

Sustainable Financial Values and Rural Bank Risk Mitigation: An Experimental Study

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Rural Credit Banks (hereinafter referred to as BPR) are managed in the same way as Banks in general but have a unique character. The purpose of this study is to analyze the various organizational units interact and relate to each other, and how risks are managed in an integrated and comprehensive manner from simple actions to reduce risk to sustainable risk management in the form of risk optimization without must harm the company. The study uses experiments to support testing of the proposed hypothesis. The results of the study have confirmed every hypothesis proposed by the researcher. The study looked at 33 subjects, as many as 18 into two groups. Group A was a group of subjects who were not given sustainable financial value treatment, while group B was a group of subjects who were given sustainable financial value treatment.

Key Words: Sustainable Finance, Risk Management, Rural Credit Banks
JEL: DO2, D81, G21

Introduction

Sustainable finance is a new paradigm given by financial institution authorities today as an implementation of sustainable development goals. Sustainability is the fulfillment of current human needs without compromising the ability to meet the needs of future generations (Hahn & Figge, 2011; Alshehhi et al., 2018). This concept seems very ideal but can be blocked by a comfort zone wall that always considers profit as the bottom line. It seems that the counter explanation way of thinking in the form of regret at the beginning might be able to reduce the growing skepticism. This is a descriptive issue and will become a joint convention if it becomes an obligation. Awareness and volunteerism have more meaning and leverage but are again hampered by the natural human moral hazard in humans. The strategy to become a company that is responsible and cares about environmental and social aspects is a must to maintain success in the future (Busse, 2016; Chernev & Blair, 2015).

The era of globalization can be a trigger factor for the emergence of new problems and challenges in the development process which then gave birth to several concepts and approaches in measuring development success. One important indicator in the success of development is the existence of economic equality that can be observed by all levels of society. While the failure of development can be translated into whether or not the economic conditions are even, so that it can cause economic inequality and community backwardness. These conditions, coupled with the existence of a new phenomenon namely climate change which certainly has an impact on energy and food security in the midst of population growth, especially in developing countries. Several studies reveal the relationship between environmental and economic performance (Weber, 2011; Schaltegger & Figge, 2000) or financial performance (Benson et al., 2006; Gil-Bazo et al., 2008; Elsayed & Paton, 2009). These recent natural disasters indicate and are thought to be caused intentionally or unintentionally by imbalance of the landscape. Landscapes are not just social constructs but are operated variables in the universe. Deliberation can be in the form of exploitation of nature to maximize utility or the occurrence of behavior that damages nature, even though the essence of sustainable development is the occurrence of production and consumption processes that are able to meet human welfare continuously, year after year and continue from generation to

generation. The articulation of life is a sign that the earth we are walking on is not a legacy but is entrusted to the next generation. Sustainable Finance promotes new services and products to meet customer desires as an implementation of sustainable performance (Weber, 2014; Al-Qudah et al., 2022).

Banks and financial institutions are indirectly strongly influenced by environmental risks and the sustainability of their clients. Banks and financial institutions must integrate risks into the risk management process (Weber, 2011). Some cases of negative financial impact for banks related to their client's environment that integrate sustainability risk into financial risk management (Weber et al., 2010). Furthermore, the responsibilities of lenders or lenders for borrower has negative influence on banks reputation and financial institutions (Hirigoyen & Poulain-Rehm, 2015).

Increasingly fierce business competition and increasingly complex business activities certainly increase the risk potentially, especially BPRs. Risk management application is one of BPR's efforts to strengthen institutions and improve the reputation of BPR itself. Supervision of risk, for example credit risk is an important dimension in assessing the health of a financial institution including the Rural Bank (BPR). Every person or community who places their funds or wealth in a place, including BPR, always has a question as to whether the funds and assets they place are safe. The question arises because of concerns that the funds and wealth are at risk, ranging from the risk of impairment to the risk of fraud. BPRs, like all other forms of business, are also not free from risk.

Concern for the financial services industry on environmental and social issues is a necessity and no longer something done to comply with regulations alone. The main implications that need attention are: first, Ignorance of environmental and social issues will increase financing risks, especially credit risk. Second, attention to social issues is a competitive advantage for companies, so the company has the potential to grow even bigger. Third, more broadly, by promoting sustainable financing, the financial services industry will contribute positively to economic development through financing environmentally friendly and social projects. Management and credit practices in small and medium enterprises (SMEs) that are difficult to assess with respect to their credit status. The problem that often becomes a question is whether or not adding additional criteria aimed at assessing the creditor environment, sustainability, practices on credit rating criteria by increasing the ability to rank risk (Weber et al., 2008).

A positive relationship between financial performance and the environment is expressed through several studies (Pope et al., 2004; Dasgupta et al., 2002; Nakao et al., 2007). Previous studies have been carried out to determine the effects of financial and environmental performance (Bansal & Roth, 2000; Reinhardt, 2008). Whereas the other empirical studies do not show a clear positive relationship between sustainability performance and financial performance (Margolis & Walsh, 2003). The difference in research results is due to various concepts of sustainability within the company (Barnett & Salomon, 2006) such as: corporate reputation, membership in the code of ethics (Cowton & Thompson, 2000), stakeholders, social and environmental performance, policies and long-term success.

At the other side, if the risk occurs, in the end the people who will be harmed are the BPR customers. For this reason, BPRs as a legal entity need to manage risk well. In other words, BPRs also need risk management. Each BPR management needs to understand how to identify risks, sort out risks and mitigate risks, and take steps to control risk for the accepted risk profile.

Hypothesis Development

H₁: Employees of Rural Bank (BPR) who implement sustainable financial values and local cultural values can better manage BPR risk compared to BPR employees who do not have to implement local cultural values Catur Purusha Artha (B > A)

Information:

A = Base Line Condition or No Manipulation Condition

B = Condition with the Essence of Sustainable Financial Value

Research Method

Experimental Design

The study uses experiments to support testing of the proposed hypothesis. Manipulation of the independent variable is simply done by assigning a different value charge to the independent variable to see the impact of the absence and presence of a sustainable and cultural financial charge on the dependent variable, namely BPR risk assessment. This manipulation is expected to prove the level of causal influence.

The experiment has a factorial design between subject 1x1, with independent variables: BPR employees without the essence of sustainable finance and BPR employees with sustainable financial essence, with the dependent variable in the form of BPR risk assessment.

Table 1. Factorial Between Subject Experiment Design

	Rural Banks without the essence of sustainable finance	Rural banks with the essence of sustainable finance
BPR Risk Assessment	A	B

Experiment Subjects

The experimental subjects in this study were BPR employees in Badung Regency who in their work environment faced possible risks.

Research Variables and Experimental Conditions

The independent variables used in the study are categorical, namely (1) BPR employees without the essence of sustainable finance and (2) BPR employees with sustainable financial essence. The continuous variable that is the BPR risk assessment (dependent variable).

Results and Discussion

Research data

Samples that have been obtained by researchers up to the time of this report are 33 subjects, namely 18 subjects in group A and 15 subjects in group B. Group A is the group of subjects who are not treated with sustainable financial value, while group B is the subject group who are given continuous financial value treatment. BPRs that have agreed to become subjects in this study are BPR Gisawa, BPR Kusuma Mandala, and BPR Karya Sari Sedana.

Table 2. Number of Respondents in Each Group

Treatment group	Number of Respondents
A	18
B	15
Total	33

Descriptive Statistics Results

Statistics of descriptive present the number of observations, minimum values, maximum values, mean values, and standard deviations. To measure the central value of the data distribution can be done by measuring the mean while the standard deviation is the difference in the value of the studied data with the average value.

Table 3. Descriptive Statistics Results

Variable (<i>Treatment</i>)	N	Min.	Max.	Mean	Std. Deviasi
A	18	20	90	62,22	20,16
B	15	20	80	40	15,12

1. Variant Homogeneity Test Results

Homogeneity variance test used to find out some population variants are the same or not. This test is performed as a prerequisite in the analysis of independent sample t test and ANOVA. From Table 5 it can be seen that the level of significance of the data group is 0.149*. The significance value in all data groups is more than 0.05 so it can be concluded that all of the data groups in this study have the same variant. The Statistics shows that the smaller the value, the greater of homogeneity.

Table 4. Variant Homogeneity Test Results

Description	<i>Levene Statistic</i>	<i>Sig.</i>
Hypothesis 1	2,186	0,149*

2. Hypothesis Test Results

Hypotheses tested using the ANOVA method to determine the significance of the mean difference (μ) between one sample group and another.

Table 5. Hypothesis Test Results

Descriptions	<i>Variance</i>	df	<i>Mean Square</i>	F	<i>Sig.</i>
Hypothesis 1	<i>Between groups</i>	1	4040,40	12,388	0,001*
	<i>Within groups</i>	24	326,17		

Hypothesis 1 was tested to determine the existence of a significant average difference between conditions without manipulation (A) with conditions in the presence of essence or sustainable financial value (B). Hypothesis 1 test results show a p-value of 0.001* (<0.05) so that H_1 is accepted. This value indicates that there are differences in the average risk assessment by BPR employees who do not have a sustainable financial value compared to the risk assessment by BPR employees who implement sustainable financial values.

Discussion of Research Results

Simple manipulation of the independent variable has been carried out by researchers by providing a treatment of the charge of sustainable financial values on the independent variable to see the impact of the absence or presence of an element of sustainable financial value on the dependent variable, namely BPR risk assessment. The results of researchers' testing of proposed hypotheses provide an indication that ongoing financial value interactions contribute to BPR risk assessments by employees. The existence of an ongoing financial element reduces the risk rating of a BPR compared to the absence of a sustainable financial element in the risk assessment process. These findings are in line with Weber (2011), Schaltegger & Figge, (2000), Elsayed & Paton, (2009) and Carlucci et al (2018) and are in accordance with local culture which is based on chess purusa artha, namely dharma, artha, kama and moksha. BPRs that provide financing for environmentally responsible projects are not only pursuing profit but also part of their moral responsibility to safeguard future life. BPR's greater sensitivity to environmental issues prevents the creation of a negative reputation associated with debtors who cause environmental damage.

Descriptive statistical results show that the mean value of BPR risk assessment by group B, namely the condition of BPR employees with continuous financial value treatment has a lower mean value compared to the mean variable value without treatment. This indicates that the existence of sustainable financial value affects the low risk that will be faced by BPRs. The research with the field experiment method for BPR employees in Badung regency produced a conclusion that there is an ongoing financial value interaction in BPR risk assessment by BPR employees.

Conclusions and Suggestions

Conclusions

The results of the study have confirmed every hypothesis proposed by the researcher. The study looked at 33 subjects, as many as 18 subjects in group A and 15 subjects in group B. Group A was a group of subjects who were not given sustainable financial value treatment, while group B was a group of subjects who were given sustainable financial value treatment.

Hypothesis 1 shows a p-value = 0.001 (<0.05) so that H1 is accepted. This value indicates that there are differences in the average risk assessment by BPR employees who do not have a sustainable financial value compared to the risk assessment by BPR employees who implement sustainable financial values. Hypothesis test results proved to show the existence of an ongoing financial value interaction with risk assessment by BPR employees. The mean value of BPR risk assessment by group B, namely the condition of BPR employees with continuous financial value treatment has a lower mean value compared to the variable mean value without treatment. This indicates that the existence of sustainable financial value affects the low risk that will be faced by BPRs.

Suggestion

This research is limited to the value of sustainable finance in three BPRs in Bali so that suggestions that can be given to further researchers are to expand the scope of the research so that they can get respondents from BPRs in each Regency in Bali Province. This is to get a broader picture of the risk assessment and value of sustainable finance in each of these districts. Furthermore, further research can include other variables that are considered to affect employee risk assessment, or apply research concepts to relevant research subjects.

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