Available online at: https://proceeding.researchsynergypress.com/index.php/rsfconferenceseries1

RSF Conference Series: Business, Management and Social Sciences

e-ISSN 2807-5803/p-ISSN 2807-6699 Volume 1 Number 5 (2021): 125-134

Risk Analysis of Microfinance Conversion Based on ISO 31000 PT. Bank BRI Syariah. Tbk Aceh

Wa Ode Norlita¹, Ayomi Dita Rarasati²

¹Master Candidate of Department of Civil Engineering, University of Indonesia, Indonesia ²Lecturer at Department of Civil Engineering, University of Indonesia, Indonesia

Abstract

Aceh government issued Aceh Qanun No. 11 of 2018 about Sharia Financial Institutions, which demands that all financial contracts in Aceh adhere to Sharia principles. This regulation has an impact on the Aceh region's financial business. PT Bank BRI Tbk Aceh has decided to conversion entire financing and funding portfolio to one of its sharia-compliant subsidiaries, PT Bank BRI Syariah Tbk. microfinance portfolio is bigger than other segments. By constructing a risk analysis based on ISO 31000, this study assesses the business risk associated with converting PT Bank BRI Syariah Tbk's microfinance segment in the Aceh region. The results indicate that twenty risks have been identified and evaluated. Risk can be classified into five broad categories: operational, reputational, strategic, credit, and compliance. The risk analysis results indicate that the risk is significant and requires immediate attention. Operational risk is associated with differences in data capacity, servers, the core banking system, and financing applications, whereas strategic risk is associated with differences in financial analysis, guarantee provisions, and regulations.

Keywords: ISO 31000, Qanun, Conversion, Risk Management



This is an open access article under the CC-BY-NC license.

INTRODUCTION

Aceh Province is the only province in Indonesia that has its own laws and regulations based on Islamic law called Qanun. Qanun no.11 of 2018 explains that when this Qanun comes into force, financial institutions operating in Aceh are obliged to adjust it no later than three years since this Qanun was promulgated. PT Bank BRI Tbk in the Aceh region has decided to convert its entire financing and funding portfolio to one of its sharia-based subsidiaries, PT Bank BRI Syariah Tbk amounting to Rp 11 trillion, where the micro segment has a larger portion (Rp5.77 trillion) than the retail segment, SME and consumers(Rp5.23 trillion).

Studies show that the ISO 31000 standard for risk management has the potential to be developed into a highly-adopted and impactful body of knowledge and standard of practice for the project risk management community (Olechowski, Oehmen, Seering, & Ben-Daya, 2016). Further studies revealed that so far the Bank has used Bassel so that each risk is managed independently and not integrated, but by implementing ISO 31000 Rural Bank X the risk management can be carried out as a whole within the company (Darmawijaya, T.M.A.A., 2014).

How is the implementation of risk management based on ISO 31000 in the microfinance conversion PT Bank BRI Syariah Tbk? Considering that the risk management application implemented by banks is based on the Basel Accord and POJK, the researchers developed a risk analysis based on ISO 31000 in order to provide a new perspective and perception of business process risks in the conversion process of banking financing.

LITERATURE REVIEW

The ISO 31000 standard is intended to help organizations to manage in a systematic and comprehensive manner diverse types of risk by offering a universal framework to assist the organization to integrate risk management into its overall management system (ISO, 2009). The problem that arises is not when the management framework is implemented but is determined by its use by the organization (Lalonde, C. and Boiral, O., 2012).

Corresponding author wa.ode94@ui.ac.id; ayomi@ui.ac.id DOI: https://doi.org/10.31098/bmss.v1i5.458

Wa Ode Norlita, Ayomi Dita Rarasati

Risk management is generally grouped based on the industry in which risk management is applied (SNI ISO, 2018). In practice, risk management cannot be seen only from a grouping perspective for overall risk management, so more than one perspective is needed. The application of ISO 31000 in the banking sector can find out what risks are faced, and the appropriate actions that must be taken in dealing with the risks that arise (Darmawijaya, T.M.A.A., 2014).

1.1. Banking Risk Management

Risk management in banking in Indonesia is standardized by the Basel Accord II, a global accord reached at Basel by the world's central banks (Yushita, 2008). Bank Indonesia Regulation (PBI) No. 5/8/PBI/2003 issued May 19, 2003 about the Implementation of Risk Management for Islamic Commercial Banks and Sharia Business Units specifies the application of Basel II principles in Indonesia. Bank Indonesia Regulation Number 13/23/PBI/2011 regulates the types of risks that Islamic banks face, including credit, market, liquidity, operational, legal, reputation, strategic, compliance, return and investment.

1.2. ISO 31000 Based Risk Management

The risk management process involves the systematic application of policies, procedures and practices to the activities of communicating and consulting, establishing the context and assessing, treating, monitoring, reviewing, recording and reporting risk (ISO 31000, 2018). This process is illustrated in Figure 1.

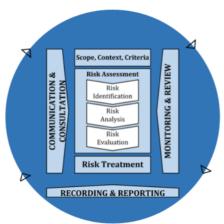


Figure 1. Risk Management Process ISO 31000:2018 (Source:ISO 31000:2018)

RESEARCH METHODOLOGY

This research use a qualitative paradigm in conjunction with a case study methodology or approach. Case study research is intended to delve deeply into the background of an issue, the conditions surrounding it, and the position of an ongoing event. A case study is a method for examining, explaining, or interpreting a situation in its natural setting, without the participation of a third party (Gunawan, 2017).

1.3. Data analysis method

The research was conducted at PT Bank BRI Syariah Tbk in the Aceh region. The risk assessment carried out in this research is based on the Risk Control Self-Assessment using the ISO 31000:2018 framework. Researchers develop risk analysis based on ISO 31000 in the banking sector.

1.4. Data Source

Primary and secondary data were analyzed in this study. The primary data for this study came straight from four expert interviews. While secondary data was gathered from books, journals, Bank Indonesia regulations, the financial services authority (OJK) law, and the Consultative Assembly's Qanun.

RESULTS AND DISCUSSION

- 1.5. BRI Syariah Business Process Risk Management Based on ISO 31000
- o Risk Identification

RSF Conference Series: Business, Management and Social Sciences Vol. 1 (5), 126-134 **Risk Analysis of Microfinance Conversion Based on ISO 31000 PT. Bank BRI Syariah. Tbk Aceh** *Wa Ode Norlita, Ayomi Dita Rarasati*

It is known that there are 20 main risks and they are classified as banking risks based on the findings of interviews and documentation. The following are the main risks, which are categorized by the risk code "R":

Table 2. Main Risk Categories

Risk Code	Main Risk	Banking Risk Category
R1	Increase in collectability	Operational
R2	work culture	
R3	Excess/ deficiency human resources	
R4	HR welfare differences	
R5	Many contract documents	
R6	Socialization & internal training	
R7	Differences in data capacity, server, core banking	
R8	Internal application features are rudimentary and	
	limited	
R9	Limited plafond	Reputation
R10	Business processes take longer	
R11	External socialization	
R12	Higher margin	
R13	HR target calculation	Strategic
R14	Product portfolio bookkeeping	
R15	Does not accommodate take over financing	
R16	Financial analysis, guarantee terms, policies	
R17	Customers in arrears	Credit
R18	Insurance terms	
R19	Customer monitoring tools	
R20	Defect of contract	Compliance

o Risk Analysis

a) Likehood and Consequence Analysis

The parameters used to assess the likelihood and consequence rating are to develop the customer service and teller assessment parameters at PT Bank BRI Syariah Tbk which are contained in the Risk and Control Self-Assessment Operational Report for September 2020 and the Financial Services Authority circular letter No.14/SEOJK.03/2017 concerning Commercial Bank Soundness Rating.

Table 3. Likelihood Rating Criteria

Likehood Rating	Criteria	Probability	Probability (%)) Frequency
1	Very Low	Almost Never Happens	0 - 10 %	≤ 1x per year
2	Low	Rare	> 10% - 20%	≤ 2x per year
3	Moderate	Occasionally	> 20% - 50%	≤ 4x per year
4	High	Often	> 50% - 70%	≤ 6x per year
5	Very High	Almost Definitely Happening	> 70%	> 6x per year

Table 4. Consequence Rating Criteria

Cons. Rating	Criteria	Impact Proses Bisnis	Financial Loss	Reputational
1	Very Low	Not interefere	< 8,62 Billion	Very Minimal or Very Low Negative Reporting
2	Low	Slightly hindered	17,24 - 43,1 Billion	Negative News Tend to Grow or Low
3	Moderate	Interfere	43,1 - 86,2 Billion	Widespread or Fairly High Negative News

RSF Conference Series: Business, Management and Social Sciences Vol. 1 (5), 125-134 **Risk Analysis of Microfinance Conversion Based on ISO 31000 PT. Bank BRI Syariah. Tbk Aceh** *Wa Ode Norlita, Ayomi Dita Rarasati*

4	High	Inhibiting certain	86,2 - 258,6	Very Wide or High Negative
		sections	Billion	Reports
5	Very	Inhibits and disrupts	≥ 258,6 Billion	Loss of trust and/or regulator
	High	the whole process		reprimand

Table 5. Likelihood and Consequence Rating Assessment

Risk Code	Possible impact	Likehood <i>Rating</i>	Impact Rating
R1	Increased CKPN costs	2	3
R2	Decreased HR motivation	2	2
R3	Decreased work unit productivity	3	3
R4	High HR turnover	3	2
R5	Longer process business	1	2
R6	Not familiar with the core banking system, Competence related to sharia aspects has not met	3	2
R7	system failure, customers are not maintained, the system is not stable	5	4
R8	The process stages are not effective	4	3
R9	Customers cannot be converted, customer financing volume decreases	1	3
R10	Longer process business SLA	1	2
R11	The customer is not informed of the conversion process	3	3
R12	Refuse the financing conversion	2	3
R13	The volume of customer financing decreases	2	2
R14	The special target for conversion customers not achieve	1	2
R15	Decreased financing volume	2	2
R16	Customers switch to other financial institutions	5	4
R17	The decrease in the volume of financing	1	2
R18	Increase in collectability	2	2
R19	Use of non-partner life insurance	2	3
R20	Customer accounts are not maintained	1	3

b) Inherent Risk Analysis

Referring to SE No.14/SEOJK.03/2017 concerning the Assessment of Commercial Bank Soundness Levels and the level of assessment on customer service and tellers at PT Bank BRIsyariah Tbk contained in the Risk and Control Self Assessment Operational Report document for September 2020, the level in Inherent risk assessment in this study is divided into five levels of risk value, namely very low(VL), Low(L), Moderate(M), High(H), and Very High(VH). The inherent risk analysis is used to ascertain the risks associated with activities prior to their control

Table 6. Inherent Risk Map

		Consequence				
		VL	L	M	H	VH
	VL					
Likehood	L					
	M					
	Н					
	VH					

Table 7. Inherent Risk Rating Criteria

Inherent Risk Rating	Criteria	Probability Affected by Loss
1	Very Low	Very low
2	Low	Low
3	Moderate	Quite high

RSF Conference Series: Business, Management and Social Sciences Vol. 1 (5), 126-134 **Risk Analysis of Microfinance Conversion Based on ISO 31000 PT. Bank BRI Syariah. Tbk Aceh** *Wa Ode Norlita, Ayomi Dita Rarasati*

4	High	High
5	Very High	Very high

Table 8. Inherent Risk Rating Result

Risk Code	Likehood Rating	Impact Rating	Inherent Risk Rating
R7	5	4	5
R16	5	4	
R8	4	3	4
R3	3	3	3
R11	3	3	
R1	2	3	2
R2	2	2	
R4	3	2	
R6	3	2	
R9	1	3	
R12	2	3	
R13	2	2	
R15	2	2	
R18	2	2	
R19	2	3	
R20	1	3	
R5	1	2	1
R10	1	2	
R14	1	2	
R17	1	2	

Based on table 7, the risks of concern are those that fall into the moderate, high, and very high categories. The risks included in the Very High criteria are 2 risks (R7, R16), those included in the High criteria are 1 risk (R8), and those included in the Moderate criteria are 2 risks (R13, R11).

c) Effectiveness Risk Control Analysis

The parameters used are the development of research conducted by McCrea, D. (2019). The following are the details of the parameters used to determine the effectiveness risk control rating:

Table 9. Forms of Risk Control in Activities

Control Rating 1	Control Form I	Description
1	Preventive	Controls that are carried out before problems arise.
2	Detective	controls are implemented where there has been a problem.
3	Corrective	Controls are carried out to improve conditions if there is a problem that causes the risk of not achieving the objectives

Table 10. Forms of Treatment Risk Control

Tuble 10.1 of file	Tubic 10.1 of his of 11 cutilient flish dontrol				
Control Rating 2	Control Form II	Description Control Activities			
1	Automatic	Fully automated			
2	Semi Automatic	Automatically and human abiliteis			
3	Manual	Only carried out with human abilities			

Table 11. Effectiveness Risk Control Map

Table 11: Effectiveness Risk control Map					
	Control 2				
Control 1	Automatic	Semi Automatic	Manual		
Preventive					

Risk Analysis of Microfinance Conversion Based on ISO 31000 PT. Bank BRI Syariah. Tbk Aceh Wa Ode Norlita, Ayomi Dita Rarasati

Detective		
Corrective		

Table 12. Control Effectiveness Level Criteria

Control Rating	Effectivenes	Description
1	Very Sufficient	Sufficient to control,implemented consistently with a high degree of automation
2	Sufficient	Sufficient to partially control,implemented consistently with a partial degree of automation
3	Insufficient	It is not enough to control, the implementation is inconsistent, the whole thing i still manual

The effectiveness of control is classified into two categories, namely control actions and control treatment. The following are the findings from the study's analysis of risk control effectiveness:

Table 13. Risk Control Effectiveness Analysis Results

Risk Code	Control Rating 1	Control Rating 2	Effectivenes Rating
R7	3	3	3
R8	3	2	
R1	2	3	
R3	2	3	
R17	2	3	
R19	2	3	
R2	1	3	2
R4	1	3	
R5	1	3	
R6	1	3	
R9	1	3	
R10	1	3	
R11	1	3	
R12	1	3	
R13	1	3	
R14	1	3	
R15	1	3	
R16	1	3	
R18	1	3	
R20	1	3	

The results of the analysis show that of the 20 risks, 6 are included in the criteria of not being sufficient and 14 other risks being sufficient. The value of this effectiveness is strongly influenced by the control carried out before/during/after the occurrence of the risk. As in the R7 and R8 risks associated with the system, where problems have occurred, the differences in system and application features. Because all business processes are carried out with the system, so improvements are carried out in parallel. The risk that is included in the sufficient category is caused by the risk control that is carried out before the problem arises.

d) Risk Residual Analysis

The parameters used are the development of research conducted by McCrea, D. (2019). The following are the details of the parameters used to determine the risk residual rating:

Table 14. Residual Risk Map

Residual Risk	Effectiveness		
Inherent Risk	1	2	3
1			
2			

RSF Conference Series: Business, Management and Social Sciences Vol. 1 (5), 126-134 Risk Analysis of Microfinance Conversion Based on ISO 31000 PT. Bank BRI Syariah. Tbk Aceh

Wa Ode Norlita, Ayomi Dita Rarasati

3		
4		
5		

Table 15. Residual Risk Criteria

Residual Risk Rating	Criteria	Control Description
1	Low	Very adequate, residual risk faced is very low
2	Moderate	Sufficiently adequate, residual risk faced is quite high
3	High	Inadequate, residual risk faced is very high

Residual risk analysis is used to assess the risks that remain after risk mitigation/control measures have been implemented.

Table 16. Risk Residual Analysis Results

Risk Code	Inherent Risk Rating	Effectivenes Rating	Residual Risk Rating
R7	5	3	3
R8	4	3	
R16	5	2	
R1	2	3	2
R2	2	2	
R3	3	3	
R4	2	2	
R6	2	2	
R9	2	2	
R11	3	2	
R12	2	2	
R13	2	2	
R15	2	2	
R18	2	2	
R19	2	3	
R20	2	2	
R5	1	2	1
R10	1	2	
R14	1	2	
R17	1	3	

From the results of the risk residual analysis, it is known that the risks that are classified as high are in the operational (R7,R8) and strategic (R16) categories. This shows that the control is inadequate and the risks faced by BRIsyariah are very high in the microfinance conversion process.

o Risk Evaluation

The risk value used in risk evaluation is the value/rating obtained from the risk residual analysis. Priorities of risks is determined using the following categories:

Table 17. Risk Priority Parameters

Residual Risk Rating	Priority	Description
1	Low priority	Can be delayed to repair, the impact is small
2	Moderate priority	Must be repaired, can be delayed, impact is moderately disturbed
3	Priority	It must be repaired as early as possible, the impact will be greatly disrupted

RSF Conference Series: Business, Management and Social Sciences Vol. 1 (5), 125-134 **Risk Analysis of Microfinance Conversion Based on ISO 31000 PT. Bank BRI Syariah. Tbk Aceh** *Wa Ode Norlita, Ayomi Dita Rarasati*

Risk evaluation aims to determine the priority of risks and the response that will be taken when a risk occurs. The following table summarizes the evaluation findings for each risk:

Table 18. Risk Evaluation Results

Priority	Residual Risk Rating	Risk Code
Priority	3	R7,R8,R16
Moderate Priority	2	R1,R2,R3,R4,R6,R9,R11,
		R12,R13,R15,R18,R19,R20
Low Priority	1	R5,R10,R14,R17

The priority risks are operational risk (R7, R8) and strategic risk (R16). This risk must be handled as early as possible because it has a large impact on the conversion of BRIsyariah microfinance. Risks that are categorized as moderate priority must also be corrected but can be postponed because they can interfere with the conversion process of microfinance but at a moderate level. Meanwhile, the risk that is classified as low priority can be postponed for repair because the impact that occurs when this risk appears is relatively small.

o Risk Treatment

To deal with the risks that arise in microfinance conversion activities, each risk must have its own risk management. Risk management activities carried out by BRIS based on SNI ISO 31000 are reduced by carrying out certain activities in order to improve risk control capabilities.

Table 19. Risk Treatment

Table 19. Risk Treat Priority	Risk	Activity Treatment
Triority	Code	receiving freatment
Priority R7		Portfolio migration manually and systemically
-	R8	Maximize the development of application features
	R16	Updating terms, policies, conditions
Moderate Priority R1		Ensure the readiness of systems, human resources, and work units to manage micro portfolio
	R2	Equalization and socialization of work culture
	R3	Provides conditional options for employees who convert, reject conversion, or resign
	R4	Update HR prosperity policy
	R6	Basic sharia banking training for BRI HR and refreshing basic sharia banking material for BRIS HR
	R9	Updating the maximum financing plafond policy
	R11	Conversion and product socialization to external
	R12	Evaluation and dissemination of rate margin and other costs
	R13	Determination of KPI parameters in detail
	R15	Development of a take-over pattern of financing in the system
	R18	Letters to all branch offices and socialization regarding the guarantee policy
	R19	Maximizing monitoring development in applications
	R20	Islamic banking basic training for HR
Low Priority	R5	Simplification of contracts according to sharia principles
	R10	Process business flow updates
	R14	Meeting with related groups for product portfolio register agreement
	R17	post booking review of financing proposals that have been processed, reminder to customers before the due date

Risk treatment is a form of mitigation that has been carried out and has gone through a discussion process with resource persons and experts in the relevant field. The results of the discussions carried out were

RSF Conference Series: Business, Management and Social Sciences Vol. 1 (5), 126-134 **Risk Analysis of Microfinance Conversion Based on ISO 31000 PT. Bank BRI Syariah. Tbk Aceh** *Wa Ode Norlita, Ayomi Dita Rarasati*

adjusted to the existing business processes and the needs in the microfinance conversion process so that the activities of each risk could be implemented.

CONCLUSION

According to the National Standardization Agency (2018), risk management is based on the industry in which risk management is applied. However, to see the overall risk cannot be seen only from the point of view of the grouping alone. Banking risk management has been regulated in Bank Indonesia Regulation (PBI) No.13/23/PBI/2011. However, it does not contain details about the risk assessment, but rather the measurement of Islamic banking risk in general.

In accordance with the statement of Lalonde, C and Boiral, O., (2012) that the effectiveness of ISO 31000 is determined by how it is used. The risk assessment in this study uses the ISO 31000:2018 framework. From the results of this study, it is known that there are 20 risks that have been evaluated and after being identified, the risks are categorized into 5 banking risks, namely operational, reputation, strategic, credit, and compliance.

The risks that are prioritized in the conversion of the microfinance business are operational risks, R7 (differences in data capacity, server, core banking), R8 (internal application features are rudimentary and limited) and strategic risk, R16 (financial analysis, guarantee terms, policies). Risks that are included in the priority category must be addressed as early as possible because they have a significant impact on the ongoing conversion process of the microfinance business.

References

- Darmawijaya, T.M.A.A. (2014). Penerapan ISO 31000 Dalam Pengelolaan Risiko Pada Bank Perkreditan Rakyat (Studi Kasus Bank Perkreditan Rakyat X). Jurnal Administrasi Bisnis Universitas Katolik Parahiyangan 10(1), 17-32.
- Gunawan, Imam. (2017). *Metode Penelitian Kualitatif*. Edisi Pertama. Cetakan Kelima. Jakarta:Bumi Aksara.
- International Organization for Standardization (ISO). (2018). ISO 31000:2018 Risk management-Guidelines. Switzerland.
- International Organization for Standardization (ISO). (2019). ISO 31000-Risk Management:Principles and Guidelines, Geneva, 2009.
- Lalonde, C. and Boiral, O. (2012). Managing Risks Through ISO 31000: A Critical Analysis. *Journal of Risk Management*, 14(4), 272-300.
- McCrea, David. (2019). *Risk Management : The Continous Program Cycle.* Paper presented at Washington Bankers Association Executive Development Program Audit and Compliance
- Olechowski, A., Oahmen, J., Seering, W., Ben-Daya, M. (2016). The Professionalization of Risk Management: What Role Can The ISO 31000 Risk Management Principles Play. International Journal of Project Management, 34, 1568 1578.
- Pemerintah Aceh. (2018). Qanun Aceh Nomor 11 Tahun 2018 *Lembaga Keuangan Syari'ah*. Lembaran Aceh Tahun 2019 Nomor 8. Banda Aceh.
- Peraturan Bank Indonesia Nomor 13/23/PBI/2011 Tahun 2011 *Penerapan Manajemen Risiko Bagi Bank Umum.* 2 November 2011. Lembaran Negara Republik Indonesia Tahun 2011 Nomor 103 DPbS. Jakarta.
- Peraturan Bank Indonesia Nomor 5/8.PBI/2003 Tahun 2003 *Penerapan Manajemen Risiko Bagi Bank Umum Syariah Dan Unit Usaha Syariah*. 19 Mei 2003. Lembaran Negara Republik Indonesia Tahun 2003 Nomor 56 DPNP.

RSF Conference Series: Business, Management and Social Sciences Vol. 1 (5), 125-134 **Risk Analysis of Microfinance Conversion Based on ISO 31000 PT. Bank BRI Syariah. Tbk Aceh** *Wa Ode Norlita, Ayomi Dita Rarasati*

- Qanun Aceh Nomor 11 Tahun 2018 *Lembaga Keuangan Syar'iah.* 31 Desember 2018. Lembaran Aceh Tahun 2019 Nomor 8. Banda Aceh
- Risk and Control Self Assetment Operatonal Report PT Bank BRIsyariah Tbk. (2020). Jakarta : PT Bank BRIsyariah Tbk
- Surat Edaran Otoritas Jasa Keuangan Nomor 14/SEOJK.03/2017 *Penilaian Tingkat Kesehatan Bank Umum.* 17 Maret 2017. Jakarta.
- Vorst, C. R., Priyarsono, D.D., dan Budiman, A. (2018). *Manajemen Risiko Berbasis SNI ISO 31000*. Edisi Pertama. Cetakan Pertama. Badan Standarisasi Nasional. Jakarta.
- Yushita, N.Y. (2008). Implementasi Risk Management Pada Industri Perbankan Nasional. *Jurnal Pendidikan Akuntansi Indonesia*, VI(I), 75-86.