

BOARD OF DIRECTORS' SIZE AND PROFITABILITY OF SHARIA INSURANCE IN OIC COUNTRIES**FALIKHATUN** (falie.feuns17@gmail.com)**ALFIYA PUTRI**Accounting Study Program, Faculty of Economics and Business, Universitas Sebelas Maret, Indonesia

ABSTRACT

This paper aimed to investigate the impact of the board of directors' size on the profitability ratio of public sharia insurance. A Hausman test was employed on the selection between fixed and random effects in our panel data for a sample of 58 firm-years from 2016 to 2019. Net Profit margin is used as proxies for the profitability ratio. The analysis was run on the samples of sharia insurance firms were OIC Countries from Malaysia, UAE, Saudi Arabia, Qatar, Oman, Pakistan, and Bangladesh. Our analyses revealed positively related and statistically significant results between board size and the profitability ratio.

Keywords : *Board of directors' size, net profit margin, sharia insurance, OIC countries*

Tujuan dari makalah ini adalah untuk menginvestigasi pengaruh ukuran dewan direksi terhadap rasio profitabilitas pada perusahaan asuransi syariah publik. Uji Hausman digunakan pada pemilihan antara efek tetap dan acak dalam data panel kami untuk sampel 58 perusahaan dari tahun 2016 hingga 2019. Margin Laba Bersih (NPM) digunakan sebagai proxy untuk mengukur rasio profitabilitas. Analisis dilakukan pada sampel perusahaan asuransi syariah negara-negara anggota OKI yaitu Malaysia, UEA, Arab Saudi, Qatar, Oman, Pakistan, dan Bangladesh. Temuan analisis kami mengungkapkan bahwa secara statistik berpengaruh positif signifikan antara ukuran dewan direksi dan rasio profitabilitas.

Kata kunci: Ukuran dewan direksi, margin laba bersih, asuransi syariah, negara-negara anggota OKI

INTRODUCTION

International Accounting Standard Board (IASB) regulates the international accounting standard for insurance firms in International Financial Reporting Standards (IFRS) 17 as an update for IFRS 4 regarding insurance contracts. The IFRS 17 emphasized risk-based liability appraisal before assessing financial performance (Palmborg, Lindholm & Lindskog, 2020). Profit computation in a firm is conducted by subtracting operational costs from revenue. However, an insurance firms' revenue is often paid in advance, leading to several years of coverage and unidentified related costs for many years in the future (Palmborg et al., 2020). IFRS 17 regulates this condition concerning premium payment appraisal and related costs regarding coverage provided by the premium. This step is taken to generate net

liability values to estimate the gain or loss of an insurance contract.

Financial performance results from the process applied to evaluate a firms' activities in a certain period (Burca & Batrinca, 2014). The financial performance also reflects the firms' achievement as the key outcome for owners and stakeholders (Endraswati & Cahya, 2020). Financial performance analysis is a tool used by firms as a decision-making consideration and a benchmark for external parties or investors to invest their funds in a firm (Ismail, 2013). According to Burca & Batrinca (2014), profitability is a means to measure an insurance firms' financial performance. Profitability is a business entity's ability to generate profit at a certain period. Profitability is a perfect indicator in measuring financial performance because it reflects the sharia

business entity's ability to generate profit from the available resources (Kholilah & Wirman, 2021).

Sharia business growth depends mainly on the stable increases in a firm's profitability (Kantakji, Hamid & Alhabshi, 2020). Additionally, profitability improves firm solvency and is vital in persuading insurance policyholders and stockholders to put their money into the firm (Çekrezi, 2015). The Improving the Takaful Sector in Islamic Countries (2019) report stated that the critical issue in the modern sharia insurance industry lies in operational, regulation, legal, and market competitiveness. In general, the changes in information technology also affect the business, especially in the firm's performance (Al Qudah, 2019). In the globalization era and increased business competition, a firm needs skills to maintain stability and improve its performance (Gunawan & Ramdhani, 2018). A firm also needs to pay attention to its financial performance, especially in corporate governance, such as the board of directors' characteristics, because it plays a central role in risk-taking decisions for financial institutions (Hakimi, Rachdi, Ben & Hssini, 2018). According to Zainudin, Mohamed, Akmal & Mohamed (2021), the board of director characteristics also plays a significant role in ensuring the effectiveness of a sharia insurance firm's operation, especially in financial performance.

Agency theory suggests that a higher number of directors could enhance control on management, contributing to better performance. The same conclusions are reached, though through different paths, from a resource-based theory perspective which links a higher number of directors to a more robust ability for corporations to benefit from their specialized skills by creating a long-term relationship with a strategic environment (Kiel & Nicholson, 2003). The board of directors has important duties in deciding on the policies and strategies of each firm, has the right to select, appoint, and dismiss the management team, and has another role in appointing other committees. Moreover,

the board plays other roles in monitoring the management team, supervising risk management, and oversight compliance with law, rules, and regulations. In addition, the board has to promote the culture of controlling the standard of good practice and supervise the disclosure of the companies' information and communication with the stakeholders (Huang & Wang, 2011).

The board of directors in insurance firms has to evaluate the entire risk. The insurance firm could afford to monitor minimum capital requirements according to the assumed actual risk, approve risk management policy, be responsible for audit activities, and determine the adequate requirement for the board and top management members. The board of directors also needs to define the governance system clearly while monitoring the internal organizational structure to ensure efficiency, effectiveness, and transparency (OECD, 2017). Structure ambiguity and consistent board of directors size could aggravate shareholder abuse (Baysinger & Butler, 1985 in Biase & Oronato, 2021). On the other side, structure clarity and board of directors' size significantly affect a firm's performance (Datta, 2018; Markonah, Sudiro, Surachman & Rahayu, 2019).

Hemrit (2020) study finds that the board of directors affects sharia insurance profitability in Saudi Arabia. This result is supported by Endraswati & Cahya (2020) study that finds the board of directors effect on sharia banks' profitability in Indonesia, and Fekadu (2015), who found a similar effect on conventional insurance firms. These results could be explained by the vital role of the board of directors in acquiring investors' trust to invest in their firms. Therefore, generating financial assistance to be managed and generate profit from time to time (Zainudin et al., 2021).

The review of the previous studies indicates inconsistent research findings on the effect of the board of directors' size on insurance companies' financial performance. Thus, the question that will be answered in the current study is

whether the board of directors affects sharia insurance profitability. Therefore, the current study analyzes the board of directors' impact on the sharia insurance firms' performance.

Our paper contributes to the literature in many ways. First, this paper contributes to understanding whether the board of directors' size enhanced the profitability ratio of Islamic public insurance. Second, this paper is one of the few studies in OIC Countries investigating the relationship between the board of directors' size and the profitability ratio. Third, besides using net profit margin as proxies for the profitability ratio, this paper utilizes information technology, incurred but not reported claims, and firm size as a control variable. Finally, this research's findings are expected to significantly contribute to understanding the most relevant board of directors' size to affect the market value of sharia insurance firms.

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

The Concept of Islamic insurance

Islamic insurance has a different fund management process from conventional insurance and other financial industries such as banking. Sharia insurance participant funds are divided into tabarru' funds, participant investment funds, and company funds. Tabarru' funds do not belong to the company. However, they are used to pay participants' claims in an accident with the principles of taawun (mutual help) and takaful (mutual bear). Company funds are used if the tabarru' funds are in deficit. The participants' investment funds remain the participants' right where the company is responsible for managing it through sharia investment. Participants will get a share if there is an underwriting surplus in by the provisions and agreements (Hassan, 2019). Whereas in conventional insurance, all premiums paid by participants become the entire property of the company because it uses the tabaduli (buying and selling) principle.

The Concept of Profitability

Kaplan & Norton (1992) developed a performance assessment based on a Balanced Scorecard consisting of four assessment perspectives, including financial performance; a firm controls its financial resources to achieve its targets. Profitability is one of the financial performance measures by observing the rate of returns of assets or equity. Profitability measurement also follows the Islamic teaching mentioned in Q.S. at-Taubah (9) verse 105 and Q.S. al-Ahqaf (46) verse 19. In Islamic teaching, Allah provides a return equal to what a person did. Therefore, to reap a positive return, people are suggested to evaluate their behavior, in this case, firm profitability.

Agency Theory

The agency theory developed by Jensen & Meckling (1976) explained that the relationship or contract between owner and managers develops agency issues due to the different interests between the related parties. Among others, the agency problem in question is the occurrence of asymmetric information (not the same) between those owned by the owner and manager. With the unequal ownership of information, the management (agent) of the company tends to carry out moral hazards and adverse selection. Managers do have an obligation to maximize the welfare of shareholders. Nevertheless, on the other hand, managers also have an interest in maximizing their welfare. The unification of the interests of these parties often creates a problem called the agency problem (Panda & Leepsa, 2017).

The agency theory explains the relationship between the principals and directors (agents) (type 1); between majority and minority owners (type 2); and between owners and creditors (type 3) (Faisal, Majid, & Sakir, 2020) (Panda & Leepsa, 2017). This theory assumed that there is an agency conflict among the stakeholders due to some of them prioritizing one-sided interests. The agent and principals are economic actors who tend to fulfill their interests (BoučNová, 2015) with bounded rationality, avoid risks (Panda & Leepsa, 2017), and are motivated

to maximize their objectives (Panda & Leepsa, 2017; Zainuddin, Lui, & Yii, 2018).

Studies employing agency theory emphasize the use of methods to control agency problems that aim to sustain company survival (Fama & Jensen, 1983). The review of the existing literature explained that there are two approaches to reducing agency conflict, the outcome-based approach and the information to verify agent behavior (Eisenhardt, 1989). Hillman & Dalziel (2003) mentioned that these approaches are implemented by providing compensation or position in the firms' structure. Further, suppose the principals could obtain information on the agents' behavior, and a contract with the agent is made based on results. In that case, the agent will tend to meet the principals' interests (Eisenhardt, 1989).

Agency problems will cause issues in achieving the firms' performance. According to Kader, Adams, Hardwick & Kwon (2014), good corporate governance could solve the agency problems because owners believe that managers will use their funds efficiently and generate competitive returns from their investment. In modern companies, the board of directors reduces this kind of conflict. Corporate governance also applies to the sharia insurance firm to protect insurance participants from stockholder and manager opportunistic behaviors. This concept aligns with Allah's teaching in Q.S al-Baqarah (2) verse 188 that Allah prohibits humans from utilizing and using others' wealth through *bathil* or opportunistic means. Therefore, firms are responsible for managing their resources in a justified manner. The presence of the board of directors is an implementation of agency theory in which the boards' role is to protect the insurance participants from other parties' interests.

Board of Directors

In the traditional economy, corporate governance is divided into two models: 1) Anglo American model (unified system) and 2) the German model (double system). The unified system is based on the relationship between stockholders and management, while a pyramid ownership

structure characterizes the double system. In a double system, companies have cross-ownership through foreign ownership, institutional ownership, and family ownership (Solomon & Solomon, 2004). However, the traditional corporate governance model in the conventional system has recurring issues because directors take over stakeholders' roles, such as stockholders, vendors, and suppliers. In addition, traditional corporate governance has failed to prevent the current financial crisis, including abusing the companies' accounting standards to create short-term profit maximization and not encouraging long-term corporate responsibilities (Adams & Jiang, 2016).

In developed nations, the board of directors has to become a legal representative of stockholders. It has fiducial responsibility to monitor firm managers by providing suggestions and assisting them in improving their performance (Kumar & Zattoni, 2013). According to Jan & Sangmi (2016), the board of directors is the link between capital owners and employees who manage the firm to generate profit for investors. Therefore, the board of directors could take a flexible approach while maintaining their responsibilities, including determining long-term targets, leading managers to achieve the objectives, determining controlling processes to ensure that managers take practical actions, and reporting firm performance to the stockholders (Jan & Sangmi, 2016).

The drawbacks of the traditional corporate governance model led to the development of corporate governance concepts based on Islamic perspectives and the tauhid concept (Al-Faruqi, 1982; Ginea & Hamid, 2015) that requires all components involved in the corporate governance process to be responsible. The new concept also promotes rational calculation of companies' performance based on material values without disregarding the companies' social welfare duties.

According to Chapra (2010), the Islamic economy contradicts the egoistic homo economicus concept and explains

that personal interests must be based on moral values under social needs (*homo islamicus*). The Islamic economy does not differentiate between material and spiritual objectives. This economic system is based on primordial needs or social justice. Thus, resources should be distributed to all people without exception. Islamic economy also leads to natural behaviors based on moral values implemented in the environmental activities that benefit and motivate people through the social structure.

The directors, the sharia board, and other stakeholders prepare the sharia insurance firms' corporate governance model. The sharia board is a vital organic body that ensures the operation activities' regulation process is implemented under Islamic laws. Unlike conventional insurance, in sharia insurance, all stockholders, majority, and minority, are included as stakeholders, together with the government and the community (customers). Therefore, the decision-making process and policy framework consider all stakeholders' interests. This model has no profit maximization for limited majority stockholders. Instead, profits are shared equally among all shareholders. Within the framework of justice or equilibrium (*Adl wal Ihsan*), corporate governance is vital in encouraging collaboration between stockholders and the community. Islam does not allow activities that lead to negative externalities for the community to build an equal distribution of wealth. These processes are centered on fulfilling Islamic corporate governance's objectives to meet personal and social needs by upholding the distributive justice principles (Choudhury & Hoque, 2006; Ginea & Hamid, 2015).

Information technology

Information technology captures the flow of information between internal and external users for various business transactions through collecting and storing transactional data for decision-making and organization data protection (Varma & Khan, 2014). IT covers the information

system, internet, information and communication-related technology, and its software, network, and hardware infrastructure. This system processes and sends information to improve individual and organizational effectiveness and positively affect firm productivity (Wou & Sorooshian, 2013). In the case of the insurance industry, IT acts as customer data processing to improve service efficiency (Radwan, Calandra & Koumbarakis, 2020).

Incurred But Not Reported Claims

Incurred but not reported claim is a type of claim that exists in both conventional and sharia insurance firms. In Statement of Financial Accounting Standards (PSAK) 28 concerning Accounting for Loss Insurance Contracts, this claim also covers the claims in the completion process and is estimated based on the estimated liability of the claim (IAI, 2015). Parts of claims in the process of completion are treated as a liability. The estimated liability of the claim or loss allowances is measured at the estimated amount based on technical insurance calculations (IAI, 2015). This allowance was made to estimate the excess of potential claims on contributions received in advance and for claims incurred but not reported at the balance sheet date. (Rosalie & Budiarmo, 2017). This allowance is the managers' best estimation based on the claims reported during the year, reporting delays of claims, and the provision for the claim handling process (Annual Report Takaful Emarat, 2019).

Firm Size

Trigueiros (2000) explains that firm size has comprehensive measurement options through various proxies, such as total assets, sales to employees proportion, and market capitalization. The firm size provides information for a firm to predict its ability to exploit the economies of scale and scope (Almajali, Alamro & Al-Soub, 2012). The previous study by Pervan, Poposki & Curak (2014) explains that firm size is a tool to compute firm prospects in managing risk for insurance companies.

Hypothesis Development

Board of Directors and Profitability

Corporate governance effectiveness is fundamental for a financial institution to maintain all stakeholders' interests. However, the difference between owners' and managers' interests often leads to agency problems. Eisenhardt (1989) argues that agency theory employs three basic assumptions: people, organization, and information. This study conceptualized the size of the board of directors as an independent variable to meet the people assumption, which assumes that people will be selfish, have limited rational ability, and are risk-averse.

A larger board of directors might have a more diverse specialization and expertise but also poses higher coordination costs and slows down the decision-making process, adversely impacting the firms' value (Ahmed, Hossain & Adams, 2006; Birindelli, Dell'Atti, Iannuzzi & Savioli 2018). Petchsakulwong & Jansakul (2018) indicated that the smaller board had greater efficiency in monitoring the performance of a firms' management team than did a larger boards, thus increasing the profitability ratio.

Endraswati & Cahya (2020) explain that the size of the board of directors could fulfill this assumption about limited rational ability. A larger board of directors has more diverse expertise, allowing wider internal and external networks. Hemrit (2020) explains that a large board of directors will improve the ability to handle complex problems using extensive information to provide managers with suggestions. Further, Karbhari, Muye, Hassan & Elnahass (2018) and Kader et al. (2014) studies find a positive effect of the board of director size on firm profitability. In the case of the financial industry, such as sharia insurance, a larger board of directors positively impact performance through more effective control of managers (De Andres & Vallelado, 2008; Belkhir, 2009 in Biase & Oronato, 2021). Therefore, a larger board of directors increases firm profitability. Thus, the following hypothesis is proposed:

H1: Size Board of directors positively affect

firm profitability

IT Investment and Profitability

A well-designed IT could improve effectiveness and efficiency, thus, reducing decision-making process costs (Romney & Steinbart, 2006). IT implementation allows firms to trace their competitors' prices, conduct proper market research, deliver information efficiently to other parties (Martell, 1988), and improve product and service marketing efficiency (Noh & Fitzsimmons, 1999). Aldalayeen, Alkhatatneh & AL-Sukkar (2013) and Al Qudah (2019) studies find that IT investment positively impacts firm profitability.

Incurred But Not Reported Claim and Profitability

The incurred but not reported claims are recorded as an element of short-term liabilities. The value of this record is estimated using the past claim completion trend. This claim is a short-term liability with the potential to incur future claim costs (Annual Report Takaful Emarat, 2019). PSAK 28 concerning Accounting for Loss Insurance Contracts, explains that the recording of this claim needs to consider the date of incurred loss and whether it was incurred at the end of the reporting period (IAI, 2015). The number of incurred and incurred but not reported claims is recorded as costs when the firms' obligation to complete the claims occurred. Its record as claim costs will affect the firms' income statements.

Firm Size and Financial Performance

Large insurance firm allows them to diversify their risks effectively (Ismail, 2013). Burca & Batrinca (2014), in their study, explain that firms with more significant assets have complex resources, information systems, and better cost management. Therefore, firms with significant assets can better minimize their risks. This explanation aligns with Ismail (2013), Burca & Batrinca (2014), and Arshad, Gondal & Hussain (2016) studies that find a positive effect of firm size on sharia insurance financial performance.

RESEARCH METHODS**Population and Sample**

According to the data published by statista.com in 2015 – 2018, the sharia insurance industry experienced a decline in total assets in 2017 and stagnation in the following year. However, sharia insurance, with its tendency to own significant assets, has a higher ability to increase its investment. Therefore, it is expected to increase investment returns, affecting its financial performance (Kantakji et al., 2020). Global Takaful Report 2020 recorded that the Gulf Cooperation Council (GCC) countries have the largest market share of sharia insurance. It covers up to 77% of the market, followed by Southeast Asia, Africa, and other countries such as Bangladesh, Pakistan, Turkey, Sri Lanka, Syria, Yaman, and Jordan.

The population in this study is all sharia insurance listed in the Global Takaful Report 2017. The sampling technique applied to select the samples are the nonprobability sampling method based on several criteria: 1) Independent sharia insurance firm; 2) Sharia insurance firms in OIC countries: Malaysia, UEA, Saudi Arabia, Oman, Qatar, Pakistan, and Bangladesh, 3) Sharia insurance firm issuing annual report per 31 December 2016 to 2019; 4) Sharia insurance firms did not make a merger during the research period.

Operational Definition of Research Variables**Profitability**

Profitability in this study is measured using Net Profit Margin (NPM). This proxy is an analysis applied to determine the net return from the generated revenue (IFSB, 2019). NPM in a financial institution, including sharia insurance, is calculated by

dividing the net profit by the gross profit (IFSB, 2019). $NPM = \text{Net Profit} / \text{Gross Profit}$.

Board of Directors

The board of directors is a component of corporate governance. In the current study, this variable was measured using the board of directors' size as one of the characteristic measures. This measurement is in line with Hemrit (2020), Endraswati & Cahya (2020), and Kader et al. (2014) studies.

Information Technology

The concept of IT offers no comprehensive and diverse definition depending on each intellectual vision and research or writer perspective (Aldalayeen et al., 2013). Therefore, in the current study, IT was measured using the ratio of IT costs compared to the total operational cost of a sharia insurance firm. $IT = \text{IT cost} / \text{Total Costs}$.

Incurred But Not Reported Claims

PSAK 28 concerning Accounting for Loss Insurance Contracts, categorized the claims in the process into three groups, the incurred but not reported claims. This claim is a short-term liability in the sharia insurance firms' financial report. The current study measures the variable by dividing the incurred but not reported claim by total liability. $INBR = \text{Incurred but not reported claims} / \text{Total Liabilities}$.

Firm Size

Large firms could dominate the market coverage and compete, having a more stable financial performance (Almajali et al., 2012). Firm size is measured from the natural logarithm of total firm assets (Kantakji et al., 2020; Arshad et al., 2016;

Table 1.
Descriptive Statistics

	N	Mean	Maximum	Minimum	SD
Dependent					
NPM	58	0.120	0.5336	0.0031	0.121
Independent					
BOD	58	7.67	11.00	5.00	1.342
IT	58	0.026	0.098	0.0001	0.0231
INBR	58	0.118	0.389	0.001	0.104
SIZE	58	14.91	21.14	9.36	3.0003

Burca & Batrinca, 2014).

Data Analysis

The current study applies descriptive statistics, classical assumptions, and multiple linear regression analysis to analyze the data. The analysis was performed on Eviews 10 program, starting with determining estimation methods between Common Effect Model, Fixed Effect Model, and Random Effect Model. The selected estimation model was the Random Effect Model with the following regression analysis model:

$$\text{NPM} = \alpha + \beta_1 \text{BOD} + \beta_2 \text{IT} + \beta_3 \text{INBR} + \beta_4 \text{SIZE} + \varepsilon$$

ANALYSIS AND DISCUSSION

Research Samples and Descriptive Statistics

The current study analyzed secondary data from sharia insurance firms' annual reports in Malaysia, UAE, Saudi Arabia, Oman, Qatar, Bangladesh, and Pakistan. The samples were selected using purposive sampling methods, resulting in the elimination of several companies. The final samples of the study were 24 firms with a total of 58 observations.

Table 1 summarizes the result of the descriptive statistics analysis. The mean profitability score measured using NPM on 58 observations was 12%. NPM is a ratio to determine the proportion of net profit relative to its gross profit. The minimum score of NPM was 0.3%, with a maximum score of 53%. A high NPM score indicates good financial performance because firm income holds a higher proportion than its incurred operational costs. The board of directors was measured by computing the total members of the board of directors on each sample. On average, the samples have

7.67 directors, meaning that most of the sampled sharia insurance firms have eight directors as board members. The optimum board of directors has between seven and nine members. Lipton & Lorsch (1992) in Tornyeva & Wereko (2015) argue that this number could ensure good coordination on the board and make a faster decision in improving firm performance.

The IT variable shows an average score of 2.6%, showing that the sampled firms have other costs dominating their expenditure. For example, in sharia insurance firms, IT costs could include maintenance costs of its IT facilities. The incurred but not reported claims (INBR) as a short-term liability in sharia insurance companies has an average score of 11.8%. This variable was measured to determine the proportion of incurred but not reported claims (INBR) compared to the total liabilities. The variable is also directly related to the claim cost that needs to be paid in the future. The current study measures firm size using the natural logarithm of the total assets with an average score of 14.91 and the maximum score of 21.14.

Model Selection

The first hypothesis analysis conducted in this study is selecting between common and fixed effect models using the Chow test. Table 2 summarizes the analysis and shows the probability F-statistics of 0.0000, indicating that the chow test result suggested selecting a fixed effect model. This analysis is followed by the Hausman test to select between fixed effect and random effect models. The analysis results in Table 2 show the chi-square score of 0.5260 (< 5%), indicating that the random

Table 2.
Model Selection Analysis

Effects Test	Statistic	d.f.	Prob.
(Chow Test)			
Cross-section F	6.853617	(23.30)	0.0000
Hausman Test			
Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section Random	3.193125	4	0.5260

effect model is the appropriate analysis model in this study.

Hypothesis Testing

The hypothesis testing was conducted using the F-statistics test, coefficient of determination (R^2), and t-statistics analysis. Table 3 summarizes the hypothesis analysis results with F-statistics of 0.039116 (<0.05), indicating that the independent variables simultaneously affect profitability. The adjusted R-square score of 0.107721 indicates that the board of directors, IT, incurred but not reported claims, and firm size explain 10.7% of the variability in NPM, with 80.3% of the influence caused by other factors outside this research model.

Board of Directors' Size and Profitability

The analysis results show that the number of board of directors' members has a probability of 0.0801 and a coefficient of 0.019. These results indicate that size of the board of directors positively affects sharia insurance profitability at a 10% confidence level. Therefore, the larger the board of directors, the higher the profitability of the sharia insurance firm. This finding aligns with Biase & Onorato (2021), Karbhari et al. (2018) and Kader et al. (2014) study. According to Dhouibi (2013), the board of directors' size increases the boards' expertise and expands its networking. This condition will lead to better decision-making and place the board in a better position to monitor managers' activities (Tornyeva & Wereko, 2012). Therefore, the size of the board of directors has a positive effect on

performance, and the addition of the board of directors can predict an increase in company performance, but with a maximum number of seven or eight people (Belkhir, 2009). Furthermore, quality boards indicate the existence of quality company performance and are reflected in financial and market performance (Dowen, 1995).

The board of directors is an agent acting on behalf of stakeholders and has a fiduciary obligation to ensure business operations following Islamic sharia (Ginea & Hamid, 2015). Therefore, they must understand the risks associated with products not compliant with sharia while considering the sharia insurance market segment. The market segment for Islamic financial institutions is usually divided into several categories. The first segment has strong religious beliefs, tends to be loyal to financial institutions, and has established relationships regardless of the amount of profit sharing paid by Islamic financial institutions compared to conventional financial institutions. The second segment is those who only agree with the ethical dimensions of Islamic financial institutions but ignore religious considerations. Finally, the third market segment bases its decisions solely on the financial returns of Islamic financial institutions, and this last market segment, although driven by religious values, is willing to switch to other Islamic insurance based on the consideration of higher financial returns.

Information Technology and Profitability

IT has a probability score of 0.9179 on a 0.05 significance level. Therefore, IT does

Table 3.
Hypothesis Analysis Results

Variable	Dependent Variable	Coef.	Prob	Note
BOD	NPM	0.019	0.0801	Positive effect *)
IT	NPM	0.077	0.9179	No effect
INBR	NPM	0.394	0.0086	Positive effect **)
SIZE	NPM	-0.002	0.7489	No effect
R-Square			0.170338	
Adjusted R-square			0.107721	
F-Statistics			2.720350	
Prob(F-statistic)			0.039116	

*) significant at 10%; **) significant at 5%

not affect sharia insurance firms' profitability. This result indicates that the proportion of IT costs to total operational costs does not affect the profitability of sharia insurance firms. This result contradicts Aldalayeen et al. (2013) and Al Qudah (2019) study, finding that IT positively affects profitability. According to Mithas, Tafti, Bardhan & Goh (2012), there was no evidence of IT effects on profitability through operational costs reduction because not all IT project has the potential to increase firm income. The relationship between IT and firm profitability also needs to consider the risks the firm will bear because the factor is vital to managing firm performance (Singh & Harmon, 2003). In IFRS 17, risk adjustment for non-financial risk is defined as an adjustment to reflect the number of expenditures an entity needs to cover for the uncertainty that arises from non-financial risks (IASB, 2017).

Incurred but Not-Reported Claims and Profitability

Table 3 shows a probability for incurred but not reported claims of 0.0086 with a coefficient of 0.394. These scores indicate that INBR positively affects profitability at a 5% significance level. This result is inconsistent with the proposed hypothesis that expected a negative effect of INBR on profitability. Therefore, the higher the INBR as a liability component, the higher the profitability of the sharia insurance firm. PSAK 28 concerning Accounting for Loss Insurance Contracts, explains that the recognition of INBR as a firms' cost depends on the claim completion trend in the past to predict future claim completion. INBR is also a cost when the need to fulfill the claims occurs. Claim costs are reported in the income statement as a gross claim that the re-insurance claim will deduce. Therefore, the claim costs in the income statement could be reduced.

Firm Size and Profitability

Firm size has a probability score of 0.7489 and a coefficient of -0.002, meaning that firm size has no significant effect on profitability. This finding does not align

with the research hypothesis and previous studies conducted by Ismail (2013), Burca & Batrinca (2014), and Arshad et al. (2016) that firm size positively affects sharia insurance performance. Therefore, sharia insurance total assets do not affect profitability, unlike the previous studies, which find that significant assets allow firms to invest and increase their income through investment returns (Kantakji et al., 2020). However, Nurwulandari, Wibowo & Hasanudin (2021) explain in their study that firm size is not the only consideration for investors to invest in the firm because, without optimum assets management, large assets will not pose a significant effect on firm profitability.

CONCLUSION

The analysis showed that simultaneously all independent variables showed a significant effect on sharia insurance firm profitability. Meanwhile, INBR and the board of directors partially have a positive and significant effect on profitability, and IT and firm size have no significant effect.

In connection to agency theory implementation, directors must become a mediator between the principals and the agents to minimize the conflict of interest as a part of the corporate governance mechanism. For example, in sharia insurance firms, agency theory could be implemented by adding an organ to the firm, the Sharia Supervisory Board (Dewan Pengawas Syariah). According to AAOIFI (2010), this board is an independent body with *fiqh muamalat* expertise to ensure that financial institutions, including sharia insurance, obey the sharia principles in implementing their business activities. This board is also in charge of providing advice and suggestions to the directors.

The empirical finding has a significant implication for managers and policymakers in the insurance industry, especially regarding the number of board of directors members that align with the sharia insurance industry characteristics in Indonesia, Malaysia, UAE, Saudi Arabia, Qatar, Oman, Pakistan, and Bangladesh. Precise regulation of the board of directors' size is expected to stimulate sharia

insurances' growth in assets capitalization, earning, and profit-sharing for customers.

LIMITATIONS AND SUGGESTIONS

Future study is expected to apply sharia insurance risk in predicting profitability as it was expected to cause the insignificant relationship between IT and firm size. The current study samples were limited to public sharia insurance in Asian countries and could be improved in future research. A similar approach could be applied to the research period by extending the observation years.

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