

DETERMINANTS OF ISLAMIC BUSINESS UNIT REGIONAL DEVELOPMENT BANK MERGER MODEL STABILITY IN INDONESIA

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ABSTRACT

This study aims to analyze the determinants of consolidation strategy based on the evaluation of internal and external factors of the Sharia Business Unit of Regional Development Banks (UUS BPD) and to obtain an equation model of UUS BPD consolidation strategy towards the level of stability. This research uses a quantitative approach with panel data regression. All independent and dependent variables are tested with Ordinary least squares to obtain an equation model from the regression test. The results of the study indicate that the determinants of the results of the merger consolidation model, namely, ROA, LAR, RGEK, IPTIK, and GDP, have a positive effect on the level of stability of the UUS BPD merger model, and concentration (Herrfbdhal Hiermans Index) has a negative and significant effect. However, IM has a positive but insignificant effect, and TA has a negative but insignificant effect. The study's results simultaneously show that the merger consolidation model's determinants affect UUS BPD's stability by 22,50%. By optimizing internal factors (finance, technology, governance) and synergy with economic growth, UUS can be more stable and ready to face financial challenges in the future.

ABSTRAK

Penelitian ini bertujuan untuk menganalisis faktor penentu strategi konsolidasi berdasarkan evaluasi faktor internal dan eksternal Unit Usaha Syariah Bank Pembangunan Daerah (UUS BPD) dan untuk memperoleh model persamaan strategi konsolidasi UUS BPD terhadap tingkat stabilitas. Metode penelitian ini menggunakan pendekatan kuantitatif dengan regresi data panel. Seluruh variabel bebas dan variabel terikat diuji dengan Ordinary least squares untuk memperoleh model persamaan dari uji regresi. Hasil penelitian menunjukkan bahwa determinan hasil model konsolidasi merger secara parsial yaitu; ROA, LAR, RGEK, IPTIK dan PDB berpengaruh positif terhadap tingkat stabilitas model merger UUS BPD, dan konsentrasi (Herrfbdhal Hiermans Index) berpengaruh negatif dan signifikan. Namun, IM berpengaruh positif tetapi tidak signifikan dan TA berpengaruh negatif tetapi tidak signifikan. Hasil penelitian secara simultan menunjukkan bahwa faktor-faktor determinan model konsolidasi merger berpengaruh terhadap tingkat stabilitas UUS BPD sebesar 22,50%. Dengan mengoptimalkan faktor internal (keuangan, teknologi, tata kelola) dan sinergi dengan pertumbuhan ekonomi, UUS dapat lebih stabil dan siap menghadapi tantangan keuangan di masa depan.

INTRODUCTION

The concept of stability is associated with the role of banking as an intermediary sector that manages financial resources from one industry to another, so that funding is in accordance with expectations. Therefore, Islamic banking must maintain its stability in Indonesia's economic situation to gain the community's trust as an intermediary for the chosen financial services. If this condition is maintained, then the process of money circulation and the mechanism of monetary policy transmission in the economy, which mostly occurs through the banking system, will also run well. Regional Development Banks Sharia Business Units, as we mentioned with Sharia Business Unit of Regional Development Banks, in Indonesia, have not experienced a significant increase for three decades, while the distribution of BPD covers 38 provinces in Indonesia, currently, there are only 12 Sharia Business Unit of Regional Development Banks.

The slow growth in the number of Sharia Business Unit of Regional Development Banks is interesting when studied from the perspective of strategic policy choices. This study focuses on the merger strategy of acquisition, liquidation, or consolidation. The growth of Sharia Business Unit of Regional Development Banks (UUS BPD) can be analyzed by dividing it into two parts: internal factor analysis and external factor analysis, so that the determining factors of UUS BPD growth can be identified. Furthermore, the study also observes more deeply the determining factors of UUS BPD consolidation strategies against their level of stability. The measurement of the level of stability used in this study uses Altman's study, namely, the Z-score for companies that have not gone public. The testing of this study uses OLS to obtain an equation model from each regression test. Research on merger strategies as an alternative strategy that can improve the performance of Islamic banks was conducted by Arif et al. (2020), Ahdizia et al. (2018), and Miftah & Wibowo (2017). Currently, twelve UUS BPDs have not decided on their corporate actions. In order for UUS BPDs to be able to carry out their corporate actions to meet regulatory requirements, research is needed that provides an alternative strategy selection as a reference for choosing their corporate actions.

Many factors can affect the stability of Islamic banks in Indonesia, such as the ratio of Islamic bank financial performance, market share, inter-bank competence, government conditions, and macroeconomic variables. Nugroho et al. (2022) analyzed the quality of banks that are merging in terms of resilience and stability, while the resilience elements (capital adequacy ratio and non-performing financing), stability (return on assets, financing to deposit ratio, and capital expenditure ratio). Hakim et al. (2021) concluded that the ROA variable has a negative and significant effect. Nguyen & Pham (2020) showed that stability can significantly increase in companies that use debt management (TATO). Research by Fatoni & Sidiq (2019), Khiswaradewi et al. (2023), Maritsa & Widarjono (2021), Yuwonoputro & Syaichu (2019), and Pamungkas et al. (2021) concluded that NPF has a significant effect on the stability of Islamic banking. Meanwhile, research by Rizqi & Sunarsih (2022), Nugroho et al. (2018), and Susanto & Walyoto (2022) concluded that NPF does not have a significant effect on the stability of Islamic banks. Hamda & Sudarmawan (2023) and Femiliana et al. (2020) showed that NPF, CAR, FDR, BOPO, Inflation, BI Rate, and Exchange Rate simultaneously affect the potential for bankruptcy. Prabowo et al.'s research (2018) with 29 banks listed on the Indonesia Stock Exchange concluded that LAR had an insignificant negative effect on ROA but a significant negative effect on NIM. ROA was positive for financial distress (Kozlowski & Puleo, 2021). Sari & Indrarini (2020) stated that ROA significantly negatively affected stability in Indonesian Islamic banking. Ozili (2017) stated that the loan-to-asset ratio (LAR) captures the credit default risk associated with the bank's loan portfolio.

Banks with excessive loans relative to their assets will face a higher credit default risk and will maintain it. Dwi (2019) stated that the results of financial service technology and intellectual capital significantly affect the stability of commercial banks in Indonesia. Meanwhile, Fajri et al. (2024) show that fintech has a positive effect on market power and a negative effect on the stability of BPR/S. Ghassan &

Guendouz (2019) use the Z-score variable, total assets, loan to asset ratio, operating cost to income ratio, Herrfibdhal Hiermans Index (HHI) to measure bank competitiveness, the ratio of Islamic bank deposits to the total banking sector, while the macro variables are the real economic growth rate, and the inflation rate. The results show that Islamic banks reduce the financial stability index. Bakhouché et al. (2022) use six independent variables to capture the influence of bank structure and business model on bank stability: bank size, liquidity, asset growth, income diversification, cost efficiency, and competition. In addition, we use Z-score for the dependent variable and the Islamic index as a dummy variable. The results show a significant impact of bank-level heterogeneity on bank stability. Prasetyowati (2020) showed that the level of stability of the Islamic banking industry significantly affects the degree of competition. Yudaruddin (2022) showed that the relationship between concentration and bank stability supports the hypothesis. In addition, higher concentration and well-capitalized banks increase financial stability. However, the effect of bank concentration and financial freedom on stability is negative and significant. Fatoni & Sidiq (2019) showed that HHI does not affect the stability of Islamic banking. Heniwati (2019) stated that the GDP variable showed a significant positive coefficient value for Islamic banks (coefficient = 1.612; p-value = 0,000) and a significant negative value for conventional banks. The lack of existing literature suggests that additional studies are required to analyze the determinants of the stability of the Islamic Business of the unit regional development bank (UUS BPD) merger model in Indonesia in conjunction with strategic policy choices to increase competitive Islamic banking.

This study of the stability level of the UUS BPD merger model uses internal factors of bank characteristics, namely internal variables consisting of ROA, total asset (TA), loan-to-asset ratio, net interest margin, risk profile, good corporate governance, earnings, dan capital (RGEK), and Herfindahl–Hirschman index (HHI), obtained from the model's internal variables. External factors consist of technological change (IPTIK), and PDB is obtained from the model of the external significant variables. The stability of the results of the merger of UUS BPD is measured by a Z-score, a higher value that indicates the stability of the merged Islamic bank. In contrast, a lower number indicates instability and a higher tendency for bankruptcy (Cihak & Hesse, 2010). This study is expected to contribute significantly to existing literature to confirm the internal and external variables of UUS BPD for the stability level of the model merger UUS BPD.

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

The theory of financial intermediation discusses one of the functions of banking, where banking has an important role in the country's economy with an intermediary function (Gorton & Winton, 2003; Sumarni, 2021). The function of banks as intermediary institutions, especially in credit distribution activities, plays a significant role in the movement of the economy as a whole and facilitates economic growth. Credit provision is the main bank activity in generating profits, but it poses the most significant risk to banks. One of the reasons for the concentration of bank business in credit distribution is the nature of the bank's business as an intermediary institution between surplus units and deficit units, where the source of banking funds comes from the community so that morally they must channel it back to the community in the form of credit (Allen & Santomero, 1998; Gorton & Winton, 2003; Siringoringo, 2017).

One of the basic frameworks in industrial economic analysis is the relationship between structure-behavior-performance or structure-conduct-performance (S-C-P). The structure of an industry will determine how industry players behave (conduct), which determines the industry's performance. S-C-P are the three main categories for the market structure and competition conditions. Market concentration is the initial indicator used to assess whether a merger or consolidation of business entities occurs. The results of research by Karlsson et al. (2020) in Sweden, Gonzales et al. (2017) in MENA, show that market concentration has a negative effect on the average efficiency of commercial banking. Research by Jumono

et al. (2019) shows that basic conditions, market structure, banking characteristics, and performance significantly affect profitability.

Some research on the determinants of stability in Islamic Bank, among others, is conducted by Joudar et al. (2023) on 31 Islamic banks from 12 countries of MENA (United Arab Emirates, Saudi Arabia, Bahrain, Jordan, Kuwait, Qatar, Yemen, Palestine, Tunisia, Egypt, Turkey and Lebanon) it shown that the CAR and liquidity positive impact the Z-score. Boulanouar et al. (2023) found that institutional variables were positively affected the financial stability of operating Islamic banks in GCG countries. The Result of the study by Mohammad (2020) on operating Islamic banks in GCG countries suggests that CAR and liquidity have a positive and significant effect on banking stability. Inflation has a negative and significant effect, and the stability of conventional and Islamic banks was negatively influenced by a decrease in the GDP in GCC and Non-GCC states Sodokin et al. (2023) in the West African Economic and Monetary Union countries. The studies by Rizqi & Sunarsih (2022) find that credit risk and liquidity risk are negatively correlated with bank stability. Rahmah et al. (2020), Fatoni & Sidiq (2019), Khiswaradewi et al. (2023), Maritsa & Widarjono (2021), and Pamungkas et al. (2021) were conducted on Islamic banks in Indonesia, concluding that NPF has a significant effect on the stability of Islamic banking. Meanwhile, research by Nugroho et al. (2018) concluded that NPF does not significantly affect Islamic banks' stability. Prasetyowati (2020) showed that the level of stability of the Islamic banking industry has a significant effect on the degree of competition. Yudaruddin (2022) showed that the effect of bank concentration and financial freedom on stability is negative and significant. Fatoni & Sidiq (2019) showed that HHI has no effect on the stability of Islamic banking. Meanwhile, Risman et al. (2021) found that digital finance positively impacts stability by increasing the ability to provide financing for bank loans, which tends to experience growth. Ariefianto et al. (2022) show that increased technological adoption and financial inclusion have a negative impact on banking stability and performance.

Yudaruddin (2022) concluded that the inflation variable had a negative but insignificant impact. Rashid et al. (2017) and Warninda (2023) showed that macroeconomic variables affect bank financial stability, such as GDP and inflation. Research by Hamda et al. (2023), and Subakti et al. (2024) shows that partially BI Rate and Inflation have a significant influence on banking stability in Indonesia. Meanwhile, research by Rizqi & Sunarsih (2022) concludes that the variables FDR, Inflation, and BI Rate do not affect financial distress. The previous research shows that the stability of Islamic banks was determined by the Z-score, one of the most well-known financial stability indicators. In this study, there will be several hypotheses, including ROA, TA, LAR and IM affecting the stability level of the Islamic Business Unit Regional Development Bank merger model. ROA measures how efficiently a bank uses its assets to generate profits. A high ROA indicates that the bank is able to manage its assets optimally and generate sizable profits, reflecting healthy financial performance. In the context of stability, more profitable banks tend to have better capital reserves and are better able to deal with economic shocks or market risks, so their level of stability is also higher.

Total assets reflect the size of the bank. Larger banks (with higher total assets) are generally considered more stable as they have larger economies of scale, wider access to capital markets, and better risk diversification capabilities. In many theories, bank size is often associated with financial strength and crisis resilience. However, large size can also mean high complexity, which can potentially add operational risk if not managed well. LAR measures the proportion of a bank's assets used for financing (credit). A high LAR may indicate that the bank is actively lending, which can be a major source of income. As long as credit risk management is done well, this income from loan interest can strengthen the bank's financial position and improve its stability. However, too high a LAR without risk controls can increase exposure to bad debts. Capital Intensity refers to how large a proportion of capital is employed compared to total assets. Banks with high levels of capital intensity are typically better able to absorb losses, deal with

financial risks, and comply with regulatory capital requirements. Strong capital is an important foundation in maintaining bank stability, especially when facing economic pressures or liquidity crises.

Previous studies have empirically examined the relationship between profitability and stability, which is generally positive. This occurs because ROA can potentially increase capital through retained earnings and the proportion of bank capital increases. This increase will cause an increase in the Z-score because ROA and equity are directly proportional components of the Z-score calculation. This is in accordance with research by Xu et al. (2019), Kurniati (2016), Bouvatier et al. (2017), and Kocisova et al. (2018), which states that when profitability increases, banks will be less willing to engage in risk-taking behavior so that financial stability will increase. Dahruji & Muslich (2022) concluded that ROA has no negative effect on financial distress. Likewise, Kozlowski & Puleo (2021) stated that ROA is positive for financial distress. However, the opposite can happen, such as the research of Sari & Indrarini (2020) where ROA significantly negatively affects stability in Indonesian Islamic banking. Prabowo et al.'s research (2018) with 29 banks listed on the Indonesia Stock Exchange concluded that LAR had an insignificant negative effect on ROA but a significant negative effect on NIM. While ROA was positive for financial distress Sari & Indrarini (2020) stated that ROA significantly negatively affected stability in Indonesian Islamic banking. Ozili (2017) stated that the loan-to-asset ratio (LAR) captures the credit default risk associated with the bank's loan portfolio.

H₁: Return of Asset has a positive effect on the stability level of the model merger of the Sharia Business Unit of Regional Development Banks.

H₂: Total Asset has a positive effect on the stability level of the model merger of the Sharia Business Unit of Regional Development Banks.

H₃: Loan to Asset Ratio has a positive effect on the stability level of the model merger of the Sharia Business Unit of Regional Development Banks.

H₄: Capital Intensity positively affects the stability level of the model merger of the Sharia Business Unit of Regional Development Banks.

Hosen et al (2022) showed that the health level of Bank BTPN Syariah studied using the CAMELS, RGEC, and Altman Z-Score methods produced a very healthy rating for the CAMELS and RGEC assessments, as well as a healthy rating for the Altman Z-Score assessment. These three methods are relevant for analyzing the health level of Sharia Banks. Fatoni & Sidiq (2019) showed that HHI does not affect the stability of Islamic banking. Dwi (2019) stated that the results of financial service technology and intellectual capital significantly affect the stability of commercial banks in Indonesia. Meanwhile, Fajri et al. (2024) found that fintech has a positive effect on market power and a negative effect on the stability of BPR/S. Heniwati (2019) stated that the GDP variable showed a significant positive coefficient value for Islamic banks and a significant negative value for conventional banks.

H₅: Good corporate governance, earnings, dan capital has a positive effect on the stability level of the model merger of the Sharia Business Unit of Regional Development Banks.

H₆: Herrfibdhal Hiermans Index has a negative effect on the stability level of the model merger of the Sharia Business Unit of Regional Development Banks.

H₇: technological change has a positive effect on the stability level of the model merger of the Sharia Business Unit of Regional Development Banks.

H₈: Gross domestic product has a positive effect on the stability level of the model merger of the Sharia Business Unit of Regional Development Banks.

RESEARCH METHOD

This research analyzed the bank's quarterly reports for the 12 Sharia Unit Regional Development Bank from 2012 to 2022. The report's sources are the Financial Services Authority, Bank Indonesia, Indonesia Deposit Insurance Corporation, and/ or other Islamic Banking Institutions. List of Sharia Unit Regional

Development Bank (UUS BPD) is as follows: UUS BPD Sumut; UUS BPD Sumbar, UUS BPD Jambi, UUS BPD Sumselbar, UUS BPD DKI, UUS BPD Jateng, UUS BPD DIY, UUS BPD Jawa Timur, UUS BPD Kalsel, UUS BPD Kalbar, UUS BPD Kaltimara, UUS BPD Sulselbar. This research was conducted from January to June 2023.

This research uses a quantitative approach with panel data regression with e-views-10 software. The equation model for the consolidation strategy as an independent variable from internal and external banks is; ROA to measure the level of profitability, TA to measure the Size of UUS BPD, LAR to measure liquidity, IM to measure capital, RGEC to measure risk-based bank rating, and HHI (Herfindahl-Hirschman Index) to measure concentration. The external factor consists of technology (IPTIK) to measure technology update and PDB to measure economic growth. This equation model has a dependent variable, Stability Level, proxied by Z-Score (Cihak & Hesse, 2010). All independent variables and dependent variables are tested with OLS, Fixed Effect Model (FEM) and Random Effect Model (REM) to obtain an equation model from the regression test. The selection of regression specifications is based on the Chow test, the Hausman test, and the Lagrange Multiplier test. At the same time, R Square and F-statistics are used to measure the goodness of fit of the empirical model. Several researchers have used these approaches: Nugroho & Qizam (2014), Mohammad (2020), Ariefianto et al. (2022), and Danisman & Tarazi (2020).

The data set consisted of cross-sectional and time series data (Greene, 2002). The cross-section data are shown by the data consisting of more than one entity (individual). In contrast, any individual with more than one observation period represents the time series data. The regression model tested in this research and the description of the variables will be as follows.

$$Z_{i,t} = \alpha + \beta_1 internal_{i,t} + \beta_2 external_{i,t} + e_{i,t} \quad (1)$$

$Z_{i,t}$ is Z-score; $\beta_1 internal_{i,t}$ is UUS BPK an internal variable; $\beta_2 external_{i,t}$ is UUS BPD an external variable; and $e_{i,t}$ is residual. Model Stability level of Islamic Business Unit Regional Development Bank (UUS BPD) merger model in Indonesia.

$$Z_{i,t} = \alpha + \beta_1 ROA_{i,t} + \beta_2 TA_{i,t} + \beta_3 LAR_{i,t} + \beta_4 IM_{i,t} + \beta_5 RGEC_{i,t} + \beta_6 HHI_{i,t} + \beta_7 IPTIK_{i,t} + \beta_8 PDB_{i,t} + e_{i,t} \quad (2)$$

$Z_{i,t}$ is Z-score; $ROA_{i,t}$ is return on assets; $TA_{i,t}$ is total assets; $LAR_{i,t}$ is loan to assets ratio; $IM_{i,t}$ is capital intensity; $RGEC_{i,t}$ is risk-based bank rating; $HHI_{i,t}$ is Herrfibdhal Hiermans Index; $IPTIK_{i,t}$ is Technology; $PDB_{i,t}$ is Gross Domestic Product; $e_{i,t}$ is Residual.

The Stability level (Z-Score) was adapted from Cihak & Hesse (2010), Apoga et al. (2018), Apriadi (2023), Nugroho et al. (2014), Wibowo (2016). Six items to measure internal variable such as ROA was adapted from SEBI No.13/24/DPNP 2011; Banna et al. (2020); Haq & Harto (2019); TA was adapted from Kastrinaki & Stoneman (2007), Nugroho & Qizam (2014); Riyanti et al. (2016). LAR was adapted from Cihak & Hesse (2010) and Nugroho & Qizam (2014). IM was adapted from Rivandi & Ariska (2019), and RGEC was adapted from SEBI No.13/24/DPNP 2011; Banna et al. (2020); Haq et al (2019); Agustin & Widhiastuti (2021). HHI was adapted from Cihak & Hesse (2010), Apriadi et al. (2017), and Prasetyowati (2020). Two items to measure external variables, such as IPTIK, were adapted from Gemiharto & Robbi (2018), and PDB was adapted from Cihak & Hesse (2010), Nugroho & Qizam (2014), Apoga et al. (2018), Banna et al. (2020), and Mala (2022).

RESULTS AND DISCUSSIONS

The Stability Level of Merger Consolidation of UUS BPD is measured using Z-score indicators. Z-score measures the risk of individual UUS BPD and reflects a bank's strength (Cihak & Hesse, 2010). The analysis of the Z-score indicates that a higher Z-score indicates a stronger stability level of the UUS BPD model merger. If the Z-score had increased, the risk of individual banks declined, and if the Z-score decreased, the risk of individual banks increased. Table 1 shows the descriptive statistics of this research. It can be seen in Table 1 that the average level of stability of UUS BPD (ZScore) is 3,011. This means that most UUS

BPDs are stable. The highest level of stability is 12,287, and the lowest level is -0.934. High variation reflects the outliers, which significantly impact the average Z-score. In comparison, the Z-score standard deviation value is 1,998. The negative value of the minimum value of the stability level of UUS BPD means that some UUS BPD have a high probability of bank insolvency risk. It can be seen in Table 1 that the average proportion of ROA is 1,8%. The lowest and highest proportion of ROA are -1,9% and 8,9% respectively. The standard deviation value is 0.015. The high value of average ROA indicates health because it is > 1,5%, and it is above the average for Islamic banking in Indonesia, namely 1,7%.

The total assets are expressed in thousands. The values of total assets are not in ratio with other variables. That is why the study used the log. The study used the log of the total assets. The average TA is 6,137, and it ranges from 5,004 to 6,952. In comparison, the standard deviation of TA is 0,354. According to Nireesh & Velnampy (2014), firm size (total assets) is the main factor determining a company's profitability, with the usual concept known as the economics scale. Afiqoh et al. (2018) state that company size is used as an internal variable that is thought to affect bank stability positively. Meanwhile, the average Loan asset ratio (LAR) is 65,1%, which ranges between 0% and 566%. In comparison, the standard deviation of LAR is 0,294. The average LAR value of general banks on IDX for 2013-2015 was 66,95setyawatu%, with a standard deviation of 6,733 (Zeuspita & Yadnya, 2019). LAR is a ratio that measures the amount of credit disbursed and the amount of assets owned by the bank. The possibility of interest income obtained by the bank from the distribution of credit will be higher if the amount of credit disbursed by the bank is higher.

Meanwhile, the average capital intensity (IM) is 21,0%, between 1,3% and 183%. While the standard deviation of IM is 0.162, the value of the descriptive analysis result of capital intensity (IM) varies greatly. This is in accordance with research by Sanira & Ratnasari (2024), which found that the capital intensity variable in the banking sector, as registered and published in financial reports on IDX in 2020-2022, produced an average value of 2,10%, which ranges between 0.1% and 5.2%, and the standard deviation value is 0.012. The average value of *Risk Profile, Good Corporate Governance, Earnings, and Capital* (RGEC) is 57,9% (the composite rating "less healthy" based on the OJK regulator) and it ranges between 26,7% and 80%. The standard deviation value is 0.094. According to a study by Mohammad (2020), based on the average final composite score of RGEC 2019, the top five ranking Islamic banks in Indonesia range between 81,14% and 93,71%. The average Herrfibdhal Hiermans Index (HHI) is 0,039, which means a low concentration industry (result is ranging from 101 to 1500 divided by 10.000 or 0,0101 to 0,15) based on US Department of Justice and the Federal Trade Commission (2010) or a monopolistic competition market because HHI is below 0,2 (Prasetyowati, 2020). Which ranges between 0,026 and 0,046. In comparison, the standard deviation of IM is 0,049. This is in accordance with the study by Syamlan et al. (2023), where the province-owned Islamic subsidiary (UUS BPD) HHI value is 0,17. The average value of technology (IPTIK) is 4.996 (low), which ranges between 4.240 and 5.720.

Table 1. Descriptive Statistics

	Average	Maximum	Minimum	Standard Deviation
Zscore	3,011	12,287	-0,934	1,998
ROA	0,018	0,089	-0,019	0,015
Log TA	6,137	6,952	5,004	0,354
LAR	0,651	5,660	0,000	0,294
IM	0,210	1,830	0,013	0,162
RGEC	0,579	0,800	0,267	0,094
HHI	0,039	0,046	0,026	0,049
IPTIK	4,996	5,760	4,240	0,528
Log PDB	3,011	12,287	-0,934	1,998

Table 2. Correlation Matrix

	ROA	Log TA	LAR	IM	RGEC	HHI	IPTIK	Log PDB
ROA	1,000							
Log TA	-0,226	1,000						
LAR	0,083	0,032	1,000					
IM	-0,219	-0,027	-0,072	1,000				
RGEC	0,547	0,020	0,043	-0,080	1,000			
HHI	-0,103	0,269	0,161	0,035	0,007	1,000		
IPTIK	-0,124	0,599	0,009	0,136	0,021	0,032	1,000	
Log PDB	-0,095	0,542	-0,036	0,599	0,027	0,038	0,779	1,000

IPTIK is standard measure of the level of ICT development in region that can be compare over time and between regions. IPTIK (ICT Development index) value is categorized as height (7.51-10.00), Medium (5.01-7.50), low (2.51-5.00), very low (0,0 – 2,50) based on Central Statistics Agency RI. Meanwhile for the average of PDB (GDP) is 3.01 which ranges between -0.934 to 12.287, While the standar deviation of PDB is 1.998. Table 2 presents the correlation matrix of the independent variables used ini this study (The stability Level of Model Merger UUS BPD). Based on Table 2, the correlation between the indepenetet variables are samller than 80%. It shows no problem of multicollinearity in this study or it indicates no multicollinearity problem in this research. Based on the classical assumption test (Chow Test, Hausman Test and Autocorrelation Test), Random Effect Model is the model that is applicable for this research. Table 3 shows the fixed-effects panel data regression result of stability level of internal variable, stability level of external variable and stability level of Sharia unit Regional Development Bank Model merger in Indonesia.

According to the regression result, the value of adjusted R-squared model merger variable is 0.2250. It means that the independent variable of 22,50% can explain the level deposit and the rest is caused by the other variables outside the model. The variables internal that significantly influence the deposit level at 5% significant level include ROA, LAR, RGEC and HHI; however, TA and IM are insignificant. The variables external that significantly influence the deposit level at 5% significant level include IPTIK and PDB.

Table 3. Regression Result The Stability Level of Model Merger of UUS BPD

	Coeffisien	Standard Deviasion
Constant	-25,680	9,390
ROA	34,520*	10,649
Log TA	-0,356	0,633
LAR	1,108*	0,400
IM	1,019	0,775
RGEC	6,694*	1,574
HHI	-1,312*	0,470
IPTIK	1,370*	0,374
PDB	3,753*	1,680
R-Squared	0,225	
Adjusted R-Sq	0,213	
F-Statistik	18,839	
Prob. (F-Stat)	0,000	
No. Of Obs	528	
Model	REM	

It can be seen that the ROA variable has a significant and positive effect at the 5 percent level ($\alpha = 5\%$), meaning that if the ROA of the merged BPD UUS increases by 1 %, the level of stability (Z-Score) will increase 34.519 by standard deviations from the average. In other words, if there is an increase in 1% ROA, the risk of bankruptcy or default faced by the BPD UUS resulting from the merger of all BPD UUS will also decrease 34.519 by standard deviations from the average. The significant increase in stability reflects that BPD UUS, which is able to optimize efficiency in generating profits from its total assets, will have a healthier and more stable financial structure. This is because a high ROA reflects effective managerial performance in managing assets, so potential losses or financial pressures can be minimized.

The implication is that ROA improvement strategies, such as operational efficiency, financing portfolio optimization, and operational cost control, become crucial steps to maintain the sustainability and resilience of post-merger banks. These results also confirm that in the context of regional Islamic banking, profitability is not only an indicator of financial performance but also a key determinant in reducing systemic risk and maintaining the long-term sustainability of financial institutions.

This is in accordance with the research of Xu et al. (2019), Bouvatier et al. (2017), and Kocisova et al. (2018), which states that when profitability increases, it will cause banks to be less willing to engage in risk-taking behavior, so that financial stability will increase. Dahruji & Muslich (2022) concluded that ROA has no negative effect on financial distress. Likewise, Kozlowski & Puleo (2021) stated that ROA is positive for financial distress. However, the opposite can happen, such as the research of Sari & Indrarini (2020) where ROA has a significant negative effect on stability in Indonesian Islamic banking.

The result show that LAR variable has a significant and positive effect at the 5 percent level ($\alpha = 5\%$), meaning that if the LAR of the merged BPD UUS increases by 1 %, the level of stability (Z-Score) will increase 1.1075 by standard deviations from the average. In other words, if there is an decrease in 1% LAR, the risk of bankruptcy or default faced by the BPD UUS resulting from the merger of all BPD UUS will also decrease 1.1075 by standard deviations from the average. The LAR ratio measures how much of a bank's assets are allocated to lending. An increase in LAR shows that the bank is more active in lending, which may result in increased interest income. When lending is done judiciously and effectively, it can boost profitability and ultimately improve the bank's financial resiliency. As a result, LAR is more than just a measure of financing activity; it also reflects effective asset management techniques.

Thus, our finding demonstrates that increased conservatively managed lending can improve the stability of post-merger banks. However, it should be noted that, while high LAR can promote stability, credit risk management must be maintained to avoid an increase in nonperforming loans. Proper loan portfolio monitoring is critical to ensuring that the increased LAR has a beneficial influence on UUS BPD's sustainability and overall financial health. This result support the study of Fatoni & Sidiq (2019), Prabowo et al. (2018), Izzatika et al. (2021), Siyamto (2023) where partially LAR have a significant effect on stability of the Islamic Banking System.

The beta coefficient value of the RGEC variable has a significant and positive effect at the 5 percent level ($\alpha = 5\%$), meaning if the value of other variables is constant and the RGEC variable increases by 1% RGEC, then the Z-Score variable (Y) will increase by 6.6938 standard deviations of the average. In other words, if there is an decrease in 1% RGEC, the risk of bankruptcy or default faced by the BPD UUS resulting from the merger of all BPD UUS will also decrease 6.6938 by standard deviations from the average. The composite rating UUS BPD "less healthy" based on OJK regulator and it ranges between 26,7% to 80% so if the positive effect RGEC increases then Z-score (stability) will increase. This result support the study of Ashuri & Hosen (2022) and Haq & Harto (2019) where partially RGEC have a significant effect on stability of the Islamic Banking System.

The result show that HHI variable has a significant and negative effect at the 5 percent level ($\alpha = 5\%$), meaning if the value of other variables is constant and the HHI variable increases by 1% HHI, then the Z-Score variable (Y) will decrease by 1.3121 standard deviations of the average. In other words, if there

is an decrease in 1% HHI, the risk of bankruptcy or default faced by the BPD UUS resulting from the merger of all BPD UUS will also increase 1.1075 by standard deviations from the average. The result does not support the study of Fatoni & Sidiq (2019) shows that HHI has no effect on the stability of Islamic banking. Meanwhile, this result of this study support of Prasetyowati (2020) and Yudaruddin (2022).

The beta coefficient value of the IPTIK variable has a significant and positive effect at the 5 percent level ($\alpha = 5\%$), meaning if the value of other variables is constant and the IPTIK variable increases by 1 unit IPTIK, then the Z-Score variable (Y) will increase by 1.3704 standard deviations of the average. In other words, if there is an decrease in 1 unit IPTIK, the risk of bankruptcy or default faced by the BPD UUS resulting from the merger of all BPD UUS will also decrease 1.3704 by standard deviations from the average. This result support the study of (Ansori, 2019; Xiang et al., 2021; Ariefianto et al., 2022; Ma'ruf, 2021; Saraswati & Tisnawati, 2021) stated that fintech has a positive effect on financial stability.

The result show that PDB variable has a significant and positive effect at the 5 percent level ($\alpha = 5\%$), meaning that if the PDB increases by 1 % PDB, the level of stability (Z-Score) will increase 3.7531 by standard deviations from the average. In other words, if there is an decrease in 1% PDB, the risk of bankruptcy or default faced by the BPD UUS resulting from the merger of all BPD UUS will also decrease 3.7531 by standard deviations from the average. This result support the study of Andi et al. (2023), is concluded that the higher the level of gross domestic product (GDP), the stronger the level of financial stability. Meanwhile, this result of the study does not support Nugroho & Qizam (2014) stated that the GDP variable or small Islamic bank GDP has no effect on the Z-Score value.

Beside those significant variables, the TA variable and IM variable do not significantly. The beta coefficient value of TA variable has negative effect and insignificant at the 5 percent level ($\alpha = 5\%$), meaning that the negative relationship of the effect of bank size on the stability level of model merger UUS BPD based on the assumption that smaller banks (smaller asset) tend to be stricter in controlling risk and larger asset tend to have greater operating cost, causing cost inefficiencies (Siyamto, 2023). The IM variable do not significantly influence the level of a number of factors. First, in monetary transmission theory, the BI rate variable is expected to affect the distribution of financing which in turn will affect investment consumption (gross domestic product) thus keeping the inflation rate stable.

The level stability in sharia unit regional development model is one objectives when there are merged or consolidated. The information variable that related to stability level will help sharia unit regional development bank to selection their strategy consolidated. First, found that the ability to utilized their resources to achieve stability level was found by utilizing ROA, Loan To Asset Ratio (LAR), RGEC, HHI, Technology (IPTIK) and PDB. This were proven that ROA, LAR, RGEC, IPTIK (Technology) and PDB had positive and significant effect on stability level sharia unit regional development bank merger model. Meanwhile HHI had negative dan significant effect on stability level sharia unit regional development bank merger model. The findings of this study provide significant contributions to decision-makers in sharia unit regional development bank. ROA is one of the key financial performance indicators that need to be maintained because it can determine the profitability of a company to always be in good condition. Companies need to do asset efficiency, cost control, and moderate debt ratio to improve ROA. Asset efficiency can be done by optimizing the use of assets to generate revenue. Cost control can be done by reducing unnecessary or inefficient costs. A moderate debt ratio can help protect the company from financial risks. In addition, companies can also maximize LAR to obtain maximum company profits. Increasing stable LAR means reducing the risk of problematic credit so that the loan portofolio becomes healthier. To maintain and improve RGEC scores, bank need to focus on this four main element in an integrated manner. The general strategies to increase RGEC are digitalization and technology transformation, improving human resources quality dan reputation management. To improve technology (IPTIK) to stability level sharia unit regional development model merger are integrate technology with strategy, strengthening technology infrastructure, enhance process digitalization, integrate data and

analytics. Focus on technology for customer experience, training and education for employees, adopting the latest technology and monitoring and evaluation. PDB and Islamic banking business have two-way relationship that support each other. Increasing and investment in the real sector. Conversely, the existence and activities of Islamic banks strengthen economic growth by supporting financial inclusion, financing of productive sector and financial stability. By optimizing the role of Islamic banks, especially in supporting the real sector and MSMEs, PDB stability and growth can be more assured.

Thus, UUS can be more stable and ready to face financial challenges that may arise in the future. Since this study only reaches on sharia unit regional development bank and faktor internal and macroeconomic, further research can be done to explore more determinan faktor of islamic banking following their consolidation model such as ownweship and political faktor for Islamic banking with core capital above Rp 6 triliun or KBMI 2 and 3.

CONCLUSION

The results of the analysis on the economic potential in Bogor Regency, which involves the Location Quotient (LQ) and Klassen Typology, provide guidance that can be used as a basis for formulating strategic steps in economic and social development in various districts. From these results, several important suggestions emerge. First, it is important for local governments and related stakeholders to develop economic sectors that have been identified as potential bases in each district. For example, Nanggung District with an economic base in the Mining and Quarrying sector and Cisarua and Megamendung Districts with a focus on Provision of Accommodation and Food and Drink need to be given special support according to their economic characteristics. Second, economic diversification should be prioritized to reduce the risk of economic instability and encourage innovation in various sectors. The development of supporting infrastructure such as transportation and information technology also needs to be a priority to improve connectivity and accessibility between regions. In addition, sectors identified as backward in the Klassen Typology, such as Financial and Insurance Services, Agriculture, Forestry and Fisheries, Other Services, Transportation and Warehousing, Corporate Administration, Defense and Mandatory Social Security, as well as Education Services, require special attention through development programs that support growth and quality improvement. Improving education and training is also key to advancing human resources in supporting sustainable economic growth. Finally, collaborative efforts between regency governments, district governments, and communities are an important foundation in formulating and implementing development programs that are in line with the potential and needs of each region. By responding appropriately to these analysis results, Bogor Regency has a better opportunity to achieve equitable, sustainable development that has a positive impact on all levels of society.

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