices encompass a comprehensive framework of policies, procedures, protocols, norms, and behaviors adopted by organizations to facilitate their operations (North, 1989). These practices can significantly impact organizational performance, either positively or negatively, depending on their alignment with organizational objectives and values (Dillard et al., 2004; Greening & Gray, 1994). Conversely, asset misappropriation can severely impact AM performance. Misappropriation leads to direct financial losses, reducing the organization's overall value and profitability (Greenlee et al., 2007; Kummer et al., 2015), and disrupting normal operations. Good governance entails public administration reform, anti-corruption measures, policy and administrative participation, budgetary transparency, accountability mechanisms, and state capacity (Goldfinch et al., 2013). These principles facilitate effective decision-making, enhance accountability, and encourage resource efficiency in the public sector (Srivastava, 2009).

3. METHODOLOGY

A total of 152 government agencies participated in this study. The respondents are required to answer the questionnaire through a Google form, which is attached to the email. This study examined measurement and structural models via PLS-SEM using SmartPLS 3.3.3 version (Ringle et al., 2015) as the statistical tool since it dismisses the normality assumption. The type II higher-order (reflective-formative) construct is used in conducting this study. The first-order component was the assessment of the reflective measurement model, followed by the formative measurement model assessment in the second-order component, and finally, the structural model assessment.

4. RESULTS AND DISCUSSION

The result shows that out of eight hypotheses, events are significant at 0.05 and have coefficient values (β) between -0.381 and 0.237. It indicates that accounting practice, information systems, and training and development have a significant positive impact on AM performance, while asset misappropriation has a negative relationship with AM performance in government agencies. Additionally, good governance principles moderate the relationship between accounting practice, information systems, training and development, and AM performance. The current research model also found the R² for the model tested is 0.860.



5. CONCLUSION

In conclusion, institutional practices, asset misappropriation, and good governance significantly influence AM performance in the Malaysian public sector. The government must effectively manage these factors to enhance performance and obtain greater value for money. This study underscores the necessity of bridging the gap between policy intent and operational reality through applying good governance principles, ultimately strengthening the integrity and efficacy of AM practices in the public sector. This study's findings contribute to theoretical and practical knowledge, offering valuable insights for policymakers and public administrators.

REFERENCES

- Bourgon, J. (2007). Responsive, responsible and respected government: Towards a New Public Administration theory. *International Review of Administrative Sciences*, 73(1), 7–26.
- Buang, A. (2011). “Public asset management in Malaysia – An audit perspective.” *At the 1st World Congress and Exhibition Infrastructure Asset Management PWTC Kuala Lumpur, February*, 1–7.
- Dillard, J. F., Rigsby, J. T., & Goodman, C. (2004). The making and remaking of organization context: Duality and the institutionalization process. *Accounting, Auditing & Accountability Journal*, 17(4), 506–542. <https://doi.org/10.1108/09513570410554542>
- Goldfinch, S., DeRouen, K., & Pospieszna, P. (2013). Flying blind? Evidence for good governance public management reform agendas , implementation and outcomes in low income countries. *Public Administration and Development*, 33(1), 50–61. <https://doi.org/10.1002/pad>
- Greening, D. W., & Gray, B. (1994). Testing a Model of Organizational Response to Social and Political Issues. *Academy of Management Journal*, 37(3), 467–498. <https://doi.org/10.5465/256697>
- Greenlee, J., Fischer, M., Gordon, T., & Keating, E. (2007). An investigation of fraud in nonprofit organizations: Occurrences and deterrents. *Nonprofit and Voluntary Sector Quarterly*, 36(4), 676–694. <https://doi.org/10.1177/0899764007300407>
- Kummer, T. F., Singh, K., & Best, P. (2015). The effectiveness of fraud detection instruments in not-for-profit organizations. *Managerial Auditing Journal*, 30(4–5), 435–455.
- Mihaiu, D. M., Opreana, A., & Cristescu, M. P. (2010). Efficiency, effectiveness and performance of the public sector. *Romanian Journal of Economic Forecasting*, 13(4), 132–147.
- North, D. C. (1989). Institutions and economic growth: An historical introduction. *World Development*, Vol., 17(9).
- Ringle, C. M., Wende, S., & Becker, J. M. (2015). *SmartPLS 3*.
- Saleh, E. F., & Al-Nawfali, H. K. (2022). Social Welfare Policy Programs in Oman Sultanate: Reality and Challenges. *Asian Journal of Research in Education and Social Sciences*, 4(1), 234–254. <https://doi.org/10.55057/ajress.2022.4.1.21>
- Schraven, D., Hartmann, A., & Dewulf, G. (2011). Effectiveness of infrastructure asset management: Challenges for public agencies. *Built Environment Project and Asset Management*, 1(1), 61–74. <https://doi.org/10.1108/20441241111143786>
- Shah, A. (2005). Public services delivery. In *The World Bank*. <https://doi.org/10.1596/978-0-8213-6140-5>
- Srivastava, M. (2009). Good governance- concept, meaning and features: A detailed study. In *URL: http://Ssrn. Com/Abstract (Vol. 1528449)*.
- TAMM. (2021). *Total asset management manual*.

DOES GREEN FINANCING MATTER?

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ABSTRACT

The influence of green financing on firm value has garnered significant interest, particularly in advancing the Sustainable Development Goals (SDGs). By adopting environmentally and socially responsible practices, companies can enhance their reputations and attract investors, customers, and partners who prioritize sustainability. This, in turn, encourages further green financing and ultimately increases firm value. Previous studies, such as Flammer (2021), support this by demonstrating that companies issuing green bonds credibly signal their commitment to the environment, thus enhancing their market appeal and overall value. This article explores the multifaceted benefits of green financing, providing empirical evidence on how it contributes to sustainable business growth and increased firm value particularly non-financially as indicated by its Environmental, Social, and Governance (ESG) scores. High ESG scores signify adept management of environmental, social, and governance risks, correlating with improved financial performance and reduced investment risk, while low scores indicate areas of weakness in ESG practices. The objective of this study is to compare the effect of green financing on firms with green financing initiatives to those without. The findings reveal a lack of statistically significant relationship between green financing and companies' ESG scores. This suggests that the impact of investing in green financing on ESG score may not be as pronounced as previously assumed. However, these results offer valuable insights for environmentally conscious investors, guiding them in making informed decisions regarding risk management and portfolio optimization. The increasing trend of companies voluntarily disclosing ESG reports underscores the growing importance of transparency in meeting stakeholder expectations. As businesses pivot towards more sustainable practices not just in response to market demands but also to innovate and mitigate environmental risks, the study advocates for a nuanced approach to sustainability strategies that transcends mere financial considerations. It highlights the evolving landscape where ESG reporting is becoming a cornerstone for companies to showcase their dedication to sustainability and ethical business practices. Ultimately, this research emphasizes the necessity for organizations to embrace a holistic and multifaceted approach to sustainability, moving beyond simplistic associations between green financing and non-financial value. The findings will shed light on the critical role ESG scores play in evaluating a company's long-term sustainability and prospects.

Keywords: green financing, ESG, firm's value, green investment

1. INTRODUCTION

In contemporary financial realms, the prominence of sustainable stocks - those associated with companies dedicated to minimizing environmental impact- has notably increased. Past studies documented valuation methodologies that blend fundamental analysis with Environmental, Social, and Governance (ESG) metrics, furnishing investors with insights into long-term returns. ESG factors are considered akin to traditional variables, serving as proxies for financial soundness in the eyes of the market. Torre et al. (2020) have demonstrated that firms boasting robust ESG ratings tend to yield enhanced returns alongside reduced volatility, indicating that market participants view ESG factors as indicators of financial resilience. Investors are increasingly prioritizing socially responsible investments that promote positive environmental and social outcomes. This trend is driven

by concerns over climate change and social inequality, leading policymakers to focus on mitigating these risks through green finance initiatives. Publicly traded companies have significantly increased their use of ESG disclosures in recent years. This trend, which has grown from 35% to 86% between 2010 and 2021, reflects the growing importance of ESG disclosures in meeting investor expectations and enhancing transparency. Companies are investing in technology and governance to ensure reliable and timely ESG data, leading to high-quality information. The increasing demand for sustainable products also presents a business opportunity or a necessary path for many companies, which can lead to higher costs and new environmental risks. The study aims to investigate whether green finance initiatives, such as green bonds and loans, can positively impact a company's ESG score. This is significant because companies' environmental stances have been shown to significantly affect their stock performance, as seen in the 2014 Volkswagen emissions scandal. Additionally, corporate social responsibility (CSR) practices are increasingly important for businesses to establish a positive image and meet stakeholder needs. Previous studies have found that green financing can significantly influence firm performance, and this study aims to explore the relationship between green finance and ESG scores.

2. LITERATURE REVIEW

The section discusses the influence of Environmental, Social, and Governance (ESG) index and green financing on firm behavior, sustainability, and financial performance. It highlights the significant attention ESG investing has gained and notes the unclear impact it has on companies' behavior and sustainability. Studies by D. Siswanto (2018) and X Zhou & Cui (2019) suggest that green financing, particularly through green bonds, boosts a company's reputation and fosters sustainable business practices and environmental protection efforts. Research by Wang & Zhi (2016) and Abdul Razak & Norli Ali (2023) indicates a positive association between green financing and firm performance. Zhou & Cui (2019) examined the relationship between green bond issuance and corporate social responsibility (CSR), revealing that firms issuing green bonds often experience an increase in their CSR scores. This uptick contributes to enhanced corporate image and sustained CSR practices.

Past studies have documented the importance of ESG disclosure for optimizing financial performance. Research by Khandelwal, Sharma, & Chotia (2023) and Mohamed & Nahia (2023) emphasizes the positive correlation between ESG standards and corporate financial performance. A study by Friede et al. (2015) analyzed over 2,200 papers, revealing that approximately 90% of the studies reported a positive relationship between ESG standards and corporate financial performance. More recent research has provided a more nuanced perspective, with a positive relationship found for 58% of corporate studies focused on operational metrics. A study by Tao (2023) analyzed the relationship between firm performance and ESG performance using samples of listed companies in Shanghai and Shenzhen. The study found that ESG performance gives a significant positive impact on firm performance, with better ESG performance corresponding to better firm performance. A study by Fu & Li (2023) investigated the impact of ESG on financial performance in the context of digital transformation. The researchers found that ESG implementation can improve corporate financial performance, and digital transformation moderates this relationship.

The study by Chodnicka-jaworska (2021) found that higher ESG risk has a strong negative impact on the credit ratings of non-financial institutions across sectors. The study underscores the need for increased awareness and sensitization of financial stakeholders to the importance of ESG issues. ESG investing appears to provide downside protection, especially during social or economic crises. Investor studies demonstrate a strong correlation between lower risk related to sustainability and better financial performance. The section concludes that past studies provide insights into the broader investor optimism about ESG assets and the consistent outperformance of ESG assets over broader indices across asset classes. However, it acknowledges the need for further research and nuanced analysis to fully grasp the intricate dynamics and long-term implications of integrating ESG principles into investment strategies and corporate practices.



3. METHODOLOGY

The study analyzed the impact of green financing on the non-financial value of public listed companies (PLCs) in Malaysia from 2015 to 2023 which was chosen because green financing was actively issued during this time and daily data on share prices and ESG scores was available. The study obtained ESG scores from Refinitiv-Eikon to measure the impact of green financing on the firms' non-financial value. The data was then paired with companies that did not issue green financing, matching them by size and industry. The study used a paired t-test, linear regression, and correlation analysis to investigate the impact and relationship of green financing on ESG scores,

4. RESULTS AND DISCUSSION

The study analyzed the impact of green financing on a company's non-financial value by comparing the ESG score of firms that have issued green financing to those that have not. Based on paired t test, the study did not find a statistically significant difference in ESG index means between firms with and without green financing. This suggests that investing in green financing does not have a statistically significant impact on a company's ESG index score. The findings highlight the importance of a comprehensive sustainability strategy within organizations, emphasizing the need for a nuanced approach that extends beyond financial decisions.

The study also analyzed the relationship between green financing and ESG scores using regression analysis. The results showed a negative correlation between green financing issuance and ESG scores, but the relationship was not statistically significant. This implies that an increase in green financing issuance is linked to a decrease in ESG scores, although the effect is not strong enough to be considered reliable or generalizable. The study suggests that green financing issuance may not be a robust predictor of ESG performance, and instead, other factors such as corporate governance practices, social responsibility initiatives, and environmental management systems may play a more significant role in determining a company's ESG score.

Other than that, the study also analyzed the relationship between the issuance of green financing and a company's ESG performance. The results showed a strong positive correlation between ESG scores before and after the new issuance of green financing, indicating that the new issuance has a significant positive impact on a company's ESG performance which can lead to improved sustainability and reduced environmental impact. The findings suggest that investors should consider a company's ESG performance before investing in green financing initiatives, policymakers should develop policies to incentivize companies to improve their ESG performance through green financing, and businesses should prioritize ESG performance when issuing green financing. Although green financing alone may not directly affect ESG scores, integrating it into a broader sustainability framework can still yield benefits by bolstering a company's reputation, managing risks, and attracting socially responsible investors.

5. CONCLUSION

This study analyzed the impact of green financing on a firm's performance in Malaysia, using non-financial values like ESG scores. The results showed that green financing did not significantly affect a company's performance, but companies without green initiatives had slightly higher average ESG scores. The study emphasizes the need for a comprehensive sustainability strategy within organizations, highlighting the importance of a holistic approach that goes beyond financial considerations.



REFERENCES

- Abdul Razak, S. S., & Ali, N. (2023). Green Financing and Environmental Protection. *Management Accounting Review*, 22(2).
- Chodnicka-jaworska, P. (2021). ESG as a Measure of Credit Ratings. *Risks*, 9(226).
- Fu, T., & Li, J. (2023). An empirical analysis of the impact of ESG on financial performance : the moderating role of digital transformation. *Frontiers in Environmental Science*, (August), 1–11.
<https://doi.org/10.3389/fenvs.2023.1256052>
- Khandelwal, V., Sharma, P., & Chotia, V. (2023). ESG Disclosure and Firm Performance: An Asset-Pricing Approach. *Risks*.
- Mohamed, A., & Nahia, H. (2023). The Influence of Environmental , Social , and Governance (ESG) Practices on US Firms ' Performance : Evidence from the Coronavirus Crisis. *Journal of the Knowledge Economy*, (0123456789). <https://doi.org/10.1007/s13132-023-01278-w>
- Siswantoro, D. (2018). The relationship of the green bond and the Social Development Goals (SDGs) targets : a case study of Vigeo Eiris. In *E3S Web of Conferences* (Vol. 01003).
- Tao, J. (2023). Study on the impact of ESG performance on firm performance. *SHS Web of Conferences*, 01016(165), 1–4.
- Wang, Y., & Zhi, Q. (2016). The role of green finance in environmental protection : Two aspects of market mechanism and policies. In *Energy Procedia* (Vol. 104, pp. 311–316). Elsevier B.V.
<https://doi.org/10.1016/j.egypro.2016.12.053>
- Zhou, X., & Cui, Y. (2019). Green Bonds , Corporate Performance , and Corporate Social Responsibility. *Sustainability*, 11(6881), 1–27.

VOLUNTARY DISCLOSURE AND TAX AMNESTY: A RECENT SIGNIFICANT SYSTEMATIC REVIEW

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ABSTRACT

Voluntary Disclosure (VD) and Tax Amnesty (TA) are crucial strategies in enhancing tax compliance and boosting government revenue. This systematic literature review aims to synthesize recent research on these topics, focusing on studies published between 2022 and 2024. The problem statement addresses the need for a comprehensive understanding of how VD and TA impact taxpayer behavior and government fiscal health. The review follows the PRISMA framework, ensuring a rigorous selection and analysis process. A total of 23 final articles were identified and analyzed from reputable databases including Scopus, Web of Science (WoS), and EconBiz, to extract relevant data on objectives, methodologies, findings, and future research suggestions. The findings are divided into three themes which are (1) behavioral aspects of TA (2) economic impacts of TA and (3) legal and institutional frameworks of VD and TA. Notably, the studies demonstrate varying impacts based on country-specific contexts and implementation strategies. The conclusion underscores the importance of carefully designed VD and TA programs and suggests areas for future research, including longitudinal studies to assess long-term impacts and comparative analyses across different jurisdictions. This review provides valuable insights for policymakers and researchers aiming to enhance tax systems through voluntary disclosure and tax amnesty initiatives.

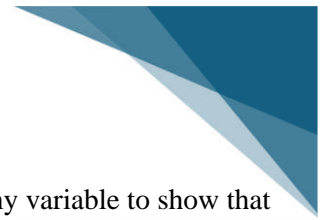
Keywords: Voluntary disclosure; Tax amnesty

1. INTRODUCTION

Voluntary disclosure (VD) and tax amnesty (TA) are crucial components in the modern landscape of tax administration, playing pivotal roles in enhancing tax compliance and short-term revenue generation (Aini1 et al., 2023; Koch & Müller, 2024; Pratama & Pratiwi, 2022). These mechanisms are designed to encourage taxpayers to come forward and declare previously underreported or unreported income and overstatement of expenses or reliefs, thereby broadening the tax base and enlightening the transparency of the tax system. An increasing globalization and technological advancements, which have enabled more methods of tax evasion, the need for effective VD and TA programs has never been more pronounced (Bhalla et al., 2022). VD offers taxpayers the opportunity to correct their tax affairs without the severe penalties typically associated with non-compliance (Al-Nasrallah, 2023; Boateng et al., 2022; Chung et al., 2023). By providing a framework for individuals and businesses to resolve past omissions, VD programs aim to foster a cooperative relationship between taxpayers and tax authorities. These programs are often accompanied by incentives such as reduced fines, immunity from audit, and more favorable terms for settling outstanding tax liabilities. The underlying principle is to strike a balance between strict enforcement and incentivized compliance, thus creating a more inclusive and efficient tax system (Demin & Efremova, 2022; Pham et al., 2023)

2. LITERATURE REVIEW

Voluntary disclosure and tax amnesty policies have been significant tools in the fiscal strategies of many countries, particularly in addressing issues related to tax evasion and enhancing tax compliance. Marpaung et al. (2023) highlight the critical role of tax amnesty in economic development, emphasizing its impact on repatriation funds



and overall economic growth in Indonesia. This study used linear regression with a dummy variable to show that government spending, tax amnesty, tax revenue, and GDP positively affect economic growth, illustrating the multifaceted benefits of such policies in revitalizing a contracting economy. Similarly, Sultan et al. (2023) explore the implementation issues of tax amnesty schemes in Pakistan, discussing the challenges in aligning these schemes with anti-money laundering regulations and the implications for the financial industry. These findings suggest that while tax amnesty can boost short-term revenues, the long-term benefits are less clear due to the complexities of regulatory compliance and enforcement. Further analysis by Soepriyanto et al. (2024) examine the impact of CEO age on the likelihood of firms participating in tax amnesty programs in Indonesia. The study finds a negative correlation between CEO age and participation in tax amnesty, indicating that older CEOs tend to be more risk-averse and less inclined to engage in such programs. This highlights the role of individual decision-makers' characteristics in the success of tax amnesty initiatives. In contrast, Doğan & Abdurrahmani (2021) investigate taxpayers' attitudes towards tax amnesty in Kosovo, finding that key reasons for support include reducing administrative burdens and short-term revenue gains. However, the study also notes concerns about fairness and the potential for tax amnesties to undermine long-term compliance.

3. METHODOLOGY

Three key phases of the systematic review approach were used to select a large number of relevant papers for this study. The first stage involves selecting keywords and searching for related terms using a thesaurus, dictionaries, encyclopaedias, and previous research. Following the construction of search strings for the Scopus, Web of Science, and EconBiz databases (see Table 1), all relevant keywords were selected. During the initial step of the systematic review approach, both databases yielded a total of 2,779 publications for this study.

TABLE 1: The search string

Scopus	TITLE ("voluntary disclosure*" OR "tax amnest*") AND (LIMIT-TO (PUBYEAR , 2022) OR LIMIT-TO (PUBYEAR , 2023) OR LIMIT-TO (PUBYEAR , 2024)) AND (LIMIT-TO (DOCTYPE , "ar")) AND (LIMIT-TO (LANGUAGE , "English")) AND (LIMIT-TO (PUBSTAGE , "final")))
	Access date: 26 May 2024
Web of Science	"voluntary disclosure*" OR "tax amnest*" (Title) and 2024 or 2023 or 2022 (Publication Years) and Article (Document Types) and English (Languages)
	Access Date: 26 May 2024
EconBiz	(title:(("voluntary disclosure*") OR ("tax amnest*"))))
	Access Date: 26 May 2024

4. RESULTS AND DISCUSSION

The discussion for this article focusing on behavioral aspects of TA, economic impacts of TA and legal and institutional frameworks of VD and TA. On the positive side, tax amnesties can lead to an immediate increase in tax revenues and a temporary boost in compliance as taxpayers take advantage of the opportunity to clear their liabilities without severe repercussions. However, the literature also highlights potential negative behavioral impacts, such as the creation of a moral hazard where taxpayers anticipate future amnesties and continue to evade taxes in the interim. . To maximize the positive impacts, tax amnesties should be carefully designed with strong post-amnesty enforcement to deter future evasion and ensure fairness. Integrating

amnesties into a broader tax compliance strategy that includes continuous taxpayer education and systematic improvements to tax administration is crucial. Robust enforcement measures, high service quality, coherent legislation, and trust-building initiatives are also crucial for successful tax amnesty programs. Additionally, the frequency of amnesties should be limited to avoid creating a culture of non-compliance, and amnesties should be accompanied by unpredictable enforcement measures to deter future tax evasion.

5. CONCLUSION

A systematic literature review on voluntary disclosure (VD) and tax amnesty (TA) reveals complex implications across behavioral, economic and institutional dimensions. Tax amnesty can increase tax revenue in the short term and improve compliance temporarily by allowing taxpayers to clear their liabilities with lower penalties. However, they can also create moral hazard, leading to continued tax evasion when taxpayers expect amnesty to come.

REFERENCES

- Aini1, N., Indarto, B. A., & Jayanti, F. D. (2023). The influence of tax knowledge, tax rates, tax penalties, tax amnesty and voluntary disclosure programs on tax compliance of AHASS employees in Semarang district. *Jurnal Ilmiah Bisnis, Manajemen Dan Akuntansi*.
- Al-Nasrallah, W. (2023). The decade long story of gender equality and female empowerment: a case study of corporate disclosures in Saudi Arabia. *Sustainability Accounting, Management and Policy Journal*. <https://doi.org/10.1108/SAMPJ-04-2022-0193>
- Bhalla, N., Sharma, R. K., & Kaur, I. (2022). Effect of Tax Knowledge and Technological Shift in Tax System on Business Performance: A PLS-SEM Analysis. *Sustainability (Switzerland)*. <https://doi.org/10.3390/su141610217>
- Boateng, R. N., Tawiah, V., & Tackie, G. (2022). Corporate governance and voluntary disclosures in annual reports: a post-International Financial Reporting Standard adoption evidence from an emerging capital market. *International Journal of Accounting and Information Management*. <https://doi.org/10.1108/IJAIM-10-2021-0220>
- Chung, R., Bayne, L., & Birt, J. L. (2023). Determinants of ESG disclosure among listed firms under voluntary and mandatory ESG disclosure regimes in Hong Kong. *Journal of Applied Accounting Research*. <https://doi.org/10.1108/JAAR-07-2022-0179>
- Demin, A. V., & Efremova, E. S. (2022). Tax Compliance and its Enforcement Instruments: Russian Approach. *Journal of Siberian Federal University - Humanities and Social Sciences*. <https://doi.org/10.17516/1997-1370-0846>
- Koch, C., & Müller, C. (2024). Tax amnesties and the insurance effect: An experimental study. *Journal of Behavioral and Experimental Economics*, 108, 102130. <https://doi.org/10.1016/j.socec.2023.102130>
- Pham, Q. T., Tran, T. G. T., Bui, T. T. H., Nguyen, T. P. L., & Bui, A. T. (2023). Impacts of tax enforcement and independent audit on financial reporting quality through the internal control effectiveness: Evidence from Vietnam enterprises. *Cogent Social Sciences*. <https://doi.org/10.1080/23311886.2023.2175486>
- Pratama, A., & Pratiwi, A. P. (2022). Tax Disclosure in Financial Statements: The Case of Indonesia. *International Journal of Applied Economics, Finance and Accounting*. <https://doi.org/10.33094/ijaefa.v14i1.648>

A SYSTEMATIC REVIEW ON THE INFLUENCE OF BOARD GOVERNANCE AND SUSTAINABILITY REPORTING

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ABSTRACT

Sustainability reporting has become the primary method used by large corporations to inform stakeholders about the sustainability practices of the companies. Even though research on sustainability has gain prominence globally, there is still limited literature specifically on board governance and sustainability reporting of listed corporations. This gap in the research is significant, as the board decides on the sustainability strategies of the company and is responsible for monitoring the implementation of these strategies as well as ensuring the integrity of the information that is shared with the stakeholders. Therefore, it is vital that existing literature is accumulated, organised and analysed to determine the extent and development of literature in this area of research, including an overview of the key findings. The review adheres to the publication standard, namely Reporting Standards for Systematic Evidence Synthesis (ROSES). It includes articles from two leading databases, Scopus and Web of Science, which generated a final total of 53 related studies. The review is mainly categorised into six themes: social reporting, environmental reporting, GRI-based reporting, ESG-based reporting, reporting based on the scoring system and a combination of sustainability and integrated reporting. These themes further explore board governance and other related corporate governance aspects. The findings from the thematic analysis reveal an overview of board governance on sustainability reporting according to four main themes: (1) board independence and diversity; (2) board size and meeting; (3) board committee; and (4) board remuneration. Based on the results, board size and women directors tend to encourage sustainability reporting, but board independence seems less effective. The findings of this review are crucial for enhancing stakeholder confidence and protecting shareholders' interests as this study systematically summarises findings from various countries and contexts and does not just refer to the results of a single study. This study should also be particularly useful to future researchers who plan to embark on research in the areas of governance and sustainability reporting. This is because gaps in this research area are identified, and recommendations for future research are proposed at the conclusion of this study.

Keywords: board of directors; corporate governance; sustainability reporting



1. INTRODUCTION

Several research has been conducted on board governance and sustainability reporting, however, the efforts to systematically review this literature are still limited. A systematic review offers a comprehensive examination of the existing body of knowledge on the impact of the board on sustainability reporting. The process begins with formulating key questions and objectives. The paper examines and analyses previous work on the influence of board governance on sustainability reporting and identifies potential gaps. Sustainability reporting communicates sustainability initiatives to stakeholders. A sustainability reporting framework is used to prepare reliable and accurate information. Understanding the board's influence on the extent of sustainability reporting is essential since boards are responsible for communicating the information to stakeholders.

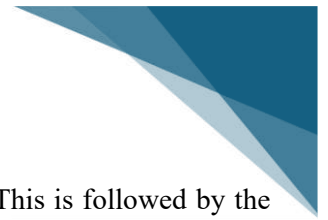
The origins of sustainability dates back to the 1970s, however the concept of sustainability was popularised with the declaration of United Nations' Sustainability Development Goals (SDGs). Since then, the research efforts on sustainability reporting have expanded. This is because numerous countries, globally, are in support of these SDGs. Companies and their board of directors play an essential role in their countries attaining their SDGs; considering that there are many countries in the world initiating efforts on sustainability reporting (SR), the literature on board governance on SR remains considerably limited.

Sustainability reporting has gained increased importance since regulators mandated that listed companies disclose their sustainability activities. Support from listed companies can significantly impact the attainment of the SDGs agenda. While developed countries have integrated sustainability initiatives into their business operations in order to support the SDGs, some developing countries publish sustainability reporting voluntarily. The impact of board governance on providing non-financial information to stakeholders has drawn considerable interest from researchers globally. A substantial body of literature on sustainability reporting exists, incorporating various approaches and methodologies. However, traditional review practices face issues related to transparency and bias, as reviewers often selectively choose articles that support their research (Mohamed Shaffril et al., 2020). This traditional approach presents significant challenges for future research in replicating studies, validating interpretations, and assessing the comprehensiveness of the research. Therefore, there is a need for a systematic literature review (SLR) that uses systematic techniques to identify and evaluate related research comprehensively. The researchers aim to address the gap in the literature by conducting a SLR that examines explicitly how board governance impacts the extent of sustainability reporting. This study seeks to provide empirical evidence to justify the methods used to identify the existing gaps and guide future research in this field. The review is structured around the central question: "What is the effect of board governance on sustainability reporting?". Additionally, the paper emphasises the board structure employed by companies, highlighting their crucial role in ensuring compliance with sustainability reporting standards and maintaining the integrity of disclosure provided to stakeholders.

This paper examines and analyses previous work on the influence of boards on sustainability reporting and identifies potential research gaps. This section explains the purpose of conducting a systematic review, followed by a second section elaborating on the methodology used in the study. Then, the third section systematically reviews and synthesises the relevant research on board governance and sustainability reporting. Lastly, the paper presents a discussion on recommendations for future research.

2. METHODOLOGY

The study conducted in this paper is guided by the Reporting Standard for Systematic Evidence Syntheses (ROSES), which aims to maintain a sound methodology for developing SLR via increased transparency and to ensure control of the quality of the review. The process begins with formulating the research questions by applying



the PICo method: ‘P’ for Problem or Population, ‘I’ for Interest, and ‘Co’ for Context. This is followed by the explanation of the systematic search strategy, which consists of three main sub-processes: identification, screening (inclusion and exclusion criteria) and eligibility. Then, a quality appraisal process was conducted for each selected article before being incorporated into a review. Lastly, the selected articles were processed through data extraction and data analysis. The primary research question guided the data extraction process, while qualitative data synthesis (thematic synthesis) was performed in the review by considering alternatives to ensure that the review protocol has met the aims of the review.

3. RESULTS AND DISCUSSION

The review's results are divided into two main findings. The first findings relate to the sustainability reporting approaches used in the selected studies, and the second finding is on the effects of board governance on sustainability reporting. The section begins by describing the background of the selected studies. Then, developed themes from both categories are presented.

3.1. Background of the selected studies

A category of studies focuses on multiple countries (Cicchiello et al., 2021; Amran et al., 2013; Githaiga & Kosgei, 2022), which group into Asia, Africa, the Baltic region, and countries worldwide. These studies aim to provide empirical evidence from global perspectives. Another category is studies conducted in a single country that are interested in examining the board's influence in the local governance context, such as reporting requirements and corporate governance recommendations. These studies can be categorised into Africa, the Middle East, Asia, and Western countries. For example, a study from Germany reported that the board influence was based on a two-tier board structure, compared to another study, which operates based on a one-tier board structure. Most of the recent studies are conducted in African countries. There are 16 single-country studies conducted in the Asian region, which aim to present different insights from Western countries due to cultural differences.

3.2. The developed themes

For sustainability reporting, the thematic analysis was undertaken, resulting in six main themes: (1) Corporate social reporting, (2) Corporate environmental reporting, (3) Sustainability reporting based on GRI Index, (4) Sustainability reporting – ESG Index, (5) Scoring System (6) Sustainability reporting and Integrated reporting. Further exploration using thematic analysis revealed that the findings could be categorised into four main themes: (1) Board Independence and diversity, (2) Board size and meeting, (3) Board committee, and (4) Board remuneration. Mainly, 31 articles from selected studies examine gender diversity, and 25 (80%) articles found that the presence of female directors enhances sustainability reporting. There are 24 studies conducted on board independence related to its influence on sustainability reporting, and 11 (46%) found that board independence improves sustainability reporting. Under the second theme, 23 studies on the influence of board size were presented, and 17 (73%) articles found that a bigger board size can improve sustainability reporting since some board members are represented by stakeholders. The third theme examines two board committees, namely, six articles on the audit committee and ten articles on the sustainability committee. Lastly, only two articles (Gerwing et al., 2022; Malee et al., 2021) found that board remuneration improved sustainability reporting.

4. CONCLUSION

This review concluded that strengthening board independence and diversity provides significant benefits and eventually enhances corporate sustainability reporting practices. Therefore, it is crucial to ensure board independence and diversity in the selection and appointment of board members. Corporations need to properly plan for a balance of gender diversity in their board composition since the review revealed that the presence of female directors positively influences sustainability reporting. The board succession planning process should emphasise the firm commitment to gender diversity. The review also found that larger boards typically include



members with expertise and experience in sustainability reporting, as well as representatives of the firm's stakeholders. This composition contributes to the promotion of enhanced sustainability reporting. The articles reviewed in this study are limited to two main databases, i.e. Scopus and Web of Science; future research should consider extending to other related databases to broaden the literature search. Despite this limitation, the articles selected from these leading databases can offer valuable insights and align with the purpose of the review regarding the influence of board governance on sustainability reporting.

REFERENCES

- Amran, A., Lee, S. P., & Devi, S. S. (2013). The Influence of Governance Structure and Strategic Corporate Social Responsibility Toward Sustainability Reporting Quality. *Business Strategy and the Environment*, 23(4), 217–235. <https://doi.org/10.1002/bse.1767>
- Cicchiello, A. F., Fellegara, A. M., Kazemikhasragh, A., & Monferrà, S. (2021). Gender diversity on corporate boards: How Asian and African women contribute on sustainability reporting activity. *Gender in Management: An International Journal*, 36(7), 801–820. <https://doi.org/10.1108/gm-05-2020-0147>
- Gerwing, T., Kajüter, P., & Wirth, M. (2022). The role of sustainable corporate governance in mandatory sustainability reporting quality. *Journal of Business Economics*, 92(3), 517–555. <https://doi.org/10.1007/s11573-022-01092-x>
- Githaiga, P. N., & Kosgei, J. K. (2022). Board characteristics and sustainability reporting: a case of listed firms in East Africa. *Corporate Governance: The International Journal of Business in Society*, 23(1), 3–17. <https://doi.org/10.1108/cg-12-2021-0449>
- Malee, J., Kusuma, D., & Chanongkorn, K. (2021). The Effect of Corporate Governance on the Board of Directors' Characteristics and Sustainability Disclosure: An Empirical Study from Thailand. *Journal of Asian Finance*, 8(12), 191-0201. <https://doi.org/10.13106/jafeb.2021.vol8.no12.0191>
- Mohamed Shaffril, H. A., Samsuddin, S. F., & Abu Samah, A. (2020). The ABC of systematic literature review: the basic methodological guidance for beginners. *Quality & Quantity*, 55(4), 1319–1346. <https://doi.org/10.1007/s11135-020-01059-6>

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ABSTRACT

Enhancing corporate environmental, social, and governance (ESG) performance is critical to the economy's high-quality and sustainable growth. Many tax incentives have been implemented by governments throughout the globe to encourage businesses to actively carry out their ESG obligations. However, limited academic research done on the relationship between tax incentives and ESG performance in Malaysia. This paper aims to provide a review on the relationship between tax incentives and ESG performance. Using the literature review technique, this study investigated whether tax incentives may successfully encourage companies to improve their (ESG) performance. This study adds to the body of knowledge by examining how ESG is being implemented in Malaysia. This study enriches the research perspectives on the factors influencing corporate ESG performance and provide strong empirical evidence to support the implementation and improvement of ESG related tax incentives, helping the implementation of the concept of sustainable development and high-quality economic development.

Keywords: Tax Incentives, ESG performance

1. INTRODUCTION

Environmental, social, and governance (ESG), is a corporate evaluation standard and investment concept that prioritises a company's social, environmental, and governance performance over its financial performance (EBA 2021). An ESG research that included the ideas of environmental, social, and governance was released by Goldman Sachs, 2006. Since then, businesses and financial institutions have expanded on the idea of ESG by incorporating performance evaluation techniques for each of the three ESG pillar into a full ESG concept framework, as well as thorough and methodical disclosure criteria. ESG investing solutions have also been progressively introduced by significant multinational investment firms. The ESG idea has gained popularity recently all around the world (Amel-Zadeh and Serafeim 2018, Engle III et al, 2020).

2. LITERATURE REVIEW

2.1. Tax Incentives

Tax incentives as a unique tool for governmental economic regulation, do, in fact, have a significant impact on business operations and strategic goals (Stantcheva, 2021). In addition to encouraging innovation and R&D inside companies to increase their competitiveness on the market, tax incentives could aid in the reduction of regional poverty and the advancement of regional development (Norouzi et al.,2022). Tax incentives also boost business investment levels (Dai & Chapman, 2022) as well as business digitalization, labor market activation that generates new job opportunities (Garrett et al.,2020). Additionally, tax incentives can boost exports and draw in foreign capital, which will promote economic expansion (Li et., 2019). It is important to recognise that different tax incentives lead to varied results. There has been limited research done on tax incentives in relation to sustainable

development, especially looking into how different types of incentives affect business ESG performance. As such, this study contributes to enriching the body of knowledge on tax incentive research.

2.2. Environmental, Social and Governance (ESG) in Malaysia

Malaysia's experience with ESG disclosure dates back to 2006, when the government required all PLCs listed on the Main and ACE Markets to include a CSR section in their annual reports (Bursa Malaysia, 2015). In light of this, Bursa Malaysia also released the first CSR framework, which was centred on four dimensions: the environment, the marketplace (economic), the community (social external stakeholders), and the workplace (social internal stakeholders) (Tan et al., 2021). CSR was also introduced into the Tenth Malaysia Plan from 2011 to 2015 and has been review as a critical component of the national Integrity Plan's strategic objectives for achieving Vision 2020.

3. METHODOLOGY

This study employs a descriptive method for its conceptual framework, involving an extensive review of papers, journals, books, research reports, and other pertinent sources on tax incentives and ESG performance. We collected and compiled data through literature research, article screening and selection, and synthesized and analyzed selected articles related to tax incentives and ESG performance. Using keywords associated with ESG, firm performance, the benefits of ESG, and tax incentives for ESG, we identified relevant papers through popular databases such as Web of Science, Scopus, and Google Scholar. Although the aim was to gather papers on ESG from its inception to the present, there was no predefined time frame for the search. In the second stage, all identified articles were imported into the Mendeley Reference Management Software. Each article was meticulously examined based on titles, abstracts, and full content to assess its relevance to the study. In the third stage, the qualified articles were further synthesized and analyzed to understand the connectivity of the context. All relevant findings were thoroughly evaluated to propose an initial review of the concept of tax incentives and ESG performance.

REFERENCES

- Stantcheva, S. (2021). Understanding tax policy: How do people reason? *The Quarterly Journal of Economics*, 136(4), 2309–2369.
- Norouzi, N., Fani, M., & Talebi, S. (2022). Green tax as a path to greener economy: A game theory approach on energy and final goods in Iran. *Renewable and Sustainable Energy Reviews*, 156, 111968.
- Dai, X., & Chapman, G. (2022). R&D tax incentives and innovation: Examining the role of programme design in China. *Technovation*, 113, 102419.
- Garrett, D. G., Ohrn, E., & Suárez Serrato, J. C. (2020). Tax policy and local labor market behavior. *American Economic Review: Insights*, 2(1), 83–100.
- Li, J., Liu, B., & Qian, G. (2019). The belt and road initiative, cultural friction and ethnicity: Their effects on the export performance of SMEs in China. *Journal of World Business*, 54(4), 350–359.
- Bursa Malaysia (2015). Sustainability Reporting Guide. Kuala Lumpur: Bursa Malaysia Berhad.
- Tan, K. L., Ho, J. M., Pidani, R., & Goveravaram, A. D. (2021). Doing good does you good? The financial impact of individual CSR dimensions: A Malaysian context. *Social Responsibility Journal*, Vol. 18 No. 1, pp. 43–67.
- EBA. EBA report on management and supervision of ESG risks for credit institutions and investment firms. Available online: https://www.eba.europa.eu/sites/default/document_library/Publications/Reports/2021/1015656/EBA%20Report%20on%20ESG%20risks%20management%20and%20supervision.pdf (accessed on 31 July 2021).
- Amel-Zadeh A, Serafeim G (2018) Why and how investors use ESG information: evidence from a global survey. *Financ Anal J*74(3):87–103.
- Engle RF III, Giglio S, Kelly B, Lee H, Stroebe J (2020) Hedging climate change news. *Rev Fin Stud* 33(3):1184–1216.

**THE INFLUENCE OF BOARD OF DIRECTOR FACTORS AND WHISTLEBLOWING
POLICIES DISCLOSURE: EVIDENCE FROM TOP 100 MALAYSIAN
PUBLIC LISTED COMPANIES**

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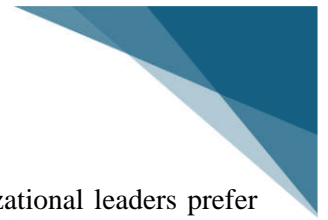
ABSTRACT

Voluntary disclosure is a significant aspect of good corporate governance since it enhances the level of accountability hence the level of trust by various stakeholders and upholding of the corporate integrity. The scope of this research has now expanded to include the examination of companies' whistleblowing policy disclosure, which is also a voluntary disclosure. Having an adequate whistleblowing policy disclosure would send a positive message to stakeholders that such a company is concerned about safeguarding their interests. The study contributes to the literature by investigating whether different types of board composition and organizational climate influence whistleblowing policy disclosure in the Top 100 Malaysian listed companies. We specifically investigate whether Malaysian corporate whistleblowing policy disclosure is influenced by the board independent, board size, frequency of board meetings, the proportion of board skills, and the board gender diversity. We also investigated whether the board gender diversity moderates the relationship between the board of director factors to the whistleblowing policy disclosure. The relationship between these five types of board composition and the level of whistleblowing policy disclosure is tested using an OLS regression model. The sample is made up of the top 100 Malaysian publicly traded companies in 2022. The study found that the board independent and the board gender diversity have significant positive relationships with whistleblowing policy disclosure. However, board size, frequency of board meetings, and board skills do not have significant relationships with whistleblowing policy disclosure. Board gender diversity has no moderating effect on the relationship of the board independent, board size, frequency of board meetings, and the proportion of board skills to the whistleblowing policies disclosure. This paper presents the first empirical study where principal-principal conflict theory is extended to explain the drivers of whistleblowing policy disclosure and, hence, brings new insights to the literature on whistleblowing policy disclosure.

Keywords: Board composition, corporate governance, disclosure, Malaysia, whistleblowing

1. INTRODUCTION

The issue arises in Malaysia also that the regulations for whistleblowing is selective and protection would not be given under the Whistleblowing Protection Act (WPA) 2010 when disclosure made internally (Bakar et al, 2022). The Whistleblower Protection Act in 2010 (WPA 2010) is the most recent legislation enacted to cover whistleblowing in Malaysia. Such an outcome is unfortunate as employees may seek to report any improper



conduct internally within the organization. Besides, be it directors or managers, organizational leaders prefer internal whistleblowing. It increases the chance for information about the misconduct to stay inside the organization, where it may be remedied, instead of being made public Kalyanasundram, (2018). Hence, a conducive environment equipped with an effective whistleblowing system must be created in organizations to encourage employees to report any existing corruption, fraud, or wrongdoing (Nurhidayat & Kusumasari, 2018). Most scholars seem to agree that whistleblowing is a superb way to discover malpractices and fraud in a company. Malaysian culture is just one of the factors that appear to actively discourage whistleblowing, in addition to regulators' strength and the existence of public listed companies and their structure. Chia et al., (2020) stated that public-listed companies are part and parcel of Malaysian culture, with shareholdings in these companies being largely concentrated. Malaysians are thus unlikely to draw attention to any illegal activities in these companies (Rachagan & Kuppusamy, 2013). Besides that, implementing an effective whistleblowing policy can be determined through the board of directors as they are responsible for designing company policies. Also, as the company's leaders, they carry the responsibility of building a workplace environment that either encourages or restricts whistleblowing culture.

2. LITERATURE REVIEW

Whistleblowing research has been quite predominant in recent years, with studies assessing whistleblower intentions. However, by looking at whistleblowing from various angles, the spectrum of this field can be expanded. In this regard, the area of whistleblowing policy analysis has risen in popularity recently. Though there have been studies on whistleblowing policy, the amount of empirical data is not as comprehensive as whistleblowing intentions. More whistleblowing policy disclosures are an indication that a better whistleblowing system has been put in place. In the Malaysian context, some studies have several shortcomings in terms of whistleblowing policy disclosure. Firstly, prior studies examined potential individual's whistleblowing intentions, but did not go in-depth on the disclosure level of whistleblowing policies. Many previous studies predicted whistleblowing intentions (Hadli et al., 2023; Rahayu & Astuti, 2023; Rahman et al., 2023; Rashid et al., 2023; Yusoff et al., 2023). On the contrary, there has been a lack of research concerning whistleblowing policy in Malaysia. Al-absy et al., (2019b) and Abidin et al., (2019) only discussed the box-ticking method, and whether it has a whistleblowing policy. Kalyanasundram (2018) focused on whistleblowing policy effectiveness in their research and analysis board characteristics and their influence on whistleblowing policy efficacy. The results may also be subject to social desirability bias since the responses were based on internal auditor perceptions regarding the whistleblowing policy in the company. Ahmad et al., (2018) investigated the level of whistleblowing policy disclosure in more detail by using Standard Australia 2003 among the top 50 Malaysian public-listed companies. However, this study was rather simplified in its sampling, which led to a biased result. The study also did not relate to corporate governance characteristics. As of today, the relationship between corporate governance characteristics towards the whistleblowing policies disclosure.

3. METHODOLOGY

This paper uses the board of director characteristics and whistleblowing policies disclosure collected through a content analysis approach. This research used sample involved the companies listed among the top 100 Malaysian Public Listed Companies in the main market of Bursa Malaysia as of 31 December 2022. The selection was based on their market capitalization. Further, the sample under consideration can be more suitable for the purpose of this study as large firms are likely to follow good governance and better disclosure practices due to better resources availability (Saha, 2022). Whistleblowing policy disclosures were assessed using the whistleblowing policy disclosure scoring index. The basis of development of the index as studies by (Salleh et al., 2019). The index is self-constructed because there is no standardized checklist of whistleblowing disclosures for Malaysian companies (Ahmad et al., 2018, 2023). The whistleblowing policy disclosure scoring index is based on the checklist benchmarking with the disclosure checklist recommended by Standards Australia (2003), the OECD



Whistleblower Protection Report (2012), and MCCG 2021. Malaysian companies do not have a uniform checklist for disclosure of policies on whistleblowing (Ahmad et al., 2018, 2023). As per the requirement, each company's website was visited, and all annual reports were digitally obtained from the website, bursamalaysia.com.

4. RESULTS AND DISCUSSION

The mean WBP level is 4.11, indicating that, on average, companies have a relatively high level of whistleblowing policy disclosure. The whistleblowing policies disclosure range's minimum and maximum value as 1 and 5, respectively. This means that the minimum level of WBPD was 1, signifying a very low level. The standard deviations suggest variability in the data, with the board gender diversity having a mean of 0.2604, highlighting the relatively low representation of women on boards.

The significant positive correlation between whistleblowing policies disclosure and the board independent ($r = 0.313$, $p < 0.01$) suggests that higher board independence is associated with higher whistleblowing policy disclosure level. Similarly, the positive correlation between whistleblowing policies disclosure and the board gender diversity ($r = 0.241$, $p < 0.05$) indicates that gender diversity on the board is related to greater policy disclosure.

Table 1. Regression analysis

Variables	Unstandardized Coefficients (B)	Std. Error	Standardized Coefficients (Beta)	t	Sig
(Constant)	1.185	0.831	-	1.426	0.158
BIND	2.229	0.894	0.267	2.494	0.015*
BS	0.080	0.059	0.161	1.342	0.184
BM	0.011	0.041	0.032	0.272	0.786
BEXP	0.891	0.710	0.139	1.255	0.213
BG	2.397	1.070	0.239	2.240	0.028
SIZE	3.912E-12	0.000	0.095	0.829	0.410
AUD	-0.180	0.266	-0.074	-0.676	0.501

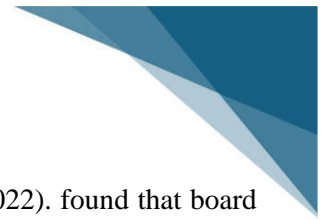
Reference: Sungip, 2024

The regression analysis shows that the board independent ($\beta = 0.267$, $p = 0.015$) and the board gender diversity ($\beta = 0.239$, $p = 0.028$) have significant positive relationships with whistleblowing policy disclosure, supporting Hypotheses 1 and 5. However, board size, frequency of board meetings, and board skills do not have significant relationships with whistleblowing policy disclosure, thus not supporting Hypotheses 2, 3, and 4.

The interaction terms indicate that the presence of female directors does not significantly moderate the relationships between board independence, board size, frequency of board meetings, or board skills and whistleblowing policy disclosure. The coefficients for BI*BG ($\beta = -0.222$, $p = 0.704$), BS*BG ($\beta = -0.536$, $p = 0.443$), BM*BG ($\beta = -0.144$, $p = 0.813$), and BEXP*BG ($\beta = -0.075$, $p = 0.870$) are not significant, indicating that Hypotheses 6, 7, 8, and 9 are not supported.

5. CONCLUSION

The study provides useful insights into the factors that influence whistleblower policy disclosure in firms. The findings emphasize the relevance of board independence and gender diversity in enhancing accountability through improved policy disclosure. Independent directors, especially female directors, have an important role



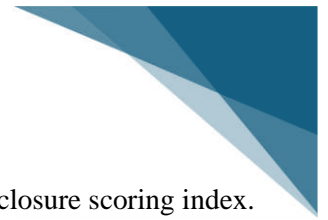
in improving whistleblower policy disclosure. This has been supported by Peng et al. (2022). found that board gender diversity effectively enhances voluntary disclosure, and female directors are more concerned about the stakeholders, and this solves the agency problem. Meanwhile, the board's independence enhances the disclosure (Khanchel & Bentaleb, 2022). This is due to the reason that the independent director exerts pressure to enhance the disclosure to reduce information asymmetry in the companies. Other board characteristics, such as size, meeting frequency, and board competencies, as well as the moderating impacts of female directors on these correlations, had no significant impact. These findings indicate that organizations seeking to improve whistleblower policy disclosure should prioritize board independence and gender diversity. Future research should investigate additional board characteristics and potential modifiers to acquire a better understanding of the factors that influence whistleblowing policy disclosure.

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REFERENCES

- Abidin, A. F. Z., Hashim, H. A., Salleh, Z., & Devi, S. (2019). Ethical Practice Disclosure of Malaysian Public Listed Companies. *KnE Social Sciences*, 2019, 1168–1201.
- Ahmad, S. A., Sungip, N., Paino, H., Yunos, R. M., & Hashim, F. (2023). Development of a Crafted Malaysian Whistleblowing Policy Disclosure Index. *Advances in Social Sciences Research Journal*, 10(4), 25–33.
- Ahmad, S. A., Yunos, R. M., & Amin, J. M. (2018). Whistleblowing Policy: An Analysis of Disclosure Level among Malaysian Listed Companies. *Global Business and Management Research: An International Journal*, 10(3), 36–44.
- Al-absy, M. S. M., Nor, K., Ku, I., & Chandren, S. (2019b). Corporate Governance Mechanisms, Whistleblowing Policy and Real Earnings Management. *International Journal of Financial Research*, 10(6), 265–282.
- Bakar, M. A. O. C. A., & Mangsor, M. M. (2022). It's Not Enough to Speak, But to Speak True: Revisiting the Whistleblower Protection Law in Malaysia. *Malaysian Journal of Social Sciences and Humanities (MJSSH)*, 7(11), e001949.
- Chia, Y. E., Lim, K. P., & Goh, K. L. (2020). More shareholders, higher liquidity? Evidence from an emerging stock market. *Emerging Markets Review*, 44.
- Hadli, Y., Saraswati, E., & Atmini, S. (2023). Factors Affecting Intention on Whistleblowing : An Analysis on Moderated Model of Legal Protection. *International Journal of Business, Economics & Management*, 6(2), 184–198.
- Kalyanasundram, S. N. (2018). Board Characteristics and the Effectiveness of Whistleblowing Policy A Conceptual Paper. *Global Business and Management Research; An International Journal*, 10(3), 1080–1091.
- Nurhidayat, I., & Kusumasari, B. (2018). Strengthening the effectiveness of whistleblowing system. *Journal of Financial Crime*, 25(1), 140–154.
- Rahayu, U. A., & Astuti, C. D. (2023). Faktor-Faktor yang Mempengaruhi Intention Whistleblowing. *Jurnal Informatika Ekonomi Bisnis*, 5(1), 111–117.
- Rahman, R. A., Hashim, H., Ishak, N., Zaini, N., & Rohani, S. R. S. (2023). Determinants of Whistleblowing Intention on Academic Dishonesty. *International Journal of Academic Research in Business and Social Sciences*, 13(3), 1–12.
- Rashid, N. R. A., Ahmad, A. N., Dahlal, N. M., & Abdullah, M. A. (2023). Applying Ethical Climate Theory in Whistleblowing Intentions Study among Employees in Halal Food Companies: A Protocol. *Halalsphere*, 3(1), 47–54.
- Saha, R. (2022). Corporate governance, voluntary disclosure and firm valuation relationship: evidence from top listed Indian firms. *Journal of Accounting in Emerging Economies*, 14(1), 187–219.
- Salleh, M. F. Md., Yusoff, W. S., & Basnan, N. (2019). Whistleblowing disclosure policy and cost of equity in



ASEAN 5 publicly listed companies: A new establishment of regional whistleblowing disclosure scoring index. *Jurnal Pengurusan*, 55.

Yusoff, N. M., Ahmad, A. N., & Dahlal, N. M. (2023). The Degree of Whistleblowing Intention and its Determinants among Halal Food Manufacturing Employees. *Journal of Fatwa Management and Research*, 28(2), 14–37.

GREEN FINANCE TRENDS IN MALAYSIAN COMMERCIAL BANKS: LISTING, OWNERSHIP, AND BANKING TYPE ANALYSIS

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ABSTRACT

This study analyzes green finance trends in Malaysian commercial banks and examines the role of key bank characteristics in shaping their green loan provisions. Annual reports from 28 commercial banks, spanning 2010 to 2022, are analyzed. The research employs paired sample T-tests, correlations, and multiple regression analyses to test hypotheses regarding banks' propensity to provide green loans based on listing status, ownership, and banking type. The findings indicate that publicly listed and government-linked banks provide more green loans than non-listed and non-government-linked banks. Conversely, Islamic and foreign-owned banks are found to issue significantly fewer green loans than their conventional and locally-owned counterparts, respectively. These insights contribute to the existing literature on the endogenous determinants of green loans and offer guidance for regulators in promoting green loans among financiers.

1. INTRODUCTION

Green finance is defined as efforts by banks to protect the environment by financing and investing in green developments such as green buildings, renewable energy, and green technology (Ali Al-Qudah et al., 2021; Park & Kim, 2020). The push from stakeholders and the urgency of addressing climate change risk have pressured banks to adopt green banking practices. This study wants to analyze green finance trends in Malaysian commercial banks, focusing on the impact of listing status, ownership, and banking type.

2. LITERATURE REVIEW

2.1 Global Development of Green Banking

After the Paris Agreement, banks have increasingly focused on environmental finance. Initiatives such as the United Nations Environmental Program Finance Initiative (UNEP FI) and the Equator Principles have been introduced to be embedded in the social, environmental, and governance factors into risk analysis processes (Munitlak-Ivanovic et al., 2017). Green products in banking can be separated into retail banking, corporate investment banking, asset management, and insurance (Menon et al., 2018)). Mandatory and voluntary green banking policies across various countries have helped to accelerate the adoption of green finance (Park & Kim, 2020).

Table 1 provides some insight on countries around the world that had implemented mandatory green banking policies.

Countries	Policies Implemented	Description	Source
Bangladesh	<ul style="list-style-type: none"> • Green Central Financing • Environmental Guideline • Lending Portfolio 	<ol style="list-style-type: none"> 1. Refinancing windows to encourage green finance 2. Banks are required to disclose the E&S in the report through the guidelines provided 	(Khairunnessa et al., 2021)

		3. Banks are required to have at least 5% of green lending in their portfolio	
Brazil	Resolution	Financial Institution must assess their activities exposure to the E&S risk and issue a green policy and its guideline on how to implement the policy for banks to refer.	(Matthias Knoch & Colin Van der Plasken, 2020)
China	Green Credit Policies	Financial Institution are required to encourage lending to green project and remove any firm that violates the environment protection from the bank's portfolio.	(Choi et al., 2020; Dikau et al., 2017)

2.3 Green Banking Development in Malaysia

Malaysia's economy is driven primarily by its manufacturing sector, however, this economic progress led to increase in greenhouse gas (GHG) emissions. This phenomenon raises the concern of climate change that may affect Malaysia environment. To mitigate these risks, green technology financing scheme (GTFS) were introduced in 2010. Through this scheme, financial institutions sector is encouraged to take part by providing financial support in accelerating green development.

Since the introduction of (GTFS), Malaysia has introduced several initiatives to enhance green banking. Bank Negara Malaysia (BNM) has played a crucial role by introducing various frameworks and policies. The Value-based Intermediation Financing and Investment Impact Assessment Framework (VBIF) in 2019 was mandatory for Islamic banks and encouraged for others, focusing on impact-based risk management.

In 2021, BNM introduced the Climate Change and Principal Based Taxonomy (CCPT) providing guiding principles for banks to assess the environmental impact of their financing activities. This was followed by the Climate Risk Management and Scenario Analysis (CRMSA) framework which offered guidelines for assessing climate-related risks. The Task Force on Climate-Related Financial Disclosure (TCFD) further encouraged transparency in climate-related financial disclosures to boost investor confidence.

Leading Malaysian banks have made significant impact in green banking. Maybank and CIMB for example, have mobilized substantial funds towards sustainable finance and committed to phasing out coal activities. Other banks such as AmBank and Hong Leong, have introduced environmental and social risk assessment frameworks to align their credit evaluation processes with environmental, social and governance (ESG) standards.

3. METHODOLOGY

The study focuses on commercial banks in Malaysia. Sample data is collected from the annual reports of 28 commercial banks from 2010 to 2022.

Hypotheses are tested using univariate and multivariate analyses, including paired sample T-tests, correlations, and multiple regression with the following empirical specification:

$$GL = \alpha + \beta_1 Listed + \beta_2 Foreign + \beta_3 Government + \beta_4 Islamic + Controls + \theta_y \sum_{t=2010}^{2022} Year + \varepsilon \quad (1)$$

Where;

GL : Green loan measured as (1) the total amount of green loan in MYR, (2) the percentage of green loan over total loan, and (3) a dichotomous variable indicating whether the bank provides green financing.

Listed : A dichotomy variable that equals 1 if it is a listed bank, and 0 otherwise.

Foreign : A dichotomy variable that equals 1 if it is a foreign owned bank, and 0 otherwise.

Government : A dichotomy variable that equals 1 if it is a government-linked bank, and 0 otherwise.

Islamic : A dichotomy variable that equals 1 if it is an Islamic bank, and 0 otherwise.



Equation (1) controls for the bank size, board governance, profitability, and year fixed effects.

4. RESULTS

The results suggest that publicly listed banks have significantly higher green loans than non-listed banks. This study also documents a weak evidence of significantly higher green loan provisions by government-linked banks. In contrast, foreign banks have significantly lower green loans relative to their local counterparts. Similarly, Islamic banks exhibit significantly lower green loans than their conventional banks. Bank size and profitability as well as the corporate board's size and independence are found to not have significant effects on bank's green loans.

5. CONCLUSION

This study explores green loan provisions among the commercial banks in Malaysia based on their three key characteristics: listing status, ownership, and banking type. The findings enhance our understanding of the factors influencing green finance and offer practical insights for regulators to effectively promote green loans among financial institutions.

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REFERENCES

- Choi, J., Escalante, D., & Larsen, M. L. (2020). Green Banking in China-Emerging Trends With a spotlight on the Industrial and Commercial Bank of China (ICBC). www.climatepolicyinitiative.org
- Dikau, Simon, & Josh Ryan-Collins. (2017). Green central banking in emerging market an developing country economies.
- Khairunnessa, F., Vazquez-Brust, D. A., & Yakovleva, N. (2021). A Review of the Recent Developments of Green Banking in Bangladesh. *Sustainability* 2021, Vol. 13, Page 1904, 13(4), 1904. <https://doi.org/10.3390/SU13041904>
- Matthias Knoch, & Colin Van der Plasken. (2020). The Green Finance Market Emerging in Brazil.
- Menon, D. G., Sreelakshmi, S. G., & Shivdas, A. (2018). Green banking initiatives: A review of Indian banking sector. *Proceedings of 2017 IEEE International Conference on Technological Advancements in Power and Energy: Exploring Energy Solutions for an Intelligent Power Grid, TAP Energy 2017*, 1–7. <https://doi.org/10.1109/TAPENERGY.2017.8397303>
- Munitlak-Ivanovic, O., Zubović, J., & Mitić, P. (2017). Relationship Between Sustainable Development and Green Economy - Emphasis on Green Finance and Banking. In *Original scientific paper EP (Vol. 2017)*. <https://unfss.org/work->
- Park, H., & Kim, J. D. (2020). Transition towards green banking: role of financial regulators and financial institutions. *Asian Journal of Sustainability and Social Responsibility* 2020 5:1, 5(1), 1–25. <https://doi.org/10.1186/S41180-020-00034-3>



EFFECTIVENESS OF PREVENTION MECHANISMS ON FRAUDULENT INCIDENTS: EVIDENCE FROM MALAYSIAN PUBLIC SECTOR

ID: 061

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ABSTRACT

The primary research objectives are to examine the relationship between governance, internal control, fraud prevention programmes with fraud incidents within public sector organisations. A quantitative research methodology was employed, utilising a survey distributed to public servants with at least one year of work experience across federal ministries. The findings reveal that good governance, internal control and fraud prevention programmes have a significant negative relationship with fraud incidents in the public sector.. Additionally, the study found that increased awareness and training on internal control policies significantly contribute to reducing fraud. These insights underscore the need for continuous improvement in governance practices, the reinforcement of internal control mechanisms and implementation of fraud prevention programmes namely National Anti-Corruption Plan (NACP) 2019 - 2023 to enhance accountability and transparency in the Malaysian public sector. Future research could enhance the limitations of the present study, enhance scholarly contributions to the prevention of organisational fraud, and establish more resilient frameworks for understanding and mitigating fraudulent behaviour.

Keywords: Fraudulent incidents, Public sector, Good governance, Internal control, Anti-corruption

1. INTRODUCTION

In Malaysia, the public sector has faced a number of high-profile fraud incidents cases, including embezzlement, procurement fraud, and corruption (Zahari & Arshad, 2020). Despite multiple programmes, such as the National Anti-Corruption Plan (NACP) 2019-2023, aimed at combating these fraud activities, fraud incidents continue to pose challenges (Salleh & Heidecke, 2019). The Malaysian public sector remains vulnerable due to complex bureaucratic structures, inadequate oversight mechanisms, and gaps in the enforcement of internal controls (Habibullah et al., 2016).

Studying the effectiveness of prevention mechanisms – such as good governance, robust internal control, and dedicated fraud prevention programmes – is crucial. (Kamaliah et al., 2018). Understanding how these mechanisms can reduce fraudulent incidents helps improve governance, enhance transparency, and ensure public funds are utilised effectively (Dewata et al., 2022). The study is guided by three key objectives: (i) To examine the relationship between good governance and fraud incidents in the public sector; (ii) To examine the relationship between internal control and fraud incidents in the public sector; and (iii) To examine the relationship between fraud prevention programmes and fraud incidents in the public sector.



2. LITERATURE REVIEW

Fraud Incidents

Fraud incidents represent deliberate acts of deception intended to result in financial or personal gain at the expense of an organisation (Villegas-Ortega et al., 2021). In the public sector, these incidents include a range of activities such as corruption, asset misappropriation, and fraudulent financial reporting (Aziz & Othman, 2021; Glory et al., 2022; Gunasegaran, 2023). The public sector's complexity and the involvement of significant public resources make it especially susceptible to fraud incidents. Murti and Kurniawan (2020) have identified the detrimental impact of fraud incidents on public sector efficiency, transparency, and trust.

Good Governance

Good governance is characterised by transparency, accountability, integrity, and the rule of law, all of which contribute to creating an environment where fraudulent activities are less likely to thrive (Sabilla & Kriswibowo, 2021). Transparency ensures that processes and decision-making are open and accessible, making it harder for fraudulent behaviour to go unnoticed (Aziz & Othman, 2021). Accountability establishes clear responsibilities, ensuring that individuals and institutions are held liable for their actions (Rizvi, 2021).

Internal Control

Effective internal control is essential for preventing opportunities for fraud incidents to happen (Zahari & Arshad, 2020). Internal control act as the first line of defence, setting procedures and policies that reduce the likelihood of fraudulent incidents (COSO, 2013). Effective controls ensure that roles are clearly defined, duties are segregated, and actions are monitored regularly (COSO, 2013). By limiting access to resources, maintaining proper oversight, and regularly reviewing processes, internal control mitigates the risk of fraud incidents (Zahari & Arshad, 2020). Studies have shown that in environments where internal controls are robust, there is a notable decrease in fraud incidents (Said et al., 2016).

Fraud Prevention Programmes

Fraud prevention programmes, such as Malaysia's National Anti-Corruption Plan (NACP) 2019-2023, are pivotal in deterring fraud incidents by enhancing oversight and introducing proactive measures (Abdul Rahim et al., 2021). The NACP aims to address systemic weaknesses in the public sector by promoting anti-corruption programmes, strengthening internal governance, and fostering a culture of integrity (Ramli & Hamid, 2023). The programmes focus on five key pillars, including institutionalising transparency and accountability, empowering citizens through awareness campaigns, and enhancing enforcement capabilities (Ramli & Hamid, 2023).

3. METHODOLOGY

A structured survey questionnaire technique was adopted, consisting of 60 questions which were divided into 5 sections. A seven point Likert-scale ranging from '1' (strongly disagree) to '7' (strongly agree) was adopted. A total of 25,012 questionnaires was distributed public servants working across various Federal Ministries in Malaysia. These participants were selected based on their working experience and involvement in government financial management or administration, ensuring a relevant and representative sample. The sample selection was intended to cover a broad range of hierarchical levels within the ministries, ensuring that responses reflected different experiences and views of fraud-related activities within the public sector. The collected data was analysed using statistical methods to determine the relationship between the independent variables (good governance, internal control, and fraud prevention programmes) and the dependent variable (fraud incidents).

4. FINDINGS AND DISCUSSION

The multiple regression analysis revealed a significant relationship between the good governance, internal control, fraud prevention programmes and fraud incidents. The coefficient of variation (R-squared) was 0.328, indicating that 32.8 per cent of the variability in the dependent variable is explained by the combination of predictors in the model. From the results of the study, good governance, internal control and fraud prevention programmes have significant negative influence towards the occurrence of fraud incidents in the public sector. The negative coefficient for good governance (-0.211), internal control (-0.397) and fraud prevention programmes (-0.184) have suggested that as the good governance, internal control and fraud prevention programmes decreases, the predicted fraud incidents increase.

The findings from this study are in line with Kamaliah et al. (2018) that stated there is an inverse relationship between good governance and fraud incidents. Studies emphasise that adequate internal control mechanisms can provide advance notice of fraud risks, aiding in the detection and prevention of fraudulent activities. The findings in this study is in line with the previous study of Adam et al. (2006), Kamaliah et al. (2018) and Maria et al. (2023) that support the relationship between fraud prevention programmes and reducing fraud incidents.

5. CONCLUSION

In conclusion, the study substantiates the critical role of good governance, internal control, and fraud prevention programmes in reducing fraud incidents within the Malaysian public sector, reinforcing the principles of the fraud triangle theory. The results highlight the importance of integrating ethical practices, robust controls, and comprehensive prevention strategies to combat fraud effectively.

REFERENCES

- Abdul Rahim, R., Mohd Amin, A. and Mohd Razali, N.T. (2021). Scenario Planning for Development of a National Anti-Corruption Framework, *Foresight*, Vol. 23, No. 3, 299-310. <http://doi.org/10.1108/FS-04-20202-0040>
- Adams, G. W., Campbell, D. R., Campbell, M. and Rose, M. P. (2006). Fraud Prevention: An Investment No One Can Afford to Forego. *The CPA Journal*, Vol. 7, No. 1, 56-59. <http://archives.cpajournal.com/2006/106/essentials/p56.htm>
- Aziz, F. L. A., & Othman, I. W. (2021). Internal Auditors' Perception on the Efficacy of Fraud Prevention and Detection in the Public Sector. *Universal Journal of Accounting and Finance*, Vol. 9, No. 4, 764-772. <https://doi.org/10.13189/ujaf.2021.090422>
- Committee of Sponsoring Organizations of the Treadway Commission (COSO). (2013). Internal Control - Integrated Framework Executive Summary. Retrieved from: <https://www.coso.org/guidance-on-ic>
- Dewata, E., Farah, E. H., Jauhari, H., & Sari, Y. (2022). Good Governance and Internal Control on the Prevention of Fraud in the Procurement of Goods and Services for Government Agencies. *Advances in Social Science, Education and Humanities Research/Advances in Social Science, Education and Humanities Research*. Vol. 641, 150-154. <https://doi.org/10.2991/assehr.k.220202.026>
- Glory, G. M., Lazaro, A. M., & Alexis, N. (2022). Effectiveness of Fraud Prevention and Detection Methods in the Public Sector in Tanzania. *Journal of Accounting and Taxation*, Vol. 14, No. 1, 30-36. <https://doi.org/10.5897/jat2021.0496>
- Gunasegaran, M., Basiruddin, R., & Rizal, A. M. (2023). Detecting and Preventing Fraud in e-procurement of Public Sector: A Review, Synthesis and Opportunities for Future Research. *International Journal of Academic Research in Business & Social Sciences*, Vol. 13, No. 1. <https://doi.org/10.6007/ijarbss/v13-i1/15970>
- Habibullah, M., Din, B., & Hamid, B. (2016). Good Governance and Crime Rates in Malaysia. *International Journal of Social Economics*, Vol. 43, No. 3, 308-320. <https://doi.org/10.1108/ijse-05-2014-0096>

- Kamaliah, K., Marjuni, N., Mohamed, N., Mohd-Sanusi, Z., & Anugerah, R. (2018). Effectiveness of monitoring mechanisms and mitigation of fraud incidents in the public sector. *Administrație Şi Management Public*, Vol. 30, 82–95. <https://doi.org/10.24818/amp/2018.30-06>
- Maria, M., Darusalam, D., Yulsiati, H., & Said, J. (2023). Does Top Management Competencies, Internal Control Systems, and e-procurement Contributes to Procurement Fraud Prevention. Research Square (Research Square). 1-14. <https://doi.org/10.21203/rs.3.rs-2438959/v1>
- Murti, A., & Kurniawan, T. (2020). Implementation and Impact of Internal Control in Preventing Fraud in The Public Sector. *Proceedings of the 3rd International Conference on Administrative Science, Policy, and Governance Studies, ICAS-PGS 2019*. <https://doi.org/10.4108/eai.30-10-2019.2299394>
- Ramli, M. R., & Hamid, M. H. (2023). Examining the Perception of Corruption in the Malaysian Public Sector. *International Journal of Accounting, Finance and Business (IJAFB)*, Vol. 8, No. 50, 194-210. <https://doi.org/10.55573/IJAFB.085016>
- Rizvi, A. (2021). Prevention of Frauds in Public Sector Organizations: A Case of Pakistan. *Journal of Development and Social Sciences*, Vol. III, No. 2, 225–244. [https://doi.org/10.47205/jdss.2021\(2-iii\)21](https://doi.org/10.47205/jdss.2021(2-iii)21)
- Sabilla, A. & Kriswibowo, A. (2021). Implementation of the Principles of Good Governance in Combating Stunting in the Jabon District, Sidoarjo Regency. *DIA: Jurnal Administrasi Publik*, Vol. 19, No. 1, 53-67. <https://doi.org/10.30996/dia.v19i1.4822>
- Said, J., Alam, M. M., Khalid, M. A. (2016). Relationship Between Good Governance and Integrity System: Empirical Study on the Public Sector of Malaysia. *Humanomics*, Vol. 32, No. 2, 151–171. <https://doi.org/10.1108/h-02-2016-0008>
- Salleh, A. & Heidecke, A. (2019). Insights: Governance, Integrity and Corruption: A Commentary from the Perspective of Human Governance. *Journal of Governance and Integrity*, Vol. 2, No. 2, 1-2. <https://doi.org/10.15282/jgi.2.2.2019.5462>
- Villegas-Ortega, J., Bellido-Boza, L., & Mauricio, D. (2021). Fourteen Years of Manifestations and Factors of Health Insurance Fraud, 2006–2020: A Scoping Review. *Health & Justice*, Vol. 9, No. 1. <https://doi.org/10.1186/s40352-021-00149-3>
- Zahari, A. I., & Arshad, R. (2020). Fraud Development and Linkages with Corruption Occurrences. *Journal of Governance and Integrity*, Vol. 2, No. 2, 65–76. <https://doi.org/10.15282/jgi.2.2.2019.5469>

IDENTIFYING FACTORS INFLUENCING COMPLIANCE OF MALAYSIAN PUBLIC SECTOR ACCOUNTING STANDARD (MPSAS) BY FEDERAL STATUTORY BODIES (FSBS)

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ABSTRACT

This study examines the compliance factor in Malaysian FSBs, specifically concerning MPSAS compliance. Three specific factors, namely accounting education, technology and infrastructure, and cost-benefit are analysed to understand their impact on MPSAS compliance. A survey questionnaire was used as the research instrument, with 67 individuals representing various FSBs. Logistic regression and correlation analyses were conducted to establish the relationships between these variables and compliance of MPSAS. The findings only confirm that cost-benefit plays a significant role in MPSAS compliance among Malaysian FSBs. However, two variables had no statistically significant role in MPSAS compliance. This study provides valuable insights from the perspective of FSBs on a future investigation to explore other factors related to MPSAS compliance. Future research also suggests the need for additional research to assess how implementing Malaysian public sector accounting standards affects financial reporting within FSBs and state government agencies.

Keywords: Public Sector Accounting, Compliance, Malaysian Public Sector Accounting Standards, Federal Statutory Bodies.

1. INTRODUCTION

The Malaysian government is transforming its accounting practices by shifting from cash to accrual accounting, a crucial element of fiscal reforms. Familiarity with full accrual information is essential for accounting employees to grasp government accounting concepts during implementation. It is also important to identify the factors influencing employees' move toward accrual accounting prior to full implementation (ACCA, 2017). Despite the Ministry of Finance's efforts to encourage Federal Statutory Bodies (FSBs) to adopt the Malaysian Public Sector Accounting Standards (MPSAS), It can be argued that the government's goal of good governance, the reduction of corruption, and the prevention of power abuses is hampered by the fact that not all FSBs have adopted MPSAS (Al-Faryan & Shil, 2023).

The need for trustworthy and accurate public sector financial reporting is heightened by projections of a significant financial crisis in 2023 (Online, 2022). The crisis will pressure public finances, so the government must show Malaysians that spending decisions are prioritised relatively and not swayed by abuses of power or corruption. To this end, governments must adopt accrual-based accounting and report their financial data following generally accepted accounting principles. Moreover, the adoption rate of MPSAS among statutory bodies has not reached its

full potential, and there does not seem to be any research conducted on the prospective research directions aimed at exploring the factors that influence the level of MPSAS adoption among statutory bodies in Malaysia (Azhar et al., 2022). Hence, it is imperative to undertake this study to gain insights into the factors contributing to the deficiencies in the existing reporting and accounting system.

2. LITERATURE REVIEW

Compliance of MPSAS

According to Kovalchuk et al. (2023), compliance is defined as adhering to established standards and regulations; in the context of financial statements, compliance means following all relevant accounting standards and regulations in preparing and presenting financial statements. The compliance certification refers to verifying that the financial statements have been prepared following the applicable standards and regulations. This certification confirms that the financial statements are a true and fair visible representation of the organisation's financial position. Minimum requirements for preparing and presenting financial statement information in the public sector are laid out in MPSAS 1 and 2, drawn primarily from International Public Sector Accounting Standards (IPSAS). IPSAS are the internationally accepted standards for government accounting, and they have the backing of the International Federation of Accountants (IFAC, 2007).

Accounting Education

The relationship between accounting education and MPSAS compliance has been debated extensively. Prior research highlights the importance of thorough accounting education for effective MPSAS compliance. AlQudah et al. (2020) note that governments aim to implement appropriate regulations, and the public interest theory (Posner, 1974). MPSAS adoption to address information asymmetry and improve transparency. Studies by Christiaens et al. (2010), Tanjeh (2016), Salia and Atuilik (2018), and the World Bank (2010) emphasize that qualified accounting staff are crucial for IPSAS compliance, with a lack of core IPSAS knowledge negatively affecting compliance (Christiaens et al., 2010). Saleh et al. (2021) and Hasan et al. (2022) further identify challenges such as insufficient skilled personnel and IT infrastructure in Malaysia's MPSAS implementation.

Technology and Infrastructure

Adequate IT infrastructure reduces operational, reputational, legal, and compliance risks, facilitating efficient operations and system interoperability (Sirkemaa, 2022). Emerging technologies like cloud computing, artificial intelligence, and blockchain enhance data management and ensure accurate financial reporting (Jayesh et al., 2022). Advanced IT infrastructure also supports data analysis, necessary for meeting intricate regulatory requirements. However, technology alone is insufficient; users' digital competencies are vital for maximizing compliance (Chehlarova et al., 2022). Din and Haron (2023) highlight that technology, expert availability, and user training are significant factors in IPSAS adoption, emphasizing the need for investment in IT systems, accounting software, and skilled technicians.

Cost-benefit

The adoption of IPSAS and MPSAS aims to improve public sector financial management, transparency, and accountability. While the compliance offers benefits such as enhanced financial reporting, informed decision-making, and greater stakeholder accountability, the process involves significant costs, raising concerns about cost-effectiveness (Schmidhuber et al., 2020). These costs, including system upgrades and personnel training, are particularly burdensome for developing countries with limited financial resources (Angahar & Gwar, 2019). Non-compliance costs are higher than compliance, as highlighted by Mahanti et al. (2022), though the financial burden of implementing IPSAS deters many public entities (Javed & Zhuquan, 2018).



3. METHODOLOGY

79 questionnaire survey was used as the research instrument, distributed to individuals representing the statutory bodies across 31 ministries in Malaysia. Using Laporan Ketua Audit Negara (LKAN), statistics, and websites as of the latest in 2020, this report is the most recent update generated by the Auditor General of the Malaysian government. Logistic regression and correlation analyses were conducted to establish the relationships between these variables and their compliance with MPSAS.

4. FINDINGS AND DISCUSSION

The logistic regression analysis assessed the impact of three independent variables accounting education (TAE), technology and infrastructure (TTI), and cost-benefit (TCB) on MPSAS compliance. For TAE, the coefficient was -1.538 with a standard error of 1.412. The Wald statistic was 1.186 with a significance level of 0.276 ($p > 0.05$), indicating no significant relationship between accounting education and MPSAS compliance. Similarly, TTI had a coefficient of 0.254 and a standard error of 0.909, with a Wald statistic of 0.078 and a significance level of 0.780 ($p > 0.05$). The odds ratio of 1.289 suggests no significant effect of technology and infrastructure on compliance. Conversely, TCB had a coefficient of 2.325, with a standard error of 1.141, and a Wald statistic of 4.152, resulting in a significance level of 0.042 ($p < 0.05$). The odds ratio of 10.227 confirms a significant positive relationship between cost-benefit and MPSAS compliance. It providing evidence to support that cost-benefit's effect on MPSAS compliance among FSBs.

5. CONCLUSION

The study aimed to assess whether accounting education, technology and infrastructure, and cost-benefit considerations predict MPSAS compliance among FSBs in Malaysia. The logistic regression analysis revealed that accounting education (odds ratio = 0.215) and technology and infrastructure (odds ratio = 1.289) did not significantly influence compliance. Conversely, cost-benefit (odds ratio = 10.227) showed a significant positive relationship with compliance. These findings suggest that while accounting education and technology are not major determinants, cost-benefit considerations greatly impact compliance, aligning with rational decision-making frameworks (Omimakinde & Adejuwon, 2022). This underscores the need for FSBs to consider practical and economic benefits in compliance strategies rather than relying solely on education or technology (Kudlai & Belozertsev, 2022). The results highlight the complex nature of compliance and suggest areas for further research and policy development. The study recommends further research on the impact of MPSAS on financial reporting within FSBs and state agencies and suggests exploring strategies for effective IPSAS implementation in Malaysian public sector financial management.

REFERENCES

- ACCA (2017). IPSAS implementation: current status and challenges. https://www.accaglobal.com/lk/en/technical-activities/technical-resource_search/2017/october/ipsas-implementation--current-status-and-challenges.html
- Al-Faryan, M. a. S., & Shil, N. C. (2023). Governance as an Interplay between Corruption and Polity: Conceptualizing from a National Perspective. *Economies*, 11(2), 65. <https://doi.org/10.3390/economies11020065>
- AlQudah, M., Azzam, A. M., Haija, M., & AlSmadi, M. (2020). The role of governance in the adoption of IPSAS: Evidence from Jordan. *International Journal of Economics, Commerce and Management*, 8(2), 1-12.

- Angahar, A., & Gwar, T. B. (2019). An assessment of the adoption of International Public Sector Accounting Standards (IPSAS) in Nigeria. *International Journal of Economics, Commerce and Management*, 7(5), 1-12.
- Azhar, Z., Kishan, K., & Alfian, E. (2022). The Malaysian Public Sector Accounting Standards (MPSAS) Adoption Among Malaysian Statutory Bodies: A Literature Review with a Future Research Direction. *IPN Journal of Research and Practice in Public Sector Accounting and Management*, 12(01), 203–218. <https://doi.org/10.58458/ipnj.v12.01.09.0082>
- Chehlarova, N., Tsochev, G., Kotseva, M., & Miltchev, R. (2021). Digital Competencies Of Public Administration Employees Related To Cybersecurity. *2021 12th National Conference with International Participation (ELECTRONICA)*,
- Christiaens, J., Reyniers, J., & Rollé, P. (2010). The adoption and implementation of International Public Sector Accounting Standards in the European Union. *Financial*
- Din, B. H., & Haron, E. O. E. (2023). Factors influencing adoption of accrual basis international public sector accounting standards. *International Journal of Accounting and Management Sciences*, 2(1). <https://doi.org/10.56830/puty6689>
- Hasan, H. A., Saleh, Z., & Isa, C. R. (2022). Malaysian Public Sector Accounting Standards (MPSAS) implementation in state Governments of Malaysia: status and challenges. *IPN Journal of Research and Practice in Public Sector Accounting and Management*, 12(01), 33–55. <https://doi.org/10.58458/ipnj.v12-01020075>
- Jabatan Audit Negara. (2022). *Laporan Ketua Audit Negara*. <https://lkan.audit.gov.my>. Retrieved September 13, 2022, from <https://lkan.audit.gov.my/documents/lkan/917/005-LAMPIRAN-2-PK-MUKTAMAD.pdf>
- Jabatan Audit Negara. (2022). *Laporan Ketua Audit Negara*. <https://lkan.audit.gov.my>. Retrieved September 13, 2022, from <https://lkan.audit.gov.my/documents/lkan/917/005-LAMPIRAN-2-PK-MUKTAMAD.pdf>
- Javed, M., & Zhuquan, W. (2018). Adoption of International Public Sector Accounting Standards (IPSAS) in Developing Countries: Challenges and Opportunities.
- Jayesh, G., Novaliendry, D., Gupta, S., Sharma, A., & Hazela, B. (2022). A Comprehensive Analysis of Technologies for Accounting and Finance in Manufacturing Firms. *ECS Transactions*. <https://doi.org/10.1149/10701.2715ecst>.
- Kovalchuk, O., Morenchenko, K., & Bibik, D. (2023). The essence and characteristics of compliance: definition, functions, goals, ethical foundations, place in the organizational structure of the enterprise. *Ekonomika, Finans, Pravo*, 1, 18–22. <https://doi.org/10.37634/efp.2023.1.4>
- Kudlai, A., & Belozertsev, V. (2022). Information Technologies In Accounting And Audit. *Bulletin of the Khmelnytskyi National University*, 306(3), 165–169. <https://doi.org/10.31891/2307-5740-2022-306-3-23>
- Mahanti, R. (2022). COMPLIANCE, DATA, QUALITY, AND GOVERNANCE. *EDPACS: The EDP Audit, Control, and Security Newsletter Online*, 66(2), 20–25. <https://doi.org/10.1080/07366981.2022.2026575>
- Omimakinde, J. A., & Adejuwon, J. A. (2022). Impact of corporate governance on accounting standards' compliance in Nigerian public institutions. *American Journal of Accounting*, 4(1), 1–14. <https://doi.org/10.47672/ajacc.1140>
- Online, S. (2022, November 11). Malaysia not expecting recession in 2023 - BNM governor. *The Star*. <https://www.thestar.com.my/business/businessnews/2022/11/11/malaysia-not-expecting-recession-in-2023---bnm-governor>
- Posner, R. A. (1974). Theories of economic regulation. *Bell Journal of Economics and Management Science*, 5(1), 3-21. *Psychometrika*, 16(3), 297–334. <https://doi.org/10.1007/BF02310555>

- Saleh, Z., Isa, C., & Hasan, H. (2021). Issues and Challenges in Implementing International Public Sector Accounting Standards (IPSAS). *IPN Journal of Research and Practice in Public Sector Accounting and Management*. <https://doi.org/10.58458/ipnj.v11.01.01.0067>.
- Salia, E., & Atuilik, J. (2018). The Challenges of Adopting International Public Sector Accounting Standards (IPSASs) in Developing Countries: A Study of Ghana. *International Journal of Economics, Commerce and Management*, VI(6), 19-34.
- Schmidhuber, L., Hilgers, D., & Hofmann, S. (2020). International Public Sector Accounting Standards (IPSASs): A systematic literature review and future research agenda. *Financial Accountability and Management*. <https://doi.org/10.1111/faam.12265>.
- Sirkemaa, S. (2022). Information Systems Infrastructure Development - Road Ahead. Proceedings of the International Conferences on Applied Computing 2022 and WWW/Internet 2022. https://doi.org/10.33965/ac_icwi2022_202208r037.
- Tanjeh, M. S. (2016). Factors influencing the acceptance of international public sector accounting standards in Cameroon. *Accounting and Finance Research*, 5(2). <https://doi.org/10.5430/afr.v5n2p71>
- The Malaysian Institute of Accountants (MIA). (2011). The changing landscape of public sector accounting. *Accountants Today*, (June), 5.
- World Bank. (2010). *Improving Financial Reporting and Budgeting in the Public Sector*. Washington, D.C.: World Bank.

SUSTAINABLE DEVELOPMENT GOALS AND BUSINESS PERFORMANCE: A BIBLIOMETRIC ANALYSIS

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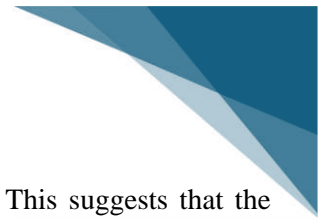
ABSTRACT

The United Nations established the sustainable development goals (SDGs) in 2015 to tackle the world's most critical issues through the "5Ps" (prosperity, planet, peace, people, and partnerships). This study investigated a trend analysis related to the Sustainable Development Goals (SDGs) and business performance. This study aims to determine the essential keywords and themes involved in the SDGs and business performance studies. A bibliometric analysis focuses on articles specifically focused on SDGs and business performance published in articles indexed in the Scopus database. The search yielded 635 articles, which were then reduced to 480 articles after screening. The data was exported and analysed using bibliomagika, OpenRefine, Microsoft Excel, and VOSviewer. The analysis further categorizes the research into five thematic areas: strategic integration of green innovation and intellectual capital for sustainable Small and Medium-sized Enterprises (SMEs), enhancing sustainability reporting through stakeholder engagement and GRI standards, assessing gender equality within the sustainable development goals framework using Structural Equation Modeling (SEM), integrating stakeholder theory into corporate governance and social implications for Indian businesses, and integrating circular economy principles into supply chain management. This analysis of trends and themes provides insight into the evolving landscape of research on SDGs and business performance, indicating a rising interest from both academic and practical perspectives in these areas of study. This study contributes to the literature on SDGs and business performance by examining the patterns in SDG and business performance publications in the Scopus database through bibliometric analysis.

Keywords: SDGs; Business performance; Bibliometric analysis; VOSviewer; Scopus

1. INTRODUCTION

Recently, increasing amount of research has focused on analysing the impact of the Sustainable Development Goals (SDGs) on company strategy. Heras-Saizarbitoria et al. (2022) describe integrating SDGs at the business level as embedding organisational practices that align with the corporate sustainability strategy and contribute towards achieving the goals. Empirical evidence indicates that only a small percentage of businesses adhere to a specific



SDG strategy despite the urgency of achieving sustainable development goals by 2030. This suggests that the majority of companies do not prioritise SDGs. Companies may not prioritise the incorporation of SDGs into their business strategy since there are no regulations requiring them to disclose their sustainability efforts, and there is not enough evidence to prove that doing so will lead to improved financial performance (Ramos et al., 2022). Therefore, further empirical research is required to enhance the current knowledge base and assess the level of integration of the Sustainable Development Goals (SDGs) into the business sector (Ferrero-Ferrero et al., 2023). This study presents a systematisation of existing research on this topic that allows the identification of current research topics.

2. LITERATURE REVIEW

SDGs and Business Performance

There is a range of research on the influence of an SDG's practice on firm performance in the existing literature, with the majority of studies demonstrating a sustainable and positive outcome for sustainability practices. Muhammad and Muhamad (2021) studied the relationship between sustainability practices and the financial performance of companies, with a focus on the increasing literature in this research area following the adoption of SDGs. A content analysis of 56 articles indexed in Web of Science (WoS) and Scopus reveals that 96% of publications report a positive relationship between sustainability practices and financial performance. However, plenty of research has shown that certain companies are confronted with a dilemma of finding a compromise between generating value for their stakeholders and the broader objective of producing value for society. Emma and Jennifer (2021) analysed the impact of SDG reporting on firm performance by examining both the symbolic and substantive aspects of this reporting. The results of the study indicate that there is no significant effect of SDG reporting on firm performance, suggesting that firms may use SDG reporting to mask their true performance rather than provide meaningful information to stakeholders.

3. METHODOLOGY

The papers used in this study were chosen from Scopus because of their comprehensive interdisciplinary coverage and recognised as a reliable source for bibliometric analysis (Chin & Chew, 2021). A total of 480 articles were used in this study. The bibliometric analysis in this study was conducted using bibliomagika 2.5 (Ahmi, 2023), OpenRefine, Microsoft Excel and VOSviewer (Van Eck & Waltman, 2023).

4. RESULTS AND DISCUSSION

To answer the research question, “What are the essential keywords and themes in SDGs and business performance research?”, the research analysed the frequency of the author's keywords and generated network. Figure 1 presents a network visualization of the most frequently used author keywords in SDGs and business performance research co-occurrence. A threshold of five keywords was applied to the dataset consisting of 480 documents, resulting in 35 keywords meeting the criteria out of 1,587 authors' keywords. The study used VOSviewer for mapping analysis. The analysis results led to the development of five (5) different clusters in this study.

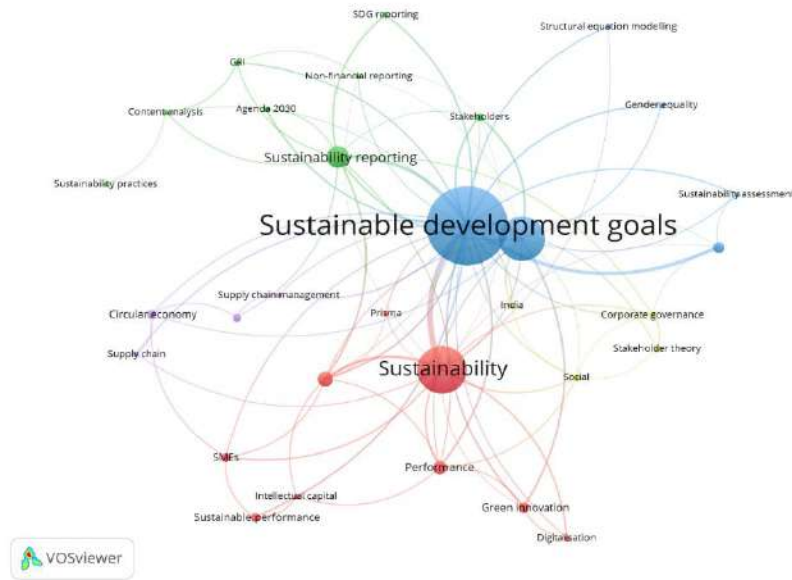


Figure 1. Network Visualisation of Co-Occurrence of Author’s Keywords

These clusters can be categorised into five themes: Strategic integration of green innovation and intellectual capital for sustainable Small and Medium-sized Enterprises (SMEs) (red - 8 items), enhancing sustainability reporting through stakeholder engagement and GRI standards (green - 8 items), assessing gender equality within the sustainable development goals framework using Structural Equation Modeling (SEM) (blue - 4 items), integrating stakeholder theory into corporate governance and social implications for Indian businesses (yellow - 4 items), and integrating circular economy principles into supply chain management (purple - 3 items). The study proposed these themes by identifying common keywords within each cluster. Table 7 presents an overview of the five themes in the research publication on SDGs and business performance.

The first theme is “strategic integration of green innovation and intellectual capital for sustainable Small and Medium-sized Enterprises (SMEs)”. This theme explores the relationship between green innovation and intellectual capital, and how they influence sustainability and business success. SMEs looking to enhance their sustainable practices should start incorporating green innovation and intellectual capital into their operations. SMEs are vital in promoting economic growth and sustainability in the dynamic business landscape. Integrating green innovation and intellectual capital is crucial for SMEs to enhance their sustainable performance in the rapidly changing business environment.

The second theme is “enhancing sustainability reporting through stakeholder engagement and GRI standards”. Organisations rely on sustainability reporting to convey their ESG performance, addressing environmental, social, and governance aspects. This theme explores how sustainability reporting, guided by global standards like the Global Reporting Initiative (GRI) and aligned with the Sustainable Development Goals (SDGs) outlined in Agenda 2030, can be improved through stakeholder engagement and content analysis. The focus is on how non-financial reporting and sustainability practices contribute to achieving these goals.

5. CONCLUSION

According to the findings, the SDGs and business performance study were separated into five primary themes based on the findings of network visualisation mapping: strategic integration of green innovation and intellectual capital for sustainable Small and Medium-sized Enterprises (SMEs), enhancing sustainability reporting through stakeholder engagement and GRI standards, assessing gender equality within the sustainable development goals

framework using Structural Equation Modeling (SEM), integrating stakeholder theory into corporate governance and social implications for Indian businesses, and integrating circular economy principles into supply chain management. This study provides global insights and a map of SDGs' development and business performance studies from a global context.

REFERENCES

- Ahmi, A. (2023). biblioMagika. available from <https://www.aidi-ahmi.com/index.php/bibliomagika>
- Chin, H., & Chew, C. M. (2021). Profiling the research landscape on electronic feedback in educational context from 1991 to 2021: a bibliometric analysis. *Journal of Computers in Education*, 8, 551-586.
- Emma, G.-M., & Jennifer, M.-F. (2021). Is SDG reporting substantial or symbolic? An examination of controversial and environmentally sensitive industries. *Journal of Cleaner Production*, 298, 126781.
- Ferrero-Ferrero, I., Muñoz-Torres, M. J., Rivera-Lirio, J. M., Escrig-Olmedo, E., & Fernández-Izquierdo, M. Á. (2023). SDG reporting: an analysis of corporate sustainability leaders. *Marketing Intelligence & Planning*, 41(4), 457-472.
- Heras-Saizarbitoria, I., Urbieta, L., & Boiral, O. (2022). Organizations' engagement with sustainable development goals: From cherry-picking to SDG-washing? *Corporate Social Responsibility and Environmental Management*, 29(2), 316-328.
- Muhmad, S. N., & Muhamad, R. (2021). Sustainable business practices and financial performance during pre-and post-SDG adoption periods: A systematic review. *Journal of Sustainable Finance & Investment*, 11(4), 291-309.
- Ramos, D. L., Chen, S., Rabeuu, A., & Abdul Rahim, A. B. (2022). Does SDG coverage influence firm performance? *Sustainability*, 14(9), 4870.
- Van Eck, N. J., & Waltman, L. (2023). VOSviewer Manual. Univeriteit Leiden, Leiden. In.

SUSTAINABILITY REPORTING DISCLOSURE AND M-SCORE PERFORMANCE OF ISLAMIC BANKS IN MALAYSIA AND INDONESIA

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ABSTRACT

This study examines the relationship between sustainability reporting disclosure (SRD) and the M-Score of Islamic Banks in Malaysia and Indonesia. Leveraging data from the 2020 to 2021 annual reports of Islamic Banks from Bursa Malaysia and the Annual Report company's website, our research employs purposive sampling to select a representative sample of companies meticulously for comprehensive analysis. The performance among IBs in both countries of Malaysia and Indonesia is proxied by the M-score to illustrate the comprehensive performance measure of Islamic Banks as Islamic institutions. The sustainability reporting disclosure encompasses key elements such as general standard disclosure, governance sustainability, economic sustainability, environment sustainability and social sustainability as independent variables. M-Score performance as a dependent variable. Utilising a robust methodology encompassing descriptive and correlation this study establishes hypotheses based on prior research, culminating in nine hypotheses. The results underscore that there is a negative relationship between SRD and M-Score in Malaysia. However, Indonesia has a positive relationship between SRD and M-Score in Islamic Banks.

Keywords: Sustainability reporting disclosure, M-score, Islamic Banks, Malaysia, Indonesia

1. INTRODUCTION

According to So et al. (2021) sustainability reporting disclosure has become a crucial aspect of corporate transparency and accountability, particularly in the context of Islamic banks in Malaysia and Indonesia. As Islamic finance continues to gain prominence in the global financial landscape, the need for Islamic banks to demonstrate

their commitment to sustainable practices through transparent reporting has intensified. This study aims to explore the relationship between sustainability reporting disclosure and the M-score (a measure of financial performance specific to Islamic banks) of Islamic banks in Malaysia and Indonesia.

2. LITERATURE REVIEW

Sustainability reporting, also known as Environmental, Social, and Governance (ESG) reporting, refers to the practice of measuring, disclosing, and being accountable for an organization's performance in relation to sustainable development. Farooq, (2015), for instance, analysed two types of organisations in India which are firms from Mumbai with less information inequality between investors and corporate management and firms from other places with more information inequality. From 2005 to 2010, the companies' financial success were measured by their market-adjusted returns, which are stock returns minus market returns. The results indicated that the disclosure of ESG ratings shows a detrimental effect of financial performance in the enterprises in Mumbai. For other areas, the effects were insignificant. Furthermore, study by Nik Abdullah and Haron (2022) indicates a positive relationship between sustainability reporting and financial measurement in Islamic banking, emphasizing the importance of incorporating ESG considerations into the operational and reporting practices of these institutions. On the other hand, Buallay (2018) analysed the performance of 235 European banks from 2007 to 2016 and came to diverse conclusions. The overall ESG scores had a positive effect on their financial performance, as measured by ROA and ROE ratios. However, the results varied when the ratings for "environment," "social," and "governance" were analysed separately. The environment scores show a positive effect, and both social and governance scores show a negative effect on ROA and ROE. Besides, according to Shakil et al., (2019), they conducted research on 93 developing market banks from 2015 to 2018 and found that the result of environmental and social scores had a positive impact on the ROA and ROE. However, their governance scores showed no effect. This was attributed to the fact that banks in developing countries may engage in weak governance practices, which would have no positive influence on their financial performance. Further research is needed to understand the relationship between sustainability reporting and M-Score of Islamic banks in Malaysia and Indonesia.

3. METHODOLOGY

The method used in this study is to use a quantitative method by analyzing all Malaysian and Indonesian Islamic Banking. The population in this study is all Islamic Banks industry registered in Malaysia and Indonesia for the 2020 to 2021 period. The data are taken from Bursa Malaysia and Annual Report in the company's website data for the end of year 2020 to 2021. Sampling using the technique of purposive sampling. The chronology of the Islamic Banks as per the sampling technique in Malaysia are: 1) Total number of Islamic Financial Institutions listed in the Bursa Malaysia main market at 2023 2) Number of Islamic Banks listed in the Bursa Malaysia. Meanwhile, In Indonesia are: 1) Total number of Islamic Financial Institutions that listed in Indonesia 2) There are 120 commercial banks in Indonesia (4 state-owned banks and 117 private banks). Two of the state-owned banks have Islamic banking units. Of the 26 government regional banks, 15 have Islamic banking units, while of 86 private national banks, 7 have Islamic banking units, and there are five Islamic commercial banks.

4. RESULTS AND DISCUSSION

The relationship between General Standard Disclosure and M-Score among Islamic banking.

For Malaysia, the Pearson correlation coefficient was found to be -0.214 with a significance level (Sig. 2-tailed) of 0.239. This indicates a weak negative correlation between General Standard Disclosure and M-Score, suggesting that as the level of general standard disclosure increases, the M-Score tends to decrease slightly. However, this correlation is not statistically significant, as the p-value exceeds 0.05. In contrast, for Indonesia, the Pearson correlation coefficient was 0.327 with a significance level (Sig. 2-tailed) of 0.068. This indicates a moderate positive

correlation between General Standard Disclosure and M-Score, suggesting that higher levels of general standard disclosure are associated with higher M-Scores. The p-value of 0.068 suggests a trend that may warrant further investigation, as it indicates a potential relationship that could become significant with a larger sample size or under different conditions.

The findings in Malaysia might be understood in light of Musleh Al-Sartawi's (2020) research, which found a negative relationship between extensive Shariah disclosure and social performance. This indicates that increased disclosure can impose financial burdens associated with corporate social responsibility (CSR) activities, potentially lowering the M-Score. For Indonesia, the moderate positive correlation aligns with Ben Abdallah and Bahloul (2021), who found that higher levels of disclosure could lead to better financial performance, operating performance, and market value. This suggests that better disclosure practices might be linked to higher M-Scores in Indonesia. Additionally, Albarak and El-Halaby (2019) demonstrated that improved disclosure positively impacts financial performance metrics like Tobin's Q and Return on Assets (ROA), supporting the trend observed in Indonesia where increased disclosure correlates with higher M-Scores.

5. CONCLUSION

In conclusion, this study sheds light on the intricate relationship between sustainability dimensions and M-Score within Islamic banking, showcasing divergent patterns between Malaysia and Indonesia. While Indonesia displays a significant positive correlation, underlining the pivotal role of disclosure and governance in bolstering M-Scores, Malaysia reveals weaker associations.

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REFERENCES

- Abdul Rahim, M., et.al., International Conference on Public Policy & Social Sciences, ICOPS 2023, International University of Bosnia, Bosnia and Herzegovina, 14-15 Sep 2023, E-BPJ 9(SI20), Mar 2024 (pp.57-63). DOI:<https://doi.org/10.21834/e-bpj.v9iSI%2020.5801>
- Amran, A., Ishak, R., Zainuddin, Y., & Yusoff, W. F. W. (2017). Sustainability Reporting and Economic Sustainability: Evidence from Islamic Banks in Malaysia. *Sustainability*, 9(4), 644.
- Jan, A., Marimuthu, M., Pisol, M., Isa, M., & Albinsson, P. (2018). Sustainability practices and banks financial performance: a conceptual review from the islamic banking industry in Malaysia. *Int. J. Bus. Manag.*, 61-88. doi:<https://doi.org/10.5539/ijbm.v13n11p61>
- Jan, A., Rahman, H., Zahid, M., Salameh, A. A., Khan P.P, Al-Faryan, M.A.S., Aziz, R., & Ali, E. (2023). Islamic corporate sustainability practices index aligned with SDGs towards better financial performance: Evidence from the Malaysian and Indonesian Islamic banking industry. *Journal of Cleaner Production*. 405. 136860. 10.1016/j.jclepro.2023.136860.
- Maali, B., Casson, P., & Napier, C. (2006). Social Reporting by Islamic Banks. *ABACUS*, 42*(2), 266-289.
- Dusuki, A. W., & Abdullah, N. I. (2007). Why Do Malaysian Customers Patronise Islamic Banks? *International Journal of Bank Marketing*, 25(3), 142-160.
- Haniffa, R., & Hudaib, M. (2004). Corporate Governance Structure and Performance of Malaysian Listed Companies. *Journal of Business Finance & Accounting*, 31(7-8), 1033-1062.
- Haniffa, R., & Hudaib, M. (2007). Exploring the Ethical Identity of Islamic Banks via Communication in Annual Reports. *Journal of Business Ethics*, 76*(1), 97-116.

**NEO-SMEFRI INDEX RANKING FOR SINGLE MOTHERPRENEURS FACING
COVID-19 PANDEMIC AMONG 13 STATES IN MALAYSIA:
FINANCIAL KNOWLEDGE PERSPECTIVE**

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ABSTRACT

The Neo-Single Motherpreneurs Financial Management and Resources Resilience Index (Neo-SMFRI) assesses the capability of Single Motherpreneurs facing a pandemic. Ultimately, it aims to offer a significant instrument to fight against any financial risk. The purpose of this study is to examine the Neo-SMEFRI Ranking that explains the differences in single motherpreneurs' resilience levels in Malaysian states. The study comprises 13 states in Malaysia which are Johor, Melaka, Negeri Sembilan, Pulau Pinang, Perak, Perlis, Selangor, Kedah, Kelantan, Pahang, Terengganu, Sabah and Sarawak, and W.P. Kuala Lumpur from 2022 to 2023. The Neo-SMEFRI utilises indicators from four areas — entrepreneurial financial literacy, financial knowledge, self-efficacy, and resilience — to assess single mothers' ability to adapt to and recover from unexpected environmental changes. This study combines the scores of the four key indicators into one overall score. The Neo-SMFRI is aggregated by category and then by weighted category average. Developed with input from single motherpreneurs, strategic experts, academia, practitioners/government agencies, and non-governmental organisations, and using 22 indicators to identify the pandemic preparedness, mitigation, and recovery needs of SMPs. Future research might investigate other elements contributing to the disparity in resilience levels amongst Malaysian states and compare the findings.

The indicator demonstrates that the performance of poorer nations is inferior. Important factors that explain the disparity in resilience levels amongst Malaysian states include financial awareness and education, motivation, personality, household income, and geographical and spiritual factors.

Keywords: Neo-SMEFRI, index, entrepreneur, single mother entrepreneurs, pandemic.

1. INTRODUCTION

In this COVID-19 pandemic era, there are many single mothers affected and have faced difficulties. The headline of the Malay Mail newspaper stated that “Single mothers among hardest hit by Movement Control Order (MCO), bear the double burden of work and family” which includes the survey that they have conducted during this pandemic (Lim, 2020). 12 percent or 55 women are single mothers, out of the 442 Selangor women polled with the Selangor Women’s Empowerment Institute (IWB) noting that this category of women was very much affected by the Movement Control Order (MCO) as they are both the sole caregiver for their dependents and the breadwinner for their families (Lim, 2020). Most of the single mothers in Selangor are earning less than RM3,000 per month according to a survey done by IWB. About 40% of them were also either forced to take unpaid leave or close their respective businesses during the second week of the implementation of the MCO. Recently, a single mother entrepreneur, Mrs. Norasiah, who is the owner of a restaurant in Kedah, has stated that her source of income is affected due to the movement control order that came into effect in early January 2021 (Noor, 2021). Through the Malaysian Insight, Aisyah, SMPs which sells cookies and cake through online business said that there is a big chance that she could not pay electricity bills, housing bill, and car loan since she cannot afford them due to MCO (Farid, 2020). As a mother of two children, she only gained around RM1500 monthly which is obviously not enough to afford their daily expenses. In the context of this research, the innovative understanding of the strategic advantage that single-mother entrepreneurs possess came about as a result of the inclusion of EFL, ESE, and ERR as aspects of business competence in RBV theory.

2. LITERATURE REVIEW

Single mothers are among the most economically and socially disadvantaged groups who experience higher rates of financial hardship, poverty, and social isolation. Holding a double role to run a family and being the primary source of financial contributors is not an easy task (Mahat et al., 2019). Numerous cases of depression and attempted suicide have been reported in our media to convey the message of the great impact of being a solo parent in the family. A stigma arises along with the term ‘single mother’ which signaled an unfavorable scenario of single mothers who had to face life and upbringing of children without the true breadwinner of the family.

Based on the Single Mother Empowerment Action Plan (2015-2020), KPWKM considers single mothers based on the following definitions: Women (Citizens) who are the Head of Household for the category: (i) marriage status of widow or divorced/divorced permanently and have unmarried children in the same household, (ii) having a husband (her husband is unhealthy and unable to work) and has an unmarried child in the household and (iii) never married but have children (adopted child or illegitimate child).

3. METHODOLOGY

3.1 SAMPLING TECHNIQUE

Data from Kementerian Pembangunan Wanita, Keluarga dan Masyarakat has been used as a basis of a sampling frame to identify single-motherpreneurs in Malaysia. The research assistant will be employed to distribute self-administered questionnaires to targeted respondents in thirteen states.



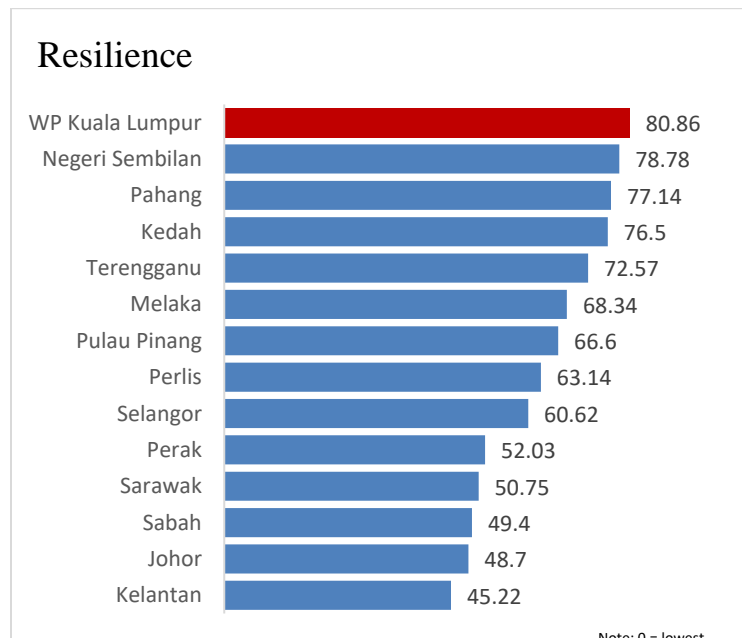
3.2 SAMPLE SIZE

There is also lacking data disclosure on SMPs in Malaysia. Based on the inadequate exact number of Single Motherpreneurs recorded and reported we estimate to have 20 - 30 SMPs for every thirteen states to represent the real scenario setting.

Using RBV theory, Ye and Kulathunga (2019) demonstrate how financial resource availability and literacy affect corporate sustainability. Hence, our RBV research on women entrepreneurship is an evocative study of specific circumstances where broad theoretical frameworks may exist, but where the operationalization of concepts and their linkages remain ambiguous.

4. RESULTS AND DISCUSSION

RESILIENCE



On this front, Kuala Lumpur (80.86) tops the category owing to the fact that women entrepreneurs were able to effectively handle themselves and their conditions with alternative solutions. These findings are comparable to the findings of Abdul rani et al. (2019), who identified resilience (the adaptive capability, such as the capacity to alter in response to new pressures) and optimism (the preparation of entrepreneurs to make choices and take action to limit their susceptibility and the effect of disasters) as a factor for business survival. The fact that Kedah has such a high score of resilience in this study is due to the fact that Kedah entrepreneurs have such a strong faith in religion. Sloane (1999) presented the notion of ikhtiar (effort) and reward in (yusuf, 2012) research, which indicated that malay entrepreneurs and small-scale enterprises in pandang, kedah, believe that if they exert effort, they will succeed in business and get rewards from God.

5. CONCLUSION

Knowledge enhancement for women in running a business via Neo-SMEFRI. The implication on the economy can be seen from the success of SMPs will provide a clear crystal of income equality. By assisting them via Neo-

SMEFRI, this action will assist them to increase their income (as they are from a lower level of income). This will be able to reduce the gap between rich and poor. The stability of the economic growth of the country can be ensured by having intellectual businesswomen. The outcome of this research would be able to impact the nation to produce more successful and healthy entrepreneurs. Balancing economic status among people in Malaysia. Increasing GDP from micro and SME business. This index, Neo-SMEFRI index ranking can be used by the Ministry to predict the business status of SMPs and improve training. This new model can be used further for empirical testing by other countries.

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REFERENCES

- Altaf, M., UI Hameed, W., Nadeem, S. & Shahzad, A. (2019). Successful Entrepreneurial Process as Contributor towards Business Performance in Banking: Moderating Role of Passion for Inventing. *South Asian Journal of Management Sciences* 13(1): 13–40.
- Abdul Rahim, M., Abu Hasan, N., Abdul Aziz, R., Mohamed Shith, M.S.S.P., Ahmad, S. H. (2024). The Development of Neo-SMEFRI Index Ranking for Single Motherpreneurs Facing Pandemic. 21 (1).
- Arshad, M., Farooq, O., Sultana, N. & Farooq, M. (2016). Determinants of individuals' entrepreneurial intentions: a gender-comparative study. *Career Development International* 21(4): 318–339.
- Amani, M., & Shabahang, M. J. (2017). The relationship of self-efficacy and money attitudes with mental health: mediation through Maslow's hierarchy of needs. *International Journal of Culture and Mental Health*, 10(3), 310-319. <https://doi.org/10.1080/17542863.2017.1314517>
- Ali, A. F. M. (2019). Difference between income and expenditure method in measuring poverty in Kelantan, Malaysia. *International Journal of Economics, Management and Accounting*, 27(1), 1-40 <https://journals.iium.edu.my/enmjjournal/index.php/enmj/article/download/594/314>
- Barney, J. (1991) Firm Resources and Sustained Competitive Advantage. *Journal of Management. Theory-RBV (Old Reference Year) -Theory*
- Bandura, A. (1997), *Self-efficacy: The Exercise of Control*, W. H. Freeman and Company, New York.-Theory
- Bandura, A. (2001), "Social cognitive theory: an agentic perspective", *Annual Review of Psychology*, Vol. 12 No. 1, pp. 1-36.- THEORY
- Dalborg, C., Von Friedrichs, Y. & Wincent, J. (2015). Risk perception matters: Why women's passion may not lead to a business Start-Up. *International Journal of Gender and Entrepreneurship* 7(1): 87–104

OWNERSHIP STRUCTURE AND FIRM'S FINANCIAL PERFORMANCE: ANALYSING GOVERNMENT, FAMILY AND FOREIGN OWNERSHIP RELATIONSHIP

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ABSTRACT

The impact of ownership structures on the financial performance of Malaysian public-listed companies has been a long-standing issue discussed and debated by various stakeholders, such as policymakers, shareholders, investors, academics, researchers, analysts, and other interested parties. This study investigates the correlation between different ownership forms (government ownership, family ownership, and foreign ownership) and the financial performance of Malaysian public-listed corporations. Prior studies have demonstrated that all of these characteristics have a significant influence on the financial performance of a company. During the period from 2009 to 2019, a comprehensive assessment was conducted on a total of 259 firms listed on Bursa Malaysia. An array of statistical tests, such as descriptive analysis, correlation, and regression analysis, were performed. Tobin's Q and accounting rate of return are utilized as metrics to assess a company's financial success. The study's findings demonstrate a noteworthy correlation between government ownership, foreign ownership, and a company's financial success as assessed by the accounting profitability metric, Return on Assets (ROA). Furthermore, the utilization of Tobin's Q as a metric for evaluating performance reveals a notable correlation between foreign ownership and the financial performance of the company. Ultimately, the results of this study enhance our comprehension of the ownership arrangements and their effects on a company's financial success.

Keywords: government ownership, family ownership, foreign ownership, firm's financial performance

1. INTRODUCTION

The ownership structure of a firm has a substantial influence on its financial performance and strategic direction. The objectives, resources, and governance styles of various ownership forms can significantly influence the operations and success of enterprises in the marketplace. Malaysia's economic landscape is primarily characterized by the prevalence of government-owned (GOV) and family-controlled (FAM) enterprises, as highlighted by Liew and Devi (2021), Sukamdani (2023), and Wong et al. (2022). This study

aims to investigate the impact of ownership arrangements on the financial performance (FFP) of publicly traded enterprises in Malaysia's Public Listed Companies (PLCs). Effective liquidity management is crucial for PLCs to carry out their short- and long-term responsibilities successfully.

The prevalence of ownership-related conflicts, such as those involving 1MDB, FELDA, and PKFZ, underscores the importance of understanding how different ownership structures impact company performance in Malaysia. The incidents highlight the importance of undertaking a comprehensive analysis of the relationships between ownership dynamics, board composition, CEO competence, and the financial outcomes of the firm. This study aims to enhance corporate governance practices in Malaysia by investigating the crucial factors that influence business performance. The study will analyze the complex relationships between these factors, as explored by Hamad et al. (2020), Jan et al. (2021), and Maaji et al. (2021). This study investigates the influence of various ownership structures on the financial success of the company, employing the principles of Agency theory. Agency theory offers a framework for examining the conflicts of interest that arise between managers and owners, based on the type of ownership.

2. LITERATURE REVIEW

Firm financial performance (FFP) is quantified by accounting profits, which are derived in several ways, such as depreciation estimates and the evaluation of both tangible and intangible assets. This study often falls under two broad categories: accounting profitability-based performance (ABP) and market-based performance (MBP). The categories encompass Tobin's Q, return on equity (ROE), return on assets (ROA), and additional metrics. Ownership structure (OS) in Malaysia, consisting mostly of directors and family members, has a significant impact on share prices. This study emphasizes the correlation between internal choices and market forces, which in turn affects the decision-making processes of the board (Acciarini et al., 2020; Nahum & Carmeli, 2020). The ownership structure (OS) of Malaysia, consisting mainly of directors and family members, significantly impacts share prices. This is due to the fact that the choices made by individuals who possess substantial ownership holdings can directly impact the company's strategic trajectory and operational effectiveness. The study emphasizes the complex connection between internal choices, such as investment decisions, resource allocation, and governance procedures, and external market pressures, such as investor sentiment and market rivalry. These dynamics subsequently impact the decision-making processes of the board of directors. Grasping this connection is crucial for understanding how the ownership structure of a company can influence its financial performance and overall market value.

Government Linked Companies (GLCs), Government Linked Investment Institutions (GLIIs), and Government Linked Investment Companies (GLICs) are the primary means by which government ownership (GOV) is evident in Malaysian Public Listed Companies (MPLCs). The findings indicate a robust and favorable relationship between firm financial performance (FFP) and government intervention, implying that enhanced supervision and harmonization of corporate activities could lead to higher profitability (Enache & Hussainey, 2020; Ilham et al., 2022; Jamil et al., 2021). As stated by Anderson & Reeb (2013), family ownership (FAM) in enterprises refers to the ownership held by parents, siblings, and other family members. This often leads to family members taking on management positions. The impact of family inheritance and legacy on the financial performance of a firm, namely FAM, is substantial. Research indicates that family-owned businesses have a positive influence on performance, however, the benefit may not be very robust. The presence of a positive and significant correlation between FAM and FFP is supported by the findings of several studies (Al-Haddad et al., 2024; Alves & Gama, 2020; Azizi et al., 2021). Enhanced surveillance, resulting in decreased conflicts of interest, and enhanced comprehension of corporate operations are two advantages of FAM for FFP.



3. METHODOLOGY

The population for this research comprises Malaysian companies that are listed on Bursa Malaysia as of December 31, 2019. Initially, there were 806 companies observed, but this number was eventually reduced to 259 based on specific criteria. Data was collected from yearly reports between 2009 and 2019, with a specific focus on industries including construction, healthcare, hotels, and utilities, among others. The sample methods employed were simple random sampling for initial selection and stratified sampling depending on industry and non-financial status. We employed non-probability sampling to eliminate firms that did not possess adequate data or provided inadequate information. The chosen timeframe of 2009 to 2019 was intended to capture a period of relative economic stability in Malaysia. The data were analyzed using SPSS version 27, which facilitated a range of statistical studies such as regression modeling and hypothesis testing. This ensured the reliability and accuracy of interpreting the results obtained from secondary data sources. In this study, the Multiple Linear Regression Model (MLRM) was employed to examine the hypotheses.

4. RESULTS AND DISCUSSION

Government Ownership and Firm's Financial Performance

Table 4: Summary of Hypothesis

No.	Hypothesis	ROA	TOBINQ
H1	There is a significant relationship between government ownership and the financial performance of public listed companies in Malaysia.	Accepted	Rejected
H2	There is a significant relationship between family ownership and the firm's financial performance of public listed companies in Malaysia.	Rejected	Rejected
H3	There is a significant relationship between foreign ownership and the firm's financial performance of public listed companies in Malaysia.	Accepted	Accepted

5. CONCLUSION

This study determines that the financial performance of Malaysian public-listed firms is influenced by the type of ownership they have. Government ownership, likely due to political and bureaucratic inefficiencies, positively impacts internal profitability, as measured by ROA. However, it does not significantly enhance market valuation, as measured by Tobin's Q. Family ownership can be attributed to issues like nepotism and incompetent management. However, it does not have any noticeable impact on market-based or operational performance. Foreign ownership consistently enhances market perception and operational efficiency, highlighting its role in enhancing overall business performance. These findings emphasize the importance of implementing advanced governance strategies that consider the diverse impacts of different ownership structures on business outcomes.

REFERENCES

- Acciarini, C., Brunetta, F., & Boccadelli, P. (2020). Cognitive biases and decision-making strategies in times of change: a systematic literature review. *Management Decision*, 59(3), 638–652. <https://doi.org/10.1108/MD-07-2019-1006>
- Aggarwal, R., Jindal, V., & Seth, R. (2019). Board diversity and firm performance: The role of business group affiliation. *International Business Review*, 28(6). <https://doi.org/10.1016/j.ibusrev.2019.101600>
- Benachour, A., & Tarhlissia, L. (2024). the Microeconomic Determinants of the Performance of Large Companies: Case of Algerian Companies. *Modern Management Review*, 29(1), 15–29. <https://doi.org/10.7862/rz.2024.mmr.02>
- Cho, S. Y., & Lee, C. (2019). Managerial Efficiency, Corporate Social Performance, and Corporate Financial

- Performance. *Journal of Business Ethics*, 158(2), 467–486. <https://doi.org/10.1007/s10551-017-3760-7>
- Ciftci, I., Tatoglu, E., Wood, G., Demirbag, M., & Zaim, S. (2019). Corporate governance and firm performance in emerging markets: Evidence from Turkey. *International Business Review*, 28(1), 90–103. <https://doi.org/10.1016/j.ibusrev.2018.08.004>
- Crisóstomo, V. L., & de Freitas Brandão, I. (2019). The ultimate controlling owner and corporate governance in Brazil. *Corporate Governance (Bingley)*, 19(1), 120–140. <https://doi.org/10.1108/CG-01-2018-0043>
- Deb, P., David, P., O'Brien, J. P., & Duru, A. (2019). Attainment discrepancy and investment: Effects on firm performance. *Journal of Business Research*, 99(February), 186–196. <https://doi.org/10.1016/j.jbusres.2019.02.047>
- Gani, A. A. M. O., Al Rahbi, A. H. S. S., & Ahmed, E. R. (2021). Empirical Analysis on Corporate Transparency, Competitive Advantage, and Performance: An Insight of Muscat Securities Market. *Journal of Governance and Integrity*, 4(2), 96–102. <https://doi.org/10.15282/jgi.4.2.2021.6091>
- Hamad, S., Draz, M. U., & Lai, F. W. (2020). The Impact of Corporate Governance and Sustainability Reporting on Integrated Reporting: A Conceptual Framework. *SAGE Open*, 10(2). <https://doi.org/10.1177/2158244020927431>
- Huu Nguyen, A., Thuy Doan, D., & Ha Nguyen, L. (2020). Corporate Governance and Agency Cost: Empirical Evidence from Vietnam. *Journal of Risk and Financial Management*, 13(5). <https://doi.org/10.3390/jrfm13050103>
- Ilham, R. N., Arliansyah, Juanda, R., Sintia, I., Multazam, M., & Syahputri, L. (2022). Application of Good Corporate Governance Principles in Improving Benefits of State-Owned Enterprise. *International Journal of Economic, Business, Accounting, Agriculture Management and Sharia Administration (IJEBAAS)*, 2(5), 761–772.

PREDICTING ETHICAL JUDGMENT OF PROSPECTIVE ACCOUNTANTS BASED ON ETHICAL IDEOLOGY, EMOTIONAL INTELLIGENCE AND RELIGIOSITY

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ABSTRACT

Ethics is a key part of the accounting profession that must be included to make sure it is honest and trustworthy. Many scandals and ethical problems that governments and companies around the world have had to deal with have made us feel relaxed and comfortable about what is going on in business. The purpose of this study is to evaluate the ethical judgment of prospective accountants based on their ethical ideology, emotional intelligence, and religiosity. This study used a survey method to gather prospective accountants' ethical judgments. This study's sample consisted of 416 accounting students from one of Indonesia's private and public universities. Collected data is supplemented by regression analysis, and the results indicate that idealism has a negative effect on ethical judgment, while relativism and emotional intelligence have a positive effect. Despite the fact that religiosity has a favorable impact, it is insignificant. This study's findings contribute to the advancement of knowledge regarding ethical judgment and are a practical consideration for prospective accountant users who place an emphasis on ethical considerations. Educational institutions are expected to emphasize the importance of ethics applied to accounting ethics issues.

Keywords: Ethical judgement; idealism; relativism; emotional intelligence; religiosity; future accountants.

1. INTRODUCTION

As a necessary consequence of scandals including those involving Enron and Lehman Brothers, which triggered the global financial crisis, the study of unethical business behavior has received increased attention in a number of academic disciplines. In Indonesia, various financial services firms violate the rights of businesses. Even OJK reported receiving complaints about 1,230 unregistered or unlicensed online loan service businesses between 2018 and 2019. In 2018, there were 404 entities, but in 2019, there will be 826. Approximately 42% of the entities that were acted upon were of unknown origin (<https://www.ombudsman.go.id>). To meet the expectations of stakeholders, it is necessary to employ ethical business practices. Financial scandals involving the role of accountants, such as those involving Garuda, Jiwasraya, and Hanson International, have caused the decline of the accounting profession in Indonesia.

The purpose of the study is to assist students, as future business professionals, in identifying and resolving ethical difficulties that will emerge in their careers. In order to address a gap in the existing literature, this study will investigate the ethical judgment of accounting students. This study explores the influence of ethical ideology, emotional intelligence, and religiosity on the ethical judgment of accounting students. The research provided numerous contributions. Few previous research have studied the ethical judgment of students (McCann et al., 2015), (Hernández-López et al., 2020), . This study can contribute to the literature on students' ethical reasoning, particularly in developing nations such as Indonesia. Consequently, this study can be considered a literature

review on accounting students in relation to corporate entity violations involving accountants. Second, accounting students who have taken business ethics and accounting profession courses are included in this study. Consequently, this study plays a role in influencing the concept of ethical evaluation among accounting students who will pursue a career in accounting, thereby assisting practitioners and organizations in the development of staff recruiting strategies. Thus, this study contributes to the theory foundation of ethics education and accounting ethics by enhancing ethical decision-making, as (Mladenovic et al., 2019) suggested that the real world affords them the chance to build ethical decision-making abilities.

2. LITERATURE REVIEW

2.1 Ethical ideology and ethical judgment

Individual moral philosophy has two elements, namely idealism and relativism (Forsyth, 1980). Relativism relates to individual behavior that rejects universal moral standards, while idealism prioritizes the welfare of others. Individuals with a high degree of idealism will claim that the anticipated results of the correct action are realizable. Previous research has demonstrated that idealism and relativism influence the ethical judgment of auditors, where judgements are differentiated depending on the severity of their degree versus ethical circumstances (Johari et al., 2019). According to (Ismail & Rasheed, 2019), idealistic future accountants are more likely to make ethical decisions, whereas relativists are more likely to be compelled to make unethical decisions. This study extends the findings of a prior empirical study showing the ethical ideology and ethical assessment of accounting students is a crucial provision for them upon graduation and employment in the accounting industry, particularly in Indonesia. The proposed theories, based on empirical evidence and previous study literature, are:

H1: idealism has a positive effect on accounting student's ethical judgement

H2: relativism negatively affects accounting student's ethical judgement

2.2 Emotional intelligence and ethical judgement

Emotional intelligence is a key predictor of ethical perception and organizational commitment, according to (Mahanta & Goswami, 2020). Few research in the past have examined the association between emotional intelligence and ethical judgment (Ismail & Rasheed, 2019) (Sulaiman et al., 2022). Consequently, the purpose of this study was to examine the emotional intelligence of accounting students doing ethical assessments. As future accountants, students are required to understand and control their emotions, particularly when faced with ethical challenges. Based on these arguments, the proposed hypothesis is:

H3: students who have higher emotional intelligence tend to take ethical assessments

2.3 Religiosity and ethical judgement

(Maggalatta & Adhariani, 2020) suggests that religion and idealism be considered as significant components in corporate ethics research. Consistent with (Singhapakdi et al., 2013) statement, managers with internal religiosity tend to have greater ethical intentions, as their religious attitudes have implications for their life. In the context of this study, more religious accounting students are viewed as providing a more ethical evaluation of actions that can generate ethical issues. Consequently, the proposed hypothesis is:

H4: students who have internal religiosity tend to take ethical assessments

3. METHODOLOGY

This study utilizes a quantitative methodology and the survey method to observe the influence of personal variables and religiosity on future respondents' ethical judgments. This study's respondents are accounting students who have taken business ethics and accounting profession courses. The total number of students who presented valid responses was 416. The analysis technique used is multiple regression analysis.



4. RESULTS AND DISCUSSION

4.1. Ethical ideology and student's ethical judgement

The results of the study indicate that accounting students' idealism negatively impacts their evaluation of scenarios involving immoral actions. Idealism and relativism have a significant influence in ethical decision making (Oboh, 2019) and (Ko et al., 2019). Accounting students believe that they never intentionally damage or endanger others through their behaviors. Students' idealism demonstrates that they do not accept the general manager's conduct in the industrial process that generates excessive pollution. They also disagree with Acts that cause injury to others, as the Broker's actions in providing improper information to its clients can cause harm to those clients. Regarding a situation that exemplifies the invention of a product that can cause harm, accounting students differ. Based on the ethical scenario evaluated by accounting students, it is evident that students with a greater level of relativism are more likely to consider ethical or non-conditional acts. In the case scenario, the management of the company that executes the production process that has an impact on exceeding the limit of production provisions is not deemed to have violated business ethics, because the goal to be reached is profit for the benefit of stakeholders. It makes no difference if the entrepreneur declares only a portion of the cash received for income tax deduction purposes.

4.2. Emotional intelligence and ethical judgement

This study demonstrated that emotional intelligence favorably influences students' ethical evaluations of scenarios including ethical violations. These findings suggest that persons with high emotional intelligence will demonstrate more ethical behavior than those with poor emotional intelligence. They argue that they can sometimes comprehend their own emotions. They are also motivated and capable of achieving their highest aspirations. When faced with issues, they are typically able to control their emotions. This research concurs with (Ismail & Rasheed, 2019) (Hernández-López et al., 2020) that emotional intelligence positively influences ethical judgment.

4.3. Religiosity and ethical judgement

This study was unable to demonstrate that religiosity had a favorable effect on the occurrence of ethical violations. These findings suggest that the majority of accounting students have an external religiosity, in which their involvement in religious affairs is accompanied by a defined goal. According to (Gokcekus & Ekici, 2020), (Goel et al., 2020) religiosity is positively associated with unethical behavior. Their religious activities are conducted to provide them with protection, strength, and enjoyment. Involvement in religion also serves to preserve ties with coworkers. Therefore, the level of religiosity that does not influence their judgment of ethical circumstances may be attributable to external religiosity variables.

5. CONCLUSION

This study's findings have consequences for multiple stakeholders, including academia, potential employers, and accountant profession regulators. This study is a consideration for academics in measuring the ethical ideology of students as prospective accountants, so that they can take ethics into account when making judgments, so enhancing the legitimacy of the accounting profession.

REFERENCES

- Goel, P., Misra, R., & Dhanalakshmi, A. (2020). Examining influence of religiosity on ethical attitude towards business: Evidence from india and china. *Asian Academy of Management Journal*, 25(2), 51–83. <https://doi.org/10.21315/aamj2020.25.2.3>
- Gokcekus, O., & Ekici, T. (2020). Religion, Religiosity, and Corruption. *Review of Religious Research*, 62(4), 563–581. <https://doi.org/10.1007/s13644-020-00421-2>
- Hernández-López, L. E., Álamo-Vera, F. R., Ballesteros-Rodríguez, J. L., & De Saá-Pérez, P. (2020). Socialization of business students in ethical issues: The role of individuals' attitude and institutional factors. *International Journal*

- of Management Education*, 18(1), 100363. <https://doi.org/10.1016/j.ijme.2020.100363>
- Ismail, S., & Rasheed, Z. (2019). Influence of ethical ideology and emotional intelligence on the ethical judgement of future accountants in Malaysia. *Meditari Accountancy Research*, 27(6), 805–822. <https://doi.org/10.1108/MEDAR-04-2018-0326>
- Johari, R. J., Sanusi, Z. M., & Zarefar, A. (2019). Auditor's ethical judgments: The influence of moral intensity, ethical orientation and client importance. *International Journal of Financial Research*, 10(3), 77–87. <https://doi.org/10.5430/ijfr.v10n3p77>
- Ko, C., Ma, J., Kang, M., Haney, M. H., Bartnik, R., Hwang, D. W., & Lee, D. Y. (2019). The effect of ethical leadership on purchasers' unethical behavior in China: The moderating role of ethical ideology. *Journal of Purchasing and Supply Management*, 25(4), 100528. <https://doi.org/10.1016/j.pursup.2019.01.002>
- Maggalatta, A., & Adhariani, D. (2020). For love or money: investigating the love of money, Machiavellianism and accounting students' ethical perception. *Journal of International Education in Business*, 13(2), 203–220. <https://doi.org/10.1108/JIEB-09-2019-0046>
- Mahanta, M., & Goswami, K. (2020). Exploring the role of ethics in the emotional intelligence-organizational commitment relationship. *Asian Journal of Business Ethics*, 9(2), 275–303. <https://doi.org/10.1007/s13520-020-00110-x>
- McCann, J., Offoha, E., & Bryant, R. (2015). Student Perceptions of Accounting and Business Scandals on the Accounting Profession. *British Journal of Economics, Management & Trade*, 8(4), 326–341. <https://doi.org/10.9734/bjemt/2015/18357>
- Mladenovic, R., Martinov-Bennie, N., & Bell, A. (2019). Business Students' Insights into Their Development of Ethical Decision-Making. *Journal of Business Ethics*, 155(1), 275–287. <https://doi.org/10.1007/s10551-017-3523-5>
- Oboh, C. S. (2019). Personal and moral intensity determinants of ethical decision-making: A study of accounting professionals in Nigeria. *Journal of Accounting in Emerging Economies*, 9(1), 148–180. <https://doi.org/10.1108/JAEE-04-2018-0035>
- Singhapakdi, A., Vitell, S. J., Lee, D. J., Nisius, A. M., & Yu, G. B. (2013). The Influence of Love of Money and Religiosity on Ethical Decision-Making in Marketing. *Journal of Business Ethics*, 114(1), 183–191. <https://doi.org/10.1007/s10551-012-1334-2>
- Sulaiman, R., Toulson, P., Brougham, D., Lempp, F., & Haar, J. (2022). The Role of Religiosity in Ethical Decision-Making: A Study on Islam and the Malaysian Workplace. *Journal of Business Ethics*, 179(1), 297–313. <https://doi.org/10.1007/s10551-021-04836-x>

FACTORS AFFECTING UNETHICAL BEHAVIOUR OF THE MALAYSIAN FAMILY TAKAFUL AGENTS

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ABSTRACT

This research investigates a range of personal, organizational, and environmental factors potentially influencing unethical behaviour among agents in the Malaysian Family Takaful Industry. Specifically, it assesses the impact of self-motivation, role clarity, supervisory roles, ethical climate, sales target pressure, and competition intensity on unethical sales behaviours. The study is motivated by the lack of research on a comprehensive set of determinants of unethical conduct in the Takaful industry. It features a sample of 164 participants, utilizing cluster sampling targeting the top five Family Takaful operators in Malaysia. Data collection was carried out through self-reported questionnaires. Using multiple regression analysis, the findings reveal significant negative links between self-motivation, role clarity, supervisory roles, ethical climate, and unethical sales behaviour. The study contributes broadly to the sales ethics literature by investigating unethical sales practices from the personal, organizational, and environmental perspectives. Additionally, the findings contribute valuable insights for Takaful agents and industry stakeholders aiming to cultivate ethical behaviour and promote integrity within the industry.

Keywords: Ethics; Malaysia; Takaful; Unethical behaviour

1. INTRODUCTION

Takaful is derived from an Arabic word that means mutual guarantee, and it refers to a group of participants who agree to mutually guarantee each other against a specified loss. This simple Takaful concept serves as the foundation for the Takaful business, which is the current Shariah-compliant insurance (Bank Negara Malaysia, n.d.). Family Takaful combines long-term savings with protection for participants and their dependents in the event of death, disability, or survival (Bank Negara Malaysia, n.d.). The Malaysian Family Takaful industry has experienced substantial growth and contributed significantly to the country's economic development. Takaful agent is defined by the Islamic Financial Services Act 2013 as a person who does all or any of the following:

- a) solicits or obtains a proposal for Takaful certificate on behalf of a Takaful operator.
- b) offers or assumes to act on behalf of a Takaful agents in negotiating a Takaful certificate; or
- c) does any other act on behalf of a Takaful agents in relation to the issuance, renewal, or continuance of a Takaful certificate.

Despite its ethical foundations, issues of unethical behaviour among Takaful agents remain (Husin, 2019). The arena of marketing Takaful products is largely driven by the mix of sales-based commission and agent-consumer information asymmetry, which offers an ideal environment for unethical behavior among agents (Shihab, 2023). The prevalent commission-driven model creates a potential conflict of interest, where agents may prioritize sales quantity over comprehensive client education (Salman, 2018). The challenge of imperfect information in Takaful

products intensifies the vulnerability of clients, who rely heavily on agents for guidance. This information gap becomes an exploitable opportunity, with agents potentially manipulating or selectively presenting details to influence clients' decisions in their favour. This environment has resulted in a concerning prevalence of unethical behaviour among Takaful agents. They frequently partake in deceptive information disclosure and practices of unfair competition, as observed by Khan et al. (2020). Mis-selling of policies emerges as a significant problem, leading to high lapsation rates and agent turnover (Chandrarathne & Herath, 2020).

The repercussions of such unethical conduct extend beyond the immediate transaction. Husin's (2019) study underscores the crucial importance of ethical behavior by sales representatives in building trust and cultivating loyalty among customers. Unethical behaviour not only erodes trust but may also lead to customer dissatisfaction, resulting in the departure of even the most loyal customers (Maha et al., 2020). Considering the aforementioned consequences, a fundamental question arises: why would Takaful agents engage in unethical behavior when faced with such adverse outcomes? This question becomes more intriguing given Takaful adheres to Shariah principles. In addressing this question, this study explores the factors potentially contributing to these unethical practices, focusing on self-motivation, role clarity, supervisory roles, ethical climate, sales target pressure, and competition intensity.

2. LITERATURE REVIEW AND HYPOTHESES

Ethics-based theories, such as ethical decision-making theory and virtue ethics theory, assert that ethical considerations are deeply rooted in an individual's inherent values (Jones, 1991; MacIntyre, 1984). Extending these theories, Schwepker (2019) emphasizes the role of organizational values and management practices, in addition to individual values, in shaping ethical behavior. This notion aligns with the general theory of marketing ethics, which suggests that various factors, including the opinions of others, significantly influence an individual's ethical decisions when faced with ethical dilemmas (Ferrell & Gresham, 1985). In the context on financial sector, past research has identified several personal (Abdullah et al., 2020; Ismail et al., 2015), organizational (Chandrarathne & Herath, 2020; Talwar, 2023), and environmental (Khan et al., 2023) factors that influence unethical behavior among sales agents. However, to the best of our knowledge, no studies have examined this comprehensive set of factors in a single study. This study addresses this gap by exploring the personal, organizational, and environmental factors to assess their incremental impact and interplay on Takaful agents' unethical behavior.

The following are hypothesized in this study:

- H1: There is a negative relationship between self-motivation and the Takaful agents' unethical behaviour.
- H2: There is a negative relationship between role clarity and the Takaful agents' unethical behaviour.
- H3: There is a negative relationship between supervisory roles and the Takaful agents' unethical behaviour.
- H4: There is a negative relationship between ethical climate and the Takaful agents' unethical behaviour.
- H5: There is a positive relationship between sales target pressure and the Takaful agents' unethical behaviour.
- H6: There is a positive relationship between competition intensity and the Takaful agents' unethical behaviour.

3. METHODOLOGY

The study employs a quantitative research design with a sample size of 164 Takaful agents from the top five Family Takaful operators in Malaysia. Data collection involved self-reported surveys. The survey items were adopted from prior literature. Statistical analyses, including correlation and regression, were used to analyze the data. The following Equation 1 was estimated using Ordinary Least Squares (OLS) to test the developed hypotheses:



$$\text{Unethical} = \alpha_0 + \alpha_1 \text{Motivation} + \alpha_2 \text{Role} + \alpha_3 \text{Supervisor} + \alpha_4 \text{Climate} + \alpha_5 \text{Sales} + \alpha_6 \text{Competition} + \alpha_7 \text{Age} + \alpha_8 \text{Sex} + \alpha_9 \text{Education} + \alpha_{10} \text{Years} + \alpha_{11} \text{Title} + \alpha_{12} \text{Premium} + \varepsilon \quad (1)$$

4. RESULTS AND DISCUSSION

The regression results indicate significant negative relationships between self-motivation, role clarity, supervisory roles, and ethical climate, and unethical sales behaviour. These results are consistent with H1, H2, H3, and H4. H5 and H6 are not supported as sales target pressure and competition intensity are both not significantly related to unethical behaviour. Together, these results highlight the importance of personal- (high self-motivation and role clarity) and organizational-level (effective supervisory roles and positive ethical climate) factors in mitigating unethical practices among the Takaful agents.

5. CONCLUSION

This study provides valuable insights into the factors influencing unethical behaviour among Family Takaful agents in Malaysia. It underscores the need for high self-motivation, role clarity, effective supervisory role, and a positive ethical climate in minimizing unethical sales practices. Future research may explore cross-cultural influences and employ mixed methods for a more comprehensive understanding of this topic.

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REFERENCES

- Abdullah, N. A., Hassan, S. A., & Yusoff, S. Z. (2020). Factors that Influence the Ethical Behaviours of Takaful Agents. *International Journal of Academic Research in Business and Social Sciences*, 10(8).
- Aziz, A., Ghani, R., & Shaari, R. (2016). Factors affecting ethical behaviour of Takaful agents. *Journal of Financial Services Marketing*, 21(4), 367-380. <https://doi.org/10.1057/s41264-016-0004-5>.
- Bank Negara Malaysia (n.d.). General Takaful: A Conceptual Framework. Retrieved from <https://www.bnm.gov.my/documents/20124/792374/booklet.en.pdf>.
- Chandrarathne, W. R. P. K., & Herath, H. M. A. (2020). Impact of Organizational Factors on Sales Force Unethical Behavior in the Sri Lankan Life Insurance Industry. *Journal of Business Research and Insights (former Vidyodaya Journal of Management)*.
- Ferrell, O. C., & Gresham, L. G. (1985). A Contingency Framework for Understanding Ethical Decision Making in Marketing. *Journal of Marketing*, 49(3), 87-96.
- Haron, R., Ismail, I., & Abdul Razak, D. (2011). Sales target pressure and unethical behaviour. *International Journal of Bank Marketing*, 29(5), 358-373. <https://doi.org/10.1108/02652321111152996>.
- Husin, M. M. (2019). The dynamics of Malaysian Takaful Market: Challenges and Future Prospects. *Journal of Islamic Finance*, 8, 131-137.
- Ismail, I., Haron, H., Abdul Razak, S. H., Ishak, N. K., & Abdul Jalil, N. A. (2015). Unethical Behavior—What Influences Salesperson to Do So? The Case of Malaysia. *Advanced Science Letters*, 21(4), 918-921.
- Jones, T. M. (1991). Ethical Decision Making by Individuals in Organizations: An Issue-Contingent Model. *Academy of Management Review*, 16(2), 366-395.
- MacIntyre, A. (1984). *After Virtue: A Study in Moral Theory*. University of Notre Dame Press.



- Maha, M. R. A. S., Davide, C., & Koumbarakis, P. (2020). Takaful industry and Blockchain: challenges and opportunities for costs' reduction in Islamic insurance companies. *Journal of Islamic Studies, 2020: Second Special Issue for EJIF Workshop* (1). <https://doi.org/10.13135/2421-2172/4926>.
- Khan, A., Rashid, H. A., Shahid Yaqub, R. M., & Abbas, S. (2020). Determinants of Customer Perception about adoption of Islamic Insurance (Takaful) in Pakistan. *Journal of Business and Social Review in Emerging Economies, 6*(4), 1505–1516. <https://doi.org/10.26710/jbsee.v6i4.1485>.
- Khan, S., Shah, S. J., Wang, C., & Ibrar, M. (2023). The impact of sales environment competitiveness on salespeople's inclination towards unethical sales practices: The mediating role of self-control depletion and the moderating role of ethical leadership. *Australian Journal of Management, 0*(0). <https://doi.org/10.1177/03128962231197829>.
- Schwepker, C. H. (2019). Strengthening the integrity of the salesforce: The pivotal role of ethical leadership. *Journal of Business Ethics, 159*(3), 609-623.
- Taek Yi, H., Dubinsky, A. J., & Un Lim, C. (2012). Determinants of telemarketer misselling in life insurance services. *Journal of Services Marketing, 26*(6), 403-418.
- Talwar, R. (2023). Determinants of Unethical Behaviour of Sales Personnel in Indian Life Insurance Industry: An Empirical Study. *SAMVAD: SIBM Pune Research Journal, 27*, 105-119.
- Zhang, Z., & Zhang, P. (2016). Ethical climate and unethical behaviour: The mediating role of moral disengagement. *Journal of Business Ethics, 134*(3), 493-504. <https://doi.org/10.1007/s10551-014-2386-2>

IS THE ACADEMIC USE OF GENERATIVE AI SUSTAINABLE? A TAM AND UTAUT-BASED MODEL OF STUDENT OUTCOMES

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ABSTRACT

Considering the increasing digitalization of education, and its implications for academic ethics and its sustainability, the current study tested the technology acceptance model elements (Perceived usefulness and perceived ease of use) among undergraduate accounting and finance, and management sciences students in Pakistan. Based on the unified theory of acceptance and use of technology, the study also tested students' adoption of the technology for academic tasks. Furthermore, the study also tested for student outcomes of using generative AI for academic tasks in the form of student satisfaction and student engagement. Time-lagged data were collected through online and paper-and pencil surveys from an undergraduate student sample of 180 respondents enrolled in Pakistani universities. Findings indicate that both perceived usefulness and perceived ease of use predicted the use of large-language models such as ChatGPT among students. Further, use of generative AI enhanced students satisfaction with the learning process. However, student engagement was not enhanced. Results are discussed in terms of implications of digitalizing education, policy making, and ethical implications. Lastly, the study also discusses the need for considering practical steps for the sustainability of AI use for academic versus other tasks.

Keywords: Technology Adoption; TAM; UTAUT; Academic use of AI; Student Outcomes

1. INTRODUCTION

The increasing digitalization of education and the learning environment is drawing skepticism worldwide owing to its' potential implications. For academic purposes, students' use of digitalized resources enables quick solutions to their queries, often providing them large text solutions to graded activities such as assignments, projects etc. While this saves students' time and effort, however, the use of generative AI in academics especially among students is drawing increasing skepticism owing to its potential impact on the learning outcomes (Abbas et al., 2024). While AI enhances learning opportunities for a wider population of students, its (un)equal access and ethicality remain questionable. These concerns notwithstanding, the direct impact on students' learning outcomes has remained underresearched. This study attempts to identify aspects of generative AI (e.g. ChatGPT) that increase its use among students, and the outcomes student satisfaction and engagement. First, the study adds the educational context to technology adoption, particularly invoking the two most used theories in technology adoption. Second, identifying student outcomes (engagement and satisfaction) can guide policy making, instructional design, and the learning process. This also provides clearer insights into the consequences of relying on technology-based tools for education.

2. LITERATURE REVIEW

2.1 TAM, UTAUT and Students' adoption of AI

TAM and UTAUT place ease of adoption and perceived usefulness at the core of user decisions to adopt a



particular technology (Edo et al., 2023). Research indicates that when a technology is both user-friendly and perceived as beneficial, its adoption is more likely (Jeyaraj et al., 2023; Saufi et al., 2023). If students perceive generative AI as enhancing their knowledge or their ability to complete graded tasks more effectively, they are more inclined to integrate these tools into their routine academic tasks (Bancoro, 2024). For generative AI, if students find the technology easy to operate and perceive it as offering significant advantages in teaching and research efficiency, they are more likely to use it (Xue et al., 2024).

2.2 Student use of AI and student outcomes

Generative AI characteristics also enable it to adapt the learning content to individual learning styles, and language of their prompts, and can keep a relevant pace for the student, creating an engaging and stimulating environment (García-Peñalvo et al., 2022). Interactive simulations and other graded tasks such as personalized project ideas and quizzes, etc. may keep students interested and psychologically involved in their learning process (Almasri, 2024; Gunuc et al., 2015). Furthermore, AI powered virtual platforms may also foster peer interaction, increasing the likelihood of learning motivation and engagement. These personalized learning experiences, prompted by the students themselves, make learning more relevant and student-focused, ultimately leading to higher engagement and satisfaction.

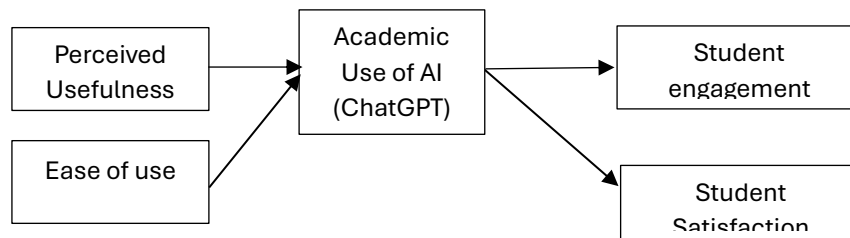


Figure 1. Theoretical Framework

3. METHODOLOGY

3.1 Process:

Data were collected in two parts, 2-weeks apart, from accounting and management undergraduates enrolled in BS-Accounting and Finance and Bachelors in Business Administration programs at 4 Pakistani Universities. Final matched sample across the two time lags constituted 190 respondents. Students were enrolled in various semesters from the 2nd to the 8th semesters.

3.2 Instrumentation and tools

Established scales were adopted for the purpose of data collection. All scales adopted a 5-point Likert Scale. Data were analyzed using the PROCESS Macro in SPSS and four mediation models (model 4) were run for the purpose of hypothesis testing.

4. RESULTS AND DISCUSSION

The findings of the current study confirm prior evidence on the role of TAM and UTAUT elements in predicting adoption of technology in an educational context. Specifically, findings confirm that students consider potential use for instrumental goals, as well as the ease of the large-language models interface in adopting generative AI

tools for academic tasks. Furthermore, the use of Generative AI, specifically ChatGPT among the undergraduate students also increased their satisfaction with the learning experience. However, it is quite telling that contrary to the hypothesis, ChatGPT use did not enhance, rather adversely affected students' cognitive engagement with the learning process/ content. The adverse significant results should be alarming because if student satisfaction with the outcomes of adopting AI tools is accompanied with reduced (versus enhanced) cognitive engagement, perhaps this signals that students are able to achieve intended course objectives (e.g. grades on assignments and projects etc.) without being immersed cognitively in the content. This calls to question whether ChatGPT-like tools have more benefits or are potentially more harmful for the learning experience. Reduced cognitive engagement may result in long-term implications like affecting skills critical to the learning objectives. These may include impaired critical thinking, unachieved knowledge objectives and general lack of mental or cognitive decline.

5. CONCLUSION

In conclusion, the findings show that encouraging students' use of AI in the classroom or for academic tasks should be proceeded with caution, as it may lead to unintended, unwanted consequences. Specifically, by increasing students satisfaction without engaging them in the learning process, use of AI among students is potentially harmful to the learning objective(s).

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REFERENCES

- Abbas, M., Jam, F.A. & Khan, T.I. Is it harmful or helpful? Examining the causes and consequences of generative AI usage among university students. *Int J Educ Technol High Educ* **21**, 10 (2024). <https://doi.org/10.1186/s41239-024-00444-7>
- Edo, O. C., Ang, D., Etu, E. E., Tenebe, I., Edo, S., Diekola, O. A. (2023). Why do healthcare workers adopt digital health technologies-A cross-sectional study integrating the TAM and UTAUT model in a developing economy. *International Journal of Information Management Data Insights*, 3(2), 100186.
- Jeyaraj, A., Dwivedi, Y. K., & Venkatesh, V. (2023). Intention in information systems adoption and use: Current state and research directions. *International Journal of Information Management*, 73, 102680.
- Saufi, M., Rofi'i, A., Firdaus, D. R. (2023). The Analysis of User Intention to Subscribe Netflix Using UTAUT Framework. *Journal of Information System, Technology and Engineering*, 1(1), 16-20.
- Bancoro, J. C. (2024). Exploring the Influence of Perceived Usefulness and Perceived Ease of Use on Technology Engagement of Business Administration Instructors. *International Journal of Asian Business and Management*, 3(2), 149-168.
- Xue, L., Rashid, A. M., Ouyang, S. (2024). The Unified Theory of Acceptance and Use of Technology (UTAUT) in Higher Education: A Systematic Review. *SAGE Open*, 14(1), 21582440241229570.
- García-Peñalvo, F. J., Corell, A., Abella-García, V., Grande, M. (2022). Online assessment in higher education in the time of COVID-19: Fostering change and collaboration. *Journal of Information Technology Research*, 15(1), 1-16.
- Almasri, F. Exploring the Impact of Artificial Intelligence in Teaching and Learning of Science: A Systematic Review of Empirical Research. *Res Sci Educ* (2024). <https://doi.org/10.1007/s11165-024-10176-3>
- Gunuc, S., Kuzu, A. (2015). Student engagement scale: development, reliability and validity. *Assessment Evaluation in Higher Education*, 40(4), 587-610.

THE RELATIONSHIP BETWEEN CORPORATE GOVERNANCE MECHANISMS, INNOVATION, AND STRATEGIC MANAGEMENT ACCOUNTING DISCLOSURE: THE MODERATING ROLE OF BOARD GENDER DIVERSITY

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ABSTRACT

In order to adapt to the constant changes in the business environment, information disclosures in the annual reports have emerged as a crucial debate point. Thus, it is essential to comprehend the notion of strategic management accounting (SMA) information as one of the companies' business strategies in business' decision-making. This paper aims, to examine the moderating effect of the board gender diversity in explaining the relationship between the board characteristics, ownership structure, and innovation with the extent of SMA disclosures in the Malaysian public listed companies' annual reports. The sample was from 180 public listed companies for the year 2020, which is the period global economies were hit by the novel COVID-19. The content analysis technique was employed to collect data for the dependent, independent, moderating, and control variables. The regression analysis implied that the significant predictors that explains the extent of SMA disclosures were the board size, board independence, foreign ownership, and innovation. However, board gender diversity's role as the moderating variable was not significant in influencing the relationship between the independent variables and the extent of SMA disclosures. The adoption of the resource-based view theory has successfully used in this study in conceptualizing the board size, board independence, foreign ownership, and innovation as companies unique resources that are valuable, rare, in-imitable, and non-substitutable. This study contributes to the improvement in strategic management accounting disclosure (SMAD) amongst the public listed companies in Malaysia for business sustainability through the utilization of the right resources in decision-making for business sustainability.

Keywords: Strategic management accounting; disclosure; business sustainability; board gender diversity; resource-based view theory.

1. INTRODUCTION

Annual report is regarded as the main source of information about companies' financial and non-financial information. The main purpose for companies to apply SMA information is to integrate competitor's strategy into companies' business sustainability. This is due to that SMA information is a method to disclose business strategy (Honggowati et al., 2020). External changes affect companies' business strategies overtime. To have the right business strategy, information related to SMA is crucial to help managers in making decision, control and monitor the strategy to achieve business sustainability.

Despite all that, not all companies disclose SMA information due to the information provided would be at the competitors' advantage, and there is no definite guideline or standard framework to disclose SMA information in the annual reports. Thus, companies that practice good corporate governance is believed to have better transparency and greater measure to heightened corporate accountability (Honggowati et al., 2020; Cescon et al., 2019; Nosratabadi et al., 2019). Hence, the society will have more confidence on the company, knowing that business strategies are being perform based on good corporate governance practices (Katmon et al., 2019).

Deciding upon the right strategies, capable of controlling and monitoring of the strategies in business sustenance, is linked to the utilization of the right resources. From the lens of the resource-based view theory (RBVT), a company's resources which are valuable, rare, in-imitable, and non-substitutable, supports companies to achieve competitive advantage and be able to remain in-existence.

2. LITERATURE REVIEW

2.1. Strategic Management Accounting Disclosure

Strategic management accounting (SMA) since it is first coined was conceptualised as information in monitoring success of the business strategy pursued (Simmonds, 1981). Thereafter, SMA is developed by looking at company's achievement relative to its competitors, as sustainable competitiveness is the outcome of a company's ability to counter its competitor's moves (Bromwich, 1990). The information elements in SMA provides the ability to adapt to intense competition and constant changes in the market (Wilson, 1995). For example, COVID-19 has a significant impact on economic activity that indirectly implicates changes in the disclosures requirement. Despite the importance of the information elements in SMA, disjointed effort to explore the overall development and broadness of SMA concept. The problem is how should we conceptualised and operationalised SMA: is it as practices, tools and techniques, or as elements of SMA information.

There is no consensus definition on what is SMA because it depends on the theme advocate by the researches. However, it can be gathered that SMA is the provision and analysis of internal and external information (Lachmann, Knauer, & Trapp, 2013), for long term purpose (Liu & Wen, 2017), and having forward looking orientation (Duci, 2022), to create competitive advantage. Therefore, it is worth mentioning that SMA in this study is looking at the strategically related activities or the information elements as a basis in understanding SMA. The information is integrated from within the company (resources) and outside of the company (changes in the market), which is to support a company in the decision-making on strategy to be pursued (Phornlaphatrachakorn & Na-Kalasinth, 2020), control, and monitoring of the company's strategy to ensure business sustainability is attainable (Nguyen & Nguyen, 2021). MCCG 2021 also stated that the board should ensure the company' sustainability strategies, goals, and activities conducted are communicated in the annual reports, and a designated individual within the management of the company is to be identified to handle the matter.

2.2. Strategic Management Accounting Disclosure in Malaysia

Businesses are essential to a country because a business engages in a vital role in boosting the economy by providing goods, services, and job opportunities to society. The global financial crisis in the United States of America from 2007 to 2009 had a damaging impact on businesses in Southeast Asia countries, including Malaysia. When the crises happened, emerging countries focused on stabilizing the economies, did not have excess funds for investment, and relied heavily on loans to sustain the business (Hatane et al., 2021), resulting in the companies' inability to bear the high cost of voluntary disclosure during the financial crisis periods. Similarly, the COVID-19 pandemic has forced companies in Malaysia to revise the company's strategy and disclosure of information to the public to remain competitive and sustainable.

3. METHODOLOGY

The study comprises of 716 public listed companies (PLCs) in Malaysia in year 2020. The annual reports represent the unit of analysis for this study. There are 180 PLCs as the sample size of this study, determine through stratified random sampling methods inclusive of 11 business sectors with the exclusion of the financial industry. Systematic sampling method is employed in selecting the companies within each business sector. Data is analyse using SPSS version 29.0 and the descriptive statistics is employed to achieve the first objective of this study, at the same time to fulfil the second and the third objectives of the study, hierarchical regression analysis is conducted.



4. RESULTS AND DISCUSSION

Table 4.1
Descriptive Statistics for Dependent Variable (SMAD) for the Years 2020

2020	
Minimum (%)	10.00
Maximum (%)	94.29
Mean (%)	40.34
SD	11.30

Table 4.2
Hierarchical Regression Analysis for Year 2020

Model		Coefficients β	t-value	Sig.
1	(Constant)		-3.873	0.001
	LgCSIZE	0.486	7.261	0.001** *
	LgLEV	-0.108	-1.615	0.108
2	(Constant)		-3.921	0.001
	LgCSIZE	0.346	5.095	0.001** *
	LgLEV	-0.102	-1.677	0.095*
	BTEN	-0.069	-1.111	0.268
	LgFORO	0.234	3.798	0.001** *
	Bsize	0.187	2.675	0.008** *
	BIND	0.170	2.636	0.009** *
3	LgINNOV	0.166	2.619	0.010**
	(Constant)		-3.894	0.001
	LgCSIZE	0.336	4.944	0.001** *
	LgLEV	-0.088	-1.429	0.155
	BTEN	-0.064	-1.029	0.305
	LgFORO	0.236	3.847	0.001** *
	Bsize	0.168	2.372	0.019**
4	BIND	0.160	2.474	0.014**
	LgINNOV	0.168	2.659	0.009** *
	LgBGEN	0.097	1.573	0.118
	(Constant)		-2.007	0.046
	LgCSIZE	0.330	4.787	0.001** *
	LgLEV	-0.075	-1.178	0.240
	BTEN	-0.126	-0.938	0.350
LgFORO	0.087	0.604	0.546	
Bsize	-0.006	-0.043	0.966	
BIND	0.163	1.361	0.175	

LgINNOV	0.110	0.767	0.444
LgBGEN	-0.342	-0.881	0.379
BTEN_BGEN	0.098	0.565	0.573
LgFORO_BGEN	0.173	1.154	0.250
BSIZE_BGEN	0.402	1.315	0.190
BIND_BGEN	-0.019	-0.069	0.945
LgINNOV_BGEN	0.080	0.515	0.607

Notes: ***Highly significant at p-value < 0.01 level; **significant at p-value < 0.05; *moderately significant at p-value < 0.1 level.

5. CONCLUSION

It can be concluded that, on average SMA disclosure is at 40.34% which is classified as marginally satisfactory. Significant predictor variables in explaining the extent of SMAD which are the companies' resources that are valuable, rare, in-imitable, and non-substitutable were board size, foreign ownership, board independence, and innovation for the Malaysia public listed companies in year 2020. It is also concluded that board gender diversity 30% requirement by MCCG 2021, has yet to achieve. At the same time, board gender diversity has no significant moderating effect on the relationship between the independent and dependent variables.

REFERENCES

- Bromwich, M. (1990). The case for strategic management accounting: The role of accounting information for strategy in competitive markets. *Accounting, Organizations and Society*, 15(1/2), 27–46.
- Cescon, F., Costantini, A., & Grasseti, L. (2019). Strategic choices and strategic management accounting in large manufacturing firms. *Journal of Management and Governance*, 23(3), 605–636.
- Duçi, E. (2021). The relationship between management accounting, strategic management accounting, and strategic cost management. *Academic Journal of Interdisciplinary Studies*, 10(5), 376–389.
- Hatane, S. E., Diandra, J. C., Tarigan, J., & Jie, F. (2021). Voluntary intellectual capital disclosure and earnings forecast in Indonesia–Malaysia–Thailand growth triangle's pharmaceuticals sector. *International Journal of Emerging Markets*. Vol. ahead-of-print No. ahead-of-print.
- Honggowati, S., Suhardjanto, D., & Wahyu, S. (2020). The Role of Corporate Governance on Strategic Management Accounting Disclosure. *International Journal of Innovation, Creativity and Change*, 13(9), 919–936.
- Katmon, N., Mohamad, Z. Z., Norwani, N. M., & Farooque, O. Al. (2019). Comprehensive Board Diversity and Quality of Corporate Social Responsibility Disclosure: Evidence from an Emerging Market. *Journal of Business Ethics*, 157(2), 447–481.
- Lachmann, M., Knauer, T. and Trapp, R. (2013). Strategic management accounting practices in hospitals: empirical evidence on their dissemination under competitive market environments. *Journal of Accounting and Organizational Change*, 9(3), 336–369.
- Nguyen, T. H., Nguyen, Q. T., Nguyen, D. M., & Le, T. (2023). The effect of corporate governance elements on corporate social responsibility reporting of listed companies in Vietnam. *Cogent Business and Management*, 10(1), 1–21.
- Norman, C. S., Rose, A. M., Rose, J. M., & Ugrin, J. C. (2020). Director friendships with the CEO: are they always a threat to director integrity? *Accounting and Business Research*, 52(2), 150–165.
- Nosratabadi, S., A. Mosavi, S. Shamshirband, E. Kazimieras Zavadskas, A. Rakotonirainy, and K. W. Chau. (2019). Sustainable Business Models: A Review. *Sustainability*, 11(6), 1663–1693.
- Phornlaphatrachakorn, K., & Na-Kalasinhu, K. (2020). Strategic management accounting and firm performance: Evidence from finance businesses in Thailand. *Journal of Asian Finance, Economics and Business*, 7(8), 309–321.
- Simmonds, K. (1981). Strategic Management Accounting. *Management Accounting*, 59(4), 26–29.



GENERAL INSURER'S FINANCIAL RESILIENCE TOWARDS CATASTROPHE RISK: A CONCEPTUAL FRAMEWORK

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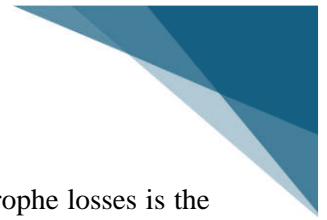
ABSTRACT

The changing climate has led to a significant increase in natural catastrophes worldwide, posing unique challenges to the insurance industry. These catastrophic events, characterized by their infrequency and severe impact, demand specialized risk management approaches and place substantial pressure on insurer capitalization. The insurance industry is particularly vulnerable to the effects of climate change, with catastrophes representing significant financial hazards, including the risk of insolvency, immediate reductions in earnings and statutory surplus, potential forced asset liquidation, and the risk of a rating downgrade. The failure of an insurance company can have far-reaching consequences for the economy, society, and the nation as a whole. In this era of abrupt climate change and heightened catastrophe risk, the resilience of insurers has become a critical concern. Understanding the extent to which these companies can withstand increasing catastrophe risks is essential. However, measuring insurers' resilience is complex and involves multiple factors across different dimensions including financial resilience, for which no clear measurement formula currently exists. This study seeks to contribute to the literature by establishing the conceptual groundwork for understanding and measuring the financial resilience potential of general insurance companies, which may be valuable for researchers interested in empirical investigations of this topic. Additionally, it extends the literature on the role of accounting in climate change risk management by demonstrating how insurance-specific accounting information can be used to assess insurers' financial resilience. Finally, this study is expected to inform public policy discussions on climate change, particularly within the financial sector.

Keywords: Climate Change; Catastrophe Risk; Insurance Resilience; Financial Stability; Risk Management

1. INTRODUCTION

Climate change is a global and long-term problem that involves complex interactions between environment, economy, policy, institutions, society, and technology (Ibrahim et al., 2016). Scientists have associated climate change with greater climate variability (i.e., more frequent and/or severe weather extremes) and a larger potential for abrupt climate change (Linnenluecke & Griffiths, 2012). Consequently, economic losses caused by natural catastrophes could increase significantly, which may compromise the economic growth and sustainable development of a country. For example, the total weather-related event losses recorded for Malaysia in 2018 was USD96 million (equivalent to approximately MYR401 millions) (Eckstein et al., 2020). This amount is huge despite the fact that Malaysia is a relatively low climate risk country ranked 97th out of 132 analyzed countries (Eckstein et al., 2020). To strengthen the resilience of a nation, particularly the climate-sensitive sectors against climate change and natural disasters, effective climate change adaptation strategy is critical (Alam et al., 2010). In Malaysia, the government introduced several market-based mechanisms to address climate change issues including Clean Development Mechanism (CDM), fiscal and financial incentives, regulatory requirements (by-laws), and insurance provisions (Begum et al., 2011).



One of the most efficient market-based climate change adaptation instruments to fund catastrophe losses is the insurance policy provided by the general insurers (Clark et al., 2015), which is the focus of this study. In the case of catastrophic events, policyholders rely on insurance companies to pay for their economic losses. Accordingly, the general insurers have to ensure that they are in the position to fully cover the insured catastrophic losses when the need arises. A key challenge for general insurers in dealing with catastrophe risk is that rapid increase in catastrophe exposure concentrations, poor data quality, and relatively short insured loss history bring a high level of uncertainty to risk management (Born & Viscusi, 2006).

The severity and magnitude of catastrophic events may give rise to unexpectedly large losses, which will result in a large deficit of funds available for the insured losses. Consequently, the financial performance of the property-casualty insurers (and solvency at the limit) may be adversely affected. In this regard, catastrophe risk may pose a prodigious threat to the general insurers' solvency thereby suggesting a critical need to manage the catastrophe risk well. Accordingly, it is important to understand how resilient are they in facing an increased catastrophe risk.

However, organizational resilience is a complex construct that encompasses multiple factors across various dimensions, including strategic, operational, and financial (Linnenluecke & Griffiths, 2010). Välikangas and Romme (2012) define strategic resilience as an organization's ability to swiftly transform risks into opportunities, identify unique prospects, and act decisively in a competitive environment. In contrast, operational resilience focuses on managing crises and returning to a prior state, often linked to the capacity to reinterpret situations and adjust actions accordingly. A systematic review by Linnenluecke and Griffiths (2017) highlights the fragmented nature of resilience research due to its context-dependent nature across different studies. Resilience has been conceptualized in various ways, with limited empirical insights into how it can be detected in the face of future adversities (or the lack thereof) (Linnenluecke & Griffiths, 2017).

As alluded to earlier, insurance plays a crucial role in mitigating the economic and social impacts of natural catastrophes (Terdpaopong & Rickards, 2021). However, there remains a gap in measuring the resilience of insurers to catastrophic weather events. This study seeks to address this gap by proposing a conceptual framework for assessing the resilience of general insurers to future extreme weather events. Furthermore, it contributes to the literature on the role of accounting, particularly the risk assessment function—encompassing vulnerability assessment and adaptive capacity—in climate change risk management (Linnenluecke et al., 2015).

2. LITERATURE REVIEW

2.1 Organizational Resilience Potential to Catastrophic Events

Linnenluecke and Griffiths (2012) developed a framework to gauge organizational resilience potential, which is determined by a firm's impact resistance and rapidity, as depicted in Figure 1. Impact resistance, is in turn, influenced by the firm's coping range (see Figure 2).

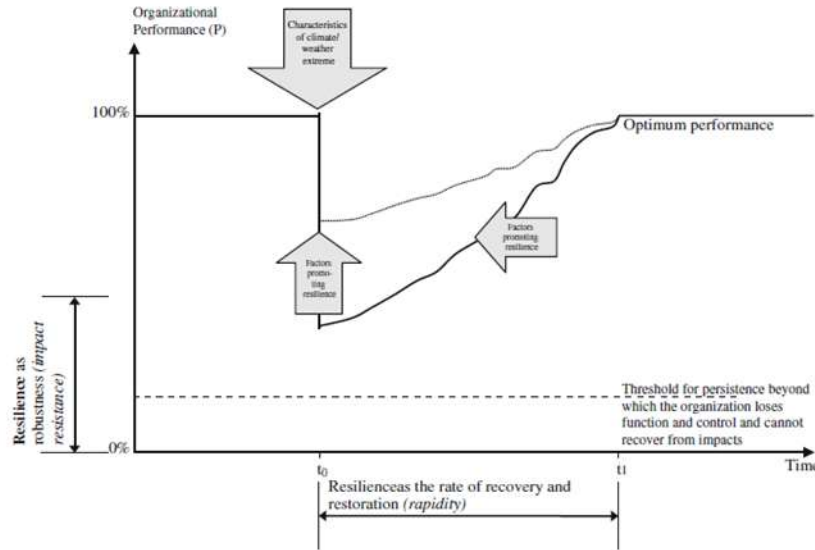


Figure 1. Organizational resilience framework [Source: Linnenluecke and Griffiths (2012)]

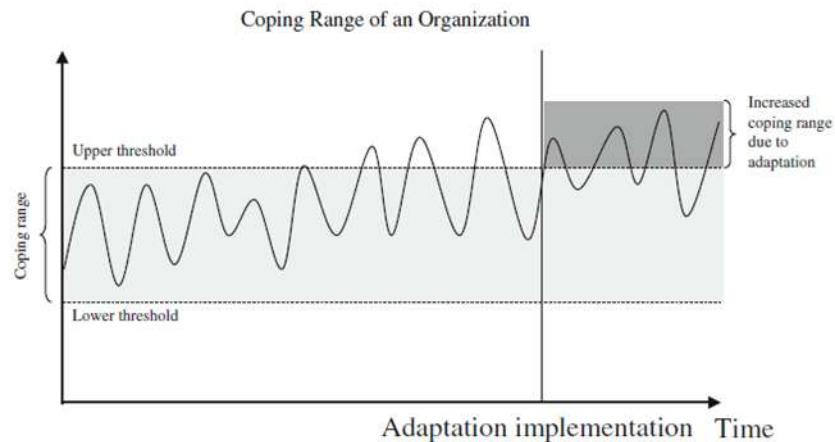


Figure 2. Organizational coping range framework [Source: Linnenluecke and Griffiths (2012)]

2.2 Insurers' Resilience to Catastrophic Events

Several research comes up with resilience indicators for insurance. Holzheu et al. (2019) constructed macro-level insurance resilience indicators that compare existing protection to what is needed globally. The indexes analyse how insurance protects families from natural catastrophes, deaths, and catastrophic healthcare costs. Further, exploiting the Covid-19 crisis, Cornaro (2023) proposed a financial resilience measure for a group (network) of insurance firms. The financial resilience index analyses an insurance network's ability to absorb shocks. It accomplishes this by modelling how a shock to one insurer propagates through the network and impacts other insurers. The indicator focusses on the clustering coefficient, which measures how interrelated the insurers are. If a shock significantly alters this interconnectivity, the network is deemed less resilient. The resilience score combines these factors to determine which insurers are most important in ensuring the general stability of the insurance industry.

Focusing on general insurers in Thailand, Terdpaopong and Rickards (2021), examined key performance indicators before, during, and after the 2011-flood. In so doing, they employed loss ratio (LR), operating expense

ratio (OER), combined ratio (CBR), return on assets (ROA), return on equity (ROE), and the debt-to-equity ratio (DE). Data Envelopment Analysis (DEA) was also used to evaluate these insurers' technical efficiency in terms of operating profit compared to assets. Key measures such as ROA, ROE, and profit margins saw significant declines during and after the flood year. The average technical efficiency of these businesses also fell, particularly for those with fewer resources (smaller businesses). Larger organizations with more assets were shown to be more robust, retaining better efficiency scores even after the floods.

3. GENERAL INSURERS' RESILIENCE FRAMEWORK

3.1 Adapting Organizational Resilience and Coping Range Frameworks for General Insurers

The organizational resilience and coping range frameworks presented in Figures 1 and 2 earlier are adapted to an insurance context as follows. Organizational exposure to an adverse event occurring at t_0 can cause sufficient damage to the general insurer such that its earnings (or highly likely statutory surplus) is reduced by a certain percentage. The extent to which statutory surplus is maintained (i.e., the extent to which statutory surplus is not driven to zero) reflects the impact resistance to a given shock (McDaniels et al. 2008). The impact resistance of an insurer increases with the width of its coping range. Replenishment of the statutory surplus is expected to occur over time, as indicated in Figure 3, until the time t_1 , when it is completely replenished. The rate with which recovery and replenishment are achieved reflects the rapidity (Adger 2000).

In the insurance context, a coping range represents a range of catastrophic losses that an insurer can tolerate without experiencing statutory surplus depletion (Figure 4). The core of the coping range shows ideal conditions for insurers' activities where the insured payable losses are within the estimated figures. The edges of a coping range indicate boundaries beyond which insurers experience significant financial consequences such as the depletion of statutory surplus (Linnenluecke & Griffiths, 2012). Climate change increases the risk that conditions outside the boundaries of the coping range occur. Such conditions can occur if the insured losses of an individual or a combination of catastrophic events significantly deviate from 'expected' losses (Linnenluecke & Griffiths, 2012). Together, the organizational resilience and coping range models discussed above suggest that the general insurers' resilience to natural catastrophic events is a function of its coping range (and impact resistance), and rapidity. This conceptual framework is presented in Figure 3 below.

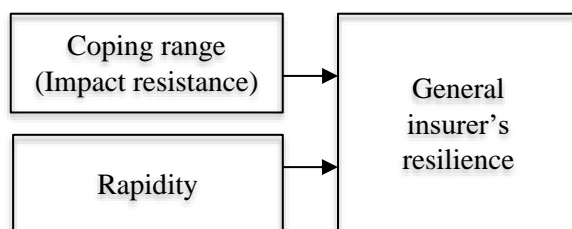


Figure 3. General insurer's resilience towards catastrophic weather events

3.2 Measuring Coping Range and Rapidity for General Insurers

The next question arising is how should we measure the coping range and rapidity in the context of insurance? This study proposes that coping range is measured as the level of policyholder surplus relative to estimated outstanding claims losses (i.e., the higher the ratio, the wider the coping range), moderated by the firm under- or over-reserving. In particular, we propose the following ranks of coping range:

- A. **Highest ranked:** A company that over-reserves its unpaid claims losses, and has a large policyholder surplus.
- B. **Upper intermediate:** A company that over-reserves its unpaid claims losses, and has a small policyholder surplus.

- C. **Lower intermediate:** A company that under-reserves its unpaid claims losses, and has a large policyholder surplus (this company is exposed to a financial higher risk relative to the B-ranked).
- D. **Lowest ranked:** A company that under-reserves its unpaid claims losses, and has a small policyholder surplus

Drawing on Levy et al. (2020), this study suggests that rapidity is measured using the three-component Altman's Z-score (i.e., the higher the Z-score, the quicker an insurer will bounce back aftermath a catastrophic event). The three components are margin improvement, revenue growth, and optionality (retained additional optional-investment opportunities). Working capital and market equity value were part of Altman's original score; but Levy et al. (2020) included the former determinant as part of optionality and recognized that the latter, market value, is externally driven and ultimately a product of the other factors. A company's Z-Score goes up if it has a well-established ability to grow margins (measured as EBIT/assets) while increasing revenues (measured by revenue/assets) and maintaining optionality (measured by retained earnings/assets).

CONCLUSION

To the best of my knowledge, this study is the first to propose a definitive measure of financial resilience specifically for insurance companies. The proposed measure, built upon prior generic frameworks of organizational resilience and coping range, is intended to pave the way for future research in more accurately assessing the financial resilience of insurance companies in the face of climate change and intensified catastrophe risk. One significant drawback of this study is that the suggested measure has not undergone empirical testing. Future research is encouraged to undertake this task.

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REFERENCES

- Alam, M. M., Siwar, C., & Al-Amin, A. Q. (2010). Climate Change Adaptation Policy Guidelines for Agricultural Sector in Malaysia. *Asian Journal of Environmental and Disaster Management*, 2(4), 463-469
- Begum, R. A., Abidin, R. D. Z. R. Z., & Pereira, J. J. (2011). Initiatives and market mechanisms for climate change actions in Malaysia. *Journal of Environmental Science and Technology*, 4(1), 31-40.
- Born, P., & Viscusi, W. K. (2006). The catastrophic effects of natural disasters on insurance markets. *Journal of Risk and Uncertainty*, 33(1-2), 55-72.
- Cornaro, A. (2023). Financial resilience of insurance network during Covid-19 pandemic. *Quality & Quantity*, 57(Suppl 2), 151-172.
- Clark, K., Manghnani, V., and Chang, H. M. (2015). Catastrophe Risk. In *International Actuarial Association Risk Book*. Retrieved from https://www.actuaries.org/iaa/IAA/Publications/iaa_riskbook/IAA/Publications/risk_book.aspx
- Eckstein, D., Künzel, V., Schäfer, L., and Wings, M. (2020). Global Climate Risk Index 2020: Who Suffers Most from Extreme Weather Events? Weather-Related Loss Events in 2018 and 1999 to 2018. Retrieved from https://germanwatch.org/sites/germanwatch.org/files/20-2-01e%20Global%20Climate%20Risk%20Index%202020_14.pdf
- Holzheu, T., Saner, P., Rischatsch, M., Tamm, K., & Lechner, R. (2019). Indexing resilience: a primer for insurance markets and economies. *Sigma*, 5, 1-44.
- Ibrahim, K., Shabudin, A. F. A., Chacko Koshy, K., & Asrar, G. R. (2016). A new framework for integrated climate finance and inclusive responses to sustainable development in Malaysia. *Geomatics, Natural Hazards and*

Risk, 7(6), 1754-1768.

Levy, C., Mysore, M., Sneader, K., & Sternfels, B. (2020). The emerging resilient: Achieving 'escape velocity'. *McKinsey & Company*. Retrieved from <https://www.mckinsey.com/business-functions/risk-and-resilience/our-insights/the-emerging-resilients-achieving-escape-velocity>.

Linnenluecke, M. K. (2017). Resilience in business and management research: A review of influential publications and a research agenda. *International Journal of Management Reviews*, 19(1), 4-30.

Linnenluecke, M., & Griffiths, A. (2010). Beyond adaptation: Resilience for business in light of climate change and weather extremes. *Business & Society*, 49(3), 477-511.

Linnenluecke, M. K., & Griffiths, A. (2012). Assessing organizational resilience to climate and weather extremes: complexities and methodological pathways. *Climatic Change*, 113(3-4), 933-947.

Linnenluecke, M. K., Birt, J., & Griffiths, A. (2015). The role of accounting in supporting adaptation to climate change. *Accounting & Finance*, 55(3), 607-625.

Terdpaopong, K., & Rickards, R. C. (2021). Thai non-life insurance companies' resilience and the historic 2011 floods: Some recommendations for greater sustainability. *Sustainability*, 13(16), 8890.

Välikangas, L., & Romme, A. G. L. (2012). Building resilience capabilities at "Big Brown Box, Inc.". *Strategy & Leadership*, 40(4), 43-45.

ROLE OF INTERNET BANKING IN FACILITATING LIKELIHOOD OF MONEY LAUNDERING OCCURRENCE IN MALAYSIA COMMERCIAL BANK BRANCH

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ABSTRACT

This study explores the role of internet banking in facilitating the likelihood of money laundering occurrence in commercial bank branches across Malaysia. The sample size of 153 responses were determined using G Power. The questionnaire distributed returned and usable was 163 responses which exceeded the minimum sample size required. By examining data from 163 compliance officers and bank managers, the research finds that while internet banking provides significant benefits in terms of convenience and efficiency, it also presents vulnerabilities that can be exploited for money laundering activities. The data was analysed using SmartPLS. The study highlights key risk factors associated with internet banking, such as insufficient transaction monitoring and inadequate customer verification procedures. The findings underscore the need for enhanced regulatory frameworks and technological safeguards to mitigate the risks associated with internet banking and improve anti-money laundering (AML) practices in Malaysian commercial banks.

Keywords: Internet Banking, Money Laundering, Commercial Banks, Anti-Money Laundering, Cybercrime.

1. INTRODUCTION

The advent of internet banking has revolutionized the financial industry, offering unparalleled convenience and efficiency in financial transactions. However, this digital transformation has also introduced new risks, particularly in the area of money laundering. Money laundering, the process of concealing the origins of illegally obtained money, is increasingly facilitated by the anonymity and speed of internet banking platforms. In Malaysia, the rapid growth of internet banking has raised concerns among regulators and financial institutions regarding its potential to facilitate money laundering. This study aims to investigate how internet banking contributes to the likelihood of money laundering within Malaysian commercial bank branches, focusing on the effectiveness of current anti-money laundering measures and identifying areas for improvement.

2. LITERATURE REVIEW

2.1 Evolution of Internet Banking

Internet banking has seen rapid adoption worldwide, driven by the need for more accessible and efficient banking services. Early studies, such as those by DeYoung (2005), highlighted the potential of internet banking to transform financial services, but also noted the emerging risks associated with digital transactions, including fraud and money laundering.

2.2 Money Laundering Risks in Digital Banking

Previous research has established a clear link between digital banking and the increased risk of money laundering. For instance, Saperstein and Rees (2013) examined the vulnerabilities in online financial systems, identifying key

areas where criminals could exploit weaknesses for money laundering. Their work laid the groundwork for understanding the complexities of digital financial crimes.

2.3 Technological Advancements and AML Efforts

Recent studies have focused on the role of advanced technologies in combating money laundering. Ng and Yeo (2020) argue that the integration of artificial intelligence and machine learning into AML systems has the potential to significantly reduce the incidence of money laundering by improving the accuracy of suspicious transaction detection. However, these technologies are not yet widely adopted, particularly in developing countries like Malaysia.

2.4 Regulatory Challenges in Internet Banking

Nguyen and Pham (2021) discuss the regulatory challenges faced by banks in enforcing AML measures in an online environment. They highlight the need for updated regulations that can keep pace with the rapidly evolving landscape of internet banking. The study also notes the difficulties that Malaysian banks face in complying with international AML standards due to technological and resource constraints.

2.5 Gaps

While there is extensive literature on the general risks of money laundering in digital banking, there is a noticeable gap in research specifically addressing the Malaysian context. Additionally, existing studies often focus on either technological solutions or regulatory frameworks, but rarely examine how these elements interact to influence the effectiveness of AML measures in internet banking. This study seeks to fill these gaps by providing a comprehensive analysis of the role of internet banking in facilitating money laundering in Malaysian commercial banks, considering both technological and regulatory perspectives.

3. METHODOLOGY

This study employs a quantitative research design, using a structured survey. The survey particularly questionnaire were distributed to 200 compliance officers and bank managers from commercial bank branches. 163 responses were returned and usable. The survey explores their perceptions of internet banking's impact on money laundering risks and evaluates the effectiveness of existing AML measures. Data analysis is conducted using SmartPLS.

4. RESULTS AND DISCUSSION

The analysis reveals that internet banking significantly increases the likelihood of money laundering activities due to several factors. First, the study revealed that inadequate transaction monitoring of online transactions makes it easier for illicit activities to go undetected. Next, the study found that weak customer verification procedures online create opportunities for identity fraud and money laundering. Finally, banks often struggle to implement and enforce AML regulations effectively within internet banking platforms. The findings suggest that while internet banking offers numerous benefits, it also presents critical challenges that need to be addressed to prevent money laundering.

5. CONCLUSION

The study concludes that while internet banking has transformed the financial landscape in Malaysia, it also poses significant risks for money laundering. To mitigate these risks, it is essential for Malaysian commercial banks to enhance their AML measures by integrating advanced technological solutions and strengthening regulatory compliance. Future research should explore the effectiveness of specific technologies, such as AI, in improving AML practices and reducing the likelihood of money laundering in the digital banking environment.



REFERENCES

- DeYoung, R. (2005). The performance of internet-based business models: Evidence from the banking industry. *Journal of Business*, 78(3), 893-947.
- Ng, T. W., & Yeo, G. T. (2020). The impact of AI on anti-money laundering efforts in internet banking. *Journal of Financial Crime*, 27(4), 1234-1248.
- Nguyen, T. T., & Pham, H. T. (2021). Regulatory challenges in internet banking: A case study of Malaysia. *Journal of Banking Regulation*, 22(1), 78-95.
- Saperstein, A., & Rees, T. (2013). Digital banking and financial crime: Assessing the risks of money laundering. *International Journal of Banking*, 17(2), 202-218.



ENHANCING CORPORATE CRISIS RESILIENCE: AN EXPLORATION OF CRITICAL ATTRIBUTES

ID: 082

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ABSTRACT

In an era marked by increasing uncertainty and volatility, effective crisis risk management has become crucial for corporate sustainability and resilience. This paper explores the key attributes that contribute to effective crisis risk management within corporate environments. By examining theoretical frameworks, real-world case studies, and best practices, this study aims to identify the critical components that enable organizations to anticipate, prepare for, respond to, and recover from crises. Key attributes including agility, communication, leadership, and technology integration are explored to give businesses a thorough grasp of how to improve their crisis management capabilities. This paper illustrates the case study on the effectiveness of the crisis risk management practice during the period of pre, during and post COVID-19 pandemic., current, and post-COVID-19. The cases analysed from prominent Malaysian companies. These cases highlight how organizations have successfully navigated crises by leveraging key attributes such as agility, communication, leadership, and technology integration. By examining these diverse scenarios, businesses can identify the critical components that enable them to anticipate, prepare for, respond to, and recover from crises effectively.

Keywords: Crisis risk management; Business resilience; Corporate strategy, COVID-19

1. INTRODUCTION

In an era characterized by increasing uncertainty and volatility, the ability of organizations to effectively manage crises is paramount to ensuring their sustainability and resilience (Vargo & Seville, 2011) (Beninger & Francis, 2022). The global business environment today faces unprecedented challenges ranging from natural disasters and economic disruptions to technological failures and reputational crises (Dumitrescu et al., 2019). These events not only test the robustness of an organization's operations but also its strategic foresight and adaptive capabilities. Consequently, Crisis Risk Management (CRMS) has emerged as a critical discipline, encompassing a comprehensive approach to identifying, assessing, mitigating, and recovering from potential threats (Al Janabi, 2021).

This paper explores the key attributes that contribute to effective crisis risk management within corporate environments. By examining theoretical frameworks, real-world case studies, and best practices, this study aims to identify the critical components that enable organizations to anticipate, prepare for, respond to, and recover from crises (Williams et al., 2017).

Crisis risk management involves the identification, assessment, and mitigation of risks that could potentially



disrupt organizational operations. In the corporate world, crises can range from financial downturns and cyber-attacks to natural disasters and public relations scandals. Effective crisis risk management not only minimizes the negative impacts of such events but also helps in maintaining stakeholder trust and ensuring business continuity.

2. LITERATURE REVIEW

Several theoretical frameworks provide a foundation for understanding crisis risk management. The contingency theory, for instance, suggests that organizational effectiveness depends on the ability to adapt to changing environments. This theory highlights the importance of flexibility and responsiveness in managing crises. Another relevant framework is the resource-based view (RBV), which emphasizes the significance of organizational resources and capabilities in achieving competitive advantage, particularly during crises.

2.1. Key attributes to CRM

Leadership

Effective leadership is paramount in crisis risk management. Leaders must exhibit decisiveness, resilience, and the ability to inspire confidence among stakeholders. The role of leadership extends beyond immediate crisis response to include fostering a culture of preparedness and continuous improvement.

Communication

Clear, transparent, and timely communication is crucial during crises. Organizations must establish robust communication channels to disseminate information, coordinate responses, and manage stakeholder expectations. Effective communication helps in reducing uncertainty and preventing misinformation.

Agility

Agility refers to an organization's ability to quickly adapt to changing circumstances. Agile organizations can swiftly modify their strategies, processes, and structures in response to crises. This attribute is particularly important in dynamic and unpredictable environments.

Technological Integration

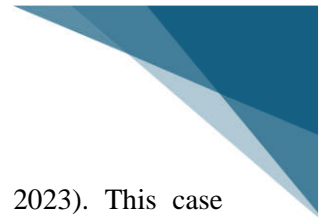
Technological advancements play a critical role in enhancing crisis risk management capabilities. Technologies such as predictive analytics, artificial intelligence, and real-time monitoring systems enable organizations to anticipate potential risks and respond proactively. Additionally, technology facilitates effective communication and coordination during crises.

3. METHODOLOGY

This paper employs systematic review analysis to identify the key attributes of effective crisis risk management. This process involved a comprehensive and structured search of existing literature on the topic, focusing on peer-reviewed articles, reports, and relevant academic publications. This systematic approach ensured that the analysis was thorough, unbiased, and provided a reliable foundation for identifying the key attributes of effective crisis risk management.

4. RESULTS AND DISCUSSION

The crisis cases of Nestlé Malaysia, Sapura Energy Berhad, and Petronas exemplify the critical attributes of effective crisis risk management. In 2019, Nestlé Malaysia's product labeling crisis required the company to demonstrate agility by promptly rectifying labeling errors and engaging with Islamic authorities to ensure compliance with halal standards. The transparent communication with consumers throughout the process helped



rebuild trust and demonstrated Nestlé's commitment to high standards (The Malketeer, 2023). This case underscores the importance of agility and clear communication in effectively managing product-related crises.

Sapura Energy Berhad faced a severe financial crisis in 2019, necessitating strategic resource management and proactive leadership. The company's approach to enhancing operational efficiency and exploring new market opportunities exemplifies the role of strategic resource allocation and leadership in crisis management. By focusing on these areas, Sapura Energy aimed to stabilize its financial position and restore stakeholder confidence (Wong Ee-Lin, 2021). This case illustrates how leadership and strategic resource management are crucial in overcoming financial crises and ensuring long-term sustainability.

During the COVID-19 pandemic, Petronas experienced significant operational disruptions due to fluctuating demand and supply chain issues (Petronas Integrated Report, 2020). The company's crisis management strategy involved implementing robust operational risk management practices, which included addressing both demand and supply disruptions and maintaining clear communication with stakeholders. By integrating technology to enhance its operational risk management framework, Petronas was able to sustain its operations amidst the global crisis (Petronas Group Strategic Communication, 2020). This case highlights the necessity of comprehensive risk management frameworks, effective communication, and technology integration to navigate complex and widespread crises. Together, these cases demonstrate that agility, communication, leadership, and technology integration are essential attributes for effective crisis risk management, enabling organizations to respond swiftly and maintain resilience during crises.

5. CONCLUSION

Effective crisis risk management is vital for corporate sustainability and resilience. By exploring the key attributes that contribute to successful crisis management, this paper provides valuable insights for organizations seeking to enhance their preparedness and response capabilities. Strong leadership, clear communication, agility, and technological integration are critical components that enable organizations to navigate crises effectively and emerge stronger.

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REFERENCES

- Al Janabi, M. A. M. (2021). How to Avoid another Derivative Crisis: Risk management for emerging markets. SSRN Electronic Journal. <https://doi.org/10.2139/ssrn.3841264>
- Beninger, S., & Francis, J. N. P. (2022). Resources for business resilience in a COVID-19 world: A community-centric approach. *Business Horizons*, 65(2), 227–238. <https://doi.org/10.1016/j.bushor.2021.11.004>
- Dumitrescu, M., Paraschiv, D., & Nițu, M. (2019). Internationalization of Companies-Stages and Challenges in the Global Business Environment. *Ovidius*.
- Petronas. (2020). Petronas integrated report 2020: Letter from the President and Group CEO. <https://www.petronas.com/integrated-report-2020/files/PETRONAS-IR20-Letter-from-the-President-and-Group-CEO.pdf>

Petronas Group Strategic Communication. (2020). Petronas takes deliberate steps to strengthen resilience amidst unprecedented challenges. <https://www.petronas.com/innovation-petronas/news-events/news/petronas-takes-deliberate-steps-strengthen-resilience-amidst-unprecedented>

The Marketeer. (2023, November 8). Navigating PR Crises: Lessons in Crisis Management for Brands in Malaysia. The Marketeer. <https://marketingmagazine.com.my/navigating-pr-crises-lessons-in-crisis-management-for-brands-in-malaysia/>

Vargo, J., & Seville, E. (2011). Crisis strategic planning for SMEs: Finding the silver lining. *International Journal of Production Research*, 49(18), 5619-5635. <https://doi.org/10.1080/00207543.2011.563902>

Williams, T. A., Gruber, D. A., Sutcliffe, K. M., Shepherd, D. A., & Zhao, E. Y. (2017). Organizational response to adversity: Fusing crisis management and resilience research streams. *Academy of Management Annals*, 11(2), 733-769. <https://doi.org/10.5465/annals.2015.0134>

Wong Ee-Lin. (2021, January 5). Best & Worst Performers: Pandemic plays dominate in 2020. *The Edge Malaysia*. Best & Worst Performers: Pandemic plays dominate in 2020 (theedgemalaysia.com)

UNLOCKING BUSINESS SUCCESS: THE POWER OF COGNITIVE SKILLS FOR SMALL AND MEDIUM ENTERPRISE

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ABSTRACT

Social enterprises, as an extension of small and medium enterprises (SMEs), have become vital in addressing social policy agendas across various countries. By focusing on social impact, these enterprises contribute to economic growth and enhance social entrepreneurs' capabilities in managing and sustaining their ventures. This study investigates the strategic capabilities employed by social entrepreneurs to remain competitive in the evolving landscape of social entrepreneurship. Guided by social cognitive theory, which offers a framework for understanding the interplay between individual cognition and social context, this research adopts a single case study approach, focusing on Hibiscus Sdn. Bhd., a prominent social enterprise in Malaysia. Data were meticulously gathered through 17 in-depth interviews, site visits, participant observations, and a comprehensive analysis of financial statements. The findings reveal that the social entrepreneur at Hibiscus Sdn. Bhd. effectively navigated three critical phases of the social cognitive process: sensing capabilities, seizing opportunities, and reconfiguring resources and capabilities. These phases were pivotal in driving the enterprise's growth and enabling it to meet both its social and business objectives. The study concludes that these cognitive processes are essential for the successful development and expansion of social enterprises in Malaysia. This research contributes to the existing literature by highlighting the practical application of social cognitive theory in the context of social entrepreneurship and offering insights into how social enterprises can strategically extend their impact to achieve broader societal goals.

Keywords: Small and Medium Enterprise, Social Enterprise, Social Cognitive Theory



1. INTRODUCTION

Social enterprises emerged in Malaysia around 2018, with 414 registered by 2020, though their roots date back to 2010, driven by initiatives from the Malaysia Global Innovation and Creativity Centre (MAGIC). MEDAC integrated social entrepreneurship into the national agenda from 2014 to 2019. However, the capabilities enabling these enterprises to thrive remain underexplored. This paper analyzes how Malaysian social enterprises develop competitive capabilities, providing insights into their strategies for sustaining growth and contributing to broader social and economic goals.

2. LITERATURE REVIEW

Social enterprises, evolving from SMEs, tackle social issues while achieving organizational goals (Xu & Xi, 2020). Their success relies on financial stability, driving innovation and strategic development (Cavazos-Arroyo & Puente-Diaz, 2023). The Resource-Based View (RBV) theory explores how firms use internal resources for competitive advantage through value creation and capture (Chaudhuri et al., 2023). This study applies RBV's dynamic capabilities to SMEs during the MCO.

3. METHODOLOGY

This study, a collaboration between the university and the Malaysian Innovation Foundation (MIF), examines SME sustainability strategies using innovation grants from MIF. Utilizing a single case study approach, it explores Hibiscus Sdn Bhd, a social enterprise led by single mothers in Malaysia, focusing on innovation in product development and training in interior design. Data collection included stakeholder interviews, site visits, observations, and financial analysis, analyzed through Attride-Stirling's method. Findings cover three phases: emergence (2017-2018), survival (2019-2021), and growth (2021-2023).

4. RESULTS AND DISCUSSION

Hibiscus Sdn. Bhd. launched in 2017-2018 by repurposing discarded jeans into bags, leveraging sensing capabilities (Teece, 2007) to create opportunities for single mothers. During the 2019 pandemic, it diversified into producing PPE for NGOs, embracing seizing opportunities (Aker et al., 2022). From 2021 to 2023, the company expanded across Malaysia, reconfigured its operations, and introduced innovative initiatives such as transforming hotel linens into clothing, enhancing both sustainability and market presence.

5. CONCLUSION

This study finds that Hibiscus Sdn. Bhd.'s founder used Teece's (2007) framework to sense capabilities, seize opportunities, and apply them effectively, impacting the company's performance over six years. It highlights the need for SMEs to be dynamic to maintain competitive advantages. The findings inform SME strategies and grant structuring by the Malaysian Innovation Foundation. While limited to one SME, the study suggests further research in other states and industries to broaden understanding and generalize findings.

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REFERENCES

- Akter, S., Dwivedi, Y. K., Sajib, S., Biswas, K., Bandara, R. J., & Michael, K. (2022). Algorithmic bias in machine learning-based marketing models. *Journal of Business Research*, 144, 201–216. <https://doi.org/10.1016/j.jbusres.2022.01.083>
- Cavazos-Arroyo, J., & Puente-Diaz, R. (2023). The effect of network capabilities, trust and pricing and selling capabilities on the impact of social enterprise. *Social Enterprise Journal*, 19(2), 123-143.
- Chaudhuri, A., Naseraldin, H., & Narayanamurthy, G. (2023). Healthcare 3D printing service innovation: Resources and capabilities for value Co-creation. *Technovation*, 121. <https://doi.org/10.1016/j.technovation.2022.102596>
- Xu, S., & Xi, Y. (2020). A study on the process and mechanism of social enterprise's legitimation: Based on analysis of social enterprise's cooperation with multiple stakeholders. *Nankai Business Review International*, 11(2), 217-252.
- Teece, D. J. (2007). Explicating dynamic capabilities: the nature and microfoundations of (sustainable) enterprise performance. *Strategic management journal*, 28(13), 1319-1350.

TARGETED CYBER ATTACKS ON HEALTH DATA AMID THE COVID-19 OUTBREAK

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ABSTRACT

Cyber-attacks on the healthcare sector in Malaysia are not new as cybercrime has been present since the late 1970s. However, since the COVID-19 pandemic began, the healthcare sector has increasingly become the target of complex and coordinated cyber-attacks. Cybercriminals are taking advantage of the situation, knowing that hospitals and medical personnel are overwhelmed by the pandemic. Healthcare operations, which operate continuously, have become prime targets. To prevent data breaches and strengthen cybersecurity, examining the factors that influence cyber-attacks on health data is crucial. This study investigates four factors that may lead to the cyber-attacks on health data during the COVID-19 pandemic: vulnerability of cybersecurity defences (VOCD), a rich source of valuable health data (RSOVHD), rapid technological advancement (RTA), and employee behaviour (EB). Data was collected through questionnaires from 128 IT department staff members in selected Malaysian healthcare sectors. This study's hypotheses were tested using Statistical Package for Social Sciences (SPSS) version 25 and SmartPLS version 4. The findings of this study reveal that the vulnerability of cybersecurity defences (VOCD) and the rich source of valuable health data (RSOVHD) significantly lead to the cyber-attacks against health data (CYB), confirming hypotheses H1 and H2. However, rapid technological advancement (RTA) and employee behaviour (EB) did not significantly lead to the cyber-attacks against health data. Therefore, hypotheses H3 and H4 are rejected. This study contributed to the existing knowledge on cyber-attacks against health data, particularly in Malaysia.

Keywords: Cyber-attacks against health-data, healthcare sector, cyber security, Moving Target Defences (MTD), Covid-19 pandemic.

1. INTRODUCTION

The COVID-19 pandemic has led to a surge in cyber-attacks on the healthcare sector, exploiting its vulnerabilities and the high value of health data (Muthupalaniappan & Stevenson, 2021). The increased reliance on technology and the wealth of sensitive patient information have made healthcare a prime target for cybercriminals (Kamal et al., 2020). These attacks can disrupt critical operations, compromise patient data, and even threaten lives. The need for robust cybersecurity measures in the healthcare sector is more critical than ever (Cisomag, 2019). Research is needed to identify the factors contributing to cyber-attacks on health data during the COVID-19 pandemic, providing valuable insights for the IT departments of the Malaysian healthcare sector. Therefore, this study aims to investigate these cyber-attacks, specifically in Malaysia during the COVID-19 pandemic. The research objectives are as follows:

1. To determine whether the vulnerability of cybersecurity defences may lead to cyber attacks against health data during the COVID-19 pandemic.
2. To examine whether the rich source of valuable health data may lead to cyber-attacks against

- health data during the COVID-19 pandemic.
3. To examine whether rapid technological advancement may lead to cyber-attacks against health data during the COVID-19 pandemic.
 4. To examine whether employee behaviour may lead to cyber-attacks against health data during the COVID-19 pandemic.

2. LITERATURE REVIEW

Cyber-attacks have increased, particularly targeting vulnerable healthcare organizations during the pandemic (Pranggono & Arabo, 2020). Cybercriminals utilize diverse techniques to compromise systems and steal valuable health data (Kamal et al., 2020). Protecting health data is paramount as it encompasses sensitive information vital for medical research and disease management (Okereafor, 2020). Cybercriminals exploit the pandemic to steal personal information, highlighting the urgent need for robust cybersecurity measures in healthcare (Kamal et al., 2020). Moving Target Defences (MTD) offer a promising solution to the problem of cyber-attacks by constantly changing system configurations (Sengupta et al., 2019). The theory behind MTD is rooted in adaptive systems research, aiming to enhance operational and security goals (Zhuang et al., 2015). MTD systems continuously and randomly move the underlying components of a system, effectively blocking or delaying the information collected by hackers (Zhuang et al., 2015). This study adopts the MTD theory because it effectively addresses the imbalance between attacks and defenses by focusing on the most critical variables contributing to cyber-attacks.

3. METHODOLOGY

This study focused on Malaysian healthcare organizations (350 in total, 208 private and 142 public). The sampling used stratified random sampling, targeting IT staff, aiming for a sample size of 184 (109 private, 75 public) based on recommendations from Sekaran & Bougie (2016) to ensure representation and avoid errors. Data was collected primarily through questionnaires, as suggested by Sekaran & Bougie (2016), for its efficiency and accuracy. The analysis involved validity and reliability tests using Cronbach's alpha and composite reliability. Data was analyzed using SPSS for descriptive analysis and SmartPLS 4 for Partial Least Squares Structural Equation Modeling (PLS-SEM) to examine relationships between variables, following established statistical practices (Sarstedt & Ringle, 2020; Hair et al., 2019).

4. RESULTS AND DISCUSSION

The majority of the 128 respondents were in the public healthcare sector (60.2%) and located in the Southern Region (35.94%). The largest group of respondents held the position of Head of Department (46.88%).

4.1. Measurement model

The measurement model's reliability and validity were assessed using Cronbach's alpha (CA), composite reliability (CR), and average variance extracted (AVE). All CA and CR values were above the acceptable threshold of 0.6 (Nunnally and Bernstein, 1994; Lyberg et al., 1997), and all AVE values exceeded the 0.5 threshold for convergent validity (Henseler, 2016). These results indicate that the measurement model is reliable and valid. The Fornell–Larcker and Heterotrait–Monotrait Ratio (HTMT) were utilized to evaluate discriminant validity. The Fornell and Larcker's Test values are higher than the correlations between variables. Moreover, in the HTMT results are below the 0.9 threshold. These findings suggest that the reflective measurement model has successfully achieved discriminant validity, in line with the guidelines proposed by Hair et al. (2010).

4.2. Structural model

The structural model, evaluated using PLS-SEM with 10,000 bootstraps, aims to understand relationships among constructs. No collinearity issues were found as VIF values were within acceptable range from 1.771 to 2.893, which

is below the recommended threshold of <3 as suggested by Hair et al. (2019). Table 1 shows that Vulnerability of Cybersecurity Defences (VOCD) and Rich Source of Valuable Health Data (RSOVHD) significantly influence Cyber-Attacks Against Health Data During the COVID-19 Pandemic (CYB), while RTA and EB do not. The model explains 23.5% of the variance in CYB. Table 6 indicates that VOCD and RSOVHD have small effects on CYB, while rapid technological advancement (RTA) and employee behaviour (EB) have no effect. The model has good predictive relevance.

This study confirmed the significant influence of vulnerable cybersecurity defenses (VOCD) and the rich source of valuable health data (RSOVHD) on cyber-attacks against health data during the COVID-19 pandemic (CYB), aligning with previous research (Coventry and Branley, 2018; Pranggono and Arabo, 2020). The predicted relationship between RTA, EB, and CYB was not significant, possibly due to the broad measurement of these newly created variables.

Table 1: Measurement Model

Effect	Relationship	Beta	Standard Deviation	t Value	p Value	R ²	f ²	Q ²
Direct Relationship								
H1	VOCD -> CYB	0.230	0.117	1.971	0.049	0.235	0.039	0.169
H2	RSOVHD -> CYB	0.250	0.115	2.181	0.029		0.038	
H3	RTA -> CYB	0.003	0.137	0.022	0.982		0.000	
H4	EB -> CYB	0.085	0.107	0.799	0.424		0.005	

5. CONCLUSION

This study reveals that inadequate cybersecurity defenses and valuable health data elevate the risk of cyberattacks in Malaysian healthcare during COVID-19. It serves as a valuable resource for IT professionals, emphasizing the importance of proactive cybersecurity measures to protect sensitive health data and infrastructure. Future research should focus on developing tailored cybersecurity frameworks for the healthcare sector, addressing its unique challenges.

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REFERENCES

- Coventry, L., Branley-Bell, D., Sillence, E., Magalini, S., Mari, P., Magkanaraki, A., & Anastasopoulou, K. (2020). Cyber-risk in healthcare: Exploring facilitators and barriers to secure behaviour. In *Lecture Notes in Computer Science: Vol. 12210 LNCS (Issue July)*. Springer International Publishing. https://doi.org/10.1007/978-3-030-50309-3_8
- Hair, J., Black, W., Babin, B., Anderson, R., & Tatham, R. (2010). *Multivariate data analysis*. Upper Saddle River, N.J: Pearson Prentice Hall.
- Hair, J.F., Risher, J.J., Sarstedt, M. and Ringle, C.M. (2019), "When to use and how to report the results of PLS-SEM", *European Business Review*, Vol. 31 No. 1, pp. 2-24.
- Kamal, A., A.H.; Yi Yen, C.C.; Ping, M.H. & Zahra, F. (2020). Cybersecurity Issues and Challenges during Covid-19 Pandemic. Preprints 2020, 2020090249 (doi: 10.20944/preprints202009.0249.v1).
- Lyberg, L., Biemer, P., Collins, M., De Leeuw, E., Dippo, C., Schwarz, N., & Trewin, D. (1997). *Survey measurement and process quality*. New York: Wiley.
- Muthuppalaniappan, M., & Stevenson, K. (2021). Healthcare cyber-attacks and the COVID-19 pandemic: An



- urgent threat to global health. *International Journal for Quality in Health Care*, 33(1), 1–4.
<https://doi.org/10.1093/intqhc/mzaa117>
- Nunnally, J.C. and Bernstein, I.R. (1994), *Psychometric theory*, Ed. ke-3, McGraw-Hill, New York
- Okereafor, K. (2020). *Addressing Cybersecurity Challenges Of Health Data In The COVID-19 Pandemic*
- Exploring Cloud Security Imperative View Project Addressing Liveness Detection Challenges View Project.
Retrieved from <https://www.researchgate.net/publication/341894685>
- Pranggono, B., & Arabo, A. (2020). COVID -19 Pandemic Cybersecurity Issues . *Internet Technology Letters*, July, 1–6. <https://doi.org/10.1002/itl2.247>
- Sarstedt, M., Ringle, C. M., Henseler, J., & Hair, J. F. (2014). On the emancipation of PLS-SEM: A commentary on Rigdon (2012). *Long Range Planning*, 47(3), 154- 121
- Sarstedt, M., & Hwang, H. (2020). Advances in composite-based structural equation modeling. *Behaviormetrika*, 47, 213–217
- Sekaran, U. and Bougie, R. (2016). *Research Methods for Business: A Skill Building Approach Seventh Edition*. 1st ed. (John Wiley & Sons. (Ed.)
- Sengupta, S., Chowdhary, A., Sabur, A., Huang, D., Alshamrani, A., & Kambhampati, S. (2019). A Survey of Moving Target Defenses for Network Security. *IEEE Communications Surveys & Tutorials*, vol. 22, no. 3, pp. 1909-1941, thirdquarter 2020, doi: 10.1109/COMST.2020.2982955.
- Zhuang, R., Bardas, A. G., DeLoach, S. A., & Ou, X. (2015). A Theory Of Cyber Attacks: A Step Towards Analyzing MTD Systems. *MTD 2015 - Proceedings of the 2nd ACM Workshop on Moving Target Defense*, Co-located with: CCS 2015, 11–20. <https://doi.org/10.1145/2808475.2808478>

DIGITALISING BUSINESS MODEL FOR TAHFIZ INSTITUTIONS SUSTAINABILITY: AN INTEGRATED REPORTING FRAMEWORK APPROACH

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ABSTRACT

Tahfiz Institutions play a crucial role in complementing mainstream education in Malaysia. However, differences in regulations, control, and reporting have led to inconsistencies in their administration and management. The Integrated Reporting <IR> framework, with its six capitals—financial, manufactured, intellectual, human, social and relationship, and natural—provides a holistic approach to assess and enhance sustainability. As such, leveraging digitalisation within the <IR> framework could significantly enhance sustainability in Tahfiz Institutions. This study proposes to develop a digital business model to improve Tahfiz Institutions' governance and management. Semi-structured interviews with selected Tahfiz Institutions were conducted to gather in-depth first-hand information. The findings suggest four digitalisation processes to capture the input, process, output, and outcome of Tahfiz Institutions. Integrating digital technologies while maintaining core religious values is crucial for Tahfiz Institutions to remain relevant and foster comprehensive development. Digitalising the business model would allow Tahfiz Institutions to understand its unique capital better and exploit it to enhance its operational efficiency and financial sustainability. By integrating digital technologies while upholding core religious values, Tahfiz institutions can stay relevant and promote comprehensive development.

Keywords: Tahfiz Institutions; Business model; Sustainability; Integrated Reporting Framework.

1. INTRODUCTION

Islamic education in Malaysia initially took place in informal settings such as suraus, mosques, and teachers' residences (Nawi et al., 2021). The primary focus was on studying and comprehending Islamic principles guided by the Quran. The increased awareness and acknowledgment within the Muslim community have led to the

emergence of Islamic education centers, including Tahfiz. Tahfiz Institutions provide an alternative education system for parents seeking religious education for their children with a diverse array of programs and governance guidelines (Johari et al., 2023). As a result, Tahfiz Institutions are expected to provide high-quality education that complements mainstream education in Malaysia. It was reported that the number of Tahfiz Institutions has grown from only 58 in 1999 to 1198 in 2021. Tahfiz Institutions are managed either by the federal government through the Islamic Development Department Malaysia (JAKIM), the Ministry of Education, and state governments under the State Islamic Religious Council or privately owned.

Tahfiz Institutions encounter several challenges, including inadequate infrastructure and facilities, unstandardized and ineffective management, and heavy reliance on government assistance and charitable endowments or waqf. The differences in ownership and structure setting (government vs private), culture, and regulation among states in Malaysia have opened a loophole and caused inconsistency in the administration and management among Tahfiz Institutions. Research and academic papers highlight the need for improved governance structures, the incorporation of green strategies for sustainability, and the importance of collaboration between stakeholders such as government agencies, educational institutions, and Islamic development authorities.

Poor management may create conflicts because it may lead to ineffective handling of disputes, resulting in crises that cause ineffectiveness. Ineffective management will affect Tahfiz Institution's development and progress as well as the quality of education. Based on the gap identified, the study proposes a standardisation of the Tahfiz Business Model. Standardisation aims to enforce consistency or uniformity in certain practices or operations within Tahfiz Institution so that it allows reporting transparency and accountability as well as performance comparison. Thus far, limited research is available on how Tahfiz Institutions can leverage digitalization. This study aims to develop a digital business model to improve the governance and management of Tahfiz Institutions. Integrating digital technologies while maintaining core religious values, the research seeks to ensure that Tahfiz Institutions remain relevant and foster comprehensive development.

2. METHODOLOGY

Semi-structured interviews were conducted with selected Tahfiz Institutions to gather in-depth insights. This qualitative method allowed for a detailed understanding of the current operation, issues, challenges, and opportunities associated with the Tahfiz Institution. The selected Tahfiz Institutions were nominated by Persatuan Institusi Tahfiz Al-Quran Negeri Selangor (PITAS) and selected based on the active visibility via media social. PITAS is an Islamic NGO organization that acts as a reference point, liaison, and spokesperson to represent the voices of Private Tahfiz Institutions in the State of Selangor. The visit to the Tahfiz was made upon getting consensus from the management team.

The questions were structured using the <IR> Framework's six capitals - financial, manufactured, intellectual, human, social and relationship, and natural. The listed capitals provide a holistic approach to assess and enhance sustainability. Organisations implementing the <IR> Framework may face substantial changes in their structure, processes, and ways of thinking (Stent & Dowler, 2015). However, research has found that organizations mostly experience changes at the level of resources and structures, while core values and beliefs are not deeply altered, implying that an incremental, rather than revolutionary (transformative), change takes place (Dumay & Dai, 2017; Guthrie et al., 2017).

Tahfiz Institutions are generally smaller in size. As such, the adopted questions were simplified and tailored to the settings. The interviews provided rich, contextual data that helped in identifying the specific needs and capacities of Tahfiz Institutions concerning digital transformation. Observing the place and surroundings provides first-hand information on the availability of resources and how digitalisation would enhance their management, process as well as visibility.



3. DISCUSSION

The findings suggest that digitalising the business model is crucial for Tahfiz Institutions. This approach enables these institutions to better understand their unique capital and exploit them to enhance operational efficiency and financial sustainability.

The proposed Tahfiz business model (input, process, output, and outcome) is based on the <IR> Framework. The framework clarifies how value is created over time with the combination of quantitative and qualitative information. The six capitals are stocks of value that are affected or transformed by the activities and outputs of an organisation. Thus, the consideration not only of the six capital categories but also of processes involved or affecting the Tahfiz Institutions.

Information concerning the input covering the six capitals, the process (activities in producing products or offering services), output, and the outcome was collected during the visit to the Tahfiz Institutions. The collected information is crucial in determining the business model and will be digitalise based on the processed outline in Figure 1.

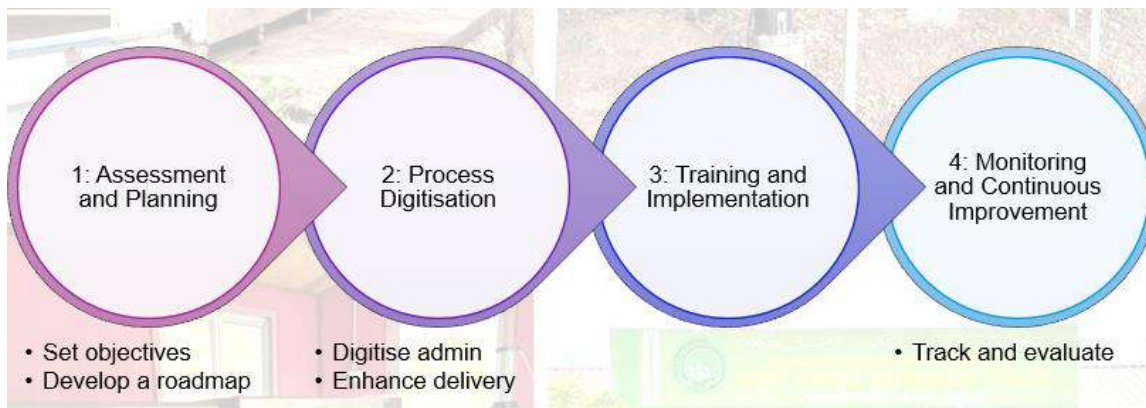


Figure 1. The digitalisation process of Tahfiz Business Model

The digitalisation process includes four steps namely (1) assessment and planning; (2) digitization process; (3) training and implementation; and (4) monitoring and continuous improvement. The first step is the most crucial where the current state of the Tahfiz Institutions is evaluated, a suitable objective is set, and develop a roadmap. The second process of digitising includes implementing digital systems for the core business area of any education provider – (i) managing student information, (ii) human resources, and (iii) finance. The digitizing of the three areas would enable Tahfiz Institutions to enhance its educational delivery and involve some important decisions on upgrading technology and usage of cloud solutions.

The third process will focus on training the staff to ensure proficiency with new tools and platforms followed by launching the tools. Implementing digitalisation involves rolling out digital systems and platforms and integrating them into daily operations and educational activities. The final process concerns tracking and evaluating the system developed, gathering feedback, and proposing any enhancements if needed.

4. CONCLUSION

Integrating digital technologies within the Integrated Reporting <IR> framework can significantly enhance the governance and management of Tahfiz Institutions. The proposed digitalisation of Tahfiz Institution’s business model not only addresses the current administrative inconsistencies but also promotes a sustainable approach aligned with its core values. Implementing this model successfully can set a benchmark for other educational

institutions looking to improve their sustainability through digitalisation.

The adoption of the <IR> framework can be a valuable tool for enhancing Tahfiz's sustainability. Existing literature suggests that by aligning financial and sustainability metrics, organizations can tackle the shortcomings associated with environmental-based reporting quality (Bui et al., 2020). Furthermore, integrating these performance dimensions can encourage more informed decision-making and accountability to stakeholders, rather than solely focusing on shareholders (Abeysekera, 2022).

This integrated approach aims to provide investors with a comprehensive understanding of how a company creates, preserves, or diminishes value over the short, medium, and long term (Baumüller & Sopp, 2021). Recognizing the potential benefits of this approach, this research suggests a comprehensive, integrated framework that Tahfiz Institutions can utilize to assess, account for, control, and report on their sustainability efforts. By leveraging digital technologies, Tahfiz Institutions can achieve more consistent and effective management, thereby supporting their long-term sustainability and educational mission.

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REFERENCES

- Nawi, M. Z. M., Omar, M. R., & Nor, M. A. M. (2021). Sistem pendidikan tahfiz di Malaysia, pilihan ibu bapa dan warisan pendidikan Islam Andalus: Satu sorotan. *Asian People Journal (APJ)*, 4(1), 132-147. <https://doi.org/10.37231/apj.2021.4.1.241>
- Johari, M. E., Anas, N., Aziz, N. H., Taharin, M. A. M., Turiman, N. F. I., Daud, N. M., & Habidin, N. F. (2024). Tahfiz Preneurship Governance Framework, Products, and Effective Marketing Strategies in Malaysia. *International Journal of Religion*, 5(1), 17-33. <https://doi.org/10.61707/jbgc4775>
- Stent, W., & Dowler, T. (2015). Early assessments of the gap between integrated reporting and current corporate reporting. *Meditari Accountancy Research*, 23(1), 92-117. <https://doi.org/10.1108/MEDAR-02-2014-0026>
- Dumay, J., & Dai, T. (2017). Integrated thinking as a cultural control?. *Meditari Accountancy Research*, 25(4), 574-604. <https://doi.org/10.1108/MEDAR-07-2016-0067>
- Guthrie, J., Manes-Rossi, F., & Orelli, R. L. (2017). Integrated reporting and integrated thinking in Italian public sector organisations. *Meditari accountancy research*, 25(4), 553-573. <https://doi.org/10.1108/MEDAR-06-2017-0155>
- Bui, T. D., Tsai, F. M., Tseng, M. L., Wu, K. J., & Chiu, A. S. (2020). Effective municipal solid waste management capability under uncertainty in Vietnam: Utilizing economic efficiency and technology to foster social mobilization and environmental integrity. *Journal of Cleaner Production*, 259, 120981. <https://doi.org/10.1016/j.jclepro.2020.120981>
- Abeysekera, I. (2022). A framework for sustainability reporting. *Sustainability Accounting, Management and Policy Journal*, 13(6), 1386-1409. <https://doi.org/10.1108/SAMPJ-08-2021-0316>
- Baumüller, J., & Sopp, K. (2021). Double materiality and the shift from non-financial to European sustainability reporting: review, outlook and implications. *Journal of Applied Accounting Research*, 23(1), 8-28. <https://doi.org/10.1108/JAAR-04-2021-0114>

DESIGNING A COMPREHENSIVE INTEGRATED REPORTING CAPITAL FRAMEWORK FOR PRIVATE TAHFIZ INSTITUTIONS

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ABSTRACT

Private Tahfiz Institutions (PTI) require alternative financial sources beyond public or government funding to ensure long-term sustainability. Integrating a business model into their organizational activities and processes is essential. Integrated Reporting (IR) offers a framework where PTI can create value by transforming their capital. These business models are based on the Integrated Reporting Capital Framework (IRCF), which highlights the importance of identifying and managing various capitals. Recognizing these capitals enables private Tahfiz institutions to effectively determine their inputs and outputs, enhancing overall efficiency and sustainability. This study proposes a design of the IRCF for PTI based on the six capitals outlined in IR: financial, manufactured, intellectual, human, social and relationship, and natural. The design is informed by semi-structured interviews with six private Tahfiz institutions in Kedah and Selangor. The findings reveal that PTI possesses a comprehensive range of capital that can create future value. Identifying these crucial capitals can help these institutions develop a business model that supports sustained growth. The results are beneficial for the government in assisting private Tahfiz institutions to generate funds through business activities and for the public to ensure efficient governance of the contributed funds.

Keywords: Tahfiz Institutions; Business model; Sustainability; Integrated Reporting Capital Framework.

1. INTRODUCTION

The growing demand by parents Private Tahfiz Institutions (PTI) has led to an increase in the number of these schools in Malaysia. Parents believe that PTI can help shape their children's character through religious teachings (Hassan et al., 2015). Parents opt to enroll their children in Tahfiz institutions with the goal of instilling

good character and recognizing the importance of religious education, which is believed to benefit both their lives in this world and the hereafter (Mohd Nawawi et al., 2021). Learning in PTI is linked to higher student achievement, as students are taught to respect their teachers, participate in consistent congregational prayers, and practice patience and sincerity (Hashim et al., 2014). Additional factors such as the quality of teachers and the unique advantages of Tahfiz Schools also attract students (Md Saiful Azizi Nik Abdullah Fathiyah Solehah Mohd Sabbri & Athirah Muhammad Isa, 2021)

The number of PTI has grown significantly over the years. In 2014, there were 151 Tahfiz Schools registered under Jabatan Agama Islam Selangor (JAIS). By 2019, this number had increased to 377 (Dewan Negeri Selangor, 2019). The Selangor government spent a total of RM 5,623,000 on these schools from 2014 to 2017. According to Gabungan Persatuan Institut Tahfiz Al Quran Kebangsaan (PINTA) and Persatuan Madrasah Tahfiz Al Quran Malaysia (PERMATA), in 2021 it is estimated that the number of tahfiz schools in Malaysia is around 1400 to 1600 with a total of 24,045 tahfiz students (Malaysiakini, 2021). Most tahfiz schools are reported to have financial difficulties, mainly private tahfiz schools, in 2021 due to the Covid 19 situation that has affected the country since 2020. A survey conducted by Persatuan Maahad Tahfiz Al Quran Negeri Perak (PEMATAP) in May 2021, from 102 tahfiz as respondents in the survey, 60 tahfiz schools can sustain within three months while the rest can maintain their operation within 4 to 6 months. This situation could result in 300 Tahfiz teachers losing their jobs and 2,500 Tahfiz students discontinuing their education (FMT, 2021).

The source of income from PTIs depends on the school fees paid by the parents every month, public donations, and government assistance. However, the inconsistencies in the fees and donations lead to the shortage of income by the tahfiz schools. The subsidies provided by the government or state authorities are insufficient to meet the needs of private Tahfiz institutions, given the growing number of PTIs in Malaysia (Mohd Yusof et al., 2022a). PTI need to reset their strategies by not depending only on the fees, donations and government assistance. PTI need to be more independent and viable by having entrepreneurship activities to fund their operations (Anas et al., 2019). Apart from the financial aspect, other aspects that lead to the sustainability of tahfiz centers need to be looked at reasonably. PTI should look into the welfare of the teaching staff who devote their energy to the tahfiz school, curriculum management by integrating the religious and academic learning, management and administrative management, and the most crucial factor is the financial management, especially the source of income how it is spent. PTI should have a business model for their entrepreneurship activities that will help their sustainability.

Therefore, this study proposes that PTI adopt a business model based on the Integrated Reporting Capital Framework to ensure its sustainability. This model is particularly crucial for PTI, which often lack additional income sources, to maintain operations despite inconsistencies in parental fees and public donations. PTI should not rely solely on government assistance to sustain their operations.

2. METHODOLOGY

Semi-structured interviews were conducted with selected PTI to gather in-depth insights. Through this qualitative method, a detailed understanding of the current operations and activities involved in the business, as well as the identification of capital and issues and challenges was obtained. PTIs were selected based on their active business models based on social media searches through Facebook and Tiktok. There were three PTIs found to have an active business in Kedah, and three other PTIs were nominated by the Persatuan Institusi Tahfiz Al-Quran Negeri Selangor (PITAS). In Selangor, PITAS serves as an Islamic non-governmental organization that serves as a point of reference, a liaison, and an advocate for Private Tahfiz Institutions. The management teams of the selected PTIs were consulted prior to visiting them.

The interview questions were structured around the six capitals of the Integrated Reporting Capital Framework: financial, manufactured, intellectual, human, social and relationship, and natural. The concept of multiple capitals

was introduced in the 2013 Integrated Reporting Framework and further refined in the 2021 revised version (IIRC, 2013; IIRC, 2021). Capitals can serve as inputs for the institution, storing value that can be transformed

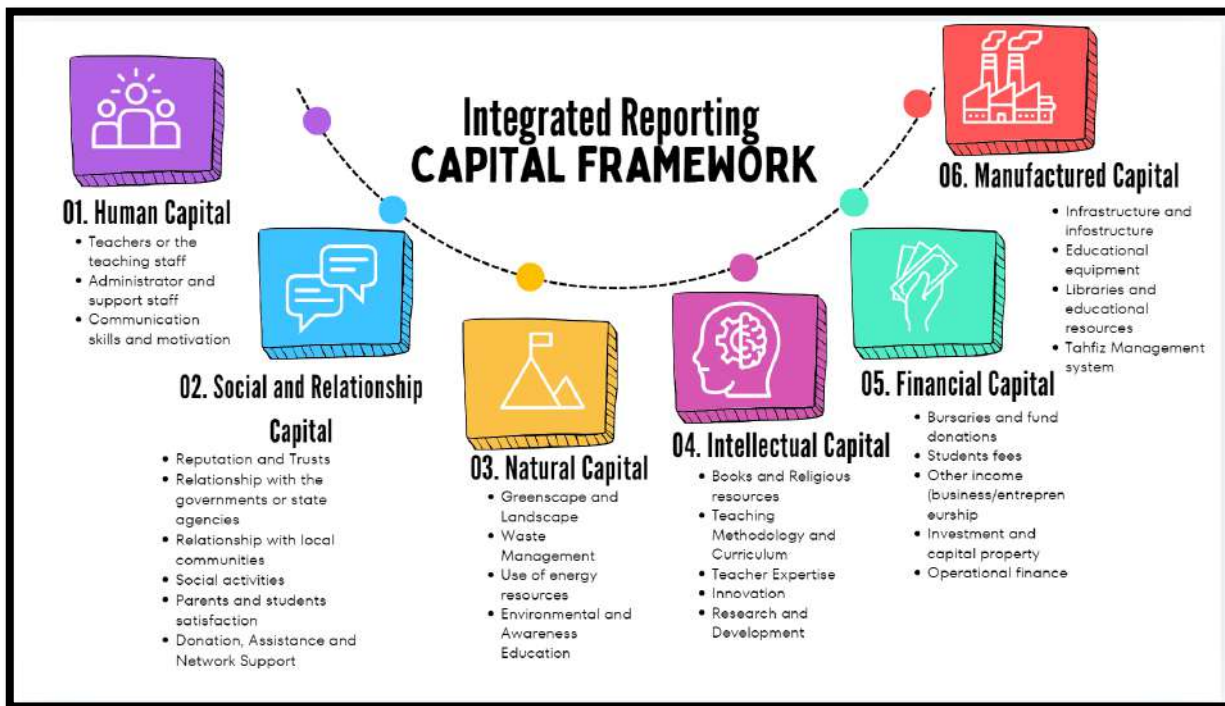
through business model activities. The value of these capitals may fluctuate, either increasing or decreasing over time (IIRC, 2013a). Identifying these capitals is crucial for the institution, as they have the potential to create value and can be integrated into performance appraisals for its long-term sustainability (Almășan et al., 2019; De Villiers & Sharma, 2020).

The interviews were conducted at PTIs during a half-day visits, allowing for face-to-face, two-way communication. This approach facilitated the collection of additional information that may not be available in reports or on the PTIs' websites. The interviews provided a deeper understanding of the availability of capitals, incorporating both quantitative and qualitative data. The visits concluded with site tours around the Tahfiz institutions, offering further insight into how business model activities are carried out. These observations served to confirm and complement the information gathered during the interviews

3. DISCUSSION

The findings indicate that all PTIs employ the Integrated Reporting Framework to manage their capitals. The components required to develop this capital framework vary according to the size and capacity of each PTI. Nevertheless, the analysis highlights that certain key elements are consistently important across all categories within the Integrated Reporting Capital Framework. For a comprehensive list of these elements, refer to Figure 1.

Figure 1: Integrated Reporting Capital Framework for PTI



4. CONCLUSION

Identifying the key capitals within PTIs is crucial for ensuring the institution's ability to create and sustain value over the long term. Understanding these capitals allows PTIs to strategically leverage their assets, resources, and

capabilities to drive growth and innovation. By clearly identifying their capitals, PTIs can generate their own income by pursuing entrepreneurial activities that align with their core strengths, as guided by the Integrated Reporting Framework. This approach not only enhances financial sustainability but also fosters a culture of innovation and adaptability within the institution. PTI needs to be independent to ensure their survivability and should think alternative ways to sustain by diversifying their resources for example by venturing into entrepreneurship activities

Moreover, recognizing the various capitals—whether they are financial, human, intellectual, or social—enables PTIs to conduct a thorough assessment of their strengths and weaknesses. This, in turn, helps them to identify the types of entrepreneurial activities that best suit their operations and long-term goals. Whether it involves developing new programs, expanding existing services, or creating partnerships with external stakeholders, a deep understanding of their capitals empowers PTIs to make informed decisions that align with their mission and vision. Ultimately, this process strengthens the institution's resilience, positioning it to navigate challenges and seize opportunities in an increasingly competitive landscape.

PTI must prioritize independence to ensure its long-term survival, exploring alternative strategies to sustain itself by diversifying its resources (Mohd Yusof et al., 2022). One effective approach is to venture into entrepreneurial activities, which can provide additional revenue streams and reduce reliance on external support. This diversification not only enhances financial stability but also empowers PTI to adapt to changing circumstances and seize new opportunities for growth.

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REFERENCES

- Almășan, A., Circa, C., Dumitru, M., Gușe, R. G., & Mangiuc, D. M. (2019). Effects of integrated reporting on corporate disclosure practices regarding the capitals and performance. *Amfiteatru Economic*, 21(52), 417–434. <https://doi.org/10.24818/EA/2019/52/572>
- Anas, N., Samori, Z., Nizam Zulkipli, S., & Syukri Mohd Noor, M. (2019). Private Tahfiz Institution Governance: A Proposed Transformation Via Social Entrepreneurship Model. In *Article in Academy of Entrepreneurship Journal*. <https://www.researchgate.net/publication/331988277>
- De Villiers, C., & Sharma, U. (2020). A critical reflection on the future of financial, intellectual capital, sustainability and integrated reporting. *Critical Perspectives on Accounting*.
- Hashim, A., Tamuri, A. H., & Aderi, M. (2014). *The Relationships between Etiquettes of Tahfiz (Memorization Al-Quran) and Tahfiz Achievement*. www.ajbasweb.com
- Hassan, N. C., Fakhruddin, F. M., Ayub, A. F. M., Mutalib, L. A., & Jaafar, W. M. W. (2015). Tahfiz Schools Entry Requirement And Characteristics Of Tahfiz Students. *IJAEDU- International E-Journal of Advances in Education*, 1(3), 234. <https://doi.org/10.18768/ijaedu.85524>
- IIRC. (2013a). *Capitals Background Paper for IR*.
- IIRC. (2013b). *The International IR Framework*. www.theiirc.org,
- IIRC. (2021). *International IR Framework*. www.integratedreporting.org
- Md Saiful Azizi Nik Abdullah Fathiyah Solehah Mohd Sabbri, N., & Athirah Muhammad Isa, atul. (2021). Tahfiz Students' Experiences in Memorizing the Qur'an: Unveiling Their Motivating Factors and Challenges. *IIUM JOURNAL OF EDUCATIONAL STUDIES*, 9(2), 42–63.
- Mohd Naw, M. Z., Omar, M. R., & Mohd Nor, M. A. (2021). SISTEM PENDIDIKAN TAHFIZ DI MALAYSIA, PILIHAN IBU BAPA DAN WARISAN PENDIDIKAN ISLAM ANDALUS: SATU SOROTAN. *Asian People Journal (APJ)*, 4(1), 132–147. <https://doi.org/10.37231/apj.2021.4.1.241>
- Mohd Yusof, A. S., Mohamad Akhir, N. S., Ismail, S. I., Abdullah, S. R., & Ghazali, A. M. (2022a).

Survivalability of Private Tahfiz Schools in Malaysia: Examining The Waqf and Ijarah Concept in Khan Mohamed Waqf Development Model. *International Journal of Academic Research in Business and Social Sciences*, 12(6). <https://doi.org/10.6007/ijarbss/v12-i6/12128>

CARBON PRICING IN THE CONTEXT OF ECONOMIC, SOCIAL, AND ENVIRONMENTAL FACTORS: A BIBLIOMETRIC AND CONTENT ANALYSIS

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ABSTRACT

Carbon pricing, often called the trading price of carbon emission rights, plays a crucial and dynamic role in the carbon market. Despite its importance, comprehensive studies that examine carbon prices within the broader context of the emerging low-carbon economy remain limited. This paper adopts a mixed-method approach, combining bibliometric and thematic analyses to explore the economic, environmental, and social impacts of carbon pricing as discussed in existing research. Moreover, the study introduces a conceptual framework through these lenses to identify and analyse emerging topics related to carbon pricing. The analysis reveals a marked increase in scholarly attention to this subject since 2021, with key themes centred around environmental economics, particularly climate change and pollution taxes. Current research predominantly focuses on carbon emissions and emissions trading systems, while theoretical discussions engage with concepts such as compliance cost theory, Porter's hypothesis, and market signal theory. The paper concludes by reflecting on the broader implications of carbon pricing for the economy, environment, and society and suggests pathways for future research.

Keywords: Carbon Pricing, Environmental, Economic, Carbon Emission Reduction.

1. INTRODUCTION

Carbon pricing refers to the monetary value assigned to releasing carbon dioxide (CO₂) and other greenhouse gases into the Earth's atmosphere. The carbon market is an environmental mechanism that operates on market principles and aims to decrease carbon emissions by establishing a price (Tang et al., 2022). Carbon prices can be established by implementing either a carbon tax or a cap-and-trade mechanism, often known as carbon trading. Under a cap-and-trade system, corporations have restrictions on the quantity of carbon they can release and have the option to purchase or sell carbon permits (Barnett et al., 2020).

This study aims to conduct a comprehensive assessment and bibliometric analysis of the existing literature about the various impacts of carbon prices. The paper will explore the following research inquiries.

- What are the patterns in the quantity of publications produced within the research field?
- Which authors, publications, and subject areas dominate the current research area?
- What are the current areas of focus in the field of research?



2. DATA COLLECTION AND RESEARCH METHODOLOGY

2.1 DATA COLLECTION

This study conducts a comprehensive search of the English language literature in the Web of Science Core Collection and Scopus databases, covering the period from 2000 to July 2024. The search focuses on articles that discuss the concept of carbon price. The literature consists exclusively of journal articles, excluding any unrelated sources such as conferences, reviews, monographs, etc., to ensure the study samples' accuracy and dependability. Specifically, in the Web of Science Core Collection database with ALL= ("carbon price*" OR "carbon prices") AND ("company value" OR "productivity" OR "financial performance" OR "carbon reduction*" OR "environment, society, governance*" OR "technological innovation " OR "innovation*" OR "employment" OR "equity" OR "income") were used as search terms to retrieve a total of 1085 documents. Likewise, the Scopus database was searched using the same search criteria, which yielded 878 articles selected based on their title, abstract, and keywords. To ensure the relevance of the literature, this work meticulously examined each retrieved item individually, resulting in the acquisition of 68 pieces of literature after data cleansing. The technique of retrieving and filtering literature is illustrated in Table 1.

Table 1. Literature Screening Process

Literature Search	Databases	
	Web of Science	Scopus
Last retrieval time	28th July 2024	28th July 2024
Document Type	Article	Article
Search Topics	("carbon price*" OR " carbon prices") AND ("company value" OR "productivity" OR "financial performance" OR "carbon reduction*" OR "Environment, society, governance*" OR "technological innovation " OR "innovation*" OR "employment" OR " equity" OR "income")	
Number of searches	1085	878
Literature Screening	Excluding literature that is not relevant to the impacts of carbon emissions trading policies	
Number of post-screening literature	30	38
Literature period	1 January 2000-28 July 2024	
Final Number of Literature	68	

2.2 RESEARCH METHODS

This work employs both bibliometric and content analysis methodologies. Knowledge graph analysis primarily utilises citations, co-citations, clustering, and word frequency analysis to delve into the development process, research hotspots, and cutting-edge trends of specific research to gain more comprehensive insights. The primary software tools typically employed to examine knowledge graphs include Cite Space, VOS Viewer, Bib Excel, and Hist Cite. One of the software options, Cite Space, can rapidly generate knowledge graphs and has excellent visualization capabilities. As a result, it is increasingly becoming the dominant software for analysing knowledge graphs. This study utilises Cite Space software to perform a scientific metric analysis of studies about the carbon price. The objective is to identify the areas of active research and the latest advancements in related subjects.

Contents analysis is a widely used qualitative method that tries to get insights into the specific state of study by systematically examining, summarising and describing the fundamental substance of literature. It analyses the

underlying features of the literature on a research topic. It elucidates the present state of development in that area by considering the specific content of the literature. However, the method is constrained by the limited sample data from the literature and is prone to subjectivity. This article utilises a mixed research strategy that combines quantitative and qualitative methodologies to investigate the various impacts of carbon prices and future research directions.

3. CONCLUSION

This study utilizes a sample of 68 papers from the Web of Science Core Collection and Scopus database from 2000 to 2024. The Cite Space software is employed to display and analyse the knowledge graph. The primary research findings are as follows: a) Current research status. The body of research in the domain of carbon prices is progressively expanding, with a more rapid rate of growth observed after 2021. The literature encompasses a diverse array of periodicals, including prominent worldwide publications such as the *Journal of Cleaner Production*. These journals delve into several fields such as environmental protection, ecological management, environmental research, and ecology. Scholars have developed several stable author groups, and it is becoming more typical for them to engage in several partnerships. b) Hot research topic. The co-occurrence analysis diagram reveals that the prominent research areas in the field of the various effects of carbon price are emission control, environmental economics, and pollution tax. c) Research frontier. The keyword emergence mapping study reveals that the forefront of carbon price research mainly focusses on carbon tax, carbon emissions trading, and price dynamics. d) Research Theory. The literature mainly encompasses compliance cost theory, Porter's hypothesis, and market signalling theory. However, there is a dearth of theoretical advancements in emerging environmental settings such as carbon neutrality and carbon peaking. e) Research methods. The literature mostly employs quantitative research approaches, including DID, PSM-DID, computable general equilibrium models, and input-output models.

REFERENCES

- Adamolekun, G. (2024). Carbon price and firm greenhouse gas emissions. *Journal of Environmental Management*, 349(September 2023), 119496.
- Anser, M. K., Khan, M. A., Nassani, A. A., Aldakhil, A. M., Hinh Voo, X., & Zaman, K. (2021). Relationship of environment with technological innovation, carbon pricing, renewable energy, and global food production. *Economics of Innovation and New Technology*, 30(8), 807–842.
- Barnett, M., Brock, W., & Hansen, L. P. (2020). Pricing uncertainty induced by climate change. *Review of Financial Studies*, 33(3), 1024–1066.
- Bayer, P., & Aklin, M. (2020). The European Union Emissions Trading System reduced CO₂ emissions despite low prices. *Proceedings of the National Academy of Sciences of the United States of America*, 117(16), 8804–8812.
- Boyce, J. K. (2018). Carbon Pricing: Effectiveness and Equity. *Ecological Economics*, 150(March), 52–61.
- Chen, M., & Wang, K. (2023). The combining and cooperative effects of carbon price and technological innovation on carbon emission reduction: Evidence from China's industrial enterprises. *Journal of Environmental Management*, 343(May), 118188.
- Chen, X., Luo, Z., & Wang, X. (2017). Impact of efficiency, investment, and competition on low carbon manufacturing. *Journal of Cleaner Production*, 143, 388–400.
- Chepeliev, M., Osorio-Rodarte, I., & van der Mensbrugghe, D. (2021). Distributional impacts of carbon pricing policies under the Paris Agreement: Inter and intra-regional perspectives. *Energy Economics*, 102(August), 105530.
- Choi, J. K., Bakshi, B. R., & Haab, T. (2010). Effects of a carbon price in the U.S. on economic sectors, resource use, and emissions: An input-output approach. *Energy Policy*, 38(7), 3527–3536.
- Dorband, I. I., Jakob, M., Kalkuhl, M., & Steckel, J. C. (2019). Poverty and distributional effects of carbon pricing in low- and middle-income countries – A global comparative analysis. *World Development*, 115.

EVALUATING THE INTEGRATION OF SDGS IN MALAYSIAN HIGHER EDUCATION: A COMPREHENSIVE ANALYSIS OF ONLINE DISCLOSURE PRACTICES

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ABSTRACT

Higher Education Institutions (HEIs) are crucial in advancing Sustainable Development Goals (SDGs) by integrating sustainability into their curricula, research, and operations, thereby shaping future leaders and innovators committed to sustainable practices. Implementing and publicly reporting on SDG initiatives is vital for HEIs, as it enhances transparency, fosters public trust, and demonstrates their commitment to societal progress, ensuring accountability and inspiring broader community engagement in sustainable development. Information on how HEIs transform SDGs into objectives, strategies, and activities remains fragmented, with infrequent and unsystematic disclosures creating a gap between practices and reporting. This study aims to investigate the extent of Malaysian HEIs' SDG disclosure on websites. Content analysis was conducted on HEIs' website to gather information on SDG information disclosed measured using the Higher Education Institution SDG Disclosure Index (HSDI). Findings from the study show that Malaysian HEIs are still at a low level and are categorised as "Fair". Malaysian public universities dominated the higher level of SDG disclosure as compared to the public HEIs. This study provides practical and managerial contributions for HEIs in developing strategic plans that will enable them to play a more prominent role in society, resulting in a more sustainable, fair, and inclusive environment. It also helps the government oversees the utilisation of public funds, ensuring that capital transfers are efficiently employed to facilitate sustainable programs that align with national interests. This study pioneered an investigation into the extent of Malaysian SDG disclosure within the HEIs context.

Keywords: SDG; Disclosure; Higher Education Institution; Malaysia

1. INTRODUCTION

The role of HEIs has become prominent in providing human capital to build the nation by delivering high-quality education. As the SDGs become a core component of HEIs' sustainability strategies, interest in their contribution has grown, and HEIs can address the increasing accountability expectations of their stakeholders by disclosing information about their impact on economic, environmental, and societal issues with positive ramifications for accountability, transparency, and performance (Blasco et al., 2021). Higher education institutions need to show their commitment to achieving SDGs. The current technology development demands fast and effective destinations of information that require universities to disclose their SDGs initiatives on their websites (UNSDN, 2021). Therefore, SDG disclosure through HEI's website is a valuable and effective tool for communicating HEIs' initiatives and long-term progress to national and international communities, with positive ramifications for accountability, transparency, and performance (De Iorio et al., 2022; Vallez et al., 2022). Websites can be a strategic instrument for communicating SDG information to stakeholders as one of the sources of coercive pressure (Midin et al., 2017). To promote the HEIs' sustainability development strategy, stakeholders must be included and engaged. HEIs

decision-making on SD activities can be strengthened by encouraging increased stakeholder engagement through disclosure (Joseph et al., 2022).

The THE World Impact ranking in 2022 revealed that only 24 Malaysian universities are listed among 1591 universities worldwide. The best-ranked Malaysian university was ranked at the fourth position, but the second-best Malaysian university was ranked in the range of 100-200. This ranking evidences a huge difference between the Malaysian best and second-best universities. Out of 24 Malaysian universities, 16 are public universities, and 8 are private universities (THE, 2023a). It was evident that there was a low participation in THE World Impact ranking among the private universities in Malaysia. Based on the scenario above, it is apparently necessary for this study to investigate the current trend of SDGs initiatives to gauge the level of initiatives and identify areas of concern related to achieving SDGs within Malaysian perspectives via website disclosure. Therefore, this study aims to examine the extent of SDGs disclosure by Malaysian HEIs websites.

2. LITERATURE REVIEW

2.1. Sustainable Development Goal Disclosure

The disclosure of sustainable development goals has recently been increasingly attracting the interest of researchers (De Iorio et al., 2022). Organisations may effectively manage their contributions to achieving global goals by reporting on the SDGs (Rosati & Lourenço, 2019). According to De Iorio et al. (2022), the additional experience and the know-how acquired during the reporting practices may be a starting point to comprehend the sustainability commitment of organisations and their contribution to the SDGs. It is critical to highlight that the SDGs are not legally binding under either international or national law. Furthermore, many of the goals and objectives are vague and only qualitative. As a result, governments and businesses have more flexibility in implementing their respective goals. Despite these deficient institutional frameworks, successful SDG implementation necessitates systems for assessing and reviewing progress. Therefore, the corresponding objectives and accomplishments must be measurable, verifiable, and comparable to enable objective comparison of organisation and country levels through SDG disclosure (Biermann & Pfahl, 2020).

Several studies have been conducted measuring the SDG disclosure based on the information disclosed in the sustainability reports (Caputo. et al., 2021; De Iorio et al., 2022). Caputo. et al. (2021) conducted a study on SDG disclosure and found a close link between information disclosed in sustainability reports of HEIs and the disclosure of SDG information. Higher Education Institutions are committed to pursuing sustainability goals, and sustainability reporting is a valuable tool they use in response to increasing stakeholder demand (Aversano et al., 2022). Therefore, relying on sustainability reports as the primary source of measuring the disclosure of SDGs may not be sufficient to enrich the research data. Another means of databases would help, such as the HEIs' websites.

2.2. HEIs Website Sustainable Goals Disclosure

The current technology development demands fast and adequate information, requiring HEIs to disclose their SDGs practices on their websites (UNSDN, 2021). The Internet has superseded conventional forms of communication media as the most effective means of public transparency (Ramírez & Tejada, 2019). Higher education institutions voluntarily provide information about their commitment to environmental responsibility on their websites (Ramírez & Tejada, 2019). Every institution shares a unique collection of information and an exceptional quantity of data, each focusing on a distinctive facet of sustainability. Nevertheless, past research has shown that these websites provide only a limited amount of information, do not encourage dialogue and interaction with various stakeholders, and do not accurately represent the goals and activities of the organisation (Di Tullio & La Torre, 2022). Therefore, according to Blasco et al. (2021), HEIs do not utilise the full potential of their websites and may only use them for reasons related to their reputations. According to Ramírez and Tejada (2019), HEIs utilise their websites to express the institution's essence to stakeholders and convince people to trust the HEI's services. On the other hand, Amey

et al. (2020) contended that current knowledge on how HEIs disseminate information regarding sustainability and SDGs over the Internet is limited.

In summary, website SDG disclosure is a valuable tool for HEIs to demonstrate their commitment to sustainability and promote transparency in their operations. By publicly reporting on their SDG efforts, HEIs can enhance their reputation and appeal to prospective students, employees, and stakeholders.

3. METHODOLOGY

This study employed a quantitative method to examine the extent of HEIs SDG disclosure. The study applied a cross-sectional study with a data-collection strategy in which data is collected at one point in time. The unit of analysis in this study is the HEIs in Malaysia, with a total of 121 HEIs registered in MOHE. The extent of HEIs SDG disclosure was measured using HSDI score adopting the Higher Education SDG Disclosure Index (HSDI) developed by Sawani et al. (2023). Data was analysed and presented descriptively.

4. RESULTS AND DISCUSSION

Public universities dominated high HSDI score; similar findings from previous studies show that public HEIs tend to disclose more information than their private counterparts, whilst low HSDI score was dominated mainly by private HEIs and university colleges. The study supports previous findings by De Iorio et al. (2022) and Ntim et al. (2017). Private HEIs and university colleges were mostly smaller in size and had a limited number of financial resources. The HEIs have a low conducive environment for SDG reporting (De Iorio et al., 2022), creating no exertion for private HEIs to voluntarily implement SDG initiatives and their disclosure. This study indicates a consistent pattern where public HEIs are more inclined to disclose information, including non-financial reporting, governance practices, and SDG-related information, compared to private HEIs. The studies suggest that public funding sources, governance structures, and strategic considerations play a significant role in driving the differences in disclosure practices among HEIs.

The average HSDI score was at a "Fair" (Sawani et al., 2023) at the level of 34.09%. The result of the study is very much lower than the study conducted by Blasco et al. (2021) (73.74%) and De Iorio et al. (2022) (54.581%). This inconsistency may be due to the diverse samples in this study, which include both established and new HEIs in Malaysia. It could also result from a huge difference in the size of the HEIs sampled, dominated mainly by small private HEIs. The top five SDGs reported identified in this study were SDG9 (53.19%): Industry, Innovation, and Infrastructure, SDG3: Good Health and Well-being (50.09%), SDG8: Decent Work and Economic Growth (48.91%), SDG4: Quality Education (48.62%) and SDG17 (47.26%). The level of disclosure of SDG3 and SDG4 are in line with the previous findings from studies conducted by Blasco et al. (2021), Caputo. et al. (2021) and De Iorio et al. (2022) as the top five SDGs disclosed by HEIs. The disclosure for SDG9 is consistent with the findings from Caputo. et al. (2021), and SDG16 is in line with the result of a study conducted by De Iorio et al. (2022).

5. CONCLUSION

The study shows the overall level of SDG disclosure for HEIs is still at a "Fair" level and still far in achieving a "satisfactory" level. There is also a huge disparity in the level of disclosure between public and private HEIs. Public HEIs dominated higher levels of disclosure than private HEIs. Due to the higher disparity in the nature and level of disclosure of HEIs, separate studies should be conducted better to understand the specific issues and challenges of HEIs.



REFERENCES

- Amey, L., Plummer, R., & Pickering, G. (2020). Website communications for campus sustainability: an analysis of Canadian universities. *International Journal of Sustainability in Higher Education*, 21,3, 531-556. <https://doi.org/10.1108/IJSHE-04-2019-0137>
- Aversano, N., Nicolò, G., Sannino, G., & Tartaglia Polcini, P. (2022). Corporate Social Responsibility, Stakeholder Engagement, and Universities. *Administrative Sciences*, 12,3, 79.
- Biermann, J., & Pfahl, L. (2020). A global monitoring practice in the making disability measurement for un sustainable development goal 4 on inclusive education [Article]. *Osterreichische Zeitschrift für Geschichtswissenschaften*, 31,3, 192-213. <https://doi.org/10.25365/oezg-2020-31-3-11>
- Blasco, N., Brusca, I., & Labrador, M. (2021). Drivers for universities' contribution to the Sustainable Development Goals: An analysis of Spanish public universities. *Sustainability*, 13,1, Article 89. <https://doi.org/10.3390/su13010089>
- Caputo., F., L., L., & Pizzi, S. (2021). The contribution of higher education institutions to the sdgs—an evaluation of sustainability reporting practices [Article]. *Administrative Sciences*, 11,3, 97, Article 97. <https://doi.org/10.3390/ADMSC11030097>
- De Iorio, S., Zampone, G., & Piccolo, A. (2022). Determinant factors of SDG disclosure in the university context. *Administrative Sciences*, 12,1, 21. <https://doi.org/10.3390/admsci12010021>
- Di Tullio, P., & La Torre, M. (2022). Sustainability Reporting at a Crossroads in Italian Universities: Is Web-Based Media Adoption Deinstitutionalising Sustainability Reporting? *Administrative Sciences*, 12,1, 34. <https://www.mdpi.com/2076-3387/12/1/34>
- Joseph, C., Rahmat, M., Syed Yusuf, S. N., Janang, J. T., & Madi, N. (2022). The ethical value disclosure index from the lens of SDG 16 and institutional theory. *International Journal of Ethics and Systems*, 39,3, 612-628. <https://doi.org/10.1108/IJOES-05-2021-0109>
- Midin, M., Joseph, C., & Mohamed, N. (2017). Promoting societal governance: Stakeholders' engagement disclosure on Malaysian local authorities' websites. *Journal of Cleaner Production*, 142(Part 4), 1672-1683.
- Ntim, C. G., Soobaroyen, T., & Broad, M. J. (2017). Governance structures, voluntary disclosures and public accountability. *Accounting, Auditing & Accountability Journal*, 30,1, 65-118. <https://doi.org/10.1108/AAAJ-10-2014-1842>
- Ramírez, Y., & Tejada, Á. (2019). Digital transparency and public accountability in Spanish universities in online media. *Journal of Intellectual Capital*, 20(5), 701-732.
- Rosati, F., & Lourenço, F. (2019). Addressing the SDGs in sustainability reports: The relationship with institutional factors. *Journal of Cleaner Production*, 215, 1312-1326. <https://doi.org/https://doi.org/10.1016/j.jclepro.2018.12.107>
- Sawani, Y., Joseph, C., & Siow, H. L. (2023). Development of sustainable development goals disclosure index for higher education institutions. *International Journal of Service Management and Sustainability*, 8,2, 81-110.
- UNSDN. (2021). How to communicate sustainability on university websites. United Nation Sustainable Development Network. Retrieved 22 December 2021 from http://www.unsdsn-ne.org/wp-content/uploads/2021/10/Sustainability-communication-on-university-websites-GUIDE_211007.pdf
- Vallez, M., Lopezosa, C., & Pedraza-Jiménez, R. (2022). A study of the Web visibility of the SDGs and the 2030 Agenda on university websites [Article]. *International Journal of Sustainability in Higher Education*, 23,8, 41-59. <https://doi.org/10.1108/IJSHE-09-2021-0361>

INSTITUTIONAL EFFECTS ON ESG AND FINANCIAL PERFORMANCE IN ASEAN-5 FIRMS

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ABSTRACT

ESG (environmental, social, and corporate governance) performance is widely known for its positive impact on a firm's financial performance. However, the role of macro elements in moderating this relationship has been largely overlooked. Grounded in the principle that "institutions matter" and acknowledging that countries with stronger institutions tend to reduce transaction costs, information asymmetries, and investor uncertainty, this paper seeks to explore whether the country's institutional profile moderates the relationship between a company's ESG performance and its financial performance. Using financial and ESG performance information from Refinitiv Eikon database and Countries' Institutional Profile from Worldbank database, a total sample used are 105 companies (735 firm-years observations) in five years period (2015-2021), which consisted of ASEAN-5 countries (Indonesia, Malaysia, Philippines, Singapore, and Thailand). Overall, the results confirm that firms with high ESG performance show high financial performance as compared to firms with low ESG performance. The country institutional profile, supported by the institutional theory, appear to strongly affect the ESG of the financial firms where they operate.

Keywords: ESG performance; financial performance; ASEAN; Institutional; panel data

1. INTRODUCTION

Scholars, practitioners, and policymakers have recently paid close attention to the integration of Environmental, Social, and Governance (ESG) elements into business strategy (Giese et al., 2019; Barko et al., 2022). As businesses embrace more sustainable practices, the relationship between ESG performance and financial performance has become a focus of academic research. Numerous studies have shown that good ESG practices can improve financial performance by reducing risks, increasing operational efficiencies, and strengthening stakeholder relationships (Aouadi & Marsat, 2018; Giese et al., 2019). However, the role of country-specific institutional characteristics in regulating this relationship is not widely understood. Given the global importance of sustainability concerns in the world of today, it is imperative to understand how different countries encourage or limit businesses' commitments to sustainable development. Institutional factors such as legal frameworks, cultural norms, and economic development can have a significant impact on how ESG activities affect corporate performance (Ioannou & Serafeim, 2012). This paper investigates the complex relationship between country institutional characteristics and the ESG-financial performance nexus, giving light on how these external factors influence the effectiveness of ESG strategies in achieving financial success.

2. LITERATURE REVIEW

2.1 Environmental, Social and Governance (ESG)

The environmental performance of a company reflects the company's efforts to reduce resource use and emissions. Human rights, employment quality, product responsibility, and community relations are all indicators of a

company's social success. Finally, a company's corporate governance performance reflects the rights and responsibilities of its management (governance framework).

2.1.2 ESG Performance and Firm Financial Performance

Recent research into the impact of ESG (Environmental, Social, and Governance) performance on financial performance finds a complex link. For example, El Ghoul and Karoui (2017) and Dalal and Thaker (2019) discovered that ESG's positive influence on financial performance differs greatly among locations and indicators. Meanwhile, Fatemi et al. (2018) demonstrates potential negative consequences, implying that the expenses associated with ESG practices may outweigh the immediate financial gains in certain situations. Velte (2017) and Alsayegh et al. (2020), found no significant long-term impact on firm valuation, indicating that the relationship between ESG and financial performance is complex and influenced by a variety of factors.

2.1.3 Country Institutional profile and ESG Performance

Country-specific characteristics have a significant impact on firms' efforts to communicate transparency messages concerning their non-financial activities (El Khoury et al., 2023). Many research suggests that there is a link between the firm's institutional environment and ESG accounting (Maama, 2021; Kuhn et al., 2018). According to Baldini et al. (2018), a country's institutional characteristics have a considerable impact on company practices and ESG disclosure volume. Duque-Grisales and Aguilera-Caracuel (2021) discovered that multinational corporations in Latin America gain from ESG performance only when they operate at several regional levels and can tailor their internal sustainable strategy to the institutional realities of each country. Finally, Shin et al. (2023) found that a country's culture influences the relationship between ESG performance and a company's financial performance. As weak institutions may lack the necessary incentives or regulatory frameworks to encourage companies to prioritize ESG, resulting in a more uncertain and risky business environment.

2.2 ASEAN 5 Countries

According to International Monetary Fund and world economic ou “ASEAN” refers to Brunei Darussalam, Cambodia, Indonesia, Lao People’s Democratic Republic, Malaysia, Myanmar, the Philippines, Singapore, Thailand, and Vietnam and “ASEAN-5” refers to Indonesia, Malaysia, the Philippines, Singapore, and Thailand.

3. METHODOLOGY

The sample of this study was made up of publicly listed firms from ASEAN-5 countries chosen based on the availability of sustainability with complete ESG performance scores from 2015 through 2021 was picked from the Refinitiv ESG database. Prior researches have shown that the Refinitiv ESG data is frequently utilized as a tool to measure ESG performance (Duque-Grisales & Aguilera-Caracuel, 2021). The ESG data accessible in the EIKON database may be the best evidence that corporations are implementing ESG and sustainability measures.

4. RESULTS AND DISCUSSION

ESG performance positively and significantly correlates with firm financial performance. It means doing more ESG activities will result in increased ESG performance which will enhance firm financial performance. Regression test results showed strong and positive relationship between ESG performance and financial performance, consistent with the results of previous studies. This result demonstrates that doing well in ESG by the companies in research countries does boost the performance and market value of the company.

5. CONCLUSION

The findings are expected to emphasize how crucial it is to support and enforce ESG disclosure, which could aid regulators and policymakers in better analyzing and assessing the financial performance of businesses as they work

to create ESG frameworks and put in place incentives to boost and encourage ESG activity. The results have significant ramifications for business management as well. Given that prioritizing ESG activities will improve a company's performance, it is hoped that the study's favorable findings will persuade the firm's managers to increase their investment in these initiatives.

REFERENCES

- Alsayegh, M. F., Abdul Rahman, R., & Homayoun, S. (2020). Corporate economic, environmental, and social sustainability performance transformation through ESG disclosure. *Sustainability*, *12*(9), 3910.
- Aouadi, A., & Marsat, S. (2018). Do ESG controversies matter for firm value? Evidence from international data. *Journal of business ethics*, *151*, 1027-1047.
- Aouadi, A., & Marsat, S. (2018). Do ESG controversies matter for firm value? Evidence from international data. *Journal of Business Ethics*, *151*, 1027-1047.
- Baldini, M., Maso, L. D., Liberatore, G., Mazzi, F., & Terzani, S. (2018). Role of country-and firm-level determinants in environmental, social, and governance disclosure. *Journal of business ethics*, *150*, 79-98.
- Barko, T., Cremers, M., & Renneboog, L. (2022). Shareholder engagement on environmental, social, and governance performance. *Journal of Business Ethics*, *180*(2), 777-812.
- Dalal, K. K., & Thaker, N. (2019). ESG and corporate financial performance: A panel study of Indian companies. *IUP Journal of Corporate Governance*, *18*(1), 44-59.
- Duque-Grisales, E., & Aguilera-Caracuel, J. (2019). Environmental, social and governance (esg) scores and financial performance of multilatinas: Moderating effects of geographic international diversification and financial slack. *Journal of Business Ethics*, *168*(2), 1–20
- El Ghoul, S. & Karoui, A. (2017). Does Corporate Social Responsibility Affect Mutual Fund Performance and Flows? *Journal of Banking and Finance*, *77*, 53-63.
- El Khoury, R., Nasrallah, N., & Alareeni, B. (2023). ESG and financial performance of banks in the MENAT region: concavity–convexity patterns. *Journal of Sustainable Finance & Investment*, *13*(1), 406-430. *131*(3), 693-714.
- Fatemi, A., Glaum, M., & Kaiser, S. (2018). ESG performance and firm value: The moderating role of disclosure. *Global Finance Journal*, *38*, 45-64.
- Giese, G., Lee, L.-E., Melas, D., Nagy, Z., & Nishikawa, L. (2019). Foundations of ESG investing How ESG affects equity valuation, risk, and performance. *Journal of Portfolio Management*, *45*, 69–83
- Ioannou, I., & Serafeim, G. (2012). What drives corporate social performance? The role of nation-level institutions. *Journal of International Business Studies*, *43*, 834–864.
- Kühn, A.L., Stiglbauer, M. and Fifka, M.S. (2018), “Contents and determinants of corporate social responsibility website reporting in Sub-Saharan Africa: a seven-country study”, *Business and Society*, Vol. 57 No. 3, pp. 437-480.
- Maama, H. (2021). Institutional environment and environmental, social and governance accounting among banks in West Africa. *Meditari Accountancy Research*, *29*(6), 1314-1336.
- Shin, J., Moon, J. J., & Kang, J. (2023). Where does ESG pay? The role of national culture in moderating the relationship between ESG performance and financial performance. *International Business Review*, *32*(3), 102071.
- Velte, P. (2017). Does ESG performance have an impact on financial performance? Evidence from Germany. *Journal of Global Responsibility*.

THE DYNAMIC OF TRANSFER PRICING PRACTICE IN AN INDONESIAN MINING COMPANY: TAX CONSULTANTS AND TAX AUTHORITIES' PERSPECTIVE

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ABSTRACT

Multinational Enterprises (MNE) conduct transfer pricing and optimize it for several purposes, both for management and taxation purposes. Several MNEs engage in tax planning or tax avoidance using transfer pricing. Most countries in the world are facing difficulties in handling tax planning and tax avoidance via related party transactions or transfer pricing within the unit company across countries. Practically, most tax avoidance via transfer pricing can cause several economic and social problems in the form of tax revenue losses for the host country which causes a broader impact on social issues. To tackle those problems, several regulations related to transfer pricing in several countries have been built. Even so, implementing the regulation is still followed by several issues, including transparency, human resources, ethical problems, and others. A multi-dimensional perspective is needed to solve those issues and enhance transfer pricing regulation. This study used a behavioral perspective by applying the theory of planned behavior and proposed three constructs that determine the MNE's transfer pricing optimization behavior. The analysis was conducted in the three research stages using a three-layer unit analysis consisting of MNE as a taxpayer, tax consultant, and tax authority. The proposed framework and findings from the three-layer unit analysis are used to develop transfer pricing guidelines which can be used by taxpayers, tax consultants, and tax authorities in the transfer pricing practice.

Keywords: Transfer Pricing Practice, Multinational Enterprises, Mining company, behavioral perspective.

1. INTRODUCTION

There are different perceptions of transfer pricing practices between multinational enterprises and tax authorities on the effect of this practice on the country's tax revenue (Firms, 2020). Therefore, a behavioural approach is needed to change the multinational enterprise's perception of transfer pricing optimization practices. Companies perception of the advantage of conducting transfer pricing optimization, perception of subjective norms related to transfer pricing optimization, and the perception of many factors that will facilitate or limit transfer pricing optimization will determine transfer pricing behaviour.

The previous studies only focus on the technical aspect of transfer pricing regulation, without considering the behavioural aspect of its implementation (Tambunan, 2022). Therefore, this research will be focused on the existence of this regulation. Whether it can change the transfer pricing optimization behaviour of multinational enterprises and the transfer pricing optimization perceptions. It will be beneficial in tackling multinational enterprises' profit shifting through transfer pricing optimization. It motivated this research to be conducted, to help the Indonesian government in minimizing tax avoidance which has a negative effect both on the country's tax revenue and socio-political problems. This research is expected to give an alternative to the strategy of minimizing profit shifting through related party transactions using behavioural approach.

2. LITERATURE REVIEW

This research is used to answer the research question about what is the principle of business norms adopted by Indonesian MNE, what is the MNE's behavior towards transfer pricing, what is the perspective of the tax consultant and tax authorities on the MNE transfer pricing practices, and what model of transfer pricing guidelines should develop and use by tax authorities to monitor and detect transfer pricing optimization. Understanding MNE behavior will be useful to propose a guideline in directing multinational enterprises' intended behaviour that is in line with the tax authority or the regulator's expectation. This study will provide a guideline which useful for tax authorities in monitoring and detecting tax avoidance and a reference for MNE managers to avoid transfer pricing for tax purposes. To answer the research question, the researcher used three layers of unit analysis, consist of the enterprise or company as a taxpayer, tax consultant, and tax authorities. The first layer of analysis is the enterprise since enterprises are the actors that conduct transfer pricing. Therefore exploring the enterprises on that practice is very important to understand the company transfer pricing optimization behaviour. Multinational enterprises in the mining sectors were chosen as the unit analysis. Mining sectors are recommended by (Solikhah et al., 2021) because of the persistent occurrence of overseas related party transactions internationally. Accordingly, there is a huge possibility of transactions with related parties in mining sector companies (transfer pricing). The second layer is tax consultants that have deep experience in helping and supervising enterprises in transfer pricing, especially for fulfilling the tax regulation requirements. Exploring the tax consultant's point of view on the MNE transfer pricing practice will give a broad understanding of Transfer Pricing practices. The last layer of analysis is tax authorities to understand the transfer pricing practice from the tax authorities perspective since the tax authorities are the tax administrators that have been supervising and examining the multinational enterprises (MNE) transfer pricing practices

3. METHODOLOGY

This research adopts multi-method designs, specifically quantitative and qualitative methods. This study adopts quantitative and qualitative but is restricted to the methods selected within one worldview or approach (Kaiser & Kaiser, 2006). These studies use a qualitative approach; therefore, the type of this study is a multi-method qualitative study. This approach is the most suitable method for this study since transfer pricing optimization behaviour is not well defined. A qualitative approach was used to answer the research questions related to how the Indonesian MNE conducts transfer pricing optimization. Multi-method qualitative studies combine surveys through questionnaires and interviews.

4. RESULTS AND DISCUSSION

This part presents the findings by describing the Multinational Enterprises (MNE) transfer pricing optimization practice from the perspective of tax consultants and tax authorities using qualitative data.



Table 4.1
Summary Of Research Finding

Issue	Theory	Tax Consultant Perspective	Tax Authorities Perspective	Finding
Differential perception of the benefit of transfer pricing optimization				
Revenue optimization, corporate profit allocation, cost optimization, and increase shareholders value	Transfer pricing is normal business activities for revenue optimization, corporate profit allocation, cost optimization, and increase shareholders value	Transfer pricing was used as managerial accounting tools to allocate the profit, especially to allocate the Income between the parties in a different taxation area	MNE use transfer pricing to allocate the profit among theirs unit in different taxation area	Transfer pricing motivation for management accounting for corporate profit allocation
Ttax payment minimization and profit shifting	Transfer Pricing regulation did not allow profit shifting via transfer pricing	MNE optimize transfer pricing to minimize the tax payment and usually to shift the profit	There is an intrinsic motivation to avoid tax using transfer pricing in MNE practice	MNE are motivated of accounting purposes to allocate profit
Industry and Business Environment				
Transfer pricing regulation, were consider by the MNE	The existence of Transfer Pricing regulation in Indonesia, which is mandatory, is quite enough to force the companies fulfil the TP requirement	There is a need to guidelines on Transfer 1's length principle.	In Fact, the Transfer Pricing documentation is quite enough for tax authorities. Practically, the taxpayers can ask the explanation of the regulation to get a detailed information on transfer pricing regulation, but it still need to be improved	There is a great need to improve transfer pricing regulation
Transfer Pricing Drivers and Barriers				
International Regulation-BEPS Action plans 5	BEPS action plan number 5 is related to how international regulation counter harmful tax practices more effectively using transparency and substance.	Some jurisdictions have not completely embraced BEP Action Plan 5 transparency standards.	MNE in Indonesia is not fully aware of this BEPS action plan. In Fact, Indonesian companies are still utilizing a preferential regime to shift profit, especially in tax haven countries or any country that has a preferential regime	Most MNE did not consider international regulations, specifically BEP action plan No 5

Source: Author's elaboration from research finding, 2022

The findings see that the company behaviour on transfer pricing aims to allocate cost and income between related parties or affiliated companies in different taxation areas. The examination on the tax consultant perspective, gives

an explanation on the business practice from the tax administrators. From the perspective of a tax consultant, transfer pricing is conducted by the companies for management accounting purposes and taxation purposes. Tax consultants state that there is still an intrinsic motivation on the company to optimize their transfer pricing for taxation purposes, specifically for tax obligation minimization. While tax authorities argue that the transfer pricing was used by most multinational companies to avoid taxation obligations. This perspective brings many actions that are conducted by the tax administrator, starting with the risk analysis, determination of the company category, and examination program.

5. CONCLUSION

The conclusion of the study from the three-layer unit analysis is that the company conducts transfer pricing for management accounting purposes and taxation purposes. Transfer pricing practice is considered as a part of normal business activities which sometimes lead to tax avoidance. Most Indonesian multinational enterprises are not fully aware of transfer pricing regulations, both national and international regulations, and they are just aware of how they comply with these regulations. Most Indonesian multinational enterprises use tax consultants and utilize several internal factors and external factors to conduct transfer pricing optimization.

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REFERENCES

- Anh, N. H. (2018). *2018*. 16(5), 104–112.
- Arham, A., Firmansyah, A., & Nor, A. M. E. (2020). *Penelitian Transfer Pricing di Indonesia : Sebuah Studi Kepustakaan Penelitian Transfer Pricing di Indonesia : Sebuah Studi Kepustakaan*. June. <https://doi.org/10.51211/joia.v5i1.1318>
- Barker, J., Asare, K., & Brickman, S. (2017). *Transfer Pricing As A Vehicle In Corporate Tax Avoidance*. 33(1), 9–16.
- Bärsch, S., & Olbert, M. (2019). *Transfer Pricing and the Decision-making Authority of the Tax Function in Multinational Companies*. Vienna 2017, 1–53.
- Beebeejaun, A. (2018). *The Efficiency of Transfer Pricing Rules as a Corrective Mechanism of Income Journal of Civil & Legal Sciences The Efficiency of Transfer Pricing Rules as a Corrective Mechanism of Income Tax Avoidance*. January, 0–9. <https://doi.org/10.4172/2169-0170.1000237>
- Bradley, W. (2015). *Transfer pricing: increasing tension between multinational firms and tax authorities*. 7(2), 65–73.
- Coarse, R. (1993). *Theory of the Firm and Development of Multinational Enterprises*.
- Cools, M., Emmanuel, C., & Jorissen, A. (2008). *Management control in the transfer pricing tax compliant multinational enterprise*. 33, 603–628. <https://doi.org/10.1016/j.aos.2007.05.004>
- Creswell. (2019). *Internal Threats from CSPs and the Continuance Intention to Use Cloud Computing*. 2017. <https://doi.org/10.12691/iteces-6-1-1>
- Djaja, M. (2021). *Transfer Pricing And BEPS Overview In Taxation*. 11(1), 198–202. <https://doi.org/10.29322/IJSRP.11.01.2021.p10920>
- Dutta, S. (2019). *Capacity Rights and Full Cost Transfer Pricing*. August.
- Dwi, R., Pangesti, A., & Jember, U. (2020). *MELAWAN BASE EROSION AND PROFIT SHIFTING (BEPS) DEMI*. April.
- Economic and Business Issues in Retrospect and Prospect Edited By*. (2020). March 2019.
- Elson Kiplangat, Yusuf, B., & Jared, B. (2020). *An empirical review of transfer pricing in kenya*. VIII(4), 540–549.



- Feleag, L., & Neacu, I. (2016). *Disclosure of related party transactions and information regarding transfer pricing by the companies listed on Bucharest Stock Exchange Abstract* : 15(4), 785–809.
- Firms, M. (2020). *Transfer pricing : Business or tax process ? Difficult equilibrium between two dimensions*.
- Fishbein, M., & Ajzen, I. (1975). (1975). 1975.
- Florence, J. (2016). *TRANSFER PRICING : CHALLENGES AND SOLUTIONS WITHIN THE ASEAN REGIME TRANSFER PRICING : CHALLENGES AND SOLUTIONS WITHIN THE ASEAN REGIME*. 14(1). <https://doi.org/10.17304/ijil.vol14.1.677>
- Garbowski, M., & Olsztyn, M. (2021). *Digitalization of Transfer Pricing As An Element of The Management Accounting System In The Company*.
- Grange, A. M. Le. (2017). *No Title*. March.
- Gupta, A. K. (2015). *Disclosure of Transfer Pricing Policies : An Internal Perspective*. 17(12), 53–55. <https://doi.org/10.9790/487X-171225355>
- Hadiya Royyan, M. D. (2019). *Sebuah literature review terhadap penelitian penghindaran pajak di jurnal terindeks Sinta*. 1, 71–79. <https://doi.org/10.20885/ncaf.vol1.art7>
- Herianti, E., & Marundha, A. (2017). *Transfer Pricing , Agency Costs , and Financial Reporting Aggressiveness : An Empirical Study in Indonesia*. 2015. <https://doi.org/10.18196/jai.2003132>
- Hikmatin, R., & Suryarini, T. (2019). *Transfer Pricing of Manufacturing Companies in Indonesia*. 8(3), 165–171. <https://doi.org/10.15294/aaj.v8i3.27706>
- Huda, M. K., Nugraheni, N., & Kamarudin, K. (2017). *The Problem of Transfer Pricing in Indonesia Taxation System*. 7(4), 139–143.
- Ioana Neacșu, Feleaga, L. (2018). *A European map regarding the strictness of the transfer pricing regulations*. January. <https://doi.org/10.24818/jamis.2017.04006>
- Janský, P., & Palanský, M. (2019). Estimating the scale of profit shifting and tax revenue losses related to foreign direct investment. *International Tax and Public Finance*, 26(5), 1048–1103. <https://doi.org/10.1007/s10797-019-09547-8>
- Journal, I., Sciences, S., Factor, I., & Id, T. R. (2016). *Transfer Pricing through the prism of Behavioral Economics Simranjeet kaur Dhir*. 6(11), 62–82.
- Juranek, Steffen, Schindler, Dirk, Schjelderup, G. (2017). www.econstor.eu.
- Kaiser, L., & Kaiser, L. (2006). Agency Relationship and Transfer Pricing Inefficiency. *Acta Oeconomica Pragensia*, 2006(3), 73–81. <https://doi.org/10.18267/j.aop.94>
- Kamilah, A. (2019). *Transfer Pricing Of Multinational Companies As A Business Crime And Their Impact On State Revenue In The Tax Sector*. 8(10), 2120–2123.
- Kusuma, H., Indonesia, U. I., Wijaya, B., Indonesia, U. I., & Author, P. (n.d.). *Transfer Pricing Practice in Indonesia*
- Le Hang, H. T. (n.d.). *MANAGING TRANSFER PRICING Protecting tax base while seeking to attract FDI*.
- Li, J. (1994). *Lincoln University Digital Thesis*.
- Merle, R., Al-gamrh, B., & Ahsan, T. (2019). Tax havens and transfer pricing intensity : Evidence from the French CAC-40 listed firms. *Cogent Business & Management*, 6(1), 1–12. <https://doi.org/10.1080/23311975.2019.1647918>
- Mohammed, A., William, C., & Philomina, A. (2019). Transfer pricing, earnings management and tax avoidance of firms in Ghana. *Journal of Financial Crime*, 26(1), 235–259. <https://doi.org/10.1108/JFC-10-2017-0091>
- Moisello, A. M. (2016). *Managerial and accounting aspects of transfer prices : A case in the shipping sector*. January 2011.
- Mulyani. (2010). *Factors influencing transfer pricing compliance: an Indonesian perspective*. September.
- Nielsen, S. B., & Schindler, D. (2014). *Abusive Transfer Pricing and Economic Activity Søren Bo Nielsen Abusive Transfer Pricing and Economic Activity Abstract*.
- Novikovas, M. (2011). *Evaluation of Theoretical and empirical researches on transfer pricing*. 90(2), 128–143.
- Nurhidayati, H. F. (2020). *The Influence of Income Shifting Incentives towards The Tax Haven Country Utilization : Case Study on the Companies listed in Indonesian Stock Exchange*. 20(1), 27–38. <https://doi.org/10.9744/jak.20.1.27-38>

THE ROLE OF COMPETITION COMMISSION OF PAKISTAN (CCP) IN MEASURING THE LEVEL OF COMPETITION OVER TIME AND ACROSS INDUSTRIES IN PAKISTAN

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ABSTRACT

Healthy and fair competition in any market is a strong economical parameter for development. It provides equal chances to all stakeholders to perform business activities and to avail maximum opportunities to expand in the market. Pakistan, as a developing country, is struggling hard to create a business atmosphere where all participants can take part fairly and can generate more and more economic activities. However, there are some business giants, which create monopolies and make business market difficult for others. To control these business tycoons, Government of Pakistan has established Competition Commission of Pakistan (CCP) as an independent quasi-regulatory and quasi-judicial body on Second of October 2007 under the Competition Ordinance 2007. The basic purpose of this organization is to ensure healthy competition among companies for the benefit of the economy in Pakistan. The Commission prohibits abuse of a dominant position in the market, certain types of anti-competitive agreements, and deceptive market practices. It also reviews mergers of undertakings that could result in a significant lessening of competition. Combined with its advocacy efforts, the Commission seeks to promote voluntary compliance and develop a competition culture in the economy. Since its establishment, CCP is playing its productive and effective role in measuring the level of competition over time and across industries in Pakistan, which is helpful for the economic development of the country.

Keywords: Fair market; competition; Competition Commission of Pakistan (CCP); Pakistan.

1. INTRODUCTION

In open market system, everyone has equal chance and opportunity to establish and penetrate in business environment. Healthy and open competition among businesses increases productivity, and quality of goods and services in an economy. However, if due to some reasons, any business or businesses hold on the market by creating monopolies or cartels, other businesses suffer a lot. This automatically creates unhealthy competition in the market. Governments try to control this phenomenon in their economies, but fails sometimes. For example, a study reveals that competitive condition in the Indian banking sector has been improving since 1996. However, big banks with market share more than 1 per cent have been exercising some degree of price mark-up over their marginal cost (Misra, A. K. and Arrawatia, R. 2013). Similarly, Casu, B. and Girardone, C. (2009) have discovered that EU banking markets are becoming progressively more concentrated and that there is no evidence of an increase in competitive pressure. Country differences are also apparent thereby indicating that despite the sustained regulatory interventions, significant barriers to the integration of EU retail banking markets remain. In line with recent literature, the analysis also seems to provide further evidence that concentration is not necessarily a good proxy for competition.



Pakistan

Pakistan is a developing country and since its independence on 14 August 1947, struggling hard to establish strong economic conditions. Situating in the heart of Asia, it is neighboring India, Iran, Afghanistan and China. Current population of the country is 212,742,631 (National Census 2017) and total area is 881,913 km². It has four major provinces namely Punjab, Khyber Pakhtunkhwa, Sind and Baluchistan. Federally Administrated Tribal Areas (FATA), Federal Capital and Azad Jammu & Kashmir are also part of the country. Current GDP of Pakistan is \$1.195 trillion with \$5,839 per capita income. Due to several political and administrative reasons, the growth rate of Pakistan could not increase and expected to be only 4.5% in 2020. Business market is monopolized by several large businesses, which ultimately create cartels and eliminate small businesses from the market. To overcome this problem, Government of Pakistan has established

Competition Commission of Pakistan (CCP) to control and check the fairness of the market.

Competition Commission of Pakistan (CCP)

The Competition Commission of Pakistan (CCP) is an independent quasi-regulatory, quasi-judicial body, which helps to ensure healthy competition among companies for the benefit of the economy in Pakistan. The Commission prohibits abuse of a dominant position in the market, certain types of anti-competitive agreements, and deceptive market practices. It also reviews mergers of undertakings that could result in a significant lessening of competition. Combined with its advocacy efforts, the Commission seeks to promote voluntary compliance and develop a 'competition culture' in the economy. The Competition Commission of Pakistan (CCP) was established on 2 October 2007 under the Competition Ordinance 2007, which was re-promulgated in November 2009. Major aim of this Ordinance was to provide a legal framework to create business environment based on healthy competition for improving economic efficiency, developing competitiveness and protecting consumers from anti-competitive practices.

Competition Commission of Pakistan (CCP) Mandate

Anti-competitive business conduct can have harmful effects on the level of competition in the economy and thus, on consumers. The Competition Act, 2010, prohibits undertakings from abusing a dominant position in the market, participating in anti-competitive agreements, and resorting to deceptive marketing practices that could result in a transaction based on incorrect or inaccurate information. It also reviews mergers between undertakings that could result in significant impediments to effective competition. Through advocacy, the Commission encourages voluntary compliance and promotes a 'competition culture' to take root in the economy. The Competition Act 2010 is based on international best practices, considers the current economic realities and corrects the deficiencies of the Monopolies and Restrictive Trade Practices Ordinance (MRTPO) of 1970 related to definitional aspects, coverage, penalties, and other procedural matters. It covers all sectors of the economy, regardless of their public or private ownership.

Departments

Advocacy

Section 29 of the Act requires the Commission to engage in advocacy through various means to create awareness of competition issues and to promote a culture of competition in the country. The Commission understands the reason for and importance of advocating competition, especially in a developing economy like Pakistan, where the general awareness of the business community may not be at an ideal level. The work of the CCP towards increasing the awareness of all stakeholders, including the public and private sectors, the legal community, academia, media, and the Government, is done through an advocacy strategy developed by the Advocacy Department. Advocacy efforts include national and international conferences, seminars, training workshops, round tables, media appearances, sessions of the Competition Consultative Group and bilateral meetings with sector regulators.

Cartels and Trade Abuses

Section 3 of the Competition Act 2010 prohibits the abuse of market power by dominant undertakings. Section 4

of Act prohibits agreements between business undertakings and decisions by trade associations that can distort competition in a market. The Cartels & Trade Abuses (C&TA) Department is tasked with enforcing these prohibitions. The C&TA Department investigates potential violations of Section 3 & 4, specifically those involving collusion and cartelization, and recommends action against violators to the Commission. It also undertakes policy reviews and recommends issuance of policy notes by the Commission in situations where governmental policy or legislation maybe discouraging competition or facilitating abuse of dominance by, or collusion between, market players. It also reviews general competition issues in the national economy and, where necessary, recommends the Commission to conduct open hearings and publicly express its opinion in the matter.

Exemptions

The Department operates under the supervision of Members (Legal, Cartels & Trade Abuses) and is tasked with granting exemptions, both of its own accord and upon request, to certain agreements that would otherwise be prohibited. Section 4 of the Competition Act 2010 prohibits an undertaking from entering into an agreement in respect of the production, supply, distribution, acquisition or control of goods or the provision of services which have the object or effect of preventing, restricting or reducing competition within the relevant market unless exempted under Section 5 of the Act for individual exemption or under Section 7 for block exemptions. The criteria for any agreement to be considered for an exemption is given in Section 9 of the Act, which says that exemptions may be granted to agreements which improve production or distribution; promote technical or economic progress; or result in benefits that clearly outweigh any adverse effects of lessening of competition. Exemptions may be granted subject to certain conditions determined on a case-to-case basis. Compliance with conditions prescribed in the exemption certificate is mandatory. Depending on material changes in the agreements, exemptions may be extended or cancelled, as per provisions of the Act, Rules, and Regulations.

Fair Trade

The Commission has established the Office of Fair Trade (OFT) in 2008 mainly responsible for the protection of consumers against deceptive marketing practices mentioned under Section 10 of the Act. The OFT has been set up to further the Competition Commission's objective of creating a business environment based on healthy competition and protecting consumers from anti-competitive practices. OFT enjoys all powers under the Act to enforce the provisions of Act in the deceptive marketing practices cases.

International Affairs

The Office of International Affairs (OIA) was established as the focal coordinating point to liaise with UNCTAD, OECD and the International Competition Network (ICN). In addition, the Office is responsible for exploring bilateral relations with competition agencies and with donor agencies for possible technical assistance. In essence, the Office is the communications focal point for all international activities. The OIA is currently involved in two ICN working groups, specifically in the working groups on cartels and mergers. It also contributes to the workings of OECD and UNCTAD. The Office also handles the liaison and cooperation relationships with other competition agencies in the world, on a bilateral or regional basis.

2. CONCLUSION

Competition advocacy is about promotion of competition through means, other than law enforcement. A competition authority, how the general public, by the business community and by other government and regulatory bodies, perceives it has a significant importance on how effectively it will be able to perform its duties. With limited resources at hand, CCP is trying to seek out programs that require little spending and ensure widespread influence.



REFERENCES

- Alhassan, A. L. and Biekpe, N. (2016). Competition and efficiency in the non-life insurance market in South Africa. *Journal of Economic Studies*, Vol. 43, No. 6, pp. 882-909.
- Cabanelas, P., Manfredi, L. C., Sánchez, M. G. and Lampon, F. (2019). Multimarket competition and innovation in industrial markets: Spain and Colombia in comparative perspective. *Journal of Business & Industrial Marketing*.
- Casu, B. and Girardone, C. (2009). Competition issues in European banking. *Journal of Financial Regulation and Compliance*, Vol. 17, No. 2, pp. 119-133.
- Competition Commission of Pakistan (CCP)
- Lakshmana, I. and Yang, Y. (2015). Product market competition and corporate investment decisions. *Review of Accounting and Finance*, Vol. 14, No. 2, pp. 128-148.
- Meng, J. and Layton, R. A. (2011). Understanding managers' marketing strategy choice in a collaborative competition industry. *European Business Review*, Vol. 23, No. 5, pp. 477-501.
- Misra, A. K. and Arrawatia, R. (2013). A conjectural variation approach for assessment of competition: a case on Indian commercial banks. *Journal of Advances in Management Research*, Vol. 10, No. 1, pp. 7-21.
- Sheikh, S. (2018). CEO inside debt, market competition and corporate risk taking. *International Journal of Managerial Finance*.
- Singla, M. and Singh, S. (2018). Board monitoring, product market competition and firm performance. *International Journal of Organizational Analysis*.
- Yuan, J., Zhou, Z., Zhou, N. and Zhan, G. (2019). Product market competition, market munificence and firms' unethical behavior. *Chinese Management Studies*, Vol. 13, No. 2, pp. 468-488.



INTENTION TO ADOPT AI AMONG MALAYSIAN PUBLIC SECTOR ACCOUNTANTS

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ABSTRACT

This study investigates the awareness and potential readiness to adopt Artificial Intelligence (AI) among accountants in Malaysian government departments, in anticipation of the implementation of AI-embedded accounting systems. This study used an online survey to find out how aware Malaysian government accountants are of AI and if they are ready to use it. We used the UTAUT2 model to understand what factors influence their willingness to adopt AI. The survey found that Malaysian government accountants have a moderate understanding of AI in general, but their knowledge of AI in accounting systems is still limited. Despite this, most accountants are open to using AI in their work. While they do not worry much about AI replacing their jobs, our analysis shows that the perceived benefits of AI in the form of performance expectancy are the main factor influencing their willingness to adopt it. Other factors like how easy it is to use AI and having the right resources might be less important in this context. To bridge the gap between willingness and AI use in Malaysian public sector accounting, training should emphasize practical benefits for accountants and focus on functionalities that demonstrably improve workflows. This focus on tangible value can foster accountant confidence and encourage AI adoption.

Keywords: Malaysian Public Sector Accounting; AI Adoption; Accounting Information Systems; UTAUT2.

1. INTRODUCTION

The rapid evolution of Artificial Intelligence (AI) is reshaping various industries, including the field of accounting. AI-powered accounting systems offer the potential to streamline workflows, enhance data accuracy, and empower accountants to focus on strategic decision-making (Brown et al., 2020). However, successful AI adoption hinges on user awareness and readiness. While there is growing interest in AI within accounting, research specifically exploring its readiness in the Malaysian public sector remains scarce. Integrating AI into public sector accounting can revolutionize processes, enhance decision-making, and improve overall efficiency and effectiveness (Ahn & Chen, 2022).

Existing studies on AI adoption often focus on private firms or specific AI functionalities (Lee & Tajudeen, 2020). As the Malaysian government actively promotes AI integration across sectors (e.g., Malaysia National AI Roadmap 2021-2025, 'AI untuk Rakyat' and AI Sandbox 2024), understanding public sector accountants' preparedness for AI adoption becomes crucial. Factors influencing AI adoption in accounting, particularly within the public sector, need careful consideration to ensure successful integration and address potential obstacles (Wael, 2023).



2. LITERATURE REVIEW

Understanding the factors influencing user acceptance of new technologies is crucial for successful implementation (Maican et al., 2021). The UTAUT2 model (Venkatesh et al., 2003) is a widely used framework that explores various factors influencing technology adoption intentions. Limited research explores the specific context of public sector accounting and the unique challenges and considerations that might arise (Amalia, 2020).

This study addresses the knowledge gap by investigating the awareness and potential readiness of Malaysian public sector accountants towards AI adoption. A quantitative survey approach explores their current awareness, potential adoption willingness, and job security concerns regarding AI in their daily tasks. The UTAUT2 model analyzes factors such as Performance Expectancy (belief in AI's usefulness), Effort Expectancy (perceived ease of using AI), and Social Influence (impact of colleagues' opinions) to understand the behavioral intention to adopt a new technology.

3. METHODOLOGY

This study employed a quantitative research design through a web-based survey to assess the awareness and potential readiness for AI adoption among accountants in Malaysian government departments. The target population included accountants holding positions within the W21-W54 job grade range in the Malaysian public service. To ensure a representative sample and facilitate data collection, the survey was administered in collaboration with the Institut Perakaunan Negara (IPN) for a duration of one month in June 2024. The survey questionnaire was developed based on the well-established UTAUT2 model which explores various factors influencing technology adoption intentions (Al-Okaily et al., 2023; Thaker et al., 2021). The collected data from the survey underwent analysis using Partial Least Squares Structural Equation Modelling (PLS-SEM). We used RStudio to run the PLS-SEM analysis on the model as depicted in Figure 1.

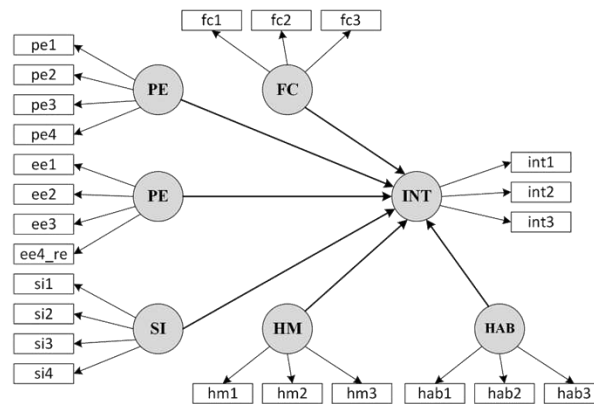


Figure 1. Research model with items

4. RESULTS AND DISCUSSION

A total of 167 usable responses were obtained from the targeted population. All participants held accountancy positions within various Malaysian government departments, reflecting the successful targeting of the intended population. In terms of experience, the respondents exhibited a range of accounting experience, with tenures varying from 1 to over 16 years.

4.1 Measurement Model Assessment

As reported in Table 1, all constructs exhibit acceptable reliability results by surpassing the thresholds of 0.708 for indicator loadings, 0.70 consistency reliability, and 0.50 AVE. For the discriminant validity assessment, we follow Hair's et al. (2021) guide to accept construct having HTMT ratio less than 0.90.

Table 1. Measurement model assessment

Constructs	Loadings	Rho _c	Alpha	AVE
PE	(0.826-0.941)	0.917	0.891	0.822
EE	(0.660-0.957)	0.891	0.812	0.737
SI	(0.808-0.917)	0.921	0.888	0.746
FC	(0.768-0.885)	0.867	0.806	0.686
HM	(0.864-0.935)	0.916	0.901	0.858
HAB	(0.850-0.963)	0.875	0.861	0.828
INT	(0.817-0.938)	0.859	0.756	0.670

4.2 Structural Model Assessment

As shown in Table 2, our findings reveal that only Performance Expectancy emerged as a significant predictor of intention to use AI in accounting by public sector accountants in Malaysia. This suggests that the other UTAUT2 predictors included in the model may not exert a direct influence on this intention. With an R-squared of 0.379, the model exhibits moderate explanatory power, indicating it explains a moderate proportion of the variance in the intention to use AI.

Table 2. Structural model assessment

Path	f ²	Path	t-value	Sig.
PE→INT	0.051	0.400	3.356	Yes
EE→INT	0.013	0.172	1.390	No
SI→INT	0.002	-0.081	-0.723	No
FC→INT	0.000	0.015	0.112	No
HM→INT	0.006	0.097	0.745	No
HAB→INT	0.003	0.073	0.902	No

5. CONCLUSION

The study aimed to understand what influences Malaysian public sector accountants' willingness to use AI in accounting. We used the UTAUT2 model and PLS-SEM to analyze the relationships between different factors and intention to use AI. We collected data through a survey of Malaysian public sector accountants. While the model was reliable and valid, only Performance Expectancy significantly predicted intention to use AI. Other UTAUT2 constructs might be less important in this context. Future research could investigate potential moderators or mediators like perceived security concerns, complexity, and compatibility. These factors might have greater explanatory power in technology adoption settings.

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REFERENCES

- Ahn, M. J., & Chen, Y. C. (2022). Digital transformation toward AI-augmented public administration: The perception of government employees and the willingness to use AI in government. *Government Information Quarterly*, 39(2), 1-14.
- Amalia, M. M. (2023). Enhancing Accountability and Transparency in the Public Sector: A Comprehensive Review of Public Sector Accounting Practices. *The ES Accounting and Finance*, 1(03), 160-168.
- Al-Okaily, M., Alkhwalidi, A. F., Abdulmuhsin, A. A., Alqudah, H., & Al-Okaily, A. (2023). Cloud-based accounting information systems usage and its impact on Jordanian SMEs' performance: the post-COVID-19 perspective. *Journal of Financial Reporting and Accounting*, 21(1), 126-155.
- Brown, R., Davies, M., & Vance, A. (2020). The impact of artificial intelligence on the accounting profession. *Accounting Horizons*, 34(2), 485-503.
- Hair, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., Danks, N. P., & Ray, S. (2021). *Partial least squares structural equation modeling (PLS-SEM) using R: A workbook*. Springer.
- Lee, C. S., & Tajudeen, F. P. (2020). Usage and impact of artificial intelligence on accounting: Evidence from Malaysian organisations. *Asian Journal of Business and Accounting*, 13(1), 213-239.
- Maican, C., Cazan, A. M., Lixandriou, R., Dovleac, L., & Maican, M. A. (2021). Exploring the factors influencing the use of communication and collaboration applications. *Journal of Organizational and End User Computing*, 33(4), 94-124.
- Thaker, H., Thaker, M., Khaliq, A., Pitchay, A., & Hussain, H. (2021). Behavioural intention and adoption of internet banking among clients' of islamic banks in malaysia: an analysis using UTAUT2. *Journal of Islamic Marketing*, 13(5), 1171-1197
- Venkatesh, V., Morris, M., Davis, G., & Davis, F. (2003). User acceptance of information technology: toward a unified view. *MIS Quarterly*, 27(3), 425-478
- Wael, A. H., Abdallah, W., Ghura, H., & Buallay, A. (2023). Factors influencing artificial intelligence adoption in the accounting profession: the case of public sector in Kuwait. *Competitiveness Review: An International Business Journal*, 34(1), 3-27.

TRAILBLAZING TANGIBLE HERITAGE ASSET DISCLOSURE INDEX FOR THE MALAYSIAN PUBLIC SECTOR

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ABSTRACT

Accounting for Heritage Assets (HAs) has been extensively debated and has evolved; however, challenges remain in the areas of accounting and reporting. HAs are crucial to a country's culture, history, and identity, and their significance extends to their inclusion in public sector financial statements. In Malaysia, specifically, the accounting for HA has gained importance with the implementation of accrual accounting under the New Public Management (NPM) framework. The issuance of relevant accounting standards for HAs by the International Public Sector Accounting Standards (IPSAS) indicates that HAs must be reported comprehensively. This study aims to propose a disclosure index that can provide more meaningful information on HA reporting, complementing the current disclosure requirements in financial statements. The study employs a qualitative approach, utilizing face-to-face interviews with relevant government departments and document reviews based on current accounting standards, heritage asset registers, and annual reports for data collection purposes. The findings identified 42 items, consisting of 11 financial items (Recognition and Measurement) and 31 non-financial items (Accountability, Narrative, and Performance) disclosures. The finding also emphasized the importance of non-financial disclosure items to better describe HAs that cannot be measured. This study contributes to the enhancement of HA literature and provides valuable insights to regulators, policymakers, and preparers, helping them improve their accounting and management policies, procedures, and practices for HA reporting. Improved disclosure allows the public sector to better fulfil its accountability to the public.

Keywords: Heritage Asset; Disclosure Index; Accrual Accounting; Public Sector; Malaysia

1. INTRODUCTION

The New Public Management (NPM) paradigm underscores the importance of accountability and transparency in public sector financial reporting. Within this framework, accrual accounting has been adopted, along with the International Public Sector Accounting Standards (IPSAS) (Dianto & Aswar, 2020; Aversano & Christiaens, 2014; Aversano, Ferrone, Christiaens, Sannino & Polcini, 2015). In Malaysia, accrual accounting was implemented on January 1, 2018 (Accountant General's Department of Malaysia, 2023), bringing to light challenges in accounting for Heritage Assets (HAs). Current standards, such as MPSAS 17 (IPSAS 17), provide minimal guidance, and issues with recognition, measurement, and disclosure persist (Rosli, Kasim & Kamaluddin, 2020; Woon, Chatterjee, & Cordery, 2019; Biondi, Grandis, & Mattei, 2021). These challenges,

including difficulties in measuring some HAs, hinder reporting that reflects their unique attributes. This study aims to highlight the need for improved disclosure that offers more meaningful insights into HA reporting, integrating both financial and non-financial information, as HAs differ from other public goods.

2. LITERATURE REVIEW

In Malaysia, the National Heritage Act 2005 (Act 645) governs the country's HA, including historical buildings, monuments, artefacts, sites, and heritage collections. A heritage item is defined as a National Heritage, heritage site, heritage object, or underwater cultural heritage listed in the Register. Despite their importance to the nation's culture, history, and economy, HAs present significant challenges in measurement and disclosure (Rosli et al., 2019; Woon et al., 2019; Biondi et al., 2021; Noaman, Ouda & Christiaens, 2018; Basnan, Salleh, Ahmad, Harun & Upawi, 2015; Hassan, Saad, Ahmad, Mohammed Salleh & Ismail, 2016; Rosli et al., 2020; Aversano, Christiaens, & Polcini, 2019). Current accounting standards, particularly IPSAS 17 (MPSAS 17 in Malaysia), provide minimal guidance, often failing to reflect the true value of these assets. The revised Interpretation of Accounting Policies (2023) states that HAs should be recorded at cost in the accrual ledger, or at a nominal value of RM1 if the cost is unknown, but this does not capture their historical, cultural, or social significance. The need for enhanced disclosure has been emphasized in response to IPSASB consultations and the introduction of IPSAS 45, which requires unrecognized heritage property, plant, and equipment to be disclosed in terms of their significance to the entity's objectives. Enhanced HA disclosure would address the public interest in the management of these resources and better reflect their true value in financial statements.

3. METHODOLOGY

The research employed a qualitative design to explore the accounting and disclosure of HA in Malaysia. Data collection involved semi-structured face-to-face interviews with 10 accountants and curators from the Ministry of Tourism, Arts and Culture (MOTAC) and its associated agencies, as well as a systematic document review. Participants, selected through purposive sampling, provided insights into the management and accounting of HAs. Interviews focused on participants' experiences, relevant disclosure themes, and the financial and non-financial items that should be included in HA reporting (Creswell, & Creswell, 2018). Thematic analysis was applied to the interview data, allowing the identification of key themes related to HA accounting and disclosure. Content analysis was used to examine documents such as current accounting standards, heritage asset registers, and annual reports (Bowen, 2009). The development of the Tangible HA Disclosure Index followed a six-step process, incorporating findings from both interviews and document reviews, as well as input from relevant literature. The index was validated by experts and finalized with specific categories and themes to enhance the reporting of HAs.

4. RESULTS AND DISCUSSION

The study reveals that each of the five entities manages different types of HA, each requiring distinct disclosure items. Interviews and document reviews show that narrative disclosure, which falls under non-financial information, is the most significant for thoroughly describing HAs and complementing their recognition and measurement. While financial data is disclosed in terms of value, narrative disclosures are essential for providing a complete and informative view of HAs. Current non-financial disclosures are limited and fail to fully represent HAs, underscoring the need for more comprehensive reporting to give financial report users an accurate picture of government managed HAs and enhance public accountability. Furthermore, there is a need to report on performance and accountability to improve government transparency, as the public is interested in how these assets are managed. The study identifies 42 disclosure items relevant to HAs, aligning with previous research that supports the inclusion of detailed descriptive information in financial reports (Aversano, 2014; Aversano et al., 2015; Basnan et al., 2015; Hassan et al., 2016; Rosli et al., 2019; Aversano et al., 2019; Noaman et al., 2018).



5. CONCLUSION

HAs are vital for a country's culture and identity. As governments adopt New Public Management and accrual accounting, transparent reporting of HAs is essential for effective resource allocation and public accountability. This study identifies 42 disclosure items for a Tangible HA Disclosure Index, emphasizing the need to include both financial and non-financial information for a comprehensive view. Integrating non-financial details, such as narrative and performance, enhances the representation of HAs. The findings offer insights for improving HA disclosure and suggest further research across various government agencies.

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REFERENCES

- Accountant General's Department of Malaysia (2024) Interpretation of Accounting Policies Revised 2023. Retrieved from https://www.anm.gov.my/images/JANM/Webmaster/PPPA/Portal_Akruan/Interpretation_of_acc_policy_Revised_2023_08052024.pdf
- Aversano, N., & Christiaens, J. (2014). Governmental financial reporting of heritage assets from a user needs perspective. *Financial Accountability & Management*, 30(2), 150-174. <https://doi.org/10.1111/faam.12032>
- Aversano, N., Christiaens, J., Polcini, P. T., & Sannino, G. (2019). Accounting for heritage assets An analysis of governmental organization comment letters on the IPSAS consultation paper. *International Journal of Public Sector Management*. <https://doi.org/10.1108/IJPSM-12-2018-0275>
- Aversano, N., Ferrone, C., Christiaens, J., Sannino, G., & Polcini, P. (2015). Heritage assets in local government financial reporting: the analysis of two case studies. *Journal of Economy, Business and Financing*, 3(1), 35-46.
- Basnan, N., Salleh, M. F. M., Ahmad, A., Harun, A. M., & Upawi, I. (2015). Challenges in accounting for heritage assets and the way forward: Towards implementing accrual accounting in Malaysia. *Geografia-Malaysian Journal of Society and Space*, 11(11).
- Biondi, L. & Grandis, F. & Mattei, G. (2021). Heritage assets in financial reporting: a critical analysis of the IPSASB's consultation paper. *Journal of Public Budgeting, Accounting & Financial Management*. ahead-of-print. <https://10.1108/JPBAFM-09-2020-0158>
- Bowen, G. A. (2009). Document analysis as a qualitative research method. *Qualitative Research Journal*, 9(2), 27-40. <https://doi:10.3316/qj0902027>
- Creswell, J. W., & Creswell, J. D. (2018). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. Fifth edition. Sage publication.
- Dianto, A. W., & Aswar, K. (2020). Assessing Accrual Accounting Implementation in Cianjur Regency: An Empirical Investigation. *International Journal of Business and Economic Sciences Applied Research*, 13 (1), 7–13. <https://doi.org/10.25103/ijbesar.131.01>
- Hassan, N. L., Saad, N., Ahmad H. N., Mohammed Salleh, M. S., & Ismail, M. S., (2016). The Accounting Practices of Heritage Assets. *International Journal of Economics and Financial Issues*, 2016, 6(S6) 80-83. ISSN: 2146-4138.
- MPSAS 17 Property, Plant and Equipment (2011) Malaysia: Accountant General's Department of Malaysia. Retrieved from [https://www2.anm.gov.my/PublishingImages/SitePages/Malaysia%20Public%20Sector%20Accounting%20Standard%20\(MPSAS\)/MPSAS%2017%20Hartanah%20Logi%20dan%20Peralatan_V1.pdf](https://www2.anm.gov.my/PublishingImages/SitePages/Malaysia%20Public%20Sector%20Accounting%20Standard%20(MPSAS)/MPSAS%2017%20Hartanah%20Logi%20dan%20Peralatan_V1.pdf)
- National Heritage Act 2005 Act 645 (2005). Malaysia: The Commissioner of Law Revision, Malaysia
- Noaman, N., Ouda, H., & Christiaens, J. (2018). Indexing financial reporting information for heritage management. *E+M Ekonomie a Management*, 21(2), 186-207. <https://doi:10.15240/tul/001/2018-2-013>
- Rosli, M. H., Kasim, N., & Kamaluddin, A. (2020). Heritage assets in Malaysia: Perspectives of Malaysian government agencies. *Humanities & Social Sciences Reviews*, 8(2), 969-973. <https://doi:10.18510/hssr.2020.82107>
- Woon, P. P., Chatterjee, B., & Cordery, C. J. (2019). Heritage reporting by the Australian public sector. *Accounting, Auditing & Accountability Journal*, 32(2), 612-631. <https://doi:10.1108/aaaj-03-2015-2008>

EVALUATING ESG INFORMATION DISCLOSURE QUALITY: A REVIEW OF ESG PERFORMANCE IMPACT ON FIRM VALUE

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ABSTRACT

Environmental, social and governance (ESG) disclosure is becoming increasingly relevant in academic literature and the corporate world. However, there is little consensus among academics about the definition of ESG scores and their measures, the concerns are mainly from the lack of transparency and the divergence of ESG ratings. Thus, this study aims to look into the content analysis and the measurement of ESG disclosure quality to see how well the ESG disclosure have developed. In addition, this study also spotted the extensive literature that used financial performance as the measurement of firm value. Given the previous research about ESG decoupling, some firms adopted the strategy of green washing, social washing and governance washing to gain legitimacy and reputation benefits by attracting customers and investors to improve their financial performance. This study aims to investigate comprehensive firm value rather than solely financial value to see whether the company truly accomplish what they report and increase the social value and environment value. The purpose of this study is to deepen the understanding of definition and measurement of ESG information disclosure quality and call for the attention to the measurement of firm value when it comes to the ESG impact. As ESG considerations become increasingly integral to corporate strategy and stakeholder decision-making, it is imperative to refine the definitions, measurements, and disclosures of ESG performance. This study seeks to bridge the gap in the current literature and practice by providing a thorough analysis of ESG disclosure quality and advocating for a more inclusive approach to assessing firm value. Through this research, the reliability and impact of ESG disclosures is expected to enhance, ultimately contributing to more sustainable and socially responsible business practices.

Keywords: ESG ratings; Disclosure quality; comprehensive firm value; ESG impact

1. INTRODUCTION

Traditional corporate value assessment methods are based solely on financial perspectives and do not consider non-financial factors such as ESG (Environmental, Social, and Governance) criteria. The International Valuation Standards Council (IVSC) highlighted in its "ESG and Corporate Valuation" report released in March 2021 that the incorporation of ESG factors into existing corporate valuation methods and procedures is crucial.

In previous research on the relationship between social responsibility and firm value, corporate value was often defined solely in terms of financial performance. However, a lingering question remains: is economic value truly accompanied with the fulfillment of social responsibility?

The concern about ESG decoupling still remains with the development of ESG. Bromley and Powell (2012) demonstrated the decoupling as a gap between policies and implementation: although companies may pretend to do well by communicating policies, and therefore gain legitimacy, these policies might not result in the implementation of ESG issues. As a well-know approach in decoupling, green washing is a legitimacy strategy

with lower costs, Luan (2024) analyzed the effect of green washing, social washing and governance washing, stating that the firms could gain numerous advantages from washing. And firms engaging in green communication may gain legitimacy and reputation benefits by attracting customers and investors (Lyon & Montgomery, 2015). Social washing is an umbrella term that covers all manner of ethical (in) activity related to the treatment of human capital and includes labour and human rights (Gálová, 2023). The measurement of ESG performance is a key dimension in investigating the impact of ESG on firm value, the application of ESG scores is extensive, however, the concerns have been raised by many scholars.

2. LITERATURE REVIEW

Plenty of previous research has focused on ESG performance, and applied it to represent transparency (Becker, 2022), quantity (Arif, 2020) or quality (Li, 2022). The collection of literature shows that present scholars basically use ESG scores to represent ESG.

However, some research has shown concern regarding ESG scores. Alexandre Clément (2022) stated that what ESG scores measure is not always quantifiable, and most agencies that produce ESG scores lack transparency, the author also stated ESG scores do not measure sustainability in terms of sustainable development. Except for lack of transparency, the divergence of weighting and methodology are also criticized (Dimson, 2020; Escrig-Olmedo, 2019). Depending on the geographical samples of the companies evaluated, different agencies assign different weights to different variables and consider the various data sources used (in whole or in part) differently. The deficiency is further compounded by differences of weighting and methodology across ESG ratings and scores providers. Such variation is problematic because there is a mismatch between stakeholders' information needs and what they actually receive in non-financial reporting (Hadro, 2021).

Disclosure quality is a complex and ambiguous concept which must be explained. Some researchers described the disclosure quality as "degree of specificity" or "degree of detail" (Hooks & Van Staden, 2011). To assess the narrative disclosure of companies, a variety of techniques have been used, most of which are roughly classified under content analysis. The assessing process involves "codifying qualitative information into related categories in order to obtain quantitative scales of varying levels of complexity" (Abbott & Monsen, 1979).

The process to calculate the disclosure quality score are developed from previous research. Hooks (2011) applied a 5-point scale (0–4) to measure whether the disclosure is little detailed or detailed. Although an self-calculated score for quality may not be a perfect proxy for disclosure quality, the quality framework is transparent and replicable. To measure the ESG quality, a quality framework with effective indicators should also be constructed. Arvidsson (2021) developed a quality framework for ESG disclosure with the consideration of temporality and impact. It entails assessing how crucial the information is for understanding a company's position (the present status), development (progress), and performance (target).

Based on the discussion about ESG decoupling, this study holds the idea that the firm value based on stakeholders' supremacy should be paid attention to. The scope of enterprise value creation has expanded from economic value to social value and environmental value. Its theoretical origin can be traced back to the "triple bottom line" theory founded by British sustainable development scholar John Elkington (1999). The "triple bottom line" includes the Economic Bottom Line, the Social Bottom Line, and the Environmental Bottom Line.



3. METHODOLOGY

The bibliometric mapping approach provides a way to visualize the direction of a research area through science mapping. This study applied bibliometric approaches, using VOS viewer to build and visualize bibliographic networks. The web of science(WOS) database was used to gather information because it provides comprehensive overview of academic research documents. In this study, the keyword “ESG performance”, “ESG disclosure quality”, “disclosure quality”, “ESG and firm value” were used to see the development of research. After the data were screened, they were uploaded to VOSviewer for bibliometric analysis. In addition, the data of the research on firm value and its relation with ESG performance were also uploaded to Cited Space to visualize the research trend and gap.

4. DISCUSSION AND CONCLUSION

In recent years, Environmental, Social, and Governance (ESG) disclosure has garnered significant attention in both academic literature and the corporate sector. Despite its growing relevance, there remains a notable lack of consensus regarding the definition and measurement of ESG scores. This ambiguity stems primarily from the opacity and divergence of ESG ratings, which hinders effective assessment and comparison. This study addressed these issues by analyzing the content and quality of ESG disclosures to evaluate their development and impact. Based on the "triple bottom line" theory, the social value and environmental value should not be ignored.

REFERENCES

- Abbott, W. F., & Monsen, R. J. (1979). On the measurement of corporate social responsibility: Self-reported disclosures as a method of measuring corporate social involvement. *Academy of management journal*, 22(3), 501-515.
- Arif, M., Sajjad, A., Farooq, S., Abrar, M., & Joyo, A. S. (2021). The impact of audit committee attributes on the quality and quantity of environmental, social and governance (ESG) disclosures. *Corporate Governance: The International Journal of Business in Society*, 21(3).
- Arvidsson, S., & Dumay, J. (2022). Corporate ESG reporting quantity, quality and performance: Where to now for environmental policy and practice?. *Business Strategy and the Environment*, 31(3), 1091- 1110.
- Becker, M. G., Martin, F., & Walter, A. (2022). The power of ESG transparency: The effect of the new SFDR sustainability labels on mutual funds and individual investors. *Finance Research Letters*, 47, 102708.
- Bromley, P., & Powell, W. W. (2012). From smoke and mirrors to walking the talk: Decoupling in the contemporary world. *Academy of Management annals*, 6(1), 483-530.
- Dimson, E., Marsh, P., & Staunton, M. (2020). Divergent ESG ratings. *The Journal of Portfolio Management*, 47(1), 75-87.
- Elkington, J., & Rowlands, I. H. (1999). Cannibals with forks: The triple bottom line of 21st century business. *Alternatives Journal*, 25(4), 42.
- Escrig-Olmedo, E., Fernández-Izquierdo, M. Á., Ferrero-Ferrero, I., Rivera-Lirio, J. M., & Muñoz-Torres, M. J. (2019). Rating the raters: Evaluating how ESG rating agencies integrate sustainability principles. *Sustainability*, 11(3), 915.
- Gálová, J. (2023). GREENWASHING AND SOCIAL WASHING. E-BOOK FOR STUDENTS, 276.
- Hadro, D., Fijałkowska, J., Daszyńska-Żygadło, K., Zumente, I., & Mjakuškina, S. (2022). What do stakeholders in the construction industry look for in non-financial disclosure and what do they get?. *Meditari Accountancy Research*, 30(3), 762-785.
- Hooks, J., & van Staden, C. J. (2011). Evaluating environmental disclosures: The relationship between quality and extent measures. *The British Accounting Review*, 43(3), 200-213.



- Li, S., Liu, Y., & Xu, Y. (2022). Does ESG performance improve the quantity and quality of innovation? The mediating role of internal control effectiveness and analyst coverage. *Sustainability*, 15(1), 104.
- Luan, T. (2024). A Review of Corporate Social Responsibility Decoupling and Its Impact: Evidence from China. *Sustainability*, 16(10), 4047.
- Lyon, T. P., & Montgomery, A. W. (2015). The means and end of greenwash. *Organization & Environment*, 28(2), 223-249.
- Clément, A., Robinot, É., & Trespeuch, L. (2022). Improving ESG scores with sustainability concepts. *Sustainability*, 14(20), 13154.

EXPLORING AI INTEGRATION IN MALAYSIAN PUBLIC ACCOUNTING: QUALITATIVE INSIGHTS ON USER READINESS

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ABSTRACT

This study aims to understand the complexities and nuances surrounding AI integration within the context of Malaysian public sector accounting. By exploring the perspectives and experiences of key stakeholders, this research seeks to contribute to the development of strategies for successful AI implementation in the sector. A qualitative research approach, involving semi-structured interviews with eighteen public sector accountants, was employed to comprehensively explore their experiences and readiness to adopt AI. Findings indicate a foundational understanding of AI's potential among public sector accountants, with its application envisioned for automating repetitive tasks, anomaly detection, and forecasting. However, challenges such as system integration, network disruptions, and resistance from senior accountants are identified to hinder its implementation. By identifying key challenges and opportunities, policymakers can establish guidelines and frameworks for a phased approach, prioritizing departments with the necessary infrastructure and human capital. This strategic approach will facilitate the seamless integration of AI, maximizing its benefits while mitigating potential risks.

Keywords: Malaysian Public Sector Accounting; AI Adoption; Accounting Information Systems; Malaysia.

1. INTRODUCTION

The rapid evolution of Artificial Intelligence (AI) is reshaping various industries, including the field of accounting. Research specifically examining the readiness of accountants in the Malaysian public sector, particularly concerning AI-embedded accounting systems, remains limited. Public sector accounting often relies on manual data entry and processing of invoices, receipts, and other financial documents (Carlsson-Wall et al., 2022). Moreover, legacy accounting systems may not be integrated, requiring manual data transfer between different platforms, which further increases the risk of errors and inconsistencies (Ullah & Ali, 2022). The sheer volume of data in public sector accounting can be overwhelming, making it difficult to identify trends and patterns without the help of data analysis tools (Otia & Bracci, 2022).

This study aims to fill the gap in knowledge by exploring the awareness and readiness for AI adoption among accountants in Malaysian government departments. Employing a qualitative approach, this research involves semi-structured interviews with eighteen public sector accountants to delve into their experiences and perceptions regarding AI integration. By examining their insights, this study seeks to identify key factors influencing AI adoption, including challenges and opportunities.

2. LITERATURE REVIEW

AI technologies offer substantial benefits in public sector accounting, such as automating repetitive tasks, generating real-time insights, and improving decision-making capabilities (Wael et al., 2023). Beyond

accounting, AI has transformative potential in public service delivery. AI-powered chatbots and virtual assistants are increasingly deployed to provide 24/7 support to citizens, answering frequently asked questions, guiding users through processes, and scheduling appointments.

Public sector organizations often face unique challenges when adopting AI technologies, such as budget limitations, legacy systems, and the need to comply with an evolving regulatory environment (Ahn & Chen, 2022; Saleh et al., 2021). For example, AI adoption in public sector accounting is complicated by the sheer volume of data and the need for advanced analytics to identify trends and patterns (Otia & Bracci, 2022). Similarly, in broader public service delivery, the integration of AI technologies requires careful planning to ensure that these systems are accessible and beneficial to all citizens, including those in underserved communities (Mergel et al., 2019).

3. METHODOLOGY

This study employed a qualitative research design utilizing semi-structured interviews to explore the perceptions, and challenges of AI adoption among accountants in Malaysian government departments. Over a 2-month period from May to June 2024, a total of 11 interview sessions were held with 17 participants. This diverse group represents a broad spectrum of positions, departments, services, and regions within Malaysia's public sector. The participants include Heads of Finance Units, Senior Accountants, and Deputy Treasurers from various ministries, national audit bodies, customs departments, and educational institutions, covering regions such as Terengganu, Johor Bahru, Selangor, and the Federal Territories. The thematic analysis followed the framework outlined by Miles, Huberman, and Saldaña (2019), which involves several key stages: data reduction, data display, and conclusion drawing/verification.

4. RESULTS AND DISCUSSION

The collected data were transcribed and analyzed using thematic analysis, which helped identify key themes and patterns across the interviews.

4.1 Coding

Using QualCoder 3.5, we were able to assign and manage codes efficiently, which made it easier to refine categories and themes as we went along. We then identified the most important themes and their relationships, contributing to a thorough analysis. The identified themes and their operational definitions related to AI adoption readiness are given in Table 1.

Table 1. Identified Themes and Operational Definitions

No.	Theme	Operational Definition	Category
1.	Awareness of AI	Participants' understanding and knowledge of AI and its applications in accounting	Awareness
2.	Technological Infrastructure	The state of current technology within public sector departments to support AI	Perceived Challenges
3.	Lack of Clear Guidelines	The absence of formal policies or frameworks guiding AI adoption	
4.	Resistance to Change	Reluctance or opposition from staff, especially those less comfortable with new technologies	
5.	Job Security Concerns	Fears related to potential job displacement or role changes due to AI	
6.	Ethical and Accountability Risks	Concerns about the ethical implications and reliability of AI in decision-making	



7.	Efficiency Improvements	AI's potential to streamline processes and reduce manual workloads	Perceived Opportunities
8.	Enhanced Decision-Making	The ability of AI to provide valuable insights through data analytics and forecasting	
9.	Reallocation of Tasks	The opportunity to shift staff from mundane tasks to more strategic roles	
10.	Long-Term Integration Plans	Participants' expectations regarding the gradual integration of AI into their work	

4.2 Themes and Sub-themes

As shown in Figure 1, our findings reveal that Perceived Challenges were mostly raised among the participants. The sub-themes emerged from this category by order of frequency are Technological Infrastructure (23), Resistance to Change (14), Lack of Clear Guidelines (7), Job Security Concerns (6) and Ethical and Accountability Risks (3). In addition, Increased Efficiency emerged as the popular sub-theme of Perceived Opportunities while Awareness remains without sub-theme.

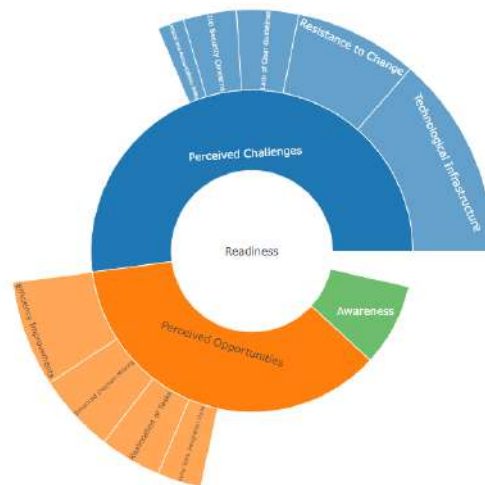


Figure 1. Sunburst of Emerged Themes

5. CONCLUSION

The qualitative study reveals that while public sector accountants in Malaysia possess a foundational awareness of AI and recognize its potential to enhance efficiency and decision-making, significant challenges remain. Key obstacles include insufficient technological infrastructure, a lack of clear guidelines for AI adoption, and resistance to change among staff. Despite these challenges, there is optimism regarding the reallocation of tasks to more strategic roles and the long-term integration of AI into public sector accounting. Future research could focus on developing and testing specific frameworks or policies to guide AI adoption in public sector accounting, ensuring that these address the ethical, technological, and human factors identified in this study.

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REFERENCES

- Ahn, M. J., & Chen, Y. C. (2022). Digital transformation toward AI-augmented public administration: The perception of government employees and the willingness to use AI in government. *Government Information Quarterly*, 39(2), 1-14.
- Carlsson-Wall, M., Goretzki, L., Hofstedt, J., Kraus, K., & Nilsson, C. J. (2022). Exploring the implications of cloud-based enterprise resource planning systems for public sector management accountants. *Financial accountability & management*, 38(2), 177-201.
- Mergel, I., Edelman, N., & Haug, N. (2019). Defining digital transformation: Results from expert interviews. *Government Information Quarterly*, 36(4), 101-123
- Miles, M. B., Huberman, A. M., & Saldana, J. (2019). *Qualitative data analysis*. Sage Publications, Thousand Oaks.
- Otia, J. E., & Bracci, E. (2022). Digital transformation and the public sector auditing: The SAI's perspective. *Financial Accountability & Management*, 38(2), 252-280.
- Ullah, I., & Ali, A. (2022). Government Accounting in Pakistan: transition from a Legacy system to the New Accounting Model. *Accounting History Review*, 32(2-3), 173-199.
- Saleh, Z., Isa, C. R., & Hasan, H. A. (2021). Issues and Challenges in Implementing International Public Sector Accounting Standards (IPSAS). *IPN Journal of Research and Practice in Public Sector Accounting and Management*, 11(1), 1-14.
- Wael, A. H., Abdallah, W., Ghura, H., & Buallay, A. (2023). Factors influencing artificial intelligence adoption in the accounting profession: the case of public sector in Kuwait. *Competitiveness Review: An International Business Journal*, 34(1), 3-27.

FINANCIAL TECHNOLOGY INNOVATION IMPACT ON TRADE-BASED MONEY LAUNDERING FROM ENVIRONMENTAL CRIMES: A GRAVITY MODEL APPROACH

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ABSTRACT

This study contributes two significant ways to the literature on trade-based money laundering (TBML). Firstly, we examine TBML dynamics using trade misinvoicing as a proxy, analysing trade data for wood imports and exports between Southeast Asia and various partner economies from 2018 to 2022. Following a gravity approach, our model incorporates economic mass and distance variables. Additionally, we include financial technology innovation (fintech) as a potential influencing factor, given its increasing prevalence. Secondly, we present an empirical TBML model that accounts for multiple destinations with Southeast Asia, a region rich in environmental resources, as the origin. Using Poisson Pseudo Maximum Likelihood (PPML) as the primary estimator, this study reveals that economic mass, distance (a proxy for trade cost), and fintech innovation significantly impact TBML. Fintech's effects on TBML vary between origin and destination countries. Mobile payments increase TBML in origins but decrease it in destinations. Regulatory sandboxes show contrasting effects, reducing TBML in origins while increasing it in destinations, suggesting varied regulatory effectiveness across jurisdictions.

Keywords: Trade-based money laundering; trade misinvoicing; gravity model; Poisson pseudo-maximum likelihood; financial technology innovation.

1. INTRODUCTION

In the intricate landscape of global finance, money laundering has long cast a shadow over legitimate economic activities, intertwining with severe criminal enterprises such as arms trafficking and terrorism. As regulatory bodies and financial institutions have tightened their grip on conventional laundering methods, criminals have adapted, giving rise to more sophisticated techniques. Among these, TBML has emerged as a formidable challenge, exploiting the complexities of international commerce to obscure the movement of illicit funds (Tiwari et al., 2024). The scale of this problem is underscored by recent findings from Global Financial Integrity [GFI] (2023), which reveals that a staggering 63% of TBML cases stem from trade misinvoicing, highlighting the urgent need for enhanced scrutiny in global trade transactions. The evolution of money laundering techniques has diversified in methodology and the choice of assets and sectors exploited. High-value items like luxury goods and artwork have traditionally been favoured for laundering operations. However, a discernible shift towards environmental resources has been observed, particularly in regions rich in environmental capital, such as Southeast Asia. This trend is especially pronounced in industries like forestry, where environmental crimes, high financial returns, and lower detection risks converge (Smith, 2023; Yamaguchi, 2023).

Next, the rapid digitalisation of global trade has introduced new dimensions to the TBML challenge. Kere and Zongo (2023) observe that technological advancements have democratised access to international markets, enabling countries with limited traditional infrastructure to participate more actively in global trade. This digital transformation generally exhibits positive associations with trade volumes. Yet, recent studies have unveiled a more nuanced picture, identifying both beneficial and adverse effects (Tian et al., 2024). The rise of fintech exemplifies this duality, offering unprecedented opportunities for trade efficiency and innovation. However, its rapid growth also raises concerns about potential exploitation for criminal activities (Mohamed Yousop et al., 2024). In the case of TBML, although trade misinvoicing was later established as a proxy, the influence remains ambiguous, as empirical evidence is still limited to the best of our knowledge. This ambiguity creates loopholes that warrant further investigation, underscoring the need for more research to understand better and address the issue.

2. LITERATURE REVIEWS

The theoretical underpinnings of this study primarily draw from three interconnected concepts: the resource curse theory, the theory of disruptive innovation as applied to fintech, and the gravity model of international trade. The resource curse theory provides a framework for understanding why countries rich in natural resources often struggle with economic and governance issues. Shaxson (2022) further highlighted financial crimes in Angola, demonstrating how oil revenue mismanagement resulted in substantial fund diversion, thereby establishing a foundation for exploring the connection between environmental resource abundance and susceptibility to illicit financial activities. The theory of disruptive innovation, when applied to fintech, helps explain the evolving landscape of financial crimes. Feyen et al. (2021) have documented how fintech innovations have reshaped the banking sector. While these technologies offer benefits like enhanced economic freedom, Akartuna et al. (2022) and Lee (2018) argue that they have also created new avenues for money laundering. For estimation, the gravity model, initially developed for international trade analysis, has been adapted by researchers to understand money laundering patterns. Walker (1999) pioneered this approach by integrating Tinbergen's gravity model with an input-output model to assess money laundering based on population size and inter-nation distance factors. Ferwerda et al. (2013, 2020) later validated this model, demonstrating how proximity and cultural affinity facilitate the movement of illicit funds.

3. METHODOLOGY

This study measures TBML by estimating trade misinvoicing from 2018 to 2022, focusing on wood-related trade within three categories: wood and articles of wood (HS44), pulp of wood (HS47), and furniture (HS94). Since HS47 and HS94 include non-wood items, careful data selection was crucial. To maintain relevance, pure wood items were aggregated at the 6-digit Harmonized System (HS) code level, resulting in a dataset specifically tailored to TBML related to environmental crimes. The gross domestic product (GDP) and distance between origin and destination countries were used as proxies for economic mass and trade costs. Three fintech innovation variables were also included, and the PPML method was used as the primary estimator to predict their influence on TBML.

4. RESULTS AND DISCUSSION

The results of this study indicate a complex relationship between financial technology innovation and TBML in wood trade, with varying impacts between origin and destination countries. In the origin country, mobile point of sales (POS) and digital commerce payments are positively associated with TBML, suggesting that these technologies may facilitate illicit trade activities, possibly due to weaker oversight. Conversely, in the destination country, these same technologies are negatively associated with TBML, indicating that increased usage of mobile and digital payments may help reduce illicit activities, likely due to better regulatory frameworks or transparency. Interestingly, a regulatory sandbox (RSF) reduces TBML in the origin country, suggesting enhanced regulatory environments can curb illicit trade. However, the positive association of the regulatory sandbox with TBML in the

destination country indicates that the sandbox might need to be more lenient or could create opportunities for TBML by allowing the exploitation of new financial technologies without sufficient oversight.

5. CONCLUSION

The wood trade illustrates how environmental and financial crimes intersect. Fintech's varied impact on TBML across countries reflects differences in addressing environmental crimes along supply chains. Regulatory challenges highlight oversight complexities in both domains. Given their cross-border nature, international cooperation is crucial. These insights help policymakers address the financial aspects of environmental crimes, particularly in the illegal wood trade. Combating financial crimes may reduce environmental crimes, emphasising their interconnectedness globally.

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REFERENCES

- Akartuna, E. A., Johnson, S. D., & Thornton, A. (2022). Preventing the money laundering and terrorist financing risks of emerging technologies: An international policy Delphi study. *Technological Forecasting and Social Change*, 179.
- Çetin, H., & Sürmen, Y. E. (2024). The relationship between cryptocurrencies and the trade balance of Nigeria. *Journal of TESAM Academy*, 11(2), 611–625.
- FATF, & Egmont Group. (2020). Trade-based money laundering trends and developments. <https://www.fatf-gafi.org/en/publications.html>
- Ferwerda, J., Kattenberg, M., Chang, H.-H. H., Unger, B., Groot, L., & Bikker, J. A. (2013). Gravity models of trade-based money laundering. In *Applied Economics* (11–16; Discussion Paper Series, Vol. 45, Issue 22).
- Ferwerda, J., van Saase, A., Unger, B., & Getzner, M. (2020). Estimating money laundering flows with a gravity model-based simulation. *Scientific Reports*, 10(1).
- GFI. (2023). Trade-based money laundering: A global challenge.
- Kere, S., & Zongo, A. (2023). Digital technologies and intra-African trade. *International Economics*, 173, 359–383.
- Lee, E. (2018). Financial inclusion: A challenge to the new paradigm of financial technology, regulatory technology and anti-money laundering law. *SSRN Electronic Journal*, 1–51.
- Mohamed Yousop, N. L., Ab Razak, N. H., & Amin Noordin, B. A. (2024). Money laundering in global trade and the role of financial technology: The structured reviews. *International Journal of Asian Social Science*, 14(1), 1–14.
- Shaxson, N. (2022). Angola: Oil and capital flight. In L. Ndikumana & J. K. Boyce (Eds.), *On the Trail of Capital Flight from Africa: The Takers and the Enablers* (pp. 39–98). Oxford University Press.
- Smith, P. (2023). Global futures bulletin: Money laundering from environmental crimes.
- Tian, X., Zhu, J., Zhao, X., & Wu, J. (2024). Improving operational efficiency through blockchain: evidence from a field experiment in cross-border trade. *Production Planning & Control*, 35(9), 1009–1024.
- Tiwari, M., Ferrill, J., & Allan, D. M. C. (2024). Trade-based money laundering : a systematic literature review. *Journal of Accounting Literature*, 27(1), 127–138.
- Walker, J. (1999). How big is global money laundering? *Journal of Money Laundering Control*, 3(1), 1–13.
- Yamaguchi, S. (2023). The nexus between illegal trade and environmental crime (2023/02; OECD Trade and Environment Working Papers



MACROECONOMIC FACTORS THAT AFFECT THE HOUSE PRICE INDEX IN MALAYSIA USING MULTIPLE LINEAR REGRESSION

ID: 104

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ABSTRACT

The housing market is a fundamental component of the Malaysian economy, significantly impacting both personal wealth accumulation and the broader economic stability of the nation. Understanding the macroeconomic factors that affect the house price index is essential for policymakers, investors, and homeowners. In the context of Malaysia, studies have shown mixed results regarding the significance of the macroeconomic factors on the House Price Index (HPI). This study is motivated by the need to fill a knowledge gap and gain a better understanding of how macroeconomic factors influence Malaysia's House Price Index. A comprehensive analysis was conducted using time-series data on Malaysia dataset from first quarter of 2010 to fourth quarter of 2023. Macroeconomic factors such as the consumer price index, lending rate, unemployment rate, exchange rate, and overnight policy rate were examined using Multiple Linear Regression and Pearson Correlation Coefficient. A strong positive correlation was found between the consumer price index and exchange rate on the HPI, whereas the unemployment rate and lending rate showed a moderate correlation on the HPI. However, the overnight policy rate has a weak correlation with the HPI. Variable selection was conducted before multiple linear regression analysis and the variables that included into the multiple linear regression model are lending rate, unemployment rate, consumer price index and exchange rate. The result show that lending rate and consumer price index have a significant impact on the HPI while exchange rate and unemployment rate have an insignificant impact on the HPI in Malaysia.

Keywords: Macroeconomic factors; Multiple Linear Regression; Pearson Correlation Coefficient; House Price Index

1. INTRODUCTION

The housing market serves as a crucial indicator of economic development, reflecting both the supply and demand dynamics within a region. Homeownership has emerged as a significant source of wealth accumulation, with property value appreciation contributing to personal net worth. In Malaysia, rapid economic growth has intensified demand for residential housing, particularly in urban areas (Ong, 2013). The housing market's significance is further underscored by its close relationship with financial institutions, where mortgage loans constitute a significant portion of bank portfolios. The volatility of the housing market, driven by various macroeconomic factors, presents challenges in predicting market trends (Hamid et al., 2022). The House Price Index (HPI), established by the National Property Information Centre (NAPIC) in 1997, serves as a reliable measure of housing market performance in Malaysia. Despite its importance, there remains limited clarity on the impact of macroeconomic variables such as exchange rates, the Overnight Policy Rate (OPR), Consumer Price Index (CPI), unemployment rates, and lending rates on housing prices in the country.

To address this gap, the study aims to explore the relationship between these macroeconomic variables and the

House Price Index (HPI) in Malaysia. Specifically, the study seeks to examine how changes in exchange rates, OPR, CPI, unemployment rates, and lending rates influence housing prices. By employing the Pearson Coefficient Correlation, the study will assess the linear relationship between the variables and HPI. This will help in identifying the strength and direction of associations between each variable and housing prices. Furthermore, Multiple Linear Regression will be utilized to identify which of these macroeconomic factors significantly affect housing prices. Through this analysis, the research seeks to provide a clearer understanding of how economic conditions influence the housing market in Malaysia. Through this comprehensive analysis, the research ultimately seeks to contribute to the understanding of economic conditions that drive the Malaysian housing market.

2. LITERATURE REVIEW

The relationship between the HPI and macroeconomic factors is crucial for understanding the dynamics of the real estate market. The HPI captures changes in residential property values over time and is a key metric for financial analysis in the real estate sector (Ghosh, 2017). The CPI, a key measure of inflation, has been shown to have a long-term positive effect on the HPI based on the study by Aliefendioğlu et al. (2022). It indicates that as CPI rise, so do HPI. For unemployment rate, the result is more contentious; while a study by Wen et al. (2019) finds it insignificant, Mokhlis et al. (2020) and Azlan and Lee (2022) highlight a negative correlation, indicating that higher unemployment rates lead to lower HPI due to reduced demand. The exchange rate, the rate at which one country's currency can be traded, also plays a significant role in influencing the HPI. Studies by Mokhlis et al. (2020) and Wen et al. (2019) found that the ER is significant on the HPI in which a lower ER relative to foreign currencies tends to attract foreign investment in the property market, driving up the HPI. Additionally, the lending rate, which refers to the cost of borrowing by commercial banks, has a mixed relationship with the HPI. A study by Wen et al. (2019) found a negative significance between the LR and the HPI indicates that higher LR results in reducing housing affordability while Rahman et al. (2020) found a positive significance. Lastly, the overnight policy rate set by Bank Negara Malaysia influences the broader lending rate environment and the HPI. Zaki (2021) found that the OPR has a positive significance with the HPI in Malaysia suggesting that a reduction in the OPR will generally boosts the HPI.

3. METHODOLOGY

This study employs a Multiple Linear Regression (MLR) model and Pearson Correlation Coefficient to explore the influence of various macroeconomic variables on the House Price Index (HPI) in Malaysia. The analysis is based on secondary data from Q1 2010 to Q4 2023, sourced from Refinitiv Eikon DataStream, which includes variables such as HPI, Exchange Rate (ER), Overnight Policy Rate (OPR), Consumer Price Index (CPI), Unemployment Rate (UR), and Lending Rate (LR). The theoretical framework of the study delineates the relationships between the dependent variable (HPI) and the independent variables (LR, CPI, UR, ER, OPR).

The research framework is structured into three phases: data collection and preprocessing, assumption checking and preliminary analysis, and regression analysis and model evaluation. In the data analysis phase, MLR is utilized to model the relationship between HPI and the selected macroeconomic variables, with the model's validity assessed through assumption checks using SPSS 20. These assumptions include normality, linearity, homoscedasticity, and multicollinearity, ensuring the robustness and reliability of the MLR model.

4. RESULTS AND DISCUSSION

The study investigates the influence of macroeconomic variables on the House Price Index (HPI) in Malaysia, utilizing Pearson Correlation and Multiple Linear Regression (MLR). Pearson correlation analysis revealed varying

strengths of linear relationships between HPI and several macroeconomic factors. Specifically, the Consumer Price Index (CPI) and Exchange Rate (ER) exhibited extremely strong positive correlations with HPI, with correlation coefficients of 0.980 and 0.912, respectively. This indicates that as CPI and ER increase, HPI tends to rise substantially. Conversely, the Lending Rate (LR) showed a moderate negative correlation of -0.353 with HPI, suggesting that higher LR is associated with lower HPI. The Unemployment Rate (UR) demonstrated a moderate positive correlation of 0.551 with HPI, though it was found to be statistically insignificant in the MLR analysis. The Overnight Policy Rate (OPR) had a weak negative correlation of -0.252 with HPI, indicating a minimal relationship.

In the MLR analysis, the CPI and LR emerged as significant predictors of HPI, with coefficients of 3.523 and -6.355, respectively. This suggests that increases in CPI and decreases in LR positively influence HPI. The ER also had a positive coefficient of 7.173 but was not statistically significant, indicating a weaker relationship with HPI. The UR was not significant in the model, aligning with its earlier Pearson correlation results.

The MLR model demonstrates high explanatory power, with an R-squared value of 0.970, meaning that 97% of the variation in HPI is explained by the selected macroeconomic factors. The model's strong performance is further evidenced by an adjusted R-squared of 0.967 and a relatively low standard error of 6.6981. The ANOVA results confirm the overall significance of the model (p -value = 0.000), indicating that at least one of the macroeconomic factors significantly affects HPI. These findings underscore the importance of CPI and LR in influencing house prices, while ER and UR have less impact, suggesting a focus on inflation and borrowing costs for effective housing market policymaking. The analysis revealed that CPI and ER have a very strong correlation while LR and UR have a moderate correlation with the HPI in Malaysia. However, OPR has a weak correlation with the HPI.

5. CONCLUSION

This study provides a comprehensive analysis of the impact of macroeconomic factors on housing prices in Malaysia. The findings offer valuable insights for policymakers, investors, and stakeholders in the real estate sector, highlighting the need for a nuanced understanding of how macroeconomic variables influence the housing market.

REFERENCES

- Aliefendioğlu, Y., Tanrivermis, H., & Salami, M. A. (2022). House price index (HPI) and Covid-19 pandemic shocks: evidence from Turkey and Kazakhstan. *International Journal of Housing Markets and Analysis*, 15(1), 108-125.
- Azlan M. I., Lee Y. (2022). Determinants of housing prices: Evidence from Malaysia and Singapore. *Asian Journal of Research in Education and Social Sciences*, 3(4), 91-106.
- Ghosh, A. (2017). Sector-specific analysis of non-performing loans in the US banking system and their macroeconomic impact. *Journal of Economics and Business*, 93, 29-45.
- Hamid, N., Razali, M.N., Azmi, F.A., Daud, S.Z., & Md. Yunus, N. (2022). Prospecting housing bubbles in Malaysia. *Real Estate Management and Valuation*, 30(4), 74-88.
- Mokhlis N. H. M., Ariffin M. N. A., Mustapha W. H. W. (2020). Analysing Macroeconomics Factors of Housing Price in Malaysia, *International Journal of Advanced Research in Economics and Finance*, 2(3), 1-7.
- Rahman, M. F. A., Ridzuan, A. R. (2020). Factors that Determine House Price Index in Malaysia, *International Journal of Academic Research in Accounting, Finance and Management Sciences* 10 (1): 351-359.
- Ong, T. S., & Chang, Y. S. (2013). Macroeconomic determinants of Malaysian housing market. *Human and Social Science Research*, 1(2), 119-127.
- Wen C. J., Hui K. C., Ler L. J., Chin W. J., Wen W. P., (2019). Macroeconomic Determinants of Malaysian Housing Price. Faculty of Banking and Finance, Universiti Tunku Abdul Rahman.
- Zaki, H. H. (2021). The determinants of house prices in Malaysia. *International Journal of Management, Finance and Accounting*, 2(1), 1-18.

ROLE OF ESGD IN ENHANCING LONG-TERM FIRM PERFORMANCE: EVIDENCE FROM SOUTHEAST ASIA'S EMERGING MARKETS

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ABSTRACT

This study investigates the impact of Environmental, Social, and Governance Disclosure (ESGD) practices on firm performance, explicitly focusing on Return on Assets (ROA) and Tobin's Q (TBQ) as performance measures. Using a sample of 3,106 firm-year observations from listed companies in Indonesia, Thailand, Malaysia, and Vietnam from 2015 to 2023, this research employs multiple regression analysis to explore the relationships between ESGD practices and financial performance. The study reveals a statistically significant negative association between ESGD practices and ROA and TBQ, suggesting that the costs of ESGD integration may outweigh short-term profitability. Similarly, ESGD practices are negatively related to Tobin's Q, although the significance diminishes when past market performance is considered, highlighting the importance of historical performance in sustaining market valuation. These findings contribute to the theoretical discourse by providing empirical evidence from Southeast Asia's emerging markets, emphasizing the complex dynamics between ESGD practices and firm performance. Practically, the study offers insights for corporate managers and policymakers, suggesting that while ESGD practices may reduce immediate financial performance, they should be viewed as strategic investments for long-term value creation. The results underscore the need for supportive regulatory frameworks that help firms manage the initial costs of ESGD adoption while promoting long-term economic resilience and sustainability.

Keywords: ESGD, firm performance, emerging markets, ROA, TBQ

1. INTRODUCTION

The significance of Environmental, Social, Governance, and Diversity Disclosure (ESGD) has grown in the global economy, becoming a critical factor in a firm's long-term success. ESGD expands the traditional ESG framework, emphasizing diversity alongside sustainability and governance, which fosters inclusive leadership and equitable practices. Firms adopting ESGD principles improve transparency and enhance risk management, operational efficiency, and stakeholder relationships, leading to better financial outcomes. In Southeast Asia, countries like Indonesia, Thailand, Malaysia, and Vietnam are increasingly adopting ESGD, although at varying maturity levels. As these markets integrate into the global economy, ESGD practices are essential for maintaining competitiveness and attracting investment, highlighting a growing need to explore their impact on long-term performance in emerging economies.



2. LITERATURE REVIEW

Several studies in developed markets have demonstrated a positive relationship between ESGD practices and firm performance. For instance, research on Chinese firms indicates that strong ESG performance helps mitigate economic uncertainty by reducing information asymmetry between firms and the market, which leads to improved technological capabilities and profitability. This ultimately benefits investors through enhanced financial metrics (Fei et al. 2024). Similarly, another study on Chinese firms found that investments in the social aspects of ESG positively correlate with firm performance, particularly when these investments are prioritized over environmental and governance initiatives. However, the impact of the Environmental and Governance pillars remains more varied, suggesting that the effectiveness of ESGD integration differs across industries (Jiahua 2024). In contrast, the impact of ESGD practices on firm performance in developing countries, such as those in the ASEAN region, is less pronounced. Although there is a positive relationship, it is often statistically insignificant, indicating that the benefits of ESG practices are not fully realized in these markets (Kenny et al. 2022). The integration of ESG practices in emerging markets like China is still evolving, with a growing focus on green innovation driven by ESG performance. This shift reflects a growing recognition of ESG's role in sustainable development, despite ongoing challenges in implementation (Lanqi et al. 2023).

3. RESEARCH HYPOTHESES

Based on the literature review, the following hypotheses are proposed for this study:

Hypothesis 1: The presence of high ESGD positively influences firm performance, leading to higher ROA and Tobin's Q in the subsequent year.

Hypothesis 2: The long-term impact of ESGD practices on firm profitability is positive, with higher ESGD scores leading to improved ROA and Tobin's Q over time.

Hypothesis 3: Financial ratios such as Current Ratio (CR), Debt to Equity Ratio (DE), and firm size (logarithm of total assets) significantly influence firm performance, as measured by ROA and Tobin's Q.

4. RESEARCH METHOD

Sample Selection

The sample for this study comprises listed companies from four Southeast Asian countries: Indonesia, Thailand, Malaysia, and Vietnam. The data were collected from the Bloomberg database, ensuring a comprehensive and reliable source of financial and ESGD-related information.

Research Methodology

The study employs a quantitative research approach, utilizing multiple regression analysis to explore the impact of ESGD practices and financial ratios on firm performance. Specifically, the fixed effects model will be applied to control unobserved heterogeneity across firms, accounting for time-invariant characteristics that may influence the results. This approach ensures that the analysis focuses on the within-firm variations over time, providing a more accurate estimation of the relationships between the variables.

Variables

- **Dependent Variables:** Return on Assets (ROA) and Tobin's Q (TBQ).
- **Independent Variables:** The key independent variable in this study is Environmental, Social, Governance, and Diversity (ESGD) practices, which are central to the research objectives.
- **Control Variable:** The study uses firm size Statistical Analysis



5. FINDINGS

The findings indicate a positive trend in the adoption and integration of ESGD practices across the four countries during the study period. The average ESGD score increased from 33.355 in 2015 to 44.966 in 2023, reflecting a growing emphasis on sustainability, governance, and diversity within these emerging markets. The mean ESGD score across the entire sample is 41.711, suggesting that companies in these countries are increasingly aligning their operations with ESGD principles, although the level of integration varies by country and industry. The initial model focuses solely on ESGD as the primary independent variable. The results reveal that ESGD has a statistically significant impact on ROA, with a negative coefficient of -0.064 at the 0.01 significance level. In the second approach, the lagged ROA (11.ROA) is added to the model alongside ESGD to account for the persistence of firm performance over time. Both ESGD and lagged ROA are found to be statistically significant, with ESGD remaining significant at the 0.01 level and lagged ROA significant at the 0.05 level. The coefficients are -0.045 for ESGD and 0.279 for lagged ROA. In the third model, several additional financial variables, including the Current Ratio (CR), Debt to Equity Ratio (DE), and firm size, are introduced alongside ESGD and lagged ROA. The results show that all variables are statistically significant in the model. ESGD continues to exert a negative influence on ROA, reinforcing the findings from the earlier models. The lagged ROA remains positively significant, with a coefficient of 0.279, indicating that strong past performance continues to benefit current profitability. Notably, the Debt to Equity Ratio (DE) also shows a significant negative impact on ROA, with a coefficient of -0.221 at the 0.05 significance level.

6. CONCLUSION

The findings reveal that while ESGD integration often incurs short-term financial costs and negatively impacts immediate firm performance, its effects are moderated by firms' historical performance. Specifically, firms with a solid financial foundation are better equipped to leverage ESGD investments for long-term benefits.

REFERENCES

- Fei, X., Xing-Yu, Z., & Mingke, L. (2024). Environmental, Social, and Governance Information Rating and Firm Uncertainty Perception, Evidence from China Listed Firms. *Sustainability*. DOI: 10.3390/su16146018
- Hasanuddin, R., Darman, D., Taufan, M. Y., Salim, A., Muslim, M., & Putra, A. H. P. K. (2021). The effect of firm size, debt, current ratio, and investment opportunity set on earnings quality: an empirical study in Indonesia. *The Journal of Asian Finance, Economics and Business*, 8(6), 179-188.
- Jiahua, Z. (2024). An Empirical Analysis of ESG Scores and Firm Performance Based on the CSI 300 Index. *Highlights in Business, Economics and Management*. DOI: 10.54097/zsjvy730
- Kenny, F., Selfi, N., & Andrey, H. P. (2022). Disclosure of Environmental, Social, and Governance on Firm Performance Pre and Post Introduction of Integrated Reporting: Evidence from ASEAN Countries. *International Journal of Energy Economics and Policy*. DOI: 10.32479/ijeep.13561
- Lanqi, H., Longze, W., & Peiqi, X. (2023). The Impact of Corporate ESG Performance on Corporate Green Innovation. DOI: 10.54097/3bxgyj32
- Liu, J. (2023, August). Time Lagged Effects of ESG Scores and Investor Attention on Stock Returns. In *International Conference on Economic Management and Green Development* (pp. 9-17). Singapore: Springer Nature Singapore.
- Priyanka, D., & Sapna, Y. (2024). Relationship of ESG Scores with Firm Performance: A Study of Indian Listed Companies. DOI: 10.1177/jinm.241242865
- Waleed, M., Tze, S. O., Fakarudin, K., Muhammad, A. K., & Zoltán, B. (2024). ESG disclosure, firm internationalization, and firm financial performance: Evidence from Asia-Pacific. *Journal of International Studies*. DOI: 10.14254/2071-8330.2024/17-2/13

LEADERSHIP STYLES AND EMPLOYEE WORK PERFORMANCE DURING THE COVID-19 PANDEMIC: THE CASE OF ACCOUNTING WORKERS IN THE KLANG VALLEY

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ABSTRACT

The COVID-19 pandemic has significantly impacted various sectors, including the accounting industry. This study examines the impact of leadership styles on the work performance of accounting employees in Malaysia's Klang Valley during the COVID-19 pandemic. The research used a survey-based approach and found that supportive, directive and servant leadership styles significantly positively influenced accounting employees' work performance. However, participatory leadership did not show a statistically significant impact. The findings suggest that during crises like the COVID-19 pandemic, accounting employees may benefit more from leadership styles that provide clear guidance, emotional support, and focus on employee well-being rather than those emphasising shared decision-making. This study contributes to understanding leadership's role in influencing employee performance in the accounting sector, particularly during times of crisis and rapid change. The findings have practical implications for organisations and leaders, emphasising the importance of adopting appropriate leadership styles to support employees and maintain productivity during challenging times. Future research could explore the impact of other leadership styles or investigate the moderating effects of organisational culture and individual employee characteristics on the relationship between leadership and work performance.

Keywords: Leadership styles, Work performance, COVID-19, Accounting

1. INTRODUCTION

The COVID-19 pandemic has significantly impacted various industries, including the accounting sector, which has faced unique challenges in maintaining productivity and employee engagement. Effective leadership is crucial in navigating these unprecedented circumstances and ensuring employee well-being and performance. Most prior studies of leadership styles and employee job performance during the COVID-19 pandemic have focused on the healthcare industry in Malaysia and other countries, making it difficult to predict outcomes due to variations in employee performance across different sectors (Teoh et al., 2022).

Recent studies have predominantly focused on common leadership styles, such as autocratic, transformational, and transactional approaches to employee work performance (Wang & Guan, 2018; Setiawan et al., 2024). However, the COVID-19 pandemic has exposed the limitations of these conventional models, underscoring the need to explore leadership approaches better suited to crisis conditions. Notably, servant leadership, a style where leaders prioritise the needs and development of their employees, has rarely been discussed in past studies despite its heightened relevance during the pandemic. In times of uncertainty, servant leadership has been particularly



effective in fostering resilience, augmenting job performance, and, most importantly, reducing turnover intentions, as it transfers the focus from the leader to serving the employees. This is because employees feel more supported and valued. Additionally, other leadership styles, such as supportive, directive, and participative leadership, have shown significant promise during the pandemic, emphasising empathy, guidance, and collaboration, all of which are essential for sustaining employee morale and commitment, which has been less frequently explored in the context of crisis management and its impact on employee performance. Therefore, the research objective of this study is to examine the relationship between servant, supportive, directive and participative leadership and accounting employees' work performance in the Klang Valley region during the COVID-19 pandemic.

2. LITERATURE REVIEW

Recent literature has extensively highlighted the positive impact of leadership on employee performance, particularly the role of supportive leadership in enhancing organizational outcomes (Khalid et al., 2012). Supportive leadership has improved employee well-being and reduced work-related stress (Nasab & Afshari, 2019), fostering a positive work environment. However, the effect of supportive leadership on critical outcomes like job performance remains underexplored.

Directive leadership, which gained prominence during the COVID-19 crisis, is characterised by clear instructions and task orientation (Mullins, 2005). While this approach can effectively provide clarity and control, it may lead to resistance if it excludes employees from decision-making. Conversely, participative leadership involves employees in decision-making and has been shown to enhance job satisfaction and performance (Hayat Bhatti et al., 2019). However, the balance between directive and participative leadership in optimising task clarity and employee engagement needs further investigation, particularly in remote work contexts. Though less commonly discussed, servant leadership has emerged as a promising style during crises, prioritising employee needs and fostering resilience (Mcquade et al., 2021). This style has been linked to improved job performance, reduced turnover intentions, and enhanced team collaboration. However, the impact of servant leadership on work-life balance and burnout remains under-researched, highlighting a need for further studies in diverse organisational settings.

3. METHODOLOGY

This study employed a quantitative research design to investigate the relationship between leadership styles and employee work performance. Data were collected through an online survey of 185 accounting employees in the Klang Valley region. The survey instrument included measures for different leadership styles, such as transformational, autocratic, and participative, and a scale for employee work performance. Participants were asked to rate their work performance during the COVID-19 pandemic.

4. RESULTS AND DISCUSSION

The results indicate that supportive leadership has a significant impact on the work performance of accounting employees, although it is not a strong predictor. Similar findings have shown that supportive supervisors who value their staff can enhance work performance (Emmanuella et al., 2018). This suggests that during the COVID-19 pandemic, maintaining a caring and empathetic leadership approach is particularly important for sustaining employee productivity. This is because supportive leadership can enhance accounting employees' work performance through thoughtful consideration, active listening, demonstrating care, providing positive feedback, building confidence, and promoting self-control.

Further analysis reveals that directive leadership, characterised by clear instructions and adherence to rules, has a

high positive correlation between directive leadership and accounting employee work performance. This study supports Saleem et al. (2020) claim that "When a leader adopts a directive style, followers are usually informed about what is expected of them when doing their jobs". This suggests that during the pandemic, clear guidance and structure from leaders were critical for maintaining productivity and efficiency, particularly in the absence of in-person supervision and oversight. Interestingly, the results show participative leadership had a weaker association with employee work performance than the other leadership styles. This finding contradicts previous research (Dalluay & Jalagat, 2016) that shows participative leadership positively impacts work performance. A possible explanation is that accounting employees may have been more receptive to directive leadership that provided clear structure and guidance during the pandemic rather than a more collaborative approach that required additional coordination and decision-making. Finally, the study found that servant leadership had a positive and significant relationship with the work performance of accounting employees. Further, servant leadership emerged as the strongest predictor of employee performance compared to the other leadership styles examined. This suggests that a leadership approach focused on prioritising the needs and development of followers may be particularly effective in enhancing the productivity and engagement of accounting professionals during challenging times like the COVID-19 pandemic.

5. CONCLUSION

The study's findings reveal that supportive, directive and servant leadership approaches are most effective in enhancing employee job performance. In contrast, participatory leadership approaches negatively impact performance levels. Future research will explore various leadership styles that affect the performance of accounting employees, particularly during periods of instability.

REFERENCES

- Dalluay, V. S., & Jalagat, R. C. (2016). Impacts of Leadership Style Effectiveness of Managers and Department Heads to Employees' Job Satisfaction and Performance on Selected Small-Scale Businesses in Cavite, Philippines. *International journal of recent advances in Organizational Behaviour & Decision Sciences*, 2(2).
- Emmanuella, O. O., Amah, E., & Olori, W. (2018). Ethical Orientation And Organizational Survival Of Fast Food Firms In Rivers State. *International Journal of Advanced Academic Research*, 4(3), 88-107.
- Hayat Bhatti, M., Ju, Y., Akram, U., Hasnat Bhatti, M., Akram, Z., & Bilal, M. (2019). Impact of participative leadership on organizational citizenship behavior: Mediating role of trust and moderating role of continuance commitment: Evidence from the Pakistan hotel industry. *Sustainability*, 11(4), 1170.
- Khalid, N., Pahi, M. H., & Ahmed, U. (2016). Loosing Your Best Talent: Can Leadership Retain Employees? The Dilemma Of The Banking Sector Of Hyderabad Sindh, Pakistan: A Mediation Investigation. *International Review of Management and Marketing*, 6(3), 608-616.
- Mcquade, K. E., Harrison, C., & Tarbert, H. (2021). Systematically Reviewing Servant Leadership. *European Business Review*, 33(3), 465-490.
- Mullins, L.J. (2008) *Essentials of Organizational Behavior*, 2nd ed. Harlow, England: Financial Times/Prentice Hall, Print.
- Hadian Nasab, A., & Afshari, L. (2019). Authentic Leadership And Employee Performance: Mediating Role Of Organizational Commitment. *Leadership & Organization Development Journal*, 40(5), 548- 560.
- Saleem, A., Aslam, S., Yin, H., & Rao, C. (2020, April 21). Principal Leadership Styles and Teacher Job Performance: Viewpoint of Middle Management. *Multidisciplinary Digital Publishing Institute*, 12(8), 3390-339
- Setiawan, G A., Mar'un, N., & Sheidu, C F. (2024). Impact of Leadership Styles on Employees' Performance. *International Journal of Economics and management review (IJEMR) Insight*
- Teoh, B E W., Wider, W., Saad, A., Sam, T H., Vasudevan, A., & Lajuma, S. (2022). The effects of transformational leadership dimensions on employee performance in the hospitality industry in Malaysia.
- Wang, H., & Guan, B. (2018). The Positive Effect of Authoritarian Leadership on Employee Performance: The Moderating Role of Power Distance.

THE NEXUS BETWEEN AUDIT PARTNER ATTRIBUTES AND ANTI-CORRUPTION DISCLOSURE PRACTICES

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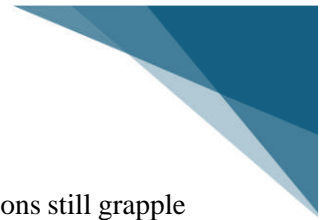
ABSTRACT

The disclosure of anti-corruption measures is essential to ensuring that business practices align with sound corporate governance principles. This study examines the effect of the audit partner characteristics on anti-corruption disclosure practices of the Malaysian public listed companies (PLCs) between the financial periods 2019 and 2020. The results indicate an insignificant relationship between audit partner gender diversity and ethnicity with the Malaysian PLCs level of disclosure of anti-corruption practices (ACPs). Furthermore, the study also found that board size, board independence, audit committee accounting and financial expertise, audit committee meetings, internal audit sourcing, and auditor reputation are not significantly related to the PLC's disclosure of ACPs. The significant positive relationship between internal audit cost and disclosure of ACPs suggests that the responsibility for preventing corruption and ensuring accountability is frequently assigned to the internal audit department as a staff function under the top management control. This study serves as a preliminary assessment of corporate commitment to fulfilling the requirements of the MACC Act's corporate liability provision, which came into effect in Malaysia in June 2020.

Keywords Anti-corruption practices disclosure; corporate governance; audit partner, gender diversity; ethnicity.

1. INTRODUCTION

Corruption is a global phenomenon (Brody et al., 2020). Due to the prevalence of corruption (Vale and Branco, 2019), developing countries are intensely implementing initiatives aimed at formulating regulations to combat corruption. The 2018 survey by PriceWaterhouseCoopers revealed that Malaysians ranked bribery and corruption as their second-highest concern for the future. As Malaysia strives to attain high-income status by 2025, the rise in corrupt practices has led to the country being labeled as a kleptocratic nation. Corruption not only undermines the principles of good governance but also distorts public policy, disrupts the rule of law, and results in the misallocation of resources (Houqe et al., 2020). The Global Integrity Survey by Ernst and Young in 2022 further revealed that 42% of surveyed board members acknowledge a tolerance of unethical behavior among senior or high-performing individuals within their organizations—an alarming rise from 34% in 2020. These findings suggest that regulators and institutions are moving in the wrong direction in



combatting fraud and corruption. Despite institutional revamp to curb corruption, key institutions still grapple with issues of lack of independence and limited enforcement power.

2. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

Corruption cannot be effectively addressed by the public sector alone; the private sector must also play a pivotal role and collaborate with public institutions to combat this issue. A crucial action the private sector should take is its commitment to a corporate anti-corruption strategy, which is essential to mitigate corruption in the business environment. In Malaysia, the low level of disclosure of corporate anti-corruption policies among Malaysian companies proves a low commitment from the private sector to be seriously involved in corruption prevention strategy (Joseph et al., 2016). In recent years, the prominence of audit partners in determining financial reporting quality and disclosure has received increasing attention from regulators, practitioners, and academicians alike. In addressing the call of past studies, this study bridges the research gap by investigating the factors influencing anti-corruption disclosures through the lens of audit partners' characteristics. The literature review and hypotheses development are presented in the following sections.

2.1. Gender Diversity and ACPs Disclosure

Gender diversity is measured by the composition of women (the social and cultural aspects of the feminine) on the board. Given the high information-processing skills, negotiation skills and monitoring capabilities of female audit partners (Karjalainen et al., 2018), it is expected that they possess the proper understanding of high-quality textual information. Thus, they are more inclined to urge their clients to transparently report on anti-corruption policies and practices. Building upon the abovementioned past findings and arguments, it is expected that the adept monitoring and information-processing skills of female audit partners have an impact on the reporting of ACPs narratives. The following hypothesis is posited:

H1. Female audit partners have a significant effect on the ACPs disclosure of Malaysian PLCs.

2.2 Ethnicity and ACPs Disclosure

Ethnicity is exclusively related to highly plural countries including Malaysia which distinguishes itself among developing countries through its diversity of multicultural ethnic groups. The presence of individuals from various ethnic backgrounds on the board and among audit partners has the potential to enhance firm performance and the quality of financial reporting. Audit partners possessing diverse cultural values help enrich discussions, fostering a variety of ideas that enhance the quality of auditing, which in turn facilitates firms to make informed and effective decisions (Estelyi and Nisar, 2016). In line with the findings of Leung and Sane (2022), companies with a higher ethnic diversity among audit partners may exhibit an increased demand for assurance, driven by the goal of enhancing investor protection, hence more transparent and quality ACPs disclosure. Hence, the following hypothesis is posited:

H2. Audit partner ethnicity has a significant effect on the ACPs disclosure of Malaysian PLCs.

3. RESEARCH METHODOLOGY

Data collection for this study was conducted on a sample of 350 companies. The study period spanned 2019 for gathering data on board and audit partner characteristics, and 2020 for the disclosure of ACPs. The year 2019 was specifically chosen to capture corporate governance data, as it was the preparatory period for all listed companies before the enforcement of Section 17A of the MACC Act on corporate liability, which came into effect on 1 June 2020. Companies operating in Malaysia were required to take immediate action to review

their procedures and implement comprehensive enforcement systems before this regulation's enforcement. As a result, most corporate anti-corruption policies were publicly disclosed in 2020.

4. RESULTS AND DISCUSSIONS

This study provides further understanding of the effect of audit partner gender diversity and ethnicity on the disclosure of ACPs among Malaysian PLCs. The findings show an insignificant relationship between audit partner gender diversity and ethnicity with the Malaysian PLCs' level of disclosure of ACPs. Furthermore, the study also found that control variables including board size, board independence, audit committee accounting and financial expertise, audit committee meetings, internal audit sourcing, and auditor reputation are not significantly related to disclosure of ACPs. This showed that board characteristics are not determinants for disclosure of ACPs among large companies in Malaysia. This finding could be explained by the fact that corporate liability enforcement was still in its infancy stage at the time of the study, and companies had not yet determined what information on ACP should be disclosed. At this stage, external motivation, for example, government agency requirement, was the main reason to disclose ACPs rather than internal motivation such as the decision by the board of directors. The significant positive relationship between internal audit cost and disclosure of ACPs suggests that the responsibility for preventing corruption and ensuring accountability is frequently assigned to the internal audit department as a staff function under the top management control.

5. CONCLUSION

This study contributes by providing valuable insights and enhancing the understanding of ACPs disclosure in developing countries by delving into the impact of audit partners' characteristics. It further contributes to the practice of making a more informed decision in terms of audit partner selection given the differential effects of the audit partner attributes on disclosure practices of the client, specifically on ACPs disclosure. Finally, this study is also relevant to policymakers in strengthening existing regulations and policies related to audit quality, fraud, and corruption.

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REFERENCES

- Al Farooque, O., Buachoom, W., & Sun, L. (2020). Board, audit committee, ownership and financial performance—emerging trends from Thailand. *Pacific Accounting Review*, 32(1), 54-81.
- Barkemeyer, R., Preuss, L., & Lee, L. (2015). Corporate reporting on corruption: An international comparison. *Accounting Forum*, 39(4), 349-365.
- Bawaneh, S. S. (2020). Impact of corporate governance on financial institutions' performance: A board composition case. *Asian Economic and Financial Review*, 10(1), 54-63.
- Blanc, R., Branco, M. C., & Patten, D. M. (2019). Cultural Secrecy and Anti- corruption Disclosure in Large Multinational Companies. *Australian Accounting Review*, 29(2), 438-448.
- Branco, M. C., & Matos, D. (2016). The fight against corruption in Portugal: Evidence from sustainability reports. *Journal of Financial Crime*, 23(1), 132-142.
- Karjalainen J, Niskanen M, Niskanen J. (2018). The effect of audit partner gender on modified audit opinions. *International Journal of Auditing*, 22, 449-463.



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ABSTRACT

The employability of accounting graduates in Malaysia is increasingly concerning, particularly against the backdrop of challenging domestic and global economic conditions. This study investigates the factors affecting the employability of these graduates, highlighting a disconnect between the skills provided by educational institutions and those demanded by employers. Despite the government's aim to produce 60,000 accountants by 2020, employers show a preference for candidates with practical experience and market-relevant skills. The education system has been criticized for focusing on theoretical knowledge while neglecting the development of saleable, technical, and job-search skills. Additionally, limited interaction between tertiary institutions and industries exacerbates graduate unemployment. Although initiatives such as expert involvement in curriculum development and short courses by industry representatives have been implemented, they have not sufficiently addressed the skills gap. Government programs like 2u2i and TalentCorp and collaboration between the industry and university such as Teaching and Account Firm(TAF) aim to bridge this gap. This study underscores the necessity for a more comprehensive strategy that includes stronger collaboration between academia and industry, ensuring graduates are equipped with the practical skills and experience needed in the job market.

Keywords: Employability, Accounting graduates, Skills, Experience, Education system, Job market, Curricula

1. INTRODUCTION

This paper explores how students' major selection is influenced by both global and domestic economies. International students and transnational corporations shape policies and opportunities, affecting students' choices. While STEM fields and entrepreneurial ambitions drive economic growth, factors like personal interests, career goals, and traits also play key roles in major selection. Graduates face numerous challenges transitioning to the job market, including the influence of work placements, liberal arts education, and job-search services. Systemic barriers, curriculum design, and gender further complicate career success. Job prospects also vary by field, location, and external factors such as media coverage, with disadvantaged groups facing additional hurdles, exacerbated by the COVID-19 pandemic. The study underscores the complexity of employment challenges, requiring a tailored, comprehensive approach for improvement.



2. LITERATURE REVIEW

Carnevale et al. (2013) suggest that employment prospects improve with increased graduate experience. They studied fresh graduates, part-time graduates, and postgraduates, finding that fresh graduates face the highest unemployment rates. For instance, unemployment among accounting graduates decreases from 6.8% for fresh graduates to 4.8% for part-time graduates and 3.8% for postgraduates. Menon et al. (2017) recommend that Cypriot universities enhance employability by offering practical exposure. Similarly, Tarsh (1985) highlights the shortage of experienced graduates as a contributor to short-term labor shortages.

In Nigeria, Jaja (1990) criticizes the education system for producing graduates lacking marketable skills. Belwal et al. (2017) made a similar observation in Oman, where low graduate employment stems from limited interaction between institutions and industry. Pauw et al. (2006) argue that graduates lack the necessary skills even for entry-level jobs. Izma and Gomes (2017) also note that outdated accounting knowledge contributes to graduates' employability challenges.

3. METHODOLOGY

This study will employ a qualitative research design to explore the key concepts related to Employability. The focus will be on understanding the issues through analysis of Literature Review. This design allows for an exploration of graduate employability dilemma. For qualitative data from literature review, thematic analysis will be applied to identify recurring patterns and themes related to employability issues. Textual data from the literature review and documents will be analyzed to identify the prevailing concepts and gaps in the existing body of knowledge. It was founded that the existing University's curriculums still produce graduates which perceived as still not industry ready by potential employer. Recommendation also discussed on this article.

4. RESULTS AND DISCUSSION

The education system has been criticized for focusing on theoretical knowledge while neglecting the development of saleable, technical, and job-search skills. Additionally, limited interaction between tertiary institutions and industries exacerbates graduate unemployment. Although initiatives such as expert involvement in curriculum development and short courses by industry representatives have been implemented, they have not sufficiently addressed the skills gap.

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REFERENCES

- A.P. Carnevale, B. Cheah, J. Strohl (2013). College Majors, Unemployment and Earnings: Not all college degrees are created equal. Hard Times. Georgetown University.
- H.E. Lim (2011). The Determinants of Individuals Unemployment Duration: The Case of Malaysian Graduates. *Journal of Global Management*, July, Vol 2, No.2.
- Baah-Boateng (2013), "Determinants of Unemployment in Ghana" ,*African Development Review*, Vol. 25, No. 4, 2013, 385–399

- Maria Eliophotou Menon, Anastasia Athanasoula-Reppa, (2017) "Managing graduate unemployment: the case of education students in Cyprus", Higher Education, Skills and Work-Based Learning, Vol. 7, Issue: 2, pp.168-178, <https://doi.org/10.1108/HESWBL-10-2016-0074>
- BJ Holloway, (1973) "Does education create unemployment?", Industrial and Commercial Training, Vol. 5 Issue: 6, pp.269-274, <https://doi.org/10.1108/eb003317>
- Jason Tarsh, (1985) "Graduate labour market statistics", Aslib Proceedings, Vol. 37 Issue: 10, pp.405-418, <https://doi.org/10.1108/eb050989>
- Macleans A. Geo-Jaja, (1990) "Non-formal Education: A Proposed Solution for Graduate Unemployment in Nigeria", Education + Training, Vol. 32 Issue: 6, <https://doi.org/10.1108/00400919010138455>
- Rakesh Belwal, Pushpendra Priyadarshi, Mariam Humaid Al Fazari, (2017) "Graduate attributes and employability skills: Graduates' perspectives on employers' expectations in Oman", International Journal of Educational Management, Vol. 31 Issue: 6, pp.814-827, <https://doi.org/10.1108/>
- Kalie Pauw, Haroon Bharat, Sumayya Goga, Liberty Ncube, Carlene Van Der Westhuizen, Karol Pauw (2006), Graduate unemployment in the context of skills shortages, education and training: Finding From A Firm Survey, Development Policy Research Unit, DPRU Working Paper 06/115, ISBN 1-920055-36-3.
- R. Ismail, I. Yusuf, L.W. Sieng (2011), "Employers' Perception on graduates in Malaysian Service Sector", International Business Management 5(3), (184-193).
- Report On Strengthening of the Accountancy Profession in Malaysia (2014), The Committee To Strengthen The Accountancy Profession (CSAP).
- Government targets spurt of chartered accountants by 2020 (2015), <http://www.thesundaily.my/news/1429868>
- Terence Toh (2015), "Quashing palm oil fallacies with full campaign", palmoiltoday.net, 6th October 2015.
- Partner Office (2015), "TAF Concept Paper", SALIHIN Chartered Accountants.
- Izma, N. and Gomes, M. (2017), "Expanding Horizons", Accountants Today, Vol. 30, No. 6, (8-12)

