# Credit Risk and Harmonious Values Practice (Study at Village Credit Institution (Lembaga Perkreditan Desa) Of Bali Province)

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Abstract: The research aims to explain harmonious values practices summarized in Tri Hita Karana (THK) culture emphasizing on harmonious relationship of human with God, between humans and human with environment that has been implementing at the village credit institution (Lembaga Perkreditan Desa/LPD) and its relationship with credit risk. 100 of 1405 existed companies are selected as sample and descriptive statistic is used to examine data collected using questioner on harmonious values practice and the amount of nonperforming loan (NPL). Research result shows that LPD has been practicing harmonious values in a good manner and LPD that implementing harmonious values in a good manner tend to have small NPL. Research implication is that in order to decrease non-performing loan, LPD managers should pay attention and monitor the implementation of harmonious values properly. It is suggested to examine the research using quantitative and qualitative approaches to understand more about the existed phenomenon.

**Keywords**: credit risk, non performing loan, harmonious values

#### I. Introduction

Credit risk is one of factors to be considered in determining the health of micro financial institutions and it can be seen on non performing loan (NPL) in which the amount has been determined by Central Bank of Indonesia (Bank Indonesia) of five percent. This risk occurs due to credit distribution to community whether for productive or consumptive purposes. The more the credit distributed and the larger the service scope (Ledgerwood, 1999) [16], the higher the possibility of credit risk occurrence that in turn will affect financial performance.

Merton (1974)[18] states that credit risk of a company is depend on the amount of company's liabilities and assets value. There are two steps conducted by Merton in measuring credit risk: (i) determining the distribution of asset value of a company; and (2) estimating the probability of default, distance of default and recovery rate. In addition, Benos and Papanastasopoulos (2005) [3]classify the measurement model of credit risk into two models, traditional and structural. Traditional model is a model adopting fundamental analysis approach in determining factors affecting credit risk. The model philosophy refers to Altman's (2002)[1] research. Structural model is a model adopting contingency analysis approach, in which credit risk is seen as the relationship of company's liability with its asset. The model philosophy refers to Black-Cox (1976)[4], Merton (1974).[18]

Liao and Chen (2005)[17] classify credit risk model into two models, structural and reduced-form. Reduced-form model is a model emphasizing on information having no relationship with fundamental factors and company's asset value, but more to credit market information.

Philips and Peters's (2005) [20] research found that credit risk is not only affected by macroeconomic condition but also variables of company's fundamental performance. Cash flow is one of indicators mostly used to Measure Company's fundamental performance. Cash flow is related to credit risk because cash is the main instrument to pay company's liabilities that past due instead of profit or asset as a whole. A research by Collin-Dufresne, et al (2001) [6] found that default is not only due to small change on income, leverage or other balance information, but more to negative trend and unexpected change on cash flow.

Organizational culture factor also affecting small companies' success (Baker and Sinkula, 2009) [5]. This research result supported by Riana's (2010)[21] research on small business of silver craft in Bali with sample of 110 owners using SEM with PLS approach to examine the relationship among variables, which found that harmonious cultural values summarized on THK (*Tri Hata Karana*) culture have influence on business performance. THK as Balinese culture contains elements of *parahyangan* (harmonious relationship between

human and God), *pawongan* (harmonious relationship between humans), and *palemahan* (harmonious relationship between human and environment).

Harmonious value is reflected in *Tri Hita Karana* philosophy (Windia, 2007) [31] includes *parahyangan* (harmonious relationship between human and God), *pawongan* (harmonious relationship between humans) and *palemahan* (harmonious relationship between human and environment). Windia and Dewi (2007) [29] states that basically, THK philosophy is a universal philosophy that exist and followed by other communities even though they are not follow Hinduism, but only in Bali there exists a social system that obviously and consciously implementing the philosophy and it is relevant to business activities.

Parahyangan is one of dimensions of THK philosophy highlighting that prosperity can be achieved if harmonious relationship between human and the creator, God, is realized (Wiana, 2004[27]; Ashrama, 2005) [2]. Business activity is a gift; therefore, it is under God's control (Windia and Dewi, 2007) [29]. Consequently, a company is hoped to create religious nuance (divinity) both inside and outside the company (Ashrama, 2005 [2]; Windia and Dewi, 2007) [29]. In creating harmony with God, a company should develops a sense of devotion and belief that God is exist and has created us (Wiana, 2007) [28] through some real activities, such as the availability of prayer room in company's environment, financing Islamic pilgrimage (umroh and hajj), religious tour (*Tirtha Yatra*), etc.

Pawongan is the existence of harmonious relationship between humans (Windia, 2004 [30]; Ashrama, 2005) [2]. In business context it is refers to harmonious relationship inter-employees, between employees and company's management and between company's management and the community (Ashrama, 2005) [2]. Comprehensively, Ashrama (2005) [2] states that harmonious relationship can be indicated from several things, such as: the existence of group in organization for example, union, sekeha-sekeha; harmonious relationship between company and community can be maintained by such program as poverty alleviation, utilization of local labor and conducting skill training.

Palemahan is the last dimension related to physical aspects of our or company surrounding environment (Surpha, 2001 [24]; Wiana, 2004[27]; Ashrama, 2005 [2]). Ashrama (2005) [2] explains that company's layout and building should be adjusted to the existed religious belief and culture. A company should have commitment to maintain and increase the quality of environment, for example, having active participation in environmental saving, nature conservation, waste management, and effective and efficient energy and natural resources utilization.

LPD is one of non-bank micro financial institutions in which the owner is *desa adat* or *desa pakraman* institution and the only non-bank micro financial institution managed by custom in Indonesia. LPD existence in Bali is regulated by regional regulation (Perda) of Bali Province No. 2, 1998, and has been renewed with Perda No. 8, 2002 [19], with characteristics of: (1) an enterprise; (2) owned by *desa pakraman*; (3) formed and managed by *desa pakraman*; (4) executing financial institution functions of *desa pakraman* community, such as: accepts/collects fund from village's *krama*, gives loan to village's *krama* only and manages institutional finance restricted to the environment of *desa pakraman*; and (5) executing business function as an internal financial institution of *desa pakraman* or inter-*desa pakraman* (at large).

All components of *desa pakraman* is based on *awig-awig* (regulation) that based on *Tri Hita Karana* ideology consisting of: harmonious relationship with God, between humans and between human and environment with its content (Gorda, 1999 [11] and Wiana, 1999)[26]. In addition, *desa pakraman* is divided into some *banjar* as the smallest group in *desa pakraman's* community. Through this *banjar*, religious ritual, mutual aid, development project, cultural group, and saving and loan activities are managed in a tight social bond (Warren, 1993) [25]. The focus of religious, social and economic life is *banjar*; therefore, *banjar* has two important liabilities, maintaining and preserving *desa adat* ritual and be in contact with *desa adat*'s control (Horbart et al, 1996) [12].

Finally, this examination tries to answer research question of how the relationship of harmonious values practice with credit risk using descriptive statistic analysis with sample of 100 LPD in Bali.

## II. Theoretical Study

Duffie and Singleton's (2003) [8] research found that credit risk is directly influenced by macroeconomic performance. The research result is supported by Duffee (1999) [9], Collin-Dufresne, et al (2001) [6], Kern and Rudolph (2003)[14], Duffie, *et al.* (2003),(2005) [8] [10], Couderc and Renault (2005) [7], and Philps and Peters (2005) [20]. The strong influence of industrial performance variable on credit risk is proven by Koopman and Lucas's (2004) [15] and Couderc and Renault's (2005) [7] researches. Past fundamental performance, industrial performance and macroeconomic performance are able to explain credit risk behavior, it is proven by Jarrow's et al. (1997) [13] and Couderc and Renault's (2005) [7] researches.

THK culture is a culture with local wisdom as its source. According to Sobirin (2007) [23]national culture is shaped by different reasons because the emergence of a country has different background. Thus, some factors (for example, ethnic, economic, politic, religion or language) have contribution in shaping national

culture. Schein (2004) [22] suggests that organizational culture is based on three levels. First, artifact, which is something that modified by human for certain purpose that can be seen directly from organizational structure and process conducted in organization. Artifact is something that easily grasped when we enter an organization because it is related to what we heard; seen and felt when we are in an organization environment. Second, espoused beliefs and values, which is supporting values including strategy, goals and basic philosophy owned by an organization that can be understood if we go deeper into the organization and stay longer in it. Supporting values usually a written statement and a reference for every steps conducted by organization's member. Third, underling basic assumptions, which is implicit assumptions that mutually believed. Values, beliefs and assumptions used by the owner is considered as important to bring organization into success.

*THK* is a product of human behavior that subjective and interpretative in nature. Therefore, symbols will be built by subjective understanding related to the phenomenon having objective consequences. Regarding THK, *parahyangan* is analogue to social sub-system, whereas *palemahan* is analogue to artifact sub-system (Windia, 2007) [31].

#### III. Method

The research is using cross-section data collected using questioner distributed to 100 managers of LPD in Bali. 5 Likert scale is used and validity and reliability test on instrument is conducted before the distribution. Data collected is in form of perception on harmonious values emphasizing on harmonious relationship of human with God (*parahyangan*), between humans (*pawongan*) and humans with environment (*palemahan*) and quantitative data on NPL number in 2010. Data then analyzed using descriptive statistic analysis.

#### IV. Result and Discussion

Descriptive statistic measurement in this research is the minimum and maximum value, average value, and standard deviation. Table 1.1 shows descriptive statistic for two variables being researched.

Table 1.1 Descriptive Statistic

Variables	Minimum	Maximum	Average	Std. Dev				
Harmonious values:								
Parahyangan	55	84	70.33	6.537				
Pawongan	51	85	67.26	7.234				
Palemahan	59	85	69.22	5.331				
Credit Risk	0.00	0.64	0.12	0.12				

Source: Primary data (processed), 2012

Table 1.1 explains that harmonious values variable is divided into three indicators, *parahangan*, *pawongan* and *palemahan*. Each indicator is measured with 17 items in 1-5 scales that theoretically, score in each indicator will ranged between 17-85 with median of (17+85)/2 = 51. Descriptive analysis result on harmonious values indicators has minimum value equal to or above median value; therefore, descriptively, the implementation of harmonious values in LPD organization in Bali tend to be good. In strengthening result of descriptive analysis on harmonious values, frequency distribution is made on three class categories (low, medium and high) based on actual value of empirical data. The lowest score of harmonious value indicator is 51 and the highest is 85, resulting in value span of 85-51 = 34. If the value divided by 3 categories, the class interval value will be 34/3 = 11,33. Score of 51-62 is considered low category, score of 63-73 is medium and score of 74-85 is high. Table 1.2 explains category distribution of harmonious value indicators.

**Table 1.2 Distribution of Category Frequency on Harmonious Values Indicator** 

Category	Parahyangan		Pawongan		Palemahan	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Low	11	11.0	19	19.0	11	11.0
Medium	60	60.0	61	61.0	70	70.0
High	29	29.0	20	20.0	19	19.0
Total	100	100.0	100	100.0	100	100.0

Source: Primary data (processed), 2012

It can be seen from Table 1.2 that most LPD is in medium and high category in implementing harmonious values emphasizing on harmonious relationship between human and God (*parahyangan*), between humans (*pawongan*) and between human and environment (*palemahan*). It means that, generally, LPD owners in Bali have been implementing harmonious values in their business activities. Thus, owner understanding on and implementation of harmonious values in business activities is better. It is indicates by almost 80% or more of LPD is in medium and high category. From the owner perception on harmonious values, it seems that maintaining harmonious relationship with God receives more attention compare to other relationship, *pawongan* and *palemahan*. This condition is supported by 29 percent of LPD has high category on the belief to God or the Creator, followed with harmonious relationship between humans (*pawongan*) of 20% and harmonious relationship with environment (*palemahan*) of 19%.

Credit risk is measured from non performing loan (NPL) value which is the amount of non performing loan divided by total loan. The bigger the value of credit risks the more the number of non performing loan in the institution. Research data shows that credit risk is ranged between 0.00-0.64 with average of 0.12. It can be interpreted that the amount of credit risk in LPD in Bali tends to be low, 12% of total credit. Composite description of credit risk and harmonious values can be seen on following Table 1.3.

Table 1.3

Descriptive Statistic of Credit Risk and Harmonious Values

Category	Parahyangan		Pawongan		Palemahan	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Low	11	0.16	19	0.15	11	0.15
Medium	60	0.11	61	0.13	70	0.13
High	29	0.13	20	0.09	19	0.08

Source: Primary data (processed), 2012

It can be seen from Table 1.3 that LPD with high category on harmonious values tends to have low credit risk. Research data explains that average value of credit risk on three harmonious value indicators is high when the value ranged between 8%-13% and low when the ranged is between 15%-16%. In other words, LPD with good harmonious values characteristic tends to have low credit risk.

# V. Implication and Limitation

The research result has implication on manager policy on method to decrease credit risk without using debt collector but by strengthening harmonious values practice in LPD. The research will be develop better through quantitative and qualitative approaches in order to get deeper result on uniqueness of village credit institution (LPD) in Bali.

## VI. Summary

- 1. LPD tends to have low credit risk by a better implementation of harmonious values emphasizing on harmonious relationship of human with God, between humans and human with environment.
- 2. LPD managers in Bali have been implementing harmonious values in their business activity in a good manner and it will be better if more attention is given to relationship with environment and *pawongan*.
- 3. A good practice of harmonious values in LPD is one of alternatives to be considered to solve credit problems.

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