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Supervision, Corporate Governance and Macroeconomics Influence on Islamic Bank Risk in Indonesia

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Abstract

This study aims to find out; (1) the effect of Supervisory Variables on Sharia Bank Risks, (2) the influence of Corporate Governance Variables on Islamic Bank Risks, (3) the influence of Macroeconomic variables on Islamic Bank Risks, (4) supervision of moderating Corporate Governance on Islamic Bank Risks, and (5) supervision of moderating Macroeconomics on Sharia Bank Risks. This research uses quantitative research methods with a descriptive approach. The data used is secondary data obtained from the IDX, Bank Indonesia, and Islamic bank websites selected as research samples. The results showed that the variables of supervision, corporate governance, and macroeconomics have a significant effect on the risks of Islamic banks. In addition, the results of the study also show that supervision moderates the relationship between corporate governance and Islamic bank risks, as well as between macroeconomics and Islamic bank risks. In the context of Islamic bank risks, supervision is very important to minimize risks that can threaten the business continuity of Islamic banks. Corporate governance and macroeconomic conditions also affect the risks of Islamic banks. Therefore, Islamic bank management must pay attention to these factors in making strategic decisions to reduce the risks of Islamic banks and ensure sustainable business continuity

Keywords: Supervision; corporate governance; macroeconomics; Islamic bank

1. INTRODUCTION

The development of Islamic banks is currently supported by the stability of financial performance, this is supported by several products and systems that exist in these banks, one of the products of Islamic banks is financing, and to see the development of financing is good or not, it can be seen from the risks that occur, namely non-performing financing (NPF) (Mustamin et al., 2020).

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Non Performing Financing (NPF) or non-performing financing is one of the key indicators to assess the Bank's Risk level (Hadiyati & Aditya Baskara, 2013). If non-performing financing increases, the risk of decreasing profitability is even greater. If profitability decreases, the bank's ability to expand financing decreases and the rate of financing decreases. The following is Non-Performing Financing (NPF) data for the last 6 years

Table 1. Data on Non-Performing Financing (NPF) 2015-2020

No	Indicator			Year			
		2015	2016	2017	2018	2019	2020
1	Non-performing financing	4.84	3.49	2.11	2.15	2.30	3.00

Source: ojk.go.id

Based on table 1, it can be seen that NPF fluctuations occurred from 2015 to 2020, namely 4.84 in 2015, then 3.49 in 2016, then 2.11 in 2017 then 2.15 in 2018, then 2.30 in 2019 and 3.00 in 2020. To find out the factors that influence problematic financing, it is necessary to look at the impact of supervision and Corporate Governance as well as the macroeconomic effect on Islamic bank risk and supervision as a moderation of the influence of Corporate Governance and macroeconomics on Islamic bank risk (Ferdyant, 2014).

The risk theory put forward by Vaughan states that risk is the chance of loss usually used to indicate a situation where there is an opportunity for loss (Marginingsih, 2017). Then the risk of possible loss which is causing a loss if not immediately resolved and risk is uncertainty due to the uncertainty of various activities, while the risk according to Philip Best's theory is a loss financially, either directly or indirectly. In this study, it is discussed about bank risk, namely exposure to the change of loss.

The theory of corporate governance put forward by Stewarship states that managers in managing organizations are not concerned with individual goals but rather the interests of the organization, corporate governance of companies must be in accordance with company performance which in this case needs to be seen from various agency theories, stewardship theories, resource dependency theories.

Keynesian Macroeconomic Theory states that the macro situation of an economy is determined by what happens with the aggregate demand of society. If aggregate demand exceeds aggregate supply (produced output) in that period, there will be a situation of production shortage. Bank risk is exposure to the possibility of loss (exposure to the change of loss). Risk can be interpreted as a consequence of a choice that contains uncertainty, with

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the potential to produce unwanted results or other negative consequences experienced by the decision maker (Wahyudi et al., 2015).

From this definition, risk has several dimensions: opportunity cost, potential loss, uncertainty, and receiving results that are not as expected. Risk is also not related to the size of the costs that must be borne by individuals or institutions. In risk management terms, the expected cost of a loss or expense. The real kind of risk is an expense that occurs suddenly through an unforeseen way, immediately eroding previously accumulated wealth. The two terms, expected and unexpected loss, are two important concepts that are often used in implementing risk management, especially with regard to measuring each type of risk. People can identify, estimate, calculate, and reduce expected losses, but fail to anticipate unexpected losses. Events that cause unexpected losses are rare, but when they do occur the negative effects are large and can cause substantial losses. Rare events causing unexpected losses are usually considered unthinkable before they occur.

The essential elements of the supervisory process are a systematic effort to set performance standards and planning objectives design information systems, feedback, compare actual activities to predetermined standards Clinical supervision is an individualized learning process for supervisees working with clients (Zack, 2020). Knowledge of supervision models is considered fundamental to ethical supervision practice. There are three main supervisory models which are presented below. These are: (1) the development model, (2) the integrated model, and (3) the specific orientation model.

Theories of corporate governance namely: Agency theory namely Agency theory defines the relationship between principals (such as company shareholders) and agents (such as company directors) (Naciri, 2008). According to this theory, company principals hire agents to do work.

The principal delegates the work of running the business to directors or managers, who are agents of the shareholders. Shareholders expect agents to act and make decisions in the best interest of the principal. In contrast, agents need not make decisions in the best interests of the principals. Agents may succumb to self-interest, opportunistic behavior and not meet the principal's expectations. The main feature of agency theory is the separation of ownership and control. The theory stipulates that people or employees are held accountable in their duties and responsibilities. Rewards and Punishments can be used to improve agent priorities.

In conventional economic theory, macroeconomics is a science that studies behavior as a whole (aggregate) or studies the relationship of aggregate economic variables, such as

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national income, household expenditure, national investment, money supply, unemployment rate, interest rate, SBI interest rate, inflation, rupiah exchange rate and other aggregative variables (Bloch, 2017).

Macroeconomics explains economic behavior in aggregate, and to study economic conditions as a whole so that it will focus on economic behavior and policies that can affect a situation. 1 This macroeconomic condition can be seen through three important macroeconomic variables, namely: real gross domestic product (real gross domestic product = GDP), inflation rate, and interest rate.

2. METHOD

The research method used in this study is a quantitative research method with a descriptive approach (Creswell & Creswell, 2017). The data used is secondary data originating from the IDX website, Bank Indonesia and Islamic Banks, each Islamic Bank. The population in this study are all Islamic Public Banks (BUS) registered with Bank Indonesia in the 2011-2020 period and which have published their financial statements on the online sites of Bank Indonesia and the Financial Services Authority (OJK). The sample specified as respondents in this study were 8 Islamic Commercial Banks. By using annual reports from 2011 to 2020.

The following table shows the number of Islamic banks during the 2011-2020 period of 8 consisting of Bank Muamalat Indonesia, Bank BCA Syariah, Bank BNI Syariah, Bank BRI Syariah, Bank Bukopin Syariah, Bank Mandiri Syariah, Bank MayBank Syariah, and Bank Panin Syariah

Table 2. List of Islamic Banks for the 2011-2020 period

No	Bank Name
1	Bank Muamalat Indonesia
2	Bank BCA Syariah
3	Bank BNI Syariah
4	Bank BRI Syariah
5	Sharia Bukopin Bank
6	Bank Mandiri Syariah
7	Bank MayBank Syariah
8	Bank Panin Syariah

Source: processed secondary data (2021)

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Structural Equation Model Analysis (SEM) SEM is an integrated analytical technique between confirmatory factor analysis, path analysis and structural models. SEM is usually used to study causal relationships between latent variables. SEM has high flexibility in combining theory and empirical knowledge by modeling errors in observations, combining theory and empirical analysis, confirming theory with data (hypothesis testing) and developing theory and data (theory building).

2.1 Partial Least Square (PLS)

The PLS approach is distribution free (does not assume a particular distribution of data, it can be in the form of a nominal scale, category scale, ordinal scale, interval scale and ratio scale). PLS provides a model that has a closer fit to the observation results, as well as a general model that includes canonical correlation techniques, redundancy analysis, multiple regression analysis, Multivariate Analysis of Variance (MANOVA) and Principal Component Analysis (PCA). 4.5.4 SEM with WarpPLS Approach WarpPLS analysis is a development of Partial Least analysis

Square (PLS). PLS was developed as an alternative for research with a weak theoretical basis or indicators that do not meet the reflective measurement model. In PLS it is possible to carry out structural modeling using reflective and formative indicators. PLS can be applied to all data scales, does not require many assumptions, and can be used on small sample sizes making it a powerful analysis. PLS is commonly referred to as variance-based SEM. If there is a problem with a weak theoretical basis, then PLS is a more appropriate approach because it is for prediction purposes. The focus of analysis on the PLS approach shifts from only parameter estimation and estimation to the validity and accuracy of predictions because it is based on a shift in analysis from estimating model parameters to estimating relevant parameters. WarpPLS is a method for analyzing variant-based SEM models or PLS. WarpPLS software is also equipped with an analysis of moderating variables using the interaction variable approach.

2.2 Assumptions in SEM with the WarpPLS Approach

The assumptions in SEM analysis can only be used for structural models where latent variables have reflective indicators, SEM analysis with the WarpPLS approach can be used for structural models where latent variables have reflective and formative indicators. The WarpPLS method can also be used for non-recursive models, as well as for non-linear model

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analysis. In addition, the WarpPLS analysis is also equipped with non-linear models, namely the U-curve and S-curve models (Sigmoid model).

2.3 Data Collection Procedures

Data collection is done by observation and documentation. The observation method is systematically observing and recording the symptoms that appear on the object of research. Observation is data collection methods using observations of research objects that can be implemented directly or indirectly. Documentation is secondary data stored in the form of documents or files (conventional and electronic records), books, writings, reports, meeting minutes, magazines, newspapers, and so on. Documentation data collection methods are used in order to fulfill the data

2.4 Data analysis technique

Data analysis method is a method used to process research results in order to obtain a conclusion. By looking at the theoretical framework, the data analysis technique used in this study is path analysis using the Structural Equation model with the PLS 7.0 warp program. can identify and estimate the relationship between latent variables whether the relationship is linear or non-linear. Comprehensively, the data analysis method in this study is as follows:

2.5 Descriptive Statistics

Descriptive statistics are research which is a transformation in research in tabulation form so that it is easy to understand. Descriptive statistics will provide an overview or description of a data obtained from the average value, standard deviation, maximum, minimum, sum, range, kurtosis and skewness. To find out the description of a data, in processing research data, researchers used the Warp PLS program. In this research, descriptive statistics will be carried out on the research data. The description of the research data includes a description of the variables, indicators and research instruments along with their characteristics.

2.6 Hypothesis Test

After carrying out various evaluations, both the outer model and the inner model, we then carry out hypothesis testing. Hypothesis testing is used to explain the direction of the relationship between the independent variable and the dependent variable. This test is

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carried out by means of path analysis (path analysis) on the model that has been made. SEM techniques can simultaneously test complex structural models, so that the results of path analysis can be known in a single regression analysis. The results of the correlation between constructs are measured by looking at the path coefficients and their level of significance, which is then compared with the research hypothesis. In this study, there is a 5% chance of making the wrong decision and a 95% chance of making the right decision. The following are used as the basis for decision making:

p-value ≥ 0.05, then H0 is accepted.

p-value < 0.05, then H0 is rejected and Ha is accepted.

Information:

p-value: probability value (opportunity value or probability value) or a value that indicates the opportunity for a data to be generalized.

Hypothesis testing was processed using SEM (Structural Equation Modeling) with the WarpPLS 7.0 program. SEM analysis techniques using the WarpPLS program, namely:

1) Open/create project file,
2) Raw of the data,
3) preprocess data,
4) Define of the variables and links in SEM Model,
5) Perform/view SEM analysis/results.

There are several steps in WarpPLS SEM testing which can be described as follows:

1) Developing Models

Based on Theory This stage is related to the development of hypotheses (based on theory) as a basis for connecting latent variables with other latent variables, and also with indicators. Basically, SEM is a confirmatory technique that is used to test causality relationships where changes in one variable are assumed to result in changes in other variables based on existing theory. Theoretical studies are used to develop models that serve as the basis for the next steps.

2) Compile a Path Diagram

The theoretical framework model that has been built is then transformed into a path diagram to describe the causal relationship between exogenous variables and endogenous variables.

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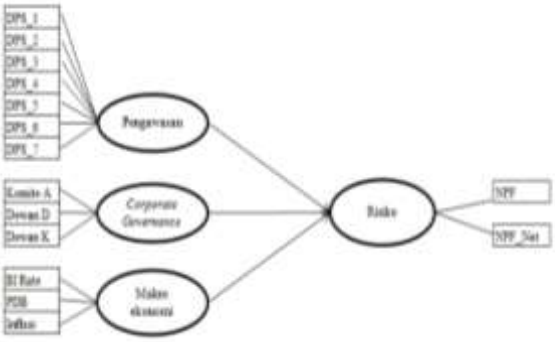

Figure 1. Variables relationship analysis

After being processed using the PLS Warp, the image of the Path Analysis of Relationships between Variables:

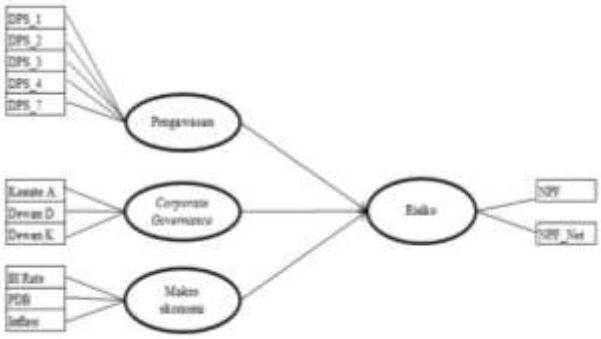

Figure 2. Variables relationship processed analysis

Based on the picture above, the SEM model can be produced as follows:

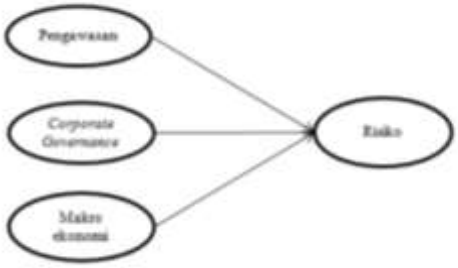

Figure 3. Path analysis of the relationship between variables after being processed

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After being processed with a direct variable, it is then processed using a variable moderation and the results are as follows:

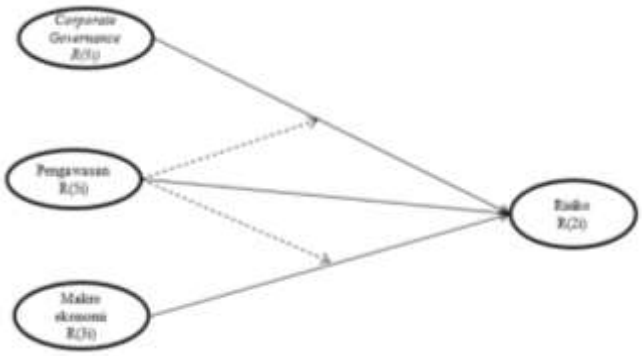

Figure 4. Path analysis of the relationship between variables after being processed using the moderating variable

Based on the Figure above, the research exogenous latent variables are Supervision, Corporate Governance, Macroeconomics, while the endogenous variables are Islamic Bank Risk.

3) Assessing Model Criteria

Fit The fit test between the theoretical model and empirical data can be seen at the level (Goodness-of-fit statistic). A model is said to be fit if the covariance matrix of a model is the same as the covariance matrix of the data (observed). The fit model in the WarpPLS 7.0 program can be seen from the general results output for judging based on the fit indices and P values model showing the results of ten fit indicators, namely:

a) The average path coefficient (APC) has a P< 0.05.
b) The Average R-Squared (ARS) has a P< 0.05.
c) The Average Adjusted R-Squared (AARS) has a P< 0.05.
d) Average Block Variance Inflation Factor (AVIF) has a value of <; 5 and ideally 3,3.
e) Average full collinearity VIF (AFVIF) has a value of <; 5 and ideally 3,3.
f) Tenenhaus GoF (GoF) has a value of small >=0.1, medium >= 0.25, large >=0.36.
g) The Sympson Paradox Ratio (SPR) has a value of >0.7 and ideally is 1
h) R-Squared Contribution Ratio (RSCR) has a value of >=0.9 and ideally 1
i) Statistical Suppression Ratio (SSR) is accepted if the value is > 0.7.

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3. RESULTS AND DISCUSSION

The data analysis technique in this study used the Warp PLS (Partial Least Square) structural equation model. The use of this analysis technique is used with consideration to test the moderating variable in this study by looking at the feasibility of each indicator used in each variable of this study. The first step in data analysis is carried out by conducting an outer model test on each variable with each indicator to see the feasibility of each indicator through indicator convergence. Then do the inner model test to determine the size of the influence of the path coefficient of exogenous variables on endogenous variables.

Monitoring Variables are proxied by the 7 indicators of statement and testing. Supervision Variables are represented by DPS for each indicator 1 using DPS1 through indicator 7 with DPS 7 and Corporate Governance (CG) Variables are proxied by the Audit Committee, Board of Directors and Board of Commissioners. Testing of the Corporate Governance (CG) variable which has three indicators, namely the Audit Committee, the Board of Directors and the Board of Commissioners is carried out by including all of these indicators in the data analysis so as to form a unified construct which becomes one variable. It is assumed that the Audit Committee, the Board of Directors and the Board of Commissioners are the components that make up the Corporate Governance (CG) variable. Macroeconomic variables are prorated to GDP, The BI Rate and Inflation are carried out by entering all indicators into the data analysis so as to form a unified construct that becomes one variable. The dependent variable is Islamic Bank Risk as measured by NPF and Net NPF. This structural equation model is used to test H1, H2, H3, H4 and H5. In the following, the process of data analysis and inferential statistics is presented using Warp PLS 7.0 to be able to draw conclusions for testing the various hypotheses proposed in this dissertation research:

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Table 3. Process of Data Analysis and Inferential Statistics

	DPS	CG	ME	NPF	DPS* CG	DPS* ME	TYPE	SE	P. VALUE
DPS 1	(0.597)	0.568	0.000	0.000	0.654	-0.050	Reflective	0.568	<0.001
DPS 2	(0.588)	0.297	-0.566	0.305	-0.087	-0.503	Reflective	0.297	<0.001
DPS 3	(0.996)	0.033	0.000	0.000	-0.086	0.022	Reflective	0.033	<0.001
DPS 4	(0.951)	-0.174	0.000	0.000	0.253	-0.037	Reflective	0.174	<0.001
DPS 5	(0.113)	0.235	-0.281	-0.043	0.276	0.364	Reflective	0.108	0.150
DPS 6	(0.240)	0.453	-1.660	0.073	-0.152	1.403	Reflective	0.104	0.012
DPS7	(0.841)	0.174	0.000	0.000	-0.512	-0.030	Reflective	0.174	<0.001
Dewan A	-0.126	(0.563)	-2.019	-0.049	-0.100	2.002	Reflective	0.094	<0.001
Dewan D	0.111	(0.884)	-0.267	-0.042	-0.057	0.276	Reflective	0.085	<0.001
Dewan K	-0.036	(0.765)	1.794	0.084	0.140	-1.792	Reflective	0.089	<0.001
BI RATE	0.039	0.157	(0.774)	0.029	0.078	0.784	Reflective	0.088	<0.001
PDB	0.040	0.229	(0.683)	-0.286	0.082	1.238	Reflective	0.091	<0.001
INFLASI	-0.076	-0.368	(0.758)	0.228	-0.154	-1.917	Reflective	0.089	<0.001
NPF GR	-0.034	-0.192	0.733	(0.864)	-0.069	-0.779	Reflective	0.086	<0.001
NPF NET	0.034	0.192	-0.733	(0.864)	0.069	0.779	Reflective	0.086	<0.001
DPS*CG	0.000	0.000	0.000	0.000	-1.000	0.000	Reflective	0.083	<0.001
DPS*ME	0.000	0.000	0.000	0.000	0.000	-1.000	Reflective	0.083	<0.001

Source: Data processing with PLS, 2022

Based on the table above, it can be seen that DPS 5 and DPS 6 cannot be processed because the data value is below 0.5, this is due to the large number of 0 (zero) in the data so that the value is small, after the DPS 5 and DPS 6 variables are removed, the processing results data is as follows:

Table 4. Process of Data Analysis and Inferential Statistics

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	DPS	CG	ME	NPF	DPS* CG	DPS* ME	TYPE	SE	P. VALUE
DPS 1	(0.597)	0.568	0.000	0.000	0.654	-0.050	Reflective	0.568	<0.001
DPS 2	(0.588)	0.297	-0.566	0.305	-0.087	-0.503	Reflective	0.297	<0.001
DPS 3	(0.996)	0.033	0.000	0.000	-0.086	0.022	Reflective	0.033	<0.001
DPS 4	(0.951)	-0.174	0.000	0.000	0.253	-0.037	Reflective	0.174	<0.001
DPS7	(0.841)	0.174	0.000	0.000	-0.512	-0.030	Reflective	0.174	<0.001
Dewan A	-0.126	(0.563)	-2.019	-0.049	-0.100	2.002	Reflective	0.094	<0.001
Dewan D	0.111	(0.884)	-0.267	-0.042	-0.057	0.276	Reflective	0.085	<0.001
Dewan K	-0.036	(0.765)	1.794	0.084	0.140	-1.792	Reflective	0.089	<0.001
BI RATE	0.039	0.157	(0.774)	0.029	0.078	0.784	Reflective	0.088	<0.001
PDB	0.040	0.229	(0.683)	-0.286	0.082	1.238	Reflective	0.091	<0.001
INFLASI	-0.076	-0.368	(0.758)	0.228	-0.154	-1.917	Reflective	0.089	<0.001
NPF GR	-0.034	-0.192	0.733	(0.864)	-0.069	-0.779	Reflective	0.086	<0.001
NPF NET	0.034	0.192	-0.733	(0.864)	0.069	0.779	Reflective	0.086	<0.001
DPS*CG	0.000	0.000	0.000	0.000	-1.000	0.000	Reflective	0.083	<0.001
DPS*ME	0.000	0.000	0.000	0.000	0.000	-1.000	Reflective	0.083	<0.001

Source: Data processing with PLS, 2022

Table 4 shows the use of data analysis techniques with WarpPLS to assess the outer model, namely convergent validity, discriminant validity and composite reliability. Convergent validity of the measurement model with reflective indicators (indicators are seen as effects of constructs that can be observed/measured) is assessed based on the correlation between the item score/component score estimated with the PLS software. Based on the table above, it shows that of the 7 monitoring indicators projected by DPS, only 5 indicators meet the standard procedures for being a Sharia Supervisory Board.

3.1 Evaluation of the Structural Model (Inner Model)

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Evaluation of the inner model in this study was carried out by looking at the Adjusted R-squared, Goodness of Fit Model, q2 predictive, effect size, and Full Collinearity VIF values and the significance value of the path coefficient

Table 5. Evaluation of the Structural Model (Inner Model)

Model fit and quality indices	Kriteria fit	Hasil model	Keterangan
Average path coefficient (APC)	p < 0.05	0.236	*Good fit*
Average R-squared (ARS)	p < 0.05	0.388	*Good fit*
Average adjusted R-squared (AARS)	p < 0.05	0.364	*Good fit*
Average block VIF (AVIF)	acceptable if <=5, ideally <=3.3	1.067	*Ideally*
Average full collinearity (AFVIF)	acceptable if <=5, ideally <=3.3	1.018	*Ideally*
Tenenhaus GoF (GoF)	small ≥ 0.10, medium ≥ 0.25, large ≥ 0.36	0.464	*Large*
Sympson's paradox ratio (SPR)	acceptable if >=0.7, ideally = 1	0.867	*Acceptable*
R-squared contribution ratio (RSCR)	acceptable if >=0.9, ideally = 1	0.982	*Acceptable*
Statistical suppression ratio (SSR)	acceptable if >=0.7	1.000	*Acceptable*
Nonlinear bivariate causality direction ratio (NLBCDR)	acceptable if >=0.7	0.667	*Moderate*

Sumber: Pengolahan data dengan PLS, 2022

APC has an index of 0.195 with a p value of 0.017. This means that endogenous and exogenous variables have a direct or indirect causal relationship. ARS has an index of 0.418 with a P-value <0.001. ARS is used to measure the accuracy of the path model's ability to describe the effect of one independent variable on a predictive value (the dependent variable).

There is no multicollinearity in this study because the AVIF value which should be ≤ 3.3 has been fulfilled because based on these data the AVIF value is 1,686. Thus, the inner model can be accepted. VIF full collinearity is used to test whether there is a vertical and lateral collinearity problem. Based on the results of the analysis, it is known that the AFVIF value: 1.748 and less than ≤ 3.3. This value indicates that the model is free from vertical collinearity problems, lateral and common method bias. The Average R-Square (ARS) or Q squared (Q2) value is used to assess the predictive validity or relevance of a set of exogenous latent variables and endogenous variables. The output ARS value is 1,000. Q-squared (q2) Predictive Relevance is used to assess the predictive validity or relevance of a set of endogenous latent variables.

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3.2 Convergent Validity Monitoring

Individual reflective measures are said to be high if they correlate more than 0.70 with the construct being measured. Ghozali, (2006) for early stage research of the development of a measurement scale of a loading value of 0.5 to 0.6 was considered sufficient. In this study, a loading factor limit of 0.50 will be used.

Table 6. Convergent Validity Monitoring

Indicator	Original Estimates	Remarks	
DPS holds concurrent positions, only 2 (two) other BUS as Chair of DPS	(0.597)	Valid	Lowest
DPS does not have a political party	(0.588)	Valid	
The frequency of DPS meetings is at least 2 times a year	(0.996)	Valid	Highest
Meeting attendance levels meet the quorum (quorum for meeting)	(0.951)	Valid	
The composition of the DPS consists of 2 (two) people (1 chairman and 1 member).	(0.841)	Valid	

Source: Data processing with PLS, 2021

Based on Table 6, it is known that of the 5 indicators selected to be used to measure the DPS model, all indicators have a loading factor value smaller and greater than 0.5 with the support of a T statistic > 1.96; and the strongest indicator is DPS 1 which is 0.068 (DPS concurrently serves only 2 (two) other BUS as Chair of DPS) and DPS 3 which is 0.906 (Frequency of DPS meetings at least 2 times a year). Thus, of the 7 indicators that are in accordance with the guiding procedures of the Operating Procedures of the Shariah Board contained in the Islamic Financial Services Board (IFSB), which are the Guiding Principles on Shariah Governance System for Institutions Offering Islamic Financial Services, only 5 can be fulfilled, so this must be considered. by the company in receiving DPS at Islamic Banks.

3.3 Convergent validity Corporate Governance

Output outer loading from the Corporate Governance model with the WarpPLS program can be explained as follows:

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Table 7 Convergent Validity Supervision

Indicator	Original Estimates	Remarks	
Number of Audit Board	0.563	Valid	
Total Board of Directors	0.884	Valid	Highest
Total Board of Commissioners	0.765	Valid	

Source: Data processing with PLS, 2022

Based on Table 7, it is known that of the 3 indicators used to measure the Corporate Governance model, all indicators have a loading factor value of more than 0.5 with the support of a T statistic > 1.96; and the strongest indicator is the Board of Directors 0.884 the weakest indicator is the Audit Board 0.563

3.4 Convergent validity of macroeconomics

Outer loading output from the Macroeconomic model with the WarpPLS program can be explained as follows:

Table 8. Convergent Validity Macroeconomics

Indicator	Original Estimates	Remarks	
BI Rate	0.774	Valid	Highest
GDP	0.683	Valid	
Inflation	0.758	Valid	

Source: Data processing with PLS, 2022

Based on Table 8, it is known that of the 3 indicators used to measure the Macroeconomic model, all indicators have a loading factor value of more than 0.5 with the support of a T statistic > 1.96; and the strongest indicator is the BI Rate of 0.774 the weakest indicator is GDP of 0.683

3.5 Convergent validation of NPF

Output outer loading of the NPF model with the WarpPLS program can be explained as follows:

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Table 9. Convergent Validity NPF

Indicator	Original Estimates	Remarks
NPF	0.864	Valid
NET NPF	0.864	Valid

Source: Data processing with PLS, 2022

Based on Table 9, it is known that the indicators used to measure the NPF model all indicators have a loading factor value of more than 0.5 with the support of a T statistic > 1.96; and the NPF indicator of 0.864 it is known that from the indicators used to measure the Supervision, Corporate Governance and Macroeconomic models, all indicators have a loading factor value of more than 0.5 with the support of a T statistic > 1.96; After PLS analysis with conditions where all indicators of the construct meet the requirements of the model. The description of the model after experiencing the model measurement test can be seen as follows:

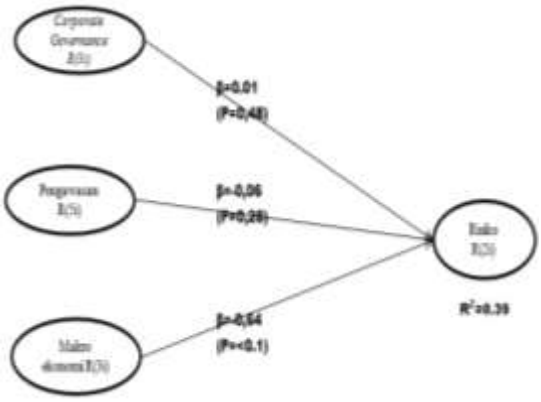

Figure 5. Model Measurement Results

The picture above shows that supervision has no effect on Islamic Bank Risk with a coefficient of 0.01 with a P-Value of 0.48 and Corporate Governance has no effect on Islamic Bank Risk with a coefficient of 0.06 with a P-Value of 0.28 while the Macroeconomic variables have a Significant Negative effect to Islamic Bank Risk with a coefficient of -0.64 with a P-Value <.01. R Square shows 0.39 meaning that this variable affects 39%, the remaining 61% is influenced by other variables.

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3.6 Convergent Validity Corporate Governance with DPS moderation

Output outer loading from the Corporate Governance model with DPS moderation with the WarpPLS program can be explained as follows:

Table 10. Convergent Validity Corporate Governance with DPS moderation

Indicator	Original Estimates	Remarks
CG*DPS	1,000	Valid

Source: Data processing with PLS, 2022

Based on Table 10, it is known that from the indicators used to measure the Corporate Governance model with DPS moderation, all indicators have a loading factor value of more than 0.5 with the support of a T statistic > 1.96; and the CG*DPS indicator is 1,000.

3.7 Convergent Validity Macroeconomics with DPS moderation

Outer loading output from the Macroeconomic model with DPS moderation with the WarpPLS program can be explained as follows:

Table 11. Convergent Validity Corporate Governance with DPS moderation

Indicator	Original Estimates	Remarks
ME*DPS	1,000	Valid

Source: Data processing with PLS, 2022

Based on Table 11, it is known that from the indicators used to measure the Macroeconomic model with DPS moderation, all indicators have a loading factor value of more than 0.5 with the support of a T statistic > 1.96; and the ME*DPS indicator is 1,000. After PLS analysis with conditions where all indicators of the construct meet the requirements of the model. The description of the model after experiencing the model measurement test can be seen as follows:

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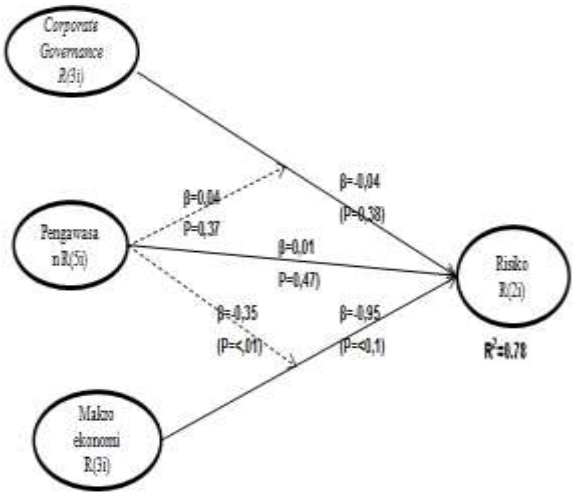

Figure 7. Model Measurement

The Figure above shows that supervision has no effect on Islamic Bank Risk with a coefficient of 0.01 with a P-Value of 0.47 and Corporate Governance has no effect on Islamic Bank Risk with a coefficient of 0.04 with a P-Value of 0.38 while the Macroeconomic variables have a Significant Negative effect on Islamic Bank Risk with a coefficient of -0.95 with P-Value <.01, Supervision moderates Corporate Governance on Islamic Bank Risk has no effect with a coefficient of 0.04 with a P-Value of 0.37 and Supervision variables moderates Macroeconomics on Islamic Bank Risk Negative Significant with a coefficient of 0.35 with P-Value <.01. R Square shows 0.78, meaning that this variable affects 78%, the remaining 22% is influenced by other variables, meaning that the moderating variable strengthens this research.

3.8 Average Variance Extracted (AVE)

The Average Variance Extracted(AVE) value of each construct is required to be above 0.50. AVE values for all variables are:

Table 12. Average Variance Extracted

	(AVE)	Roots Ave	Information
Supervision_X1	0.602	1	Valid
Corporate Governance _X2	0.749	1	Valid
Macroeconomics_X3	0.739	1	Valid

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Risk _Y1	0.864	1	Valid
Corporate Governance *DPS_Y2.1	1,000	1	Valid
Macroeconomics*DPS_Y2.21	1,000	1	Valid

Source: Data processing with PLS, 2022

Based on the table above, the AVE value for the Supervision, Corporate Governance, Macroeconomic and Risk constructs of Islamic Banks has an AVE value above 0.50; means that all variables have a high composite reliability value.

3.9 Goodness of fit models pls

The test on the structural model is the goodness-of-fit model testPLS is measured through the Q-square predictive nrelevance, to measure how well the observed values are produced by the model and also the parameter estimates. The goodness of fit test uses the predictive-relevance value (Q2). The R2 value of each endogenous variable in this study is as follows:

Table 13. R-Square Value

Variable	R Square
Risk(Y1)	0.78

Source: Data processing with PLS, 2022

From the test results above, it can be seen that the following explanation: Supervision, Corporate Governance and Macroeconomics have an Influence on Islamic Bank Risk by 0.78 or 78% and the remaining 22% is predicted to have other variables (not examined) that can increase the Islamic Bank Risk variable.

3.10 Structural Model Testing (Inner Model)

Testing the inner model or structural model is carried out to see the relationship between the constructs of the research model. The basis used in testing the hypothesis is the value contained in the output result for inner weight. In the WarpPLS program, a T-test is carried out on each line. The hypothesis test parameter uses a comparison of the t-value, that is, if the p-value is (<0.05), then H0 is rejected, and Ha is accepted. The results of statistical analysis and testing can be seen in the table below:

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Table 14. Results For Inner Weights

	Original Sample	P Values	Interpretation Mark
Supervision → Risk	0.001	0.47	No effect
Corporate Governance → Risk	- 0.04	0.38	No effect
Macroeconomics → Risk	- 0.95	<0.001	Significant negative
Corporate Governance Supervision Moderation → Risk	0.04	0.37	No effect
Macroeconomic moderation Supervision → Risk	- 0.350	<0.001	Significant negative

Source: Data processing with PLS, 2021

Based on Table 14, it can be seen the positive influence and significance level of each variable, if the P-Values <0.05 means that the exogenous variables have a significant effect on the endogenous variables and if the P-Values > 0.05 then the exogenous variables have an insignificant effect on the endogenous variables.

4. CONCLUSION

Based on the results of the study, it can be concluded that the variables of supervision, corporate governance, and macroeconomics have a significant effect on the risks of Islamic banks. Supervision variables play an important role in minimizing risks that can threaten the business continuity of Islamic banks. Meanwhile, corporate governance and macroeconomic conditions also affect the risks of Islamic banks. Supervision also has an important role in moderating the relationship between corporate governance and macroeconomics to the risks of Islamic banks. Thus, sound and effective supervision can help Islamic banks reduce risks and ensure sustainable business continuity. Islamic bank management needs to pay attention to these factors in strategic decision-making and ensure that supervision, corporate governance, and macroeconomic conditions are carried out properly in order to reduce the risks of Islamic banks and ensure sustainable business continuity.

REFERENCES

Bloch, H. (2017). Schumpeter's price theory. Routledge. Google Scholar
Creswell, J. W., & Creswell, J. D. (2017). Research design: Qualitative, quantitative, and mixed

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

methods approaches. Sage publications. Google Scholar
Elamer, A. A., Ntim, C. G., Abdou, H. A., & Pyke, C. (2020). Sharia supervisory boards, governance structures and operational risk disclosures: Evidence from Islamic banks in MENA countries. Global Finance Journal, 46, 100488. Google Scholar
Elghuweel, M. I., Ntim, C. G., Opong, K. K., & Avison, L. (2017). Corporate governance, Islamic governance and earnings management in Oman: A new empirical insights from a behavioural theoretical framework. Journal of Accounting in Emerging Economies.
Fakhrunnas, F. (2019). The effect of macroeconomic and bank-specific variables to risk-taking of Islamic bank in Indonesia. International Journal of Islamic Economics and Finance (IJIEF), 1(2), 165–186. Google Scholar
Ferdyant, F. (2014). Pengaruh Kualitas Penerapan Good Corporate Governance dan Risiko Pembiayaan terhadap Profitabilitas Perbankan Syariah. Universitas Negeri Jakarta. Google Scholar
Hadiyati, P., & Aditya Baskara, R. (2013). Pengaruh Non Performing Financing Pembiayaan Mudharabah dan Musyarakah pada Bank Muamalat Indonesia. Google Scholar
Halioui, K., Neifar, S., & Ben Abdelaziz, F. (2016). Corporate governance, CEO compensation and tax aggressiveness: Evidence from American firms listed on the NASDAQ 100. Review of Accounting and Finance, 15(4), 445–462. Google Scholar
Marginingsih, R. (2017). Tata Kelola Manajemen Risiko Pada PT Unilever Indonesia, Tbk. Cakrawala: Jurnal Humaniora Bina Sarana Informatika, 17(2), 156–164. Google Scholar
Masood, O., & Ashraf, M. (2012). Bank-specific and macroeconomic profitability determinants of Islamic banks: The case of different countries. Qualitative Research in Financial Markets. Google Scholar
Miskam, S., & Nasrul, M. A. (2013). Shariah governance in Islamic finance: the effects of the Islamic financial services act 2013. Proceedings of World Conference on Integration of Knowledge, 25–26. Google Scholar
Mustamin, A., Ismawati, I., & Trimulato, T. (2020). Analisis Kinerja Keuangan untuk Menilai Keunggulan Bersaing pada Bank Syariah Mandiri Indonesia. Jurnal Hukum Ekonomi Syariah, 3(1), 51–64. Google Scholar
Naciri, A. (2008). Corporate governance around the world (Vol. 1). Routledge London. Google Scholar
Nguyen, Q. K. (2021). Oversight of bank risk-taking by audit committees and Sharia committees: conventional vs Islamic banks. Heliyon, 7(8), e07798. Google Scholar

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Nomran, N. M., & Haron, R. (2020). Shari'ah supervisory board's size impact on performance in the Islamic banking industry: An empirical investigation of the optimal board size across jurisdictions. Journal of Islamic Accounting and Business Research.

Wahyudi, I., Rosmanita, F., Prasetyo, M. B., & Putri, N. I. S. (2015). Risk management for Islamic banks: Recent developments from Asia and the Middle East. Google Scholar

Zacky, A. (2020). Peran Mejelis Pengawas Notaris Dalam Menjalankan Kewenangannya Terhadap Laporan Masyarakat. Otentik's: Jurnal Hukum Kenotariatan, 2(2), 178–203. Google Scholar

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