

CHAPTER 3

METHODOLOGY

3.1 Introduction

This study examined the relationships between Shariah governance, Maqasid Shariah, corporate governance, and the performance of the Islamic banks in Malaysia. Specifically, this study constructed the disclosure of the SC, Shariah audit, Shariah risk, Maqasid Shariah, and BOD to the performance of Islamic banks. The present study also examined the effects of the BOD as a mediating variable on the relationships between the dimensions of Shariah governance (SC, SA, and SR) and Maqasid Shariah disclosure and the performance of Islamic banks in Malaysia.

Therefore, this section demonstrates the methods used to achieve the purpose of this study. The main topics discussed in this section include the research design, research strategies and methodologies, goodness of measure, the result of the pilot test, data analysis tools, and finally, the summary that wraps up the chapter. This chapter is arranged as follows: 3.1 the introduction, 3.2 research paradigms, 3.3 research design, 3.4 research strategies and methodology, 3.5 goodness of measure, 3.6 pilot test, 3.8 data analysis tools, 3.7 ethical consideration, and 3.8 chapter summary.

3.2 Research Paradigms

There are varying views on what research is and how it relates to knowledge development. Research has been regarded as a discipline that is guided by the paradigm and the existing knowledge related to the subject. A paradigm is a set of beliefs about an issue around and the way of thinking approach on how the issue can be investigated. It leads the researcher to make decisions towards the research. Mac Naughton et al. (2001, p. 32) provide three elements of paradigm in the definition: A belief about the nature of knowledge, a methodology, and criteria for validity. The paradigm has been characterised through its ontology, in which all research is based on beliefs about the world (what is reality), epistemology about the nature of knowledge or how we come to know (how you know something) (Bougie & Sekaran, 2020, p. 23), and methodology (how to find out) (Guba, 1990). Ontology is the nature of reality, while epistemology is the relationship between the researcher and reality (Carson et al., 2001).

Guba and Lincoln (2005) classify paradigms into four perspectives: Positivism, post-positivism, critical theory, and constructivism as the major theoretical paradigms. Meanwhile, Merriam (2009, p. 11) constructed four epistemological perspectives: Positivist, interpretive, critical, and postmodern. Table. 3.1 summarises the main characteristics and fundamental differences between positivism and interpretivism, which was useful to consider in this study (Carson et al., 1998).

Table 3.1: Characteristics of Positivism and Interpretivism

Epistemology	Positivism/post-positivism	Interpretivism/constructivism
Nature of 'being' (nature of the world)	Have direct access to the real world	No direct access to the real world
'Grounds of knowledge' (relationship between reality and research)	Possible to obtain complex, secure, and objective knowledge	Understood through 'perceived' knowledge
Purpose	Predict, control, generalise - Research focuses on generalisation and abstraction - Thought governed by hypotheses and stated theories	Describe, understand, interpret - Research focuses on the specific and the concrete - Seeking to understand the specific context
Reality	Objective, single external reality	Multiple external reality
Methodology	Experimental, survey, quasi-experimental	Phenomenology, ethnography, hermeneutic, grounded theory, naturalistic/qualitative

Source: Adapted from Carson et al. (2001); Merriam, (2009, p. 11)

Bougie and Sekaran (2020, p. 23) explain that positivists are concerned with the rigour and replicability of the research, the reliability of observations, and the generalizability of findings. The critical approach of positivist researchers in the experiment allows the researchers to test cause-and-effect relationships through manipulation and observation. Some positivists believe that the goal of the research is only to describe phenomena that one can directly observe and objectively measure. According to Merriam (2009, p. 11), the positivist orientation assumes that reality exists out there.

The methodological approach of positivism is based on hypothesis testing and the quantitative method (Guba & Lincoln, 2005). The hypothesis is developed by integrating two variables to seek the relationship whereby the study's objectives are

created to observe the actual event and explain with a logical analysis. In addition, Sukamolson (2010) states that quantitative research is viewed as a realist or positivist approach, providing the researcher to uncover the truth. The realist views that the fact can be objectively measured and found through research. Likewise, positivism claims that the truth can only be relative and never definitive.

Contrary, interpretivism or constructivism emphasises how people construct knowledge (Bougie & Sakaran, 2020, p. 23), arguing that the individuals do not have access to the real world; their knowledge of the perceived world is meaningful in its terms and can be understood through a careful use of interpretivism procedures (Carson et al., 1998). Notably, the interest in how people's world views results from interactions with others and the context in which they occur (Bougie & Sakaran, 2020, p.23). The research methods of constructionist researchers are often qualitative; focus groups and unstructured interviews allow them to collect rich data-oriented to the contextual uniqueness of the world that is being studied. Indeed, constructionists are often more concerned with understanding a specific case than generalising their findings (Bougie & Sakaran, 2020, p. 23).

The current study aimed to test the relationship between the variables based on the existing theories. The data were obtained from the secondary source and gathered using a quantitative method to meet the research objectives of the study. Thus, based on Table 3.1, the positivism paradigm is pertinent as the inquiry paradigm adopted in this study.

3.3 Research Design

Research design is the detailed outline that spells out how the investigations will be conducted throughout the study. It describes the entire strategy selected to integrate

the study logically and coherently. It typically guides the researchers to determine how the data will be collected, what instruments will be employed, and how they will be analysed. According to Sekaran (2003, p. 117), research design involves a series of rationales and issues relating to decision making. It must be considered about the purpose of the study (exploratory, descriptive, and hypothesis testing), the location of study, the types of the investigation, extending the researcher's inference, time horizon, and the unit of analysis to analyse the data. The research design, which covers research purposes and approaches, is discussed next.

3.3.1 Research Purposes

Social research has three purposes, exploratory, descriptive, and hypothesis testing, depending on the stage to which knowledge about the research topic has advanced (Sekaran, 2003, p. 119). Exploratory research is conducted when there is insufficient knowledge to guide the development of a theoretical framework, where in such cases, it aims to understand what is going on or explore new areas of organisational research (Bougie & Sekaran, 2020, p. 58; Sekaran, 2013, p. 119). Descriptive research seeks to infer an accurate profile of events, situations, and people to provide an immense body of knowledge to shape the nature of society. Hypothesis testing explains the nature of the specific relationship or establishes the differences among the group or the independence of two or more factors in a situation (Sekaran, 2003, p. 124).

This current study serves two purposes: Descriptive and hypothesis testing; the descriptive purpose aimed to identify the perspectives of Shariah governance practices concerning the disclosure of Shariah governance and Maqasid Shariah within Islamic banking. The hypothesis testing refers to the association of Shariah governance, Maqasid Shariah disclosure, and BOD attributes with the performance of Islamic Banks,

explaining the nature of the relationship of Shariah governance practice and performance of Islamic banks (Sekaran, 2003, p. 124).

The hypothesis testing was applied in this study by gathering the secondary data to determine the relationship between SC, Shariah audit, Shariah risk, and Maqasid Shariah disclosure as independent variables. In addition, the hypothesis testing also examined the mediating effect of BOD between the SC, Shariah audit, Shariah risk and Maqasid Shariah disclosure, and the financial performance. The BOD is a mediator, and financial performance is the dependent variable.

3.3.2 Research Approaches

According to Creswell (2014), the validity of social research depends on the approach, i.e., the relationship between theory and data. Bougie and Sekaran (2020, p. 21) discuss two approaches, namely, deductive and inductive. According to Bougie and Sekaran (2020, p. 21), deductive research is used to test the theory related to the topic of interest. The deductive approach starts with a general idea to a specific theory and narrows down into a specific hypothesis applicable to the test. Further, the specific observation is collected to test the hypothesis, and analysing the observation enables the researcher to confirm or refute the original theory. Meanwhile, inductive research works in the opposite direction; it is a process where the observation on specific phenomena and arrive at general conclusions. It means that inductive research works are from the more specific to the more general.

This study formulated the hypotheses along with the deductive approach. It draws on the relevance of quantitative data. The choice of the deductive approach is consistent with the positivism view that has emerged in this study. It is believed to be the most appropriate method to measure the Shariah governance and Maqasid Shariah disclosure

associated with Islamic banks' performance. Shariah governance mechanisms were determined, and disclosure practices were evaluated against the expected information.

Moreover, this study attempted to locate the phenomena of the information expectations from annual reports towards the Shariah governance and Maqasid Shariah disclosure using the disclosure items. The primary constructs of the current study have been generated from Shariah governance guidelines, regulation, and established literature. Thus, applying these constructs of Shariah governance and Maqasid Shariah in the Islamic Bank study setting involves developing a theory or hypothesis to test the hypothesis (Habbash, 2010).

3.4 Research Strategies and Methodology

There are two types of research methodologies, quantitative and qualitative research, in which the former is objective, whereas the latter is subjective. The quantitative method collects and analyses numerical data using statistical tools to measure phenomena. Instead, a qualitative approach is associated with non-numerical data, such as speech or words, video clips and images for categorising data with other analyses, to produce non-numeric inventions for a deep understanding considering human perception (Collis & Hussey, 2009). The research strategies include interviews, case studies, action research, ethnography, grounded theory, and narrative research. This study employed quantitative methods, such as analysing financial data and non-financial data.

Furthermore, this study used the content analysis technique to extract the data from the annual report to investigate the Shariah governance and Maqasid Shariah disclosure. This study also utilised the function of the BOD as a mediator and the financial ratio to measure the performance of Islamic banks in Malaysia. Content

analysis is a data collection technique by extracting data from existing sources. It is employed to analyse qualitative or numerical data by measuring the extent of the information, such as reporting the annual report or other publications from various firms (Cochran & Wood, 1984).

Disclosure refers to the process of delivering the relevant information to the public or a particular group for investor decision-making based on the information provided, avoiding fraud, and enhancing the stakeholders' confidence. Corporate disclosure is the communication tool to inform the stakeholders of a firm about the firm's financial and non-financial information and activities (Kavitha & Nandagopal, 2011).

This study anticipated the disclosure level of Islamic banks concerning that the Shariah governance is the significant element to the public, especially Muslims, to ensure the compliant status and the shareholders for their decision. Similarly, Maqasid Shariah disclosure shows the effort of Islamic banks towards the public or community through the charity and welfare program. This information might attract the public to respond to the Islamic banks on their business activities, hence, it can influence the performance.

Thus, this study developed the Shariah governance disclosure items to investigate the SC, Shariah audit, Shariah risk, Maqasid Shariah disclosure and the BOD on the performance of Islamic banks in Malaysia. The content analysis technique and data from the annual report were applied in this study, which was widely applied in numerous studies (Razali et al., 2021).

This study utilised a rating scale as the measurement to measure the disclosure. The rating scale was employed to produce a quantifiable information. The numerical rating consists of five categories of scale, ranging from one to five (1-5). These five

categories are consistent with the study by Beest et al. (2009) and Masruki (2016), and the criteria of each rate have been determined (see Table 3.8).

In addition, this study implemented three steps in preparing the data collection. Firstly, determining the Islamic bank's annual report. The annual report has been checked to see the disclosure information's availability based on self-developed disclosure items. Secondly, determining the disclosure items by rating each item based on the availability and the level of information disclosed in the annual report. Shariah governance items were developed based on the SGF 2010 and SGPD 2019, while the Maqasid Shariah items were determined based on the previous study, primarily on the elements of Maqasid Shariah and were integrated with the CSR elements as the study conducted by Arsad et al. (2015) and Razali et al. (2021). The CSR of the organisation is the activities towards the social and sustainability for the social interest. The disclosure of Maqasid Shariah demonstrates that a firm has an emphasis and concern on the Maqasid Shariah, of which the relevant CSR activities show the organisation towards the achievement of Maqasid Shariah. Finally, the developed items were used to collect data by rating each item based on the scoring criteria.

Table 3.2: The Research Method of Study

Objectives	Method
1 To investigate the impact of Shariah governance (SC, Shariah audit, and Maqasid Shariah) on Islamic banks' performance.	- Quantitative - Content analysis
2 To investigate the impact of Maqasid Shariah on Islamic banks' performance.	- Disclosure items - Rating scale (Likert scale 1-5)
3.a To investigate whether the BOD mediates the impact of Shariah governance on Islamic banks' performance.	- Analysing using multivariate analysis (PLS-SEM) using SmartPLS 3.0
3.b To investigate whether the BOD mediates the impact of Maqasid Shariah on Islamic banks' performance.	

Table 3.2 summarises the method applied in this study based on the research objective. As highlighted in the Table, this study is quantitative. The content analysis techniques of disclosure items were applied to investigate the relationship of Shariah governance and Maqasid Shariah disclosure to the Islamic bank's performance. This study developed the disclosure items related to Shariah governance and Maqasid Shariah to show the level of disclosure for each item based on the criteria, which consist of five criteria on a Likert scale. The Likert scale consists of a one to five-point (1-5) score to rate each disclosure item. The data analysis performed in this study used the Partial Least Square Structural Equation Model (PLS-SEM) using SmartPLS 3.0.

3.4.1 Quantitative Research

Quantitative research is related to positivism and relies on a deductive approach, which uses data to test the theory in structured data collection techniques (Saunders et al., 2012). The quantitative data could be obtained from the primary sources, such as survey and secondary sources or the existing sources, such as the company's report. According to Creswell (2014), quantitative research involves collecting, analysing, interpreting, and writing the result of the study.

The quantitative analysis can be divided into two types, namely, descriptive statistic and inferential statistic. Descriptive statistics are used to interpret the overall data to become more concise and comprehensive. Descriptive statistics are also performed to prepare the data collected in a more presentable format using tables and graphs (Masruki, 2016). In this study, inferential statistics were used to see the correlation between the independent and dependent variables. The data for inferential statistics were collected from samples from a large population. In line with the study's objective, the population covered the Malaysian Islamic banks listed by the BNM.

Based on the data and study setting, this study investigated the relationship between the variables. Thus, the multivariate analysis is pertinent in this study. However, the analysis technique would depend on the data or measurement scales used for the current study.

3.4.2 Variables and Measurements

This study used Partial Least Square Structural Equation Modelling (PLS-SEM) for the data analysis tools to complete the objective of this study. Hence, the data were gathered based on the variable presented in Table 3.

Table 3.3: Variables and Measurement

Variables	Measurements	Prior Studies
Dependent Variables:		
Financial Performance		
1) ROA	Profit after tax and zakat / Total asset	Muhammad et al. (2021); Shatnawi et al. (2020); Khan & Zahid (2020); Nomran & Haron (2020); Szegedi et al. (2020); Nurmawati et al. (2020); Elgattani & Hussainey (2020); Aduda et al. (2013); Uwuijbe (2011); Bebeji et al. (2015) Masruki et al. (2018)
2) ROE	Profit after tax and zakat / Shareholder equity	
3) DER	Total liability/ Total equity	
Mediator: Board		
1) BOD Size	Number of BOD in Islamic Banks	Harun et al. (2020); Khan & Zahid (2020); Shatnawi (2020); Muhammad et al. (2021); Shatnawi et al. (2020); Shakir (2008); Uwuijbe & Samuel (2012)
2) BOD Independent	% of indep. from total BOD size	Shatnawi (2020)
3) BOD Meeting	No of meeting held	Shatnawi (2020)
4) No. of Muslim in Board	The total composition of Muslim in Board	Shatnawi (2020)
Independent Variables:		
1) Shariah Governance Shariah Committee (SC)	Likert scale (score 1-5)	SGF 2010 and SGPD 2019 Smith, Yahya, & Amiruddin (2007); Masruki et al. (2018)
Shariah audit		
Shariah risk		
2) Maqasid Shariah	Likert scale (score 1-5)	
Preservation of faith Preservation of life Preservation of intellect Preservation of progeny Preservation of wealth		Ali & Hasan (2014); Asutay & Harmingtyas (2015); Mergaliyev et al. (2019); Mohammed et al. (2015b); Razali et al. (2021); Syafii et al. (2012); Abubakar (2016); Ali & Hasan (2014); Haji (2013a); Mohammed et al. (2008), (2015); Rahman et al. (2017); Syafii et al. (2012); Arsad et al. (2015); Razali et al. (2021)

Table 3.3 indicates the variables, measurement, and sources, and prior studies.

The dependent variable is the financial performance of Islamic banks. This study applied three financial performance indicators, namely, ROA, ROE, and DER. Many

studies using financial measurement as corporate performance indicators, such as Muhammad et al. (2021), Shatnawi et. al. (2020), Ahmed Sheikh et al. (2013), Aduda et al. (2013), Mollah and Zaman (2015), Tariq and Butt (2009), Al-Baidhani (2014), and Siswanti et al. (2017) who contend that profitability becomes one of the important indicators specifically for investor's investments decision-making because profitability is used to determine the company's ability to generate profits, which are also applied by Grassa et al. (2020) in their study. According to Ehikioya (2009), ROA was applied in his study to measure financial performance due to the availability of data and the choice of statistical analysis.

In addition, leverage is one of the indicators of financial ratio applied to indicate the financial status or performance (Grassa et al., 2020). Leverage is considered an essential indicator that various researchers have studied leverage or debt-equity ratio in the past (Dasgupta, 2003). Revealing this information enables the public or stakeholders to evaluate the ability of the firm to pay its debts on time and, in turn, reduce agency costs (Wajeh & Muniza, 2002). However, the level of leverage is different amongst other industries. Differ with other industry, bank industry facing with the high leverage. However, Solihati (2021) opined that the higher the DER, the higher the financing made by the bank to run its business. In contrast for the non-banking industry, the low leverage ratio allows creditors to reduce their pressure to build the trust of the firm's credit to pay debts Masruki et al. (2018). A firm is responsible for disclosing the information despite facing high debt to show transparency with all stakeholders. Moreover, Dasgupta (2003) argues that companies having more debt in their financial structure would disclose more to restore confidence amongst shareholders that their company is doing well.

This study adopted a mediation model to see the indirect effect on the relationship between Shariah governance and Maqasid Shariah with the performance of Islamic banks. The mediating variable assists in finding a clearer understanding between the independent and dependent variables whenever the variables are found no direct correlation, unlike moderating variables, which explain the conditions that lead to an ambiguous association between two variables that are expected to have a strong relationship (Bennett, 2000).

The mediation variable in this study explained the relationship between Shariah governance and Maqasid Shariah as independent variables and financial performance as the dependent variable. This study employed the BODs as mediating variables that consist of BOD size, BOD independence, BOD meeting, and composition of Muslims (Shatnawi, 2020). The size of BOD frequently refers to the total number of BOD, including CEO and chairman, for each accounting year (Shakir, 2008). The BOD size is widely applied in the analysis in both theoretical and empirical research (Srairi, 2015) as one of the factors that influence the effectiveness of an organisation. Concerning the board independent, Clifford and Evans (1997) in a study define the independent director as outside directors, of which this classifies the non-executive director as the number of independent non-executive directors on the board relative to the total number of directors (Bebeji et al., 2015; Ghaffar, 2014; Sheikh & Kareem, 2015). It was applied as a mediator in this study. Isik and Riza Ince (2016) found that board composition is correlated with bank performance in Turkish. Bebeji et al. (2015) revealed that the independent outside directors perform better than others because they must protect their reputation as influential independent decision-makers.

In addition, the number of annual board meetings is related, and it improves the firm's performance (Brick & Chindambaran, 2007). The board meeting is referred to as

the number of board meetings conducted in a year. Gavrea and Stegorean (2007) contend that a higher frequency of board meetings allows better monitoring activities. In Islamic institutions, religious background is a factor that influences an institution performance due to religious background that influences every decision based on beliefs (Nomran et al., 2018a; Shatnawi et al., 2020). It is consistent with the study by Hassan et al. (2015) on board diversity, who contend that religious beliefs are one of the mechanisms that could enhance firm value because diversity forces directors to explain their ideas logically, which leads to a better decision-making. According to Shatnawi et al. (2020), a higher number of Muslim directors on the BODs would result in a higher quality of accounting information than the non-Muslim directors.

The current study employed three Shariah governance mechanisms as independent variables: SC, Shariah audit, Shariah risk disclosure, and Maqasid Shariah disclosure. Shariah governance disclosure is referred to as the disclosure items proxy, as explained by the study conducted by Ramli et al. (2015) and Haniffa and Hudaib (2007). The mechanisms of Shariah governance, namely, SC, Shariah audit and Shariah risk, were based on the SGPD 2019 and SGF 2010 (BNM, 2020). The Shariah governance disclosure measures were constructed by developing the disclosure items based on the guidelines stated in the SGF 2010 and SGPD 2019. It was noticed that adequate internal controls, risk management, accounting, external audit, and transparency might build confidence in the system in corporate governance (Chapra & Ahmed, 2002). Many studies relate the SC function as an essential mechanism in Islamic banks as one of the significant components of Shariah governance (Grassa, 2013). Researchers have highlighted several SC criteria and responsibilities to illustrate the SC as essential elements of Shariah governance's implementation. For instance, academic qualifications are one of the SC criteria to ensure that it fits the Islamic

banking system (Injas et al., 2016). He contends that some of the primary responsibilities are to oversee the Shariah-compliant practice, approve the new product, explain the Zakat calculation, and offer Shariah-compliant solutions in the contracts (Garas, 2010).

Concerning the Shariah audit, this function becomes the attention of Malaysian's IFIs by highlighting several Shariah auditing issues on the framework and scope of qualification and independence's issues (Kasim et al., 2009). The internal audit also emphasises that all issues should be discussed with the management to enable the management to find appropriate ways and means of solution. It is emphasised that the risk management factor might build confidence in the system in corporate governance (Chapra & Ahmed, 2002). Moreover, risk disclosure quality is significantly associated with the institutions (Salem et al., 2019).

Meanwhile, the features of the Maqasid Shariah were taken from the Maqasid Shariah of necessity, which includes five aspects: Preservation of faith, preservation of life, preservation of intellect, preservation of progeny, and preservation of wealth. However, the five aspects of Maqasid Shariah are interpreted in the organisation's vision and the society by combining aspects related to employee well-being, safety and security, social responsibility, the environment, and the community.

Similarly, the items of Maqasid Shariah disclosure in this study are based on the literature includes items that are often applied in previous research (Mohammed et al., 2008; Mohammed et al., 2015; Rusydiana & Al Parisi, 2017; Ali & Hasan, 2014). The characteristics of Maqasid Shariah emphasized in this study are based on factors related to the Maqasid Shariah achievement that is revealed in the annual report of Islamic banks, such as related to sustainability and social welfare (Ahmad & Ishak, 2020; Ahmed & El-belihy, 2017; Arsad et al., 2015; Esen, 2015; Haq & Wahab, 2019;

Schaltegger & Wagner, 2006). For instance, a study conducted by Arini et al. (2020) transformed the elements of sustainability into the Islamic perspective, which translate to Maqasid Shariah achievements.

3.4.3 Content Analysis

Many studies employed content analysis in the study of financial and non-financial industries. Content analysis is a data collection technique by extracting data from existing sources. Content analysis is employed to analyse qualitative or numerical data by measuring the extent of the information, such as reporting the annual report or other publications from various firms (Cochran & Wood, 1984). According to Krippendorff (2004), content analysis is a research method to produce replicable inferences from texts (or other logical material) to the context for their use. The annual report was used as the primary data source of the study since it can provide timely and accurate information to the stakeholder. The annual report was also appropriate in this study because it is an important document that might contribute to its success (Pivac et al., 2017). In addition, the quality of the information in the annual report influences the investors or other stakeholders in decision-making by minimising the information and incentive problem as debated in the agency theory (Healy & Palepu, 2000; Pivac et al., 2017). Thus, this study applied content analysis to analyse the annual report's disclosure of Malaysia's Islamic banks. The content analysis of the annual report was performed to find the information on each item concerning the Shariah governance, Maqasid Shariah, Board, and financial information. The information criteria were derived from prior studies by codifying the qualitative information into categories to derive the quantitative scale.

Numerous studies on Shariah governance and Maqasid Shariah used data sourced from annual reports by exploring various areas and the scope of the study (Nawaz, 2017). A study explored Shariah-compliant disclosure on Malaysian takaful companies reported by the Shariah committee in the annual reports (Abu Kasim, 2012). Meanwhile, Abd Rahman (2015) conducted a study on the Shariah governance disclosure of Islamic banks in Malaysia. Likewise, Darmadi (2013b) also examined the corporate governance disclosure based on the annual report by constructing the corporate governance disclosure items to score the disclosure level of the banks. In addition, constructing the CSR disclosure standard is significant for IFIs as a communication tool between an organisation and the public or other stakeholders (Harahap, 2003; Hassan & Harahap, 2010).

Therefore, this study's content of disclosure items was obtained from the annual report based on self-developed disclosure items by referring to several documents, mainly SGF 2010 for Shariah governance items, and the previous studies specifically for developing the Maqasid Shariah items. The disclosure studies by developing the items are commonly used basically in the study on environmental, CSR and corporate governance, which similar with this study. This study also develops the disclosure items to measure the Shariah governance and Maqasid Shariah.

3.4.3.1 Determining the Disclosure Items

The assessment of the Shariah governance from the annual report was examined for its detailed inclusions and importance, emphasising the presence of the disclosure items. For instance, Majid (2001) developed corporate governance disclosure items based on guidelines or standards, such as the "Guidelines on Corporate Governance for Licensed Islamic Banks" (GP1-i) issued by BNM in 2007, the "Guiding Principles on

Corporate Governance for Institutions Offering Only Islamic Financial Services (Excluding Islamic Insurance (Takaful) Institutions and Islamic Mutual Funds)" (IFSB-3) issued by IFSB in 2006, and the "Governance Standard for Islamic Financial Institutions" (GSIFI) issued by AAOIFI in 2008. The criteria of the disclosure items were obtained from the guidelines, rules, and regulation document as stipulated in SGPD 2019 and SGF 2010 mainly.

Since the SGPD 2019 is still new, empirical studies based on SGPD are still limited, especially in Malaysia. Many studies refer to the international guidelines in developing the Shariah governance disclosure items concerning the Shariah governance study. Thus, since this study was conducted in Malaysia, the Shariah governance guidelines were used by following the guidelines issued by the BNM in developing the Shariah governance disclosure items in the Malaysia context and based on the literature. The selection of disclosure is consistent with the study by Haniffa and Hudaib (2007), Maliah et al. (2015), and Ramli et al. (2015), while this study identified all the criteria of the disclosure items applicable in the SGF as applied by Ramli et al. (2015) in their study. The disclosure items were adapted from the SGPD 2019 and SGF 2010, while other documents, such as IFSA, GP8-I, and prior studies, were also used as references.

Table 3.4: Shariah Governance Disclosure

Shariah Governance Elements	No. of Items
Shariah Committee (SC)	10
Shariah Audit (SA)	9
Shariah Risk (SR)	6

Table 3.4 presents three Shariah governance elements employed in this study: SC, Shariah audit, and Shariah risk. SC contains ten disclosure items, while Shariah audit contains nine items, and Shariah risk contains six items.

Furthermore, the Maqasid Shariah items were developed based on the prior studies considering the Maqasid Shariah achievements and integration with CSR elements. The disclosure information is essential to show the reputability of a company to the public (Ousama & Fatima, 2010); disclosing it to least meet the stakeholders' expectations. A renowned study by Haniffa and Hudaib (2007) explored the disclosure information based on the Islamic ethical framework, such as commitments to society, contributions including *zakat*, charity, and other management information. This disclosure information can be related to the Maqasid Shariah. Meanwhile, in a study on CSR by Hassan and Harahap (2010), there were six objectives of CSR relevant to the Maqasid Shariah concerning the balance of human life, namely, all the business transactions and activities comply with Shariah, the transactions are clear from *riba*, a lawful transaction, build a good relationship with customers and other stakeholders, paying attention to the SC's opinion, emphasising the *zakat* treatment and charity fund, concentrating on the development of social and community's goals, building a good relationship with employees, and balancing between the corporate goal and environmental protection.

Meanwhile, Maqasid Shariah's elements in an organisation perspective are related to management, principles, policies, practices, and responsibilities in an organisation, such as protection of administration to the interest of stakeholders, including employees, customers, shareholders, and government agencies as a study conducted by Al-Beshtawi et al. (2014) on the non-financial performance elements in creating the loyalty and enhancing confidence to their stakeholders. Likewise, Santos and Brito (2004)

included the operational domain, such as customer satisfaction, quality, innovation, employee satisfaction, and reputation as operational performance.

Table 3.5: The Elements of Maqasid Shariah

Maqasid Shariah	Items of Measurement	
Preservation of faith	Product / Service (Riba free)	36 items
Preservation of life	Employees' welfare	
Preservation of intellect	Employees / society development (Knowledge / training for employee)	Sustainability and Social well-being
Preservation of progeny	Stakeholders' right (Shareholders, customers, and employees)	
Preservation of wealth	Contribution to the society (e.g., Charity, zakat, environmental awareness)	

The elements of CSR activities in IFIs are aligned with the Maqasid Shariah (Arsad et al., 2015; Razali et al., 2021). Abubakar (2016) contends that CSR activities are aligned with the Maqasid Shariah. Moreover, CSR activities aim to benefit society by distributing wealth as a charity for needy people, social development, or environmental development (Abubakar, 2016). Meanwhile, the Maqasid Shariah aims for human well-being and sustainability without compromising the welfare and rights of others. Thus, the interpretation of Maqasid Shariah elements is based on the Islamic banking perspective by combining the CSR and stakeholder's elements. Further, this study synthesised these elements from the organisation perspective, the public, and all stakeholders to ensure sustainability and human well-being.

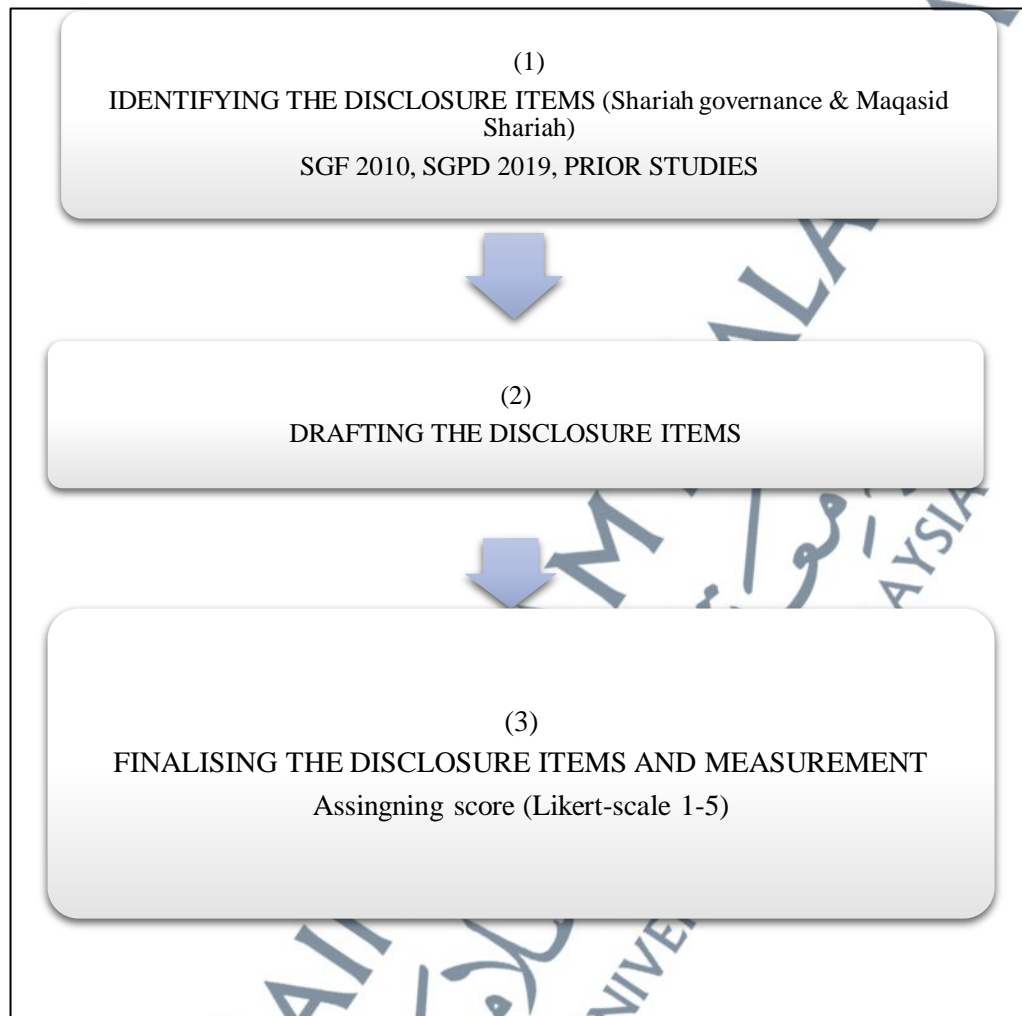
3.4.3.2 Shariah Governance and Maqasid Shariah Disclosure Items Development

The disclosure items vary in terms of the degree of the researcher's involvement in constructing the items, the type of information disclosure, and the number of items

of information included in the items. Besides, the researcher used different measurement approaches to be consistent with their study setting (Hassan & Marston, 2010). The current study developed the Shariah governance disclosure items as a tool of measurement to identify governance and Maqasid Shariah information to investigate the level of Shariah governance and Maqasid Shariah disclosure towards the Islamic banks' performance in Malaysia. The self-developed disclosure items are commonly used in the previous study to examine environmental disclosure, corporate social responsibility disclosure, and corporate governance disclosure (Majid, 2001).

In a different study context, many researchers have studied the Shariah governance disclosure elements, such as SC, Shariah audit, and Shariah risk. Likewise, many researchers examined the Maqasid Shariah disclosure, whether to the performance or on its achievements. This study obtained the data from the annual reports from 2011 to 2019 during the SGF 2010. Since the principle of the SGF 2010 and SGPD 2019 similar, certain element that stated in the SGPD become a reference since the elements in the SGPD 2019 are applicable for the Shariah governance disclosure items in this study. However, any information that not available in the SGF 2010 is not consider for the Shariah governance items even though it stated in the SGPD 2019. Thus, the Shariah governance disclosure items developed based on the SGF 2010 and SGPD 2019 consist of Shariah governance functions: SC, Shariah Audit, and Shariah Risk. Three proxies were adopted in this study by considering the availability of the information disclosed in the annual report (See appendix B1 and B2).

Therefore, the disclosure items were developed based on the prior studies analysis. The relevant items were gathered based on previous studies and placed at the relevant construct of Maqasid Shariah, following the steps of disclosure items development performed in this study.



Source: Adapted from (Majid, 2001)

Figure 3.1: Three Steps Disclosure Items Development

Numerous proprietary disclosure items exist. Many researchers construct their items to meet their own research needs (Hassan et al., 2010). The process of developing the items of Shariah governance and Maqasid Shariah was carried out in three stages. The first step was identifying the disclosure items. The relevant and disclosure items were selected concerning the variables proposed by previous studies, guidelines, and regulations concerning the Shariah governance, which consists of the Shariah governance and Maqasid Shariah. Shariah governance is measured based on the regulation/guidelines and prior studies and classified as mandatory or required to

implement and some of the items required to be disclosed in the annual report. Florou and Galarniotis (2007) argue that no theory is found in determining the disclosure items.

Therefore, consistent with Florou and Galarniotis (2007), this study applied the same approaches and only included the items based on the availability of the information in the annual report in developing the Shariah governance disclosure items. The Shariah governance disclosure items were derived from two prominent guidelines/regulations: SGF 2010 and SGPD 2019, while GP8-I and IFSA were used as references.

The second step of disclosure item development began with examining the quantifiable Shariah governance items in SGF 2010 and SGPD 2019. For Maqasid Shariah items, the analysis of the previous study was conducted to identify the appropriate items concerning the elements of Maqasid Shariah. This element is based on the organisation's perspectives, primarily on the Islamic banking institution's business operation and activities. The items checklist of Shariah governance and Maqasid Shariah were determined based on the availability of the items disclosed in the annual report. It was essential to ensure the availability of the information in the annual report because several items may not be disclosed in this document. After all, the guidelines provided for IFIs are not necessarily mandatory disclosure items.

At the early drafting of the disclosure items, 32 Shariah governance disclosure items and 38 Maqasid Shariah disclosure items were identified in this study. However, several items were dropped due to several issues, such as redundant items, collinearity, and outliers. Thus, this study finalised twenty-five (25) Shariah governance items and 36 Maqasid Shariah items. According to Florou and Galarniotis (2007), the relevant literature concerning the theory in determining the number of disclosure items has not

been found. Thus, this study assumes no rules or resolutions in determining the disclosure items (Majid, 2001).

A total of twenty-five validated Shariah governance disclosure items (see Table 3.6) and thirty-six (36) Maqasid Shariah disclosure items (see Table 3.7). Following self-developed disclosure items in this study, consisting of Shariah governance items and Maqasid Shariah disclosure items.

Table 3.6: Shariah Governance Disclosure Items

Shariah Committee (SC)	
1	Profile of SC, including the name, background and Shariah expertise of the SC members.
2	Duties and responsibilities of SC.
3	Shariah committee meetings are scheduled to be held at least six (6) times annually.
4	The SC must attend at least 75 % minimum attendance requirement of the meetings. The attendance has been disclosed in the annual report.
5	The individual's assessment and evaluation of SC's performance.
6	The Shariah committee attended the relevant training programs.
7	Statement of Shariah committee report.
8	The training on the Shariah-compliant program conducted by SC.
9	SC ensures that the bank is not involved in non-permissible activities/events in the current year, declared in their reporting.
10	The computation of Zakat according to Shariah and declared in the SC report.
Shariah Audit	
1	Rectification plan and follow-up action on Shariah-compliant.
2	Undertake remedial rectification measures to resolve Shariah non-compliance and control mechanisms to avoid recurrences.
3	The Shariah audit communicates the assessment outcome and highlights any non-compliances to the Shariah Committee and the management.
4	An internal Shariah audit ensures that the assessment is conducted continuously on the processes and deliverables and determines that such processes and outcomes satisfy the needs of the Shariah.
5	Audit on Shariah-compliant performed by the internal auditors.
6	The Shariah audit conducted the assessment on the adequacy of Shariah governance practice.
7	A regular Shariah audit is conducted, at least on an annual basis.
8	The Shariah audit verifying that the IFI's key functions and business operations comply with Shariah.
9	The Shariah audit findings have been reported to the Board Audit Committee and Shariah Committee or other related committees.
Shariah Risk	
1	Shariah risk function is performed by representative/risk officers with suitable qualifications (risk management background and experience in the subject matter).
2	Facilitating the process of identifying, measuring, controlling and monitoring Shariah non-compliance risks inherent in the IFI's operations and activities.
3	Formulating and recommending appropriate Shariah non-compliance risk management policies and guidelines.
4	Developing and implementing processes for Shariah non-compliance risk awareness in the IFI.
5	A Shariah risk management process to identify all possible Shariah non-compliance risks.
6	All Shariah non-compliance events are to be reported to the board of the IFI and the bank.

Table 3.6 presents the Shariah governance employed in this study, which consists of three mechanisms, namely, SC (10 items), Shariah Audit (9 items), and Shariah risk (6 items). Meanwhile, Table 3.9 presents the Maqasid Shariah disclosure items employed in this study.

Table 3.7: Maqasid Shariah Disclosure Items

No.	Maqasid Shariah Items
1	The bank provides sufficient information about their business on Shariah-compliant products/services.
2	The banks disclosed all the business transactions conducted based on the Shariah contract.
3	The banks mentioned their responsibility to pay zakat, which consists of the recipient, amount and calculation.
4	The banks disclose their purification planning on the Shariah non-compliant income.
5	The bank has a clear direction in serving the Muslim community's needs.
6	The banks disclose that all the business transactions of the contract were conducted with the contract (uqud) statement.
7	The bank emphasises the welfare of its employees.
8	The bank also includes the right or welfare of its shareholders in its report.
9	The bank takes the initiative to reward its employees for their achievements.
10	The bank discloses the contribution on Employees Provident Fund for employees.
11	The bank highlights their contribution to the SOCSO for their employees.
12	The bank emphasises health and safety lifestyle at the workplace.
13	The bank has maintained a safe working environment.
14	The bank organises the program with the staff, such as staff and employer engagement program (e.g., coffee time, meeting, family day etc.).
15	The bank provides training and development programs to their employees to update and increase Shariah awareness.
16	The bank provides student recruitment programs by providing training modules.
17	The bank provides training on monetary or financial literacy to enhance awareness.
18	Supporting academic programs for school or university by organising workshops or seminars.
19	Knowledge advancement by providing education grants/research.
20	Installing new skills and improvement.
21	Creating awareness of Islamic banking programs for all stakeholders and the community.
22	Enhancing employee's knowledge by providing opportunities in education or training
23	Facilities to access the knowledge (e.g., Library, source of knowledge, reading materials).
24	The bank implements the equal opportunity policy.
25	Employee's appreciation program.
26	Customer's right to access the information.
27	Customer's securities on data privacy.
28	Transparency policy (Information - accessibility for all stakeholders).
29	Consumer's care (via customer service).
30	Promoting human rights.
31	Contribution for charity (sadaqah) (other than zakat).
32	Contribution for waqf.
33	Sponsor for Islamic programmes/events (e.g., forum).
34	Organising environmental awareness program.
35	Sponsoring environmental preservation program.
36	Contribution to the community program.

A total of thirty-six (36) Maqasid Shariah disclosure items are illustrated in Table 3.7. Maqasid Shariah disclosure items (Table 3.7) were developed based on the five elements of Maqasid Shariah of necessity level, namely, preservation of faith, preservation of life, preservation of intellect, preservation of progeny, and preservation of wealth. In developing the Maqasid Shariah disclosure items, this study synthesised several elements related to the organisation's perspective concerning employee welfare, security and safety, social responsibility, environment, and community.

In the third step, this study identified the rating scale and disclosure information to score the level of disclosure. A five-point scale was used to accommodate the need of this study. A five-point scale is just as good as any (Sekaran, 2003, p. 199). The five-point scale was assigned after considering the level of information by comparing the information disclosed in the Islamic bank's annual report regarding the Shariah governance and Maqasid Shariah. The disclosure information from each Islamic bank annual report was compared as guidelines to determine the score based on the level of the information disclosed in the annual report. An analysis of ten Islamic banks has been conducted. The information in the annual report of each bank for each disclosure item guided each score for a rating point.

After assigning the score based on the level of disclosure, it was found that the availability of information level is appropriate for one to five (1-5) point rating scales. The highest information disclosed in the annual report will determine the highest rating score of "5", while the lowest disclosed information will determine the lowest rating of "1". The rating scale method for the current study is the integration of the rating scale and rubric adapted from Beest et al. (2009), Masruki et al. (2018), and Smith et al. (2007) in their studies. There are variations in determining the scale for each point of score, such as three (3) levels of the score for each observation unit, while Wiseman

(1982) and Freedman and Wasley (1990) (as cited in Vourvachis, 2010) employed a four-level item (quantitative Corporate Social Disclosure (CSD) = 3, non-quantitative = 2, general = 1, absent = 0).

On the other hand, Smith et al. (2007) developed the rating system in their study of disclosure by developing and determining the operational definition for the criteria of scores as adopted in this study. The researcher conducted the analysis based on the criteria to determine the score for each item disclosed. The modification involved was in determining the definition of each point of the scale. Table 3.8 provides the scoring criteria for this study.



Table 3.8: Scoring Criteria

Variables	Scale and criteria				
Score and determinant of Shariah governance and Maqasid Shariah	1 (Very weak)	2 (Weak)	3 (Moderate)	4 (Adequate)	5 (Satisfactory)
Criteria of Shariah governance (SC, SA, and SR) disclosure level	Based on the information given, the information is not specified, that it cannot be obtained from the annual report.	Based on the information given, there is a major gap in the Shariah governance disclosure elements, which causes the information to be very limited to obtain.	Based on the information given, there is a minor gap in the Shariah governance disclosure elements that causes information disclosed not completed.	Based on the information given, a lot of information is found, but some is limited and need additional information specified at different places in the annual report.	Based on the information given, the majority of the indicators are in place. The information disclosed is comprehensive and precise.
Criteria of Maqasid Shariah disclosure level	Based on the information given, the information is not specified, and it cannot be obtained from the annual report.	There is a major gap in the Maqasid Shariah disclosure item, the information given is below the stakeholder's expectation	Based on the information given, there is a minor gap in the Maqasid Shariah disclosure. The information given just meets the stakeholder's expectation	Based on the information given, the Islamic banks have met the stakeholder's expectation with additional information.	Based on the information given, the majority of the indicators are in place. The information disclosed is comprehensive and precise.
1) Criteria/Score of BOARD	1	2	3	4	5
BOD size	Not disclosed	1 to 4 persons	5 to 6 persons	7 to 9 persons	Nine and above persons
BOD independent	Not disclosed	Two persons	Three persons	Four persons	Five and above persons
BOD meeting	Not disclosed	Five times and less	6 to 9 times	10 to 15 times	16 times and more
Muslim in BOD	Not disclosed	Two persons	Three persons	Four persons	Five and above

The scoring criteria are divided into three sections based on the three variables using the Likert scale: Shariah governance, Maqasid Shariah, and Board. At the same time, the BOD consists of four different scoring indicators. However, all the scoring scales are consistent with a five-point scale for each item.

3.4.4 Determining the Annual Report Sample

Moreover, the annual report is considered an essential document consisting of financial and non-financial reports as a medium of communication between the firm and its stakeholders (Scaltrito, 2015). Through the annual report, the information can be accessed easily, of which there is the most comprehensive information available to the public (Beretta & Bozzolan, 2004). Moreover, according to Neu et al. (1998), the annual report contains a high degree of credibility, which becomes more significant than other sources of information (Deegan & Rankin, 1996). Meanwhile, this study obtained the annual reports from 2011 to 2019 by retrieving them from the website of each individual Islamic banks.

Before applying the items, identifying feasible annual reports encompassing financial statements and non-financial information was crucial in this study. The annual report is mandatory for Islamic banks; thus, this study has no issue in accessing the annual report, of which all the annual reports were obtained from the websites. However, there are limitations in accessing the annual report of Malaysia Foreign-banks, especially corporate reports. The foreign banks have published the combined report as the international operation. Only the financial report has been published in the Malaysian context as a Malaysian requirement. Thus, the sample of foreign banks needs to be dropped from the sample list due to the Maqasid Shariah and Shariah governance not being reported well in the Malaysian context; this means that the information

disclosed is based on the country's provider. Therefore, after surveying the availability of the information contained in the annual report, this study focused on the Malaysia-own Islamic banks' annual reports, in which there were ninety sets of complete annual reports from the ten population of Islamic banks. Ninety (90) sets of annual reports are based on the nine years from ten Islamic banks (9*10); the range of nine years is according to the implementation year of the SGF 2010. This annual report analysis involved the reports from 2011 to 2019, before the new guideline Shariah governance policy document was issued and took effect on 1 April 2020.

3.4.5 Survey Annual report

The survey of the data was based on the population of Islamic banks. The population is the entire group of people, events, or other things of interest to be investigated (Sekaran, 2003). The sample selection is based on the availability of the annual report from the 16 banks. However, one of the Malaysian Islamic banks, MBSB, and all Foreign-owned banks were excluded due to the lack of corporate reports focusing on the Malaysian perspective. Currently, only the financial reports of Malaysian foreign-own Islamic banks are available in the Malaysian context.

Meanwhile, information such as CSR, Maqasid Shariah elements, human resources, and other information has been reported worldwide by focusing on the country origin of a particular bank. Thus, to avoid bias in the scoring process, the researcher decided to exclude the foreign banks from this study. If included in this study, they would contribute to collinearity and outliers and might affect the result. Similarly, the MBSB was also excluded from this study due to the limited information obtained in their report.

Therefore, this study identified ten Malaysian Islamic banks as of 2021 based on the BNM's 2021 list. Since this study is on the disclosure consisting of the Shariah governance, Maqasid Shariah Board, and the financial information, the annual report is an appropriate document to access all the information. Moreover, the disclosure of Shariah governance was determined based on the SGF 2010, implemented by Malaysian Islamic banks. A total of nine (9) years of annual reports from 2011 until 2019 from ten (10) Islamic banks were analysed in this study. Even though after 2019, new guidelines, namely, the SGPD 2019, were issued for the 2020 effective date, there are several amendments by the BNM, SGF 2010 that remained in the SGPD 2019. The SGPD is superseded by the SGF 2010, which strengthens the oversight accountability of the Board, SC, and several key organs that directly involve Shariah governance in Malaysian's IFIs (Kamaruddin et al., 2020).

The choice of selecting Islamic banks in Malaysia motivated to cover all the Islamic banks listed by the BNM except the MBSB to look at the performance in Malaysian Islamic banks perspectives. Table 3.9 presents the list of ten local Islamic banks in Malaysia.

Table 3.9: List of Local Islamic Banks in Malaysia

No.	Islamic Banks
1	Bank Islam Malaysia Berhad
2	Bank Muamalat Malaysia Berhad
3	Alliance Islamic Bank Berhad
4	Hong Leong Islamic Bank Berhad
5	AmBank Islamic Berhad
6	Maybank Islamic Berhad
7	CIMB Islamic Bank Berhad

Table 3.9 Cont

8	Affin Islamic Bank Berhad
9	Public Islamic Bank Berhad
10	RHB Islamic Bank Berhad

Sources: Bank Negara Malaysia 2021 (BNM, 2021)

A total of ten Islamic banks were identified for this study. Table 3.9 is the list of Malaysian Islamic banks published by the BNM as of 2021. The annual report data for each bank collected from 2011 to 2019 were during SGF 2010.

3.5 Goodness of Measure

3.5.1 Validity

The researcher needed to ensure that the instrument had been developed accurately to measure the variables. According to Sekaran (2003), due to the scale developed being imperfect and frequently prone to errors, this process is crucial to avoid missing some critical dimensions or including irrelevant elements. A better instrument may ensure a better result in the study. Thus, the researcher needs to assess the goodness so that the instrument used is relevant to measure the variables. This goodness assessment involves two processes: Validity and reliability of content analysis (Guthrie & Abeysekera, 2006). According to Sekaran (2003), validity is the process of measuring the instrument so that the study can highlight the issue of authenticity of the cause-and-effect relationship as internal validity and the generalizability to the external environment as external validity. This study used content validity to test the goodness of measure. Content validity is a function to identify how the dimensions and elements of the concept have been defined.

A disclosure item is valid when the items can adequately measure the concept of interest, and a panel of judges can attest to the instrument's content validity (Sekaran, 2013). The research instruments involve a list of disclosure items from a survey in the first stage, thereby addressing the validity issue. The validity process requires the involvement of some experts, including those in the academic field or industry. In the beginning, the current study determined six experts, consisting of three academicians and three practitioners. However, only four validated instruments have been responded by experts (See appendix A1). Table 3.10 shows the validation process of the study.

Table 3.10: Validation Procedure

Validation Process	
1st Stage	Found the experts from industry and academicians Distributed the self-developed instruments to the industry expert and academicians
2nd Stage	Received the feedback First stage feedback and action: Correction and amendment <ol style="list-style-type: none"> 1) The structure of instruments needs the improvement Action: Re-structured the instruments. 2) The instruction for the validators was not explicit Action: Corrected the instruction as suggested by the validator. 3) Some of the statements of disclosure items were not precise Action: Revised the statements of disclosure to more precise Second stage feedback/comment and action: Revising the instrument <ol style="list-style-type: none"> 1) Reference outdated Action: Updated the latest references 2) The scale was not precise Action: Clarified the scale based on the nature of the current study 3) Adjustment needed on the classification of each item Action: Revised and re-arranged the items Third stage feedback and action: Correcting and revising the instruments <ol style="list-style-type: none"> 1) Revise the scale and scoring criteria Action: Revised the scale and scoring criteria to make them clear and understandable to determine the scale of each item/instrument. Revising the determinant of items. 2) Language issue Action: Revised the language/wording
3rd Stage	Finally, the validated instruments were administered for the data collection

The validation process involved three stages. Each stage of the validation process was revised and amended to ensure the instruments were clear, understandable, and rated with the exact point. The comments and recommendations of the instruments were

gathered, and the instruments amendment was based on the expert's suggestions and recommendations.

3.5.2 Reliability of the Instrument

Reliability is the assessment tool for consistency and repeatability in whatever concept it is measuring. It indicates to what extent it is without bias or error-free. The reliability process indicates the stability and consistency of the instrument to assess the goodness. The reliability test was performed to measure the inter-items consistency and inter-rater consistency. The inter-items consistency was performed by testing the Cronbach's coefficient alpha (Chronbach's alpha), which was used for multi-scale items. Meanwhile, the inter-rater reliability tests are the consistency of the judgement of several raters on how they review a phenomenon or interpret some responses (Sakaran, 2003, p. 205).

The reliability of the disclosure items was addressed by performing a pilot study to measure Cronbach's alpha, while inter-rater consistency was performed by the researcher and an independent researcher. The researcher conducted a pilot test using four years of Islamic banks annual reports from three banks, consisting of sampled annual reports for 2012, 2013, 2014, and 2015. Meanwhile, the inter-rater consistency test was performed to ensure consistency in scoring the disclosure items. The scoring consistency was examined in the pilot study to compare the result between a researcher and independent researchers, designated as Researchers A and B, respectively. The score results of Researchers A and B were compared. The following subsection provides the details of the results of the pilot test.

3.6 Pilot Test

This study had performed the test of reliability and consistency of a measure. The purpose of the pilot test was to determine whether the instruments developed to examine the opinion of financial analysts and accountants are clear, excellent, and comprehensive enough to use in the actual study (Htay et al., 2013). The following are the results of the reliability test.

3.6.1 Reliability Test

The reliability of a scale is highly dependent on the sample that is used in a study. It may be better to calculate and report the mean of inter-item correlation for the items to ensure that each scale is reliable with a particular sample. According to Pallent (2005), the rule of thumb of Cronbach alpha coefficient of a scale should be above 0.7 as Nunally (1978) recommended. The results of the reliability test are presented in Table 3.11.

Table 3.11: Reliability Results

Variables	Number of items	Cronbach's alpha
Shariah governance mechanisms:		
Shariah Committee	7	0.709
Shariah audit	5	0.742
Shariah risk	6	0.813
Maqasid Shariah	6	0.766
Board of Director (BOD)	8	0.715

Note: n = 40 (40 annual reports for pilot study).

Table 3.11 shows that the coefficient alpha for all items is more than 0.7. Shariah governance mechanism's items show coefficients ranging from 0.709 to 0.813, whereas for Maqasid Shariah, the coefficient alpha is 0.766, and for the Board, the coefficients show 0.715. These results indicate that the disclosure items are reliable and acceptable for further data collection.

3.6.2 Consistency Test

A consistency test is an assessment to ensure that the score given by the primary researcher is consistent and valid. This study applied three assessments to ensure the data collection rated was highly consistent. Firstly, the researcher had familiarised herself with the annual reports by reading them at least twice to ensure that the analysis process would be more reliable (Haji, 2012b; Milne & Adler, 1999). Secondly, only the researcher coded all the annual reports based on basic coding rules constructed to ensure reliability and validity (Haniffa & Cooke, 2005). Thirdly, the researcher rechecked the rated disclosure items for each annual report. Fourthly, the consistency test of the scoring scheme assessment, which involved two researchers (A and B), was conducted to compare the scores given by the two researchers (Masruki, 2016).

The researcher and an independent researcher performed the consistency test to score each disclosure item, designated by Researcher A and Researcher B. This pilot was set and performed on two annual reports for 2017 and 2018. The scores of the disclosure items were compared between Researcher A and Researcher B to see the scoring consistency. The score is consistent if there is no significant difference between the score coded by Researcher A and Researcher B. The score results of annual reports, Shariah governance, and Maqasid Shariah were compared, and the scores obtained by Researchers A and B were similar. A t-test reported no significant difference ($p\text{-value} = > 0.05$) between Researcher A and Researcher B's scores, indicating that the developed disclosure items are reliable for application (see Appendix A2).

3.7 Data Analysis Tools

This study used the SPSS for the data cleaning procedure and descriptive analysis and converted the file to a subsequent analysis. This study used the SmartPLS

Multivariate analysis using the SmartPLS 3.0 software to analyse the final data. It is noticeable that this tool consists of two assessments, namely, the measurement model and the structural model. In this assessment, all the items need to meet the threshold values of each assessment.

Several statistical tools can be used to achieve the objective of the study. This study adopted the Structural Equation Model (SEM) to investigate the relationship between endogenous and exogenous variables. It is a combination of path modelling or multiple regression and factor analysis. SEM is the second-generation multivariate data analysis method often used in social science research to test the theoretically supported linear and additive causal models (Chin; Haenlein & Kaplan; Statsoft as cited in Wong, 2013). The second-generation analysis refers to the SEM's ability to test multiple regression or equations simultaneously instead of testing the multiple regression by using the SPSS in the first-generation analysis (Bagozzi & Fornell, 1982; Ramayah et al., 2018, p. 3). This study applied the SEM-PLS, which focuses on analysing variance using SmartPLS.

SEM consists of two interrelated models: Measurement and structural models (Ramayah et al., 2018, pp. 81 & 141). The measurement model, also known as confirmatory factor analysis (CFA), defines the constructs or latent variables that the model uses and allocates observed variables to each. The assessment for the measurement model goes through two steps. Since all the constructs in this study were modelled as reflective, the measurement model test assessed the convergent and discriminant analysis. This assessment was carried out repeatedly until it reached the threshold value.

The structural model, also known as path analysis, defines the latent variables' hypothetical relationship (Hair et al., 2006). The structural model enables the researcher

to determine the model's capability to predict one or more target constructs (Hair et al., 2017).

Furthermore, this study applied the PLS SEM for following reasons (Hair et al., 2018):

- 1) When the analysis is concerned with testing a theoretical framework from a prediction perspective.
- 2) When the structural model is complex and includes many constructs, indicators and/or model relationships.
- 3) When the research objective is to better understand increasing complexity by exploring theoretical extensions of established theories (exploratory research for theory development).
- 4) When the path model includes one or more formatively measured constructs.
- 5) When the research consists of financial ratios or similar types of data artefacts.
- 6) When the research is based on secondary/archival data, which may lack a comprehensive substantiation on the grounds of measurement theory.

3.7.1 Measurement Model Assessment

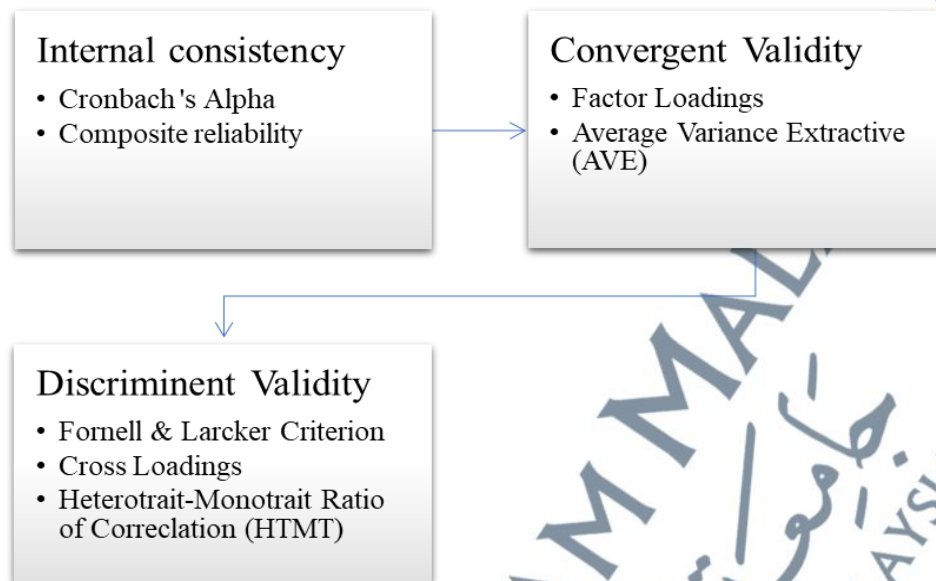


Figure 3.2: Reflective Measurement Model Assessment

The SmartPLS initiated with a measurement model breaks into a confirmatory factor analysis (CFA) and confirmatory composite analysis (CCA). CFA analysis refers to confirmatory factor analysis (Ramayah et al., 2018, p. 3). The metrics applied in the CFA for the measurement model were: 1) Internal consistency (reliability) to determine the construct reliability, such as Cronbach's alpha and Composite Reliability values, 2) Convergence validity to assess convergent validity involves the value of Average Variance Extracted (AVE) and the value of Outer loading (item loading), and 3) discriminant validity for reflective indicators involves three criteria, namely, (i) Cross-loading value, (ii) Fornell-Larcker, and (iii) Heterotrait-Monotrait Ratio of Correlation (HTMT). Meanwhile, the CCA in the measurement model consists of convergent validity and collinearity VIF.

3.7.2 Structural Measurement Model

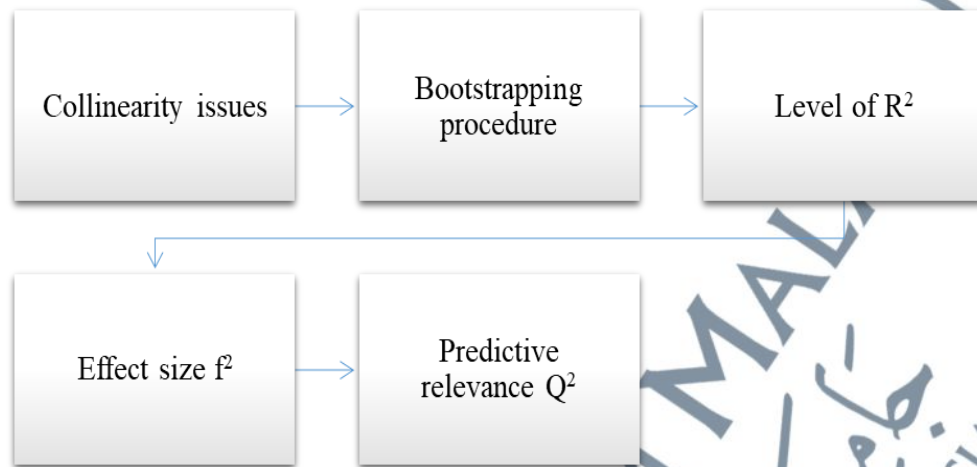


Figure 3.3: Structural Model Assessment

Figure 3.3 presents five steps for the structural assessment model involved in this study. The structural model requires assessing collinearity, the significance and relevance of the structural model relationship, examining the coefficient of determination (R^2), assessing the effect size, and assessing predictive relevance Q^2 . The path coefficients between latent variables were assessed to confirm or disconfirm each hypothesis and the relationship between dependent and independent variables. This study also assessed the mediation relationships proposed in the research model using Hayes (Ramayah et al., 2018). The significance of mediators was tested using the Preacher and Hayes techniques.

3.8 Chapter Summary

This chapter discusses the research methodology and methods before embarking on the empirical investigation. This study is descriptive and has hypothesis testing using the inductive approach. This study developed the disclosure items based on the

guideline and the analysis from the previous study. Thus, the content analysis and disclosure items adopted in this study were based on the self-developed disclosure items. The disclosure items were used to measure the extent and quality of disclosure. A five-point rating scale was assigned to score the level of annual report disclosure of each item. At least three experts have validated all the disclosure items. Before proceeding to the actual analysis, the data had been fixed for the pilot test, which indicates that the Cronbach's alpha shows more than 0.7, indicating that the disclosure items are reliable and acceptable for further data collection.

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