THE RELATIONSHIP BETWEEN ISLAMIC CORPORATE GOVERNANCE, HUMAN GOVERNANCE, USAGE OF INFORMATION TECHNOLOGY AND SUSTAINABILITY REPORTING: COMPARISON OF SHARIAH COMPLIANT COMPANIES IN MALAYSIA AND INDONESIA

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ABSTRACT

This study aims to evaluate the relationship between Islamic corporate governance (ICG), human governance (HG), and information technology (IT) usage on sustainability reporting (SR) by investigating Shariah compliant companies in Malaysia and Indonesia. Data was collected from 68 manufacturing Shariah compliant companies’ annual reports for Malaysia, and 70 manufacturing Shariah compliant companies’ annual reports for Indonesia, for the year ended 2019. Descriptive and multiple regression analysis was used to analyse the data. The study found that HG Index and IT Usage Index were positive and significantly related to sustainability reporting for Shariah companies in both countries. However, ICG was not found to be significantly related to sustainability reporting for Shariah companies in Malaysia and Indonesia. This could be because the study focuses only on manufacturing companies, and in Malaysia and Indonesia, only about 24% of the companies and 13% of the companies respectively, have an ICG structure in place. The study
suggests that to increase SR of Shariah compliant companies, there should be a good HG structure in place, and they should increase their level of IT usage in their business operations. Resource-Based theory can explain the relationship of IT Usage and HG to SR.

**Keywords**: Islamic Corporate governance, Human governance, IT Usage Index, Sustainability reporting

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**1. INTRODUCTION**

According to Mohammed et al. (2009), Shariah-compliance listed companies are becoming more aware of the importance of sustainability practices and have disclosed their practices in their annual report. In addition, with the advent of Sustainability Development Goals (SDG) in 2015 by the United Nations, which is envisioned will transform the world by 2030, most countries have turned towards achieving Sustainability Development Goals in their country’s vision, including Malaysia and Indonesia.

Shariah compliant companies are expected to operate based on Islamic moral foundations, emphasising accountability and transparency in the conduct of their business operations. Shariah compliant companies are expected to disclose all required information to all stakeholders, like the Islamic banks (Haniffa, 2001; Maali et al., 2006; El-Halaby & Hussainey, 2015; Kurniawan & Asandimitra, 2019).

The growth of Shariah business organisation is not only dominated by Islamic banking but also other types of listed companies, which had begun to operate based on Shariah ruling. In 1996, the government of Malaysia set up a Shariah Advisory Council (SAC) as part of its overall initiative for the growth of the Islamic banking and finance sector in the region. Whereas in Indonesia, the Islamic capital market began in 1997, with the issuance of Syariah Mutual Funds. Most of the previous studies related to the relevance of SR are primarily done in developed countries (Kuzey & Uyar, 2017). However, from the studies conducted on the extent of Islamic information reported in the annual reports, it was discovered that they were scarce and limited for Malaysia (Othman et al., 2009). In Indonesia, there are few studies regarding Syariah companies, and lesser related to SR disclosure since mandatory SR began in the year 2020 for all listed Indonesian companies, including Syariah companies. This research, however, extends the previous paper on sustainability reporting disclosure conducted in Indonesia which concluded that human governance and Islamic corporate governance significantly influence sustainability reporting disclosure and human governance has the biggest beta coefficient towards sustainability reporting disclosure compared to corporate governance and IT usage (So et al., 2021).

HG result in beneficial relationships for the company and can be used to address corporate governance failure in companies. As a result, HG is required to strengthen corporate governance to prevent failure, specifically in terms of humanity (Hanapiyah et al., 2016). Moreover, by establishing policy-compliant technologies and incorporating environmentally friendly IT requirements, the Industrial Revolution 4.0 (IR 4.0) has encouraged every company, including Shariah companies, to fully utilize information and communication technology (IT) such as internet platforms to effectively address disruptions ensure the sustainability of professional
knowledge in the field (Murphy & Smolarski, 2020). IT is a critical managerial asset for measuring, monitoring, promoting, and communicating financial and social objectives. IT can help boost employee knowledge, improve employee performance, and benefit by expanding communication with consumers and suppliers. (Salb et al., 2011; De Marez & Verleye, 2004). In addition, ICT can develop sustainable capabilities (Imran et al., 2021; Kauffman & Riggins, 2012; Nizam et al., 2020; Silvius et al., 2009).

Malaysia and Indonesia are two countries that have a large population of Muslims and actively promoting the Islamic capital market. There are differences in regulations and systems regarding Shariah companies in both countries, which may bring different behaviours between the two countries. Thus, it would be interesting to view the extent of variables impact on these differences by comparing how well Shariah companies react to the variables. It is hoped that the result of this study will enrich the understanding of both countries regarding Shariah companies. This research, therefore, focuses on the comparison of Shariah-compliant companies listed in Malaysia and Indonesia. Further, this research aims to analyze whether Islamic corporate governance (ICG), Information Technology Usage (IT Usage), and Human Governance (HG) could enhance the Sustainability Reporting (SR) of the companies.

The focus of this study is on the manufacturing industry as manufacturing companies tend to have a negative impact on the environment, and thus will provide more information disclosures compared to other industries (Reverte, 2009). Another reason for the choice of manufacturing companies is because manufacturing companies are moving towards a technology-driven and high-tech production and thus have a greater motivation to integrate SR initiatives into their operations to improve their social profile and attract the market (Branco & Rodrigues, 2008).

Therefore, this research seeks to answer these research questions: What is the relationship between HG and SR in Malaysia and Indonesia? What is the relationship between ICG and SR in Malaysia and Indonesia? What is the relationship between the IT Usage and SR of Malaysia and Indonesia? This paper examined and summarized previous literature on the four primary constructs, Human Governance, Islamic Corporate Governance, IT Usage, and Sustainability Reporting Disclosures, to answer the research questions. Resource-Based Theory and Stakeholder Theory are the two leading theories used to describe the relationships between these variables and formulate hypotheses. Then, this paper used indexes of HG, ICG, IT Usage, and SR from previous studies and gathered secondary data from annual reports and other available open sources. The data were then analyzed, and hypotheses were tested to draw conclusions and recommendations for future research.

2. LITERATURE REVIEW

2.1. Shariah Compliant Companies in Malaysia and Indonesia

Shariah is defined as an Islamic religious law that governs every aspect of daily life in Islam. Financial institutions and businesses are obliged to follow the principles of Shariah when doing business to ensure they are in line with the Shariah law. Among the principles that need to be followed are the prohibition of riba (interest), of gharar (uncertainty), of maysir (gambling), of prohibited elements, of darar (harmful activities) and violation of the sanctity of Shariah. A reason
for the increase in demand for Shariah compliance business model is the increasing awareness of the importance of Shariah compliance products, especially among Muslims worldwide.

In 1996, the government of Malaysia set up a Shariah Advisory Council (SAC) to provide guidance to the Securities Commission Malaysia (SCM), on all the issues relating to Islamic capital market growth and act as a reference body to Shariah issues. In Malaysia, companies can be considered as compliant to Shariah upon the approval of SAC.

In Indonesia, Islamic capital market begins on 3 July 1997, with the issuance of Syariah Mutual Funds by PT. Danareksa Investment Management. In 2000, Indonesia Stock Exchange (IDX) collaborated with PT. Danareksa Investment Management and launched the Jakarta Islamic Index (JII). JII provide investors who are interested to invest in Shariah compliant companies. The Islamic capital market is regulated by the National Sharia Board of the Indonesian Ulema Council (DSN-MUI). On 12 May 2011, IDX launched the Indonesia Syariah Stock Index (ISSI), which listed all Shariah shares on the IDX.

2.2. Theories

2.2.1. Resource-Based Theory (RBT)

All firms have a wide variety of resources and capabilities. Barney (1991) categorises resources into three types: i) physical capital resources (physical, technological, plant and equipment), ii) human capital resources (training, experience, insights) and iii) organisational capital resources (formal structure). The individual resources of the firm include both tangible and intangible resources of the firm that could give a competitive advantage to the firm (Grant, 1991; Snell, Youndt, & Wright, 1996). Tangible resources are physical assets such as plant and equipment, whereas intangible resources include the knowledge and skills of employees, a firm’s reputation, information technology system and a firm’s culture. This theory focuses on the fact that internal resources can be leveraged to guard against competitors and other external market forces that may negatively impact performance. By so doing, a firm’s sustainable competitive advantage can be reached (Campbell & Park, 2017). Competitive advantage includes being more transparent and accountable through disclosing pertinent information regarding the activities of the organisation. Porter and Kramer (2006) and McWilliams et al. (2006) found that CSR can offer competitive advantage to the firm.

2.2.2. Stakeholder Theory

According to stakeholder theory, it is critical for companies to obtain the involvement of the stakeholders to establish and enhance the firms’ legitimacy to operate. Organisational legitimacy will be able to ensure an inflow of capital, employees and customers that would be necessary for the sustainability of the company (Salancik & Pfeffer, 1978; Neu et al., 1998). According to stakeholder theory, the disclosure of financial, social, and environmental information, is considered as a form of communication between a company and its stakeholders in providing information about the activities of the company (Gray et al., 1995; Adams & Larrinaga Gonzalez, 2007; Adams & McNicholas, 2007). Previous studies have shown that disclosure policies emanate from the board (Ho & Wong, 2001; Gul & Leung, 2004; Haniffa & Cooke, 2005; Cheng & Courtenay, 2006; Cerbioni & Parbonetti, 2007), thus board characteristics can influence companies’ disclosure.
According to Deegan (2007) and Cho and Patten (2007), companies try to gain legitimacy by being more transparent about what they are doing.

2.3. **Sustainability Reporting**

The global economy has become increasingly integrated, and companies are under pressure to disclose their information relating to sustainability issues. Sustainable Development Goals (SDG) developed in 2015 by the United Nations have helped to emphasise the importance of corporate sustainability reporting disclosure, which is consistent with the definition of sustainability reporting by the Global Reporting Initiative (GRI, 2019), which “… is the practice of measuring, disclosing, and being accountable to internal and external stakeholders for organisational performance towards the goal of sustainable development” (Sustainability Reporting Guidelines, 2000-2011, p. 3). Thus, all companies are moving towards disclosing their SR which will address the financial and non-financial goals, and the financial, social, and environmental impacts of their actions (Gallo & Christensen, 2011; Tarquino et al. 2018).

3. **HYPOTHESES DEVELOPMENT**

3.1. **Relationship between Islamic Corporate Governance and Sustainability Reporting**

ICG refers to a set of organisational arrangements on how a corporation is directed, managed, governed and controlled. Islamic Financial Services Board mentioned that ICH should encompass effective management that is in line with the interest of stakeholders, the Board of Directors and the Shariah Supervisory Board. The companies should also be in compliance with Shariah rules and principles Islamic corporate governance and should seek to strike a balance between maximising profit and social justice Grais and Pellegrini (2006).

Corporate governance in the Islamic perspective links all concepts related to behaviour in business governance with spiritual matters by abiding to the principles of corporate governance: transparency, accountability, responsibility, independence, and fairness. In Islam, governance issues are different from governance in conventional because Shariah compliant companies has an obligation to obey a different set of rules, namely Islamic law (Shariah) and generally follow the expectations of Muslims by providing partnership capital, based on the arrangements of Profit and Loss Sharing (PLS) or other means of financing justified by Shariah (Lewis & Algaoud, 2004; Sudaryati & Eskadewi, 2012). Previous studies found that corporate governance positively influences sustainability performance (Haniffa & Cooke, 2005; Aman et al., 2012; Bakar et al., 2019; Purbawangsa et al., 2019; Hashim et al., 2015; Shamil et al, 2014; Haniffa & Cooke, 2005). However, some studies found no significant relationship between corporate governance and performance of Shariah approved companies with majority Muslim directors (Hameed Mohamed Ibrahim et al., 2006; Ooi et al., 2019; Lidyah, 2018).

Stakeholder theory provides a framework linking corporate governance and sustainability disclosure (Huse & Rindova, 2001; Driver & Thompson, 2002; Huse, 2003), suggesting that each enhances stakeholder engagement and organisational legitimacy (Unerman & Bennett, 2004). Thus, study suggests having Muslim BOD, non-executive Director, Muslim chairman, and CEO will assist in achieving better sustainable reporting.
The Relationship Between Islamic Corporate Governance, Human Governance, Usage of Information Technology and Sustainability Reporting: Comparison of Shariah Compliant Companies in Malaysia and Indonesia

Therefore, it is hypothesised that,

**H1: ICG has a significant relationship with SR in Malaysia and Indonesia**

### 3.2. Relationship between Human Governance and Sustainability Reporting

HG is about internal, inside-out and value-based conviction to guide humans to behave and covers value, religion, belief system, culture, and ethics to nurture the trust culture that produces high ethical values and moral conduct (Salleh & Ahmad, 2010). Hanapiyah et al. (2016) measure HG in terms of leadership, integrity, religiosity, spirituality and culture. Other studies have measured human governance by board independence, board size, board education, gender diversity, board age, board education level, training attended by board members, sound internal control system and ethical commitments (Said & Hassan, 2018; Ting et al., 2014; Setiawan & Djaedikerta, 2017; Hashim et al., 2020). Hanapiyah et al. (2016) have measured HG using surveys, while Ting et al. (2014) have measured using annual reports.

Previous studies have also shown that HG will lead to an improved CSR disclosure (Harjoto et al., 2015; Ting et al., 2014; Yaseen et al., 2019; Said et al., 2018; Jamil et al., 2021; Bakar et al., 2019). Resource based theory states that having the internal resources, which comprise both tangible and intangible resources of an organisation, can assist the organisation to have a competitive advantage over the other organisations. Internal resources include having sufficient capital equipment, required skills of individual employees, proper work ethics and adequate controls and systems.

Therefore, it is hypothesised that,

**H2: HG has a significant relationship with SR in Malaysia and Indonesia**

### 3.3. Relationship between IT Usage and Sustainability Reporting

Global disruption in business because of the Covid-19 pandemic and IR 4.0 has pushed companies to effectively use IT to address the disruption. IT usage is a valuable tool to improve the workplace, enhance the collective knowledge of employees, expand communication with customers, and increase profits (Salb et al., 2011). IT can assist an organisation to obtain unique capabilities and help to increase CSR disclosure (Charumathi & Padmaja, 2018). Previous studies have shown a positive and significant relationship of technology usage on CSR Disclosure (Bharadwaj, 2000; Charumathi & Padmaja, 2018; Malaquias et al., 2016) found a positive and significant relationship between IT capability and firm performance. Resource-based theory has shown that IT usage is an important intangible resource that can assist companies to improve SR.

Therefore, it is hypothesised that,

**H3: IT Usage has a significant relationship with SR in Malaysia and Indonesia**

### 3.4. Control variables
Branco and Rodrigues (2008); Giannarakis (2014); Haniffa and Cooke (2005); and Ghazali (2007) found a positive relationship between firm size and SR. Profitability and leverage have also been found to influence SR but findings are mixed. A positive relationship was found between profitability and CSR disclosure (Sharif & Rashid, 2014; Vitezić et al., 2012; Khan, 2010) but Andrikopoulos et al. (2014) and Michelon (2011) found otherwise. As for leverage, Christopher & Filipovic (2008) and Eberle et al. (2013) found a positive relationship between leverage and CSR, but Ho and Taylor (2007) found otherwise. The conceptual framework of the study is as shown in Figure 1.

![Conceptual Framework of the Study](image)

**Figure 1:** Conceptual Framework of the Study

4. **RESEARCH METHODOLOGY**

This study uses secondary data from annual reports and related websites that are publicly available. Hypotheses testing was conducted to understand which variable has a positive and significant relationship with SR Disclosure among Shariah-compliant companies in Malaysia and Indonesia.

4.1. **Population, sample size and sampling method**

Collection of data was conducted in June 2021. As of that date, the annual reports of Shariah-compliant companies for 2020 were not available. Thus, the study population consists of Malaysian and Indonesian Shariah-compliant companies in 2019. There are 696 Shariah-compliant securities listed in Bursa Malaysia in 2019 and 421 Shariah-compliant securities listed in Indeks Saham Syariah Indonesia (ISSI) in 2019. Manufacturing companies that have been listed in the stock exchange have issued annual reports from 2016 to 2019. From a total population of 230 manufacturing companies in Malaysia and 90 manufacturing companies in Indonesia, this research compares a total sample of 140 manufacturing companies, 70 companies from Malaysia, and 70 companies in Indonesia. The sample was taken using systematic random sampling. Out of 70 samples from Malaysian companies, two were listed in the PN17 list; therefore, they were omitted.

4.2. **Measurement SR Index**
The SR index is based on 48 items adapted from study of Jamil et al. (2021). If a sustainability item exists, a score of “1” will be given, else “0” score will be given. Based on the un-weighted approach, the score of sustainability reporting of the firms was calculated, where each score of a company was divided by total scores. The higher the SR index score, the higher the SR of the companies. The SR index score is measured by total score of average SR divided by total items, calculated as below:

$$SR \text{ index} = \frac{\sum_{i=1}^{n}(SR_i)}{48}$$

$n$ = number of items,
$SR_i$ = average of sustainability reporting item number “i”.

4.3. Islamic Corporate Governance Index

ICG Index is adapted from Haniffa and Cooke (2002) and Ooi et al. (2019) comprise of four items, (i) % of Muslim BOD over total BOD (MBOD); (ii) % of Muslim BOD over the total number of independent BOD (MIBOD); (iii) Presence of Muslim chairman (MC) and (iv) Presence of Muslim CEO (MCEO). For the presence of MC and MCEO, a score of “1” is given if present and “0” if otherwise. Thus, Islamic Corporate Governance Index is the total percentage of the four items divided by 4.

$$ICG \text{ index} = \frac{MBOD_i + MIBOD_i + MC_i + MCEO_i}{4}$$

$n$ = number of respondents,
$MBOD_i$ = average of Muslim Board of Director item number “i”
$MIBOD_i$ = average of Muslim Independent Board of Director item number “i”
$MC_i$ = average of Muslim Chairman item number “i”
$MCEO_i$ = average of Muslim CEO item number “i”

4.4. Human Governance Index

HG Index is adapted from Ting et al. (2014); Abdullah and Said (2018); Chebbia et al. (2020); Jamil, et al. (2021); Hashim et al. (2020); and Setiawan and Djadikerta (2017). HG has four dimensions: (i) board leadership, (ii) integrity, (iii) training and development, and (iv) internal control system quality. The Board’s leadership consists of five components: (i) work experience, (ii) educational background, (iii) educational level, (iv) age, and (v) gender diversity. These five components will be combined to create a Leadership Index. For work experience, a score of “1” is given if the experience is more than ten years and “0” if otherwise. For educational background, a score of “1” is given for business and “0” for non-business. For educational level, a score of “0” is given for below a bachelor’s degree, “1” for a bachelor’s degree, “2” for professional certification, “3” for masters and “4” for PhD. For age, a score of “0” is given for below 39 years old, “1” for 40 to 49 years old, “2” for 50 to 59 years old and “3” for 60 years old. For gender diversity, a score of “1” is given to female and “0” for male.
Integrity Index has five components: (i) corporate ethical values, (ii) ethical actions, (iii) code of ethics, (iv) ethical committee, and (v) whistleblowing activity. When the component is disclosed, a score of “1” will be given; otherwise, it gets “0”. Quality of control system consists of six components: (i) internal control disclosure content (five items), (ii) internal control system implementation (six items), (iii) internal control system role (five items), (iv) internal control system objectives (three items), (v) internal control system framework (one item), and a dedicated internal control system (comprises one item). If an item is disclosed, it receives a score of “1”; otherwise, it receives a score of “0”. This component will generate an Internal Control System Index.

Training and development refer to the number of trainings attended by the Board members for the year. A score of “1” will be given.

HG Index is calculated by adding these four components: board leadership, integrity, training and development and internal control system quality, divided by a total of 37 items.

\[
HG \text{ index} = \frac{\sum_{i=1}^{37} (HG_i)}{37}
\]

\[n\] = number of items,
\[HG_i\] = average of human governance item number “i”.

4.5. IT Usage Index

IT usage is adapted from Charumathi and Padmaja (2018) which uses 5 items to measure IT usage. A score of “1” will be given when ICT is used in the company’s processes, but “0” otherwise. Company’s processes include- HRM (Human Resources Management), SCM (Supply Chain Management), Accounting and Finance (AF), Manufacturing (M), and the corporate communication platform such as the company website or portal (CW), and 0 if not disclosed.

\[
ITU \text{ index} = \frac{\left(\overline{CI}_i + \overline{HRMi}_i + \overline{SCMi}_i + \overline{AFi}_i + \overline{CRMi}_i + \overline{Mfi}_i\right)}{6}
\]

\[\overline{CI}_i\] = average of corporate information score, item number “i”
\[\overline{HRMi}_i\] = average of human resource management score, item number “i”
\[\overline{SCMi}_i\] = average of supply chain management score, item number “i”
\[\overline{AFi}_i\] = average of accounting and finance score, item number “i”
\[\overline{CRMi}_i\] = average of customer relationship management score, item number “i”
\[\overline{Mfi}_i\] = average of manufacturing score, item number “i”

4.6. Control Variables
This research uses three control variables, firm size, profitability, and leverage. The values are taken from the annual reports. Firm size is represented by the natural log of total assets; profitability is represented by the return on assets; and leverage is represented by total liabilities divided by total assets.

### 5. DATA ANALYSIS AND FINDINGS

The instrument measuring the variables of the study was validated by a panel of experts from academia and industry, and inter-rater consistency was performed to ensure the validity of the research instrument before data collection. Descriptive analysis and multiple regression analysis were used to test the hypotheses of the study. All the basic assumptions of multiple regression analysis were met. Hypotheses testing was conducted to understand which variable has a positive and significant relationship with SR of Shariah compliant companies in Malaysia for the year 2019. Table 1 displays the descriptive statistics for the variables used in the analysis. The mean for HG Index, ICG Governance Index and IT Usage index shows a mean of 0.65, 0.24 and 0.25, respectively, for Malaysia. It shows that for the Human Governance Index, on average, the Shariah companies has 65% disclosure of leadership, company integrity, training and development of BOD, and internal control system quality. This figure is much higher than the human governance index disclosed in Indonesian Shariah companies. IT Usage Index shows that, on average, only about 24% of the companies uses IT in their business operations and corporate communication. As for Islamic Corporate Index, it shows that, on average, only about ¼ (25%) of the companies comprise ICG in their structure.

Indonesia shows a higher mean for IT Usage Index (0.51) but lower for HG Index (0.394) and ICG (0.130). It shows that for the HG Index, on average, the Shariah companies has 39.4% disclosure of leadership, company integrity, training and development of BOD, and internal control system quality. IT Usage Index shows that, on average, 51% of the companies uses IT in their business operations and corporate communication. This figure is a much higher percentage than Shariah companies of Malaysia. As for Islamic Corporate Index, it shows that, on average, only about 13% of the companies comprise ICG in their structure, which is much lower than Malaysian Shariah companies.

Overall, Malaysian Shariah companies show a higher index score for the HG Index and ICG Index, whilst Indonesian Shariah companies show a higher IT Usage Index than Malaysian Shariah Index companies. In addition, Indonesian Shariah companies show a slightly higher mean for SRI (0.32) than Malaysia (0.30).

### Table 1: Descriptive statistics of the Variables of the Study

<table>
<thead>
<tr>
<th></th>
<th>MALAYSIA</th>
<th>INDONESIA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>Min</td>
</tr>
<tr>
<td>HG Index</td>
<td>68</td>
<td>0.31</td>
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<tr>
<td>ICG Index</td>
<td>68</td>
<td>0.00</td>
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### Table 1: continued

<table>
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<tr>
<th></th>
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<th>Mean</th>
<th>Std Dev</th>
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<th>Mean</th>
<th>Std Dev</th>
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<tbody>
<tr>
<td>IT Usage</td>
<td>70</td>
<td>0.17</td>
<td>0.67</td>
<td>0.25</td>
<td>0.15</td>
<td>70</td>
<td>0.17</td>
<td>1.00</td>
<td>0.51</td>
<td>0.27</td>
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</tbody>
</table>
Table 2 shows that there is a significant correlation between human governance and sustainability reporting and no significant correlation between ICG for both countries. However, for IT usage, a significant correlation can be found between IT usage and sustainability reporting for Malaysia but was not significant for Indonesia. A significant correlation can be found for control variables with sustainability reporting in Malaysia, but only size was significant for Indonesia.

**Table 2: Correlation Analysis for the Variables of the Study – Malaysia and Indonesia**

<table>
<thead>
<tr>
<th>Variable</th>
<th>SR_M</th>
<th>HG_M</th>
<th>ICG_M</th>
<th>ITU_M</th>
<th>Profitability_M</th>
<th>Size_M</th>
<th>Leverage_M</th>
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<td>SR_M</td>
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<tr>
<td>HG_M</td>
<td>0.336**</td>
<td>1</td>
<td></td>
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<tr>
<td>ICG_M</td>
<td>0.084</td>
<td>0.116</td>
<td>1</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>ITU_M</td>
<td>0.424**</td>
<td>0.170</td>
<td>-0.032</td>
<td>1</td>
<td></td>
<td></td>
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<tr>
<td>Profitability_M</td>
<td>0.344**</td>
<td>0.208</td>
<td>-0.136</td>
<td>0.218</td>
<td>1</td>
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<tr>
<td>Size_M</td>
<td>0.548**</td>
<td>0.318**</td>
<td>0.113</td>
<td>0.466**</td>
<td>0.254*</td>
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<tr>
<td>Leverage_M</td>
<td>0.279*</td>
<td>-0.049</td>
<td>0.183</td>
<td>0.006</td>
<td>-0.006</td>
<td>0.303*</td>
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<tr>
<td>SR_I</td>
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<tr>
<td>HG_I</td>
<td>0.316**</td>
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<td>ICG_I</td>
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</tr>
<tr>
<td>Size_I</td>
<td>0.429**</td>
<td>0.359**</td>
<td>-0.112</td>
<td>0.111</td>
<td>0.265*</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Leverage_I</td>
<td>0.184</td>
<td>0.267*</td>
<td>-0.038</td>
<td>-0.004</td>
<td>-0.021</td>
<td>0.092</td>
<td>1</td>
</tr>
</tbody>
</table>

*Notes: ** Correlation is significant at the 0.01 level (2-tailed); * Correlation is significant at the 0.05 level (2-tailed)*

Table 3 shows regression analysis of the variables of the study. The dependent variable of this study is the Sustainability Reporting Index (SR). Models for both countries are significant with Prob >F accounts to 0.000 and F=7.640 for Malaysia and 0.003 and F= 3.784 for Indonesia.

**Table 3: Model Summary and ANOVA – Malaysia and Indonesia**

<table>
<thead>
<tr>
<th></th>
<th>Malaysia</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ANOVA</strong></td>
<td></td>
<td>Sum of Squares</td>
<td>df</td>
<td>Mean Square</td>
<td>F</td>
</tr>
<tr>
<td>1 Regression</td>
<td>0.705</td>
<td>6</td>
<td>0.117</td>
<td>7.640</td>
<td>0.000b</td>
</tr>
<tr>
<td>Residual</td>
<td>0.937</td>
<td>61</td>
<td>0.015</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1.642</td>
<td>67</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

**Table 3: continued**

**Indonesia**
The Relationship Between Islamic Corporate Governance, Human Governance, Usage of Information Technology and Sustainability Reporting: Comparison of Shariah Compliant Companies in Malaysia and Indonesia

ANOVA

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Regression</td>
<td>0.592</td>
<td>6</td>
<td>0.099</td>
<td>3.784</td>
<td>0.003b</td>
</tr>
<tr>
<td>Residual</td>
<td>1.643</td>
<td>63</td>
<td>0.026</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>2.235</td>
<td>69</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes: a. Dependent variable: Sustainable Reporting; b. Predictors: (Constant), Leverage, Profitability, Size, Human Governance, IT usage and Islamic Corporate Governance.

Table 4 shows the study variables' regression analysis and the independent variables' significance on the SR Index as the dependent variable. The adjusted R-square of the model for Malaysia is 0.373, indicating that the variables can explain 37.3% of the variation in the SR Index. The coefficient results show that HG Index (H1) and IT Usage Index (H3) are significant and have positive relationships with the SR. However, the ICG Index (H2) shows an insignificant relationship with SR, consistent with Table 3. All control variables have shown significant and positive relationships with the SR index.

Meanwhile, the adjusted R-square of the model for Indonesia is 0.195, indicating that the variables can explain 19.5% of the variation in the SR Index. The coefficient results show that HG Index (H1) and IT Usage Index (H3) are significant and have positive relationships with SR. Although ICG Index (H3) shows a significant relationship, it is in a negative direction that is not the hypothesized relationship. All control variables have shown significant and positive relationships with the SR index.

Table 4: Multiple regression analysis – for Malaysia and Indonesia

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardised Coefficients</th>
<th>Standardised Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>-0.625</td>
<td>0.092</td>
<td>-6.816</td>
<td>0.000***</td>
</tr>
<tr>
<td>HG Index</td>
<td>0.251</td>
<td>0.055</td>
<td>0.175</td>
<td>4.566</td>
</tr>
<tr>
<td>ICG Index</td>
<td>0.017</td>
<td>0.024</td>
<td>0.027</td>
<td>0.739</td>
</tr>
<tr>
<td>IT usage</td>
<td>0.246</td>
<td>0.044</td>
<td>0.228</td>
<td>5.545</td>
</tr>
<tr>
<td>Profitability</td>
<td>0.369</td>
<td>0.074</td>
<td>0.189</td>
<td>5.007</td>
</tr>
<tr>
<td>Size</td>
<td>0.031</td>
<td>0.005</td>
<td>0.271</td>
<td>5.962</td>
</tr>
<tr>
<td>Leverage</td>
<td>0.187</td>
<td>0.036</td>
<td>0.202</td>
<td>5.219</td>
</tr>
<tr>
<td>R-square</td>
<td>0.429a</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjusted R-square</td>
<td>0.373</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F-statistic</td>
<td>7.640</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4: continued

Indonesia
<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>-0.465</td>
<td>0.090</td>
<td>-5.172</td>
<td>0.000***</td>
</tr>
<tr>
<td>HG Index</td>
<td>0.215</td>
<td>0.054</td>
<td>0.178</td>
<td>3.966</td>
</tr>
<tr>
<td>ICG Index</td>
<td>-0.148</td>
<td>0.037</td>
<td>-0.165</td>
<td>-3.986</td>
</tr>
<tr>
<td>IT usage</td>
<td>0.055</td>
<td>0.026</td>
<td>0.085</td>
<td>2.080</td>
</tr>
<tr>
<td>Profitability</td>
<td>0.184</td>
<td>0.081</td>
<td>0.095</td>
<td>2.271</td>
</tr>
<tr>
<td>Size</td>
<td>0.031</td>
<td>0.005</td>
<td>0.301</td>
<td>6.710</td>
</tr>
<tr>
<td>Leverage</td>
<td>0.105</td>
<td>0.043</td>
<td>0.102</td>
<td>2.453</td>
</tr>
<tr>
<td>R-square</td>
<td>0.265a</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjusted R-square</td>
<td>0.195</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F-statistic</td>
<td>3.784</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes: a. Dependent variable: Sustainable Reporting Index; b. Predictors: (Constant), Leverage, ITU, Profitability, ICG, Size, HG_; ** indicate the significance of the correlation coefficient at level 0.05; *** indicate the significance of the correlation coefficient at level 0.01.

6. DISCUSSION

Out of the three hypotheses of the study, two hypotheses (H1 and H3) were accepted, and one hypothesis (H2) was rejected. A significant relationship between HG Index with sustainability reporting for Shariah companies in both countries was found (H1). This result is consistent with the findings of previous studies (Ting et al., 2014; Harjoto et al., 2015; Said et al., 2018; Yaseen et al., 2019; Jamil et al., 2021; Bakar et al., 2019). It is shown that good human governance by an organisation will lead to an improved CSR disclosure.

On the other hand, H2 was rejected as the study found no significant relationship between ICG and SR for Malaysia. It was found to be significant but in the opposite direction (negative) than hypothesised for Indonesia. This result is consistent with previous studies (Hameed Mohamed Ibrahim et al., 2006; Lidyah, 2018; Ooi et al., 2019). The insignificant relationship could be because only 25% of the sample manufacturing companies in Malaysia and 13% of companies in Indonesia followed the ICG structure as unlike Islamic financial institutions, there is no regulation that requires the Islamic Shariah Committee that directly supervises the implementation of Islamic principles in the Shariah companies.

H3 was accepted as the study found a significant relationship of IT Usage Index with Sustainability Reporting for Shariah companies of both countries. Indonesian Shariah companies have been shown to have a higher IT Usage Index than the Malaysian Shariah companies. This result is consistent with previous studies (Charumathi & Padmaja, 2018; Malaquias et al., 2016; Bharadwaj, 2000). All the control variables (profitability, size, leverage) were found to be significantly related to SR for Shariah companies in both countries. It is consistent with previous studies (Branco & Rodrigues, 2008; Ho & Taylor, 2007; Sharif & Rashid, 2014; Vitezić et al., 2012; Khan, 2010). Gamerschlag et al. (2011), where they highlighted that profitable companies have greater financial resources to fund voluntary reporting. This assumes that profitable companies prefer to publish their sustainability reporting as they have the capability to bear the costs.

This study has its limitations. It is confined to only manufacturing sector in 2019. The sample size comprises 68 companies for Malaysia and 70 companies for Indonesia. Future studies could expand the sample size to a larger sample size. Future studies might extend to other sectors. The study can
explain 37.3% and 19.5% of the Sustainability Reporting Disclosure for Malaysia and Indonesia respectively. With a larger sample size, future studies can examine other variables such as BOD culture and ethnicity. Future studies could use the data of annual reports for 3 to 5 consecutive years to further validate the model. Since ICG is not significant, future studies could also include more items to measure ICG.

7. CONCLUSION

The study has proven that HG and IT Usage have a significant influence on SR in Malaysia and Indonesia. To increase SR for Shariah companies, there should be a good HG structure in place through having a good board leadership, training of BOD, level of integrity and quality internal control in place. Shariah companies should also increase their level of IT usage in their business operations and communication to improve its sustainability reporting. To combat adverse outcomes in an organization, comprehensive governance must start at the top, with the employer and management team, and then move down to the employees (Wan Abdullah et al., 2020).

ACKNOWLEDGEMENT

The authors would like to express their gratitude to Universiti Sains Islam Malaysia and Binus University – Indonesia for the grant provided to execute this project (USIM/BINUS UNIVERSITY/FEM/ SEPADAN-A/70221).

REFERENCES


