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## **Hofstede's Cultural Model and Borrowing Incurring Joint Versus Individual Liability in Tanzania**

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### **Abstract**

*Culture is an important factor that influences acceptance of microfinance institutions lending models. Many scholars have applied Hofstede's cultural model to understand how values affect people's behaviors or decisions. However, researchers had overlooked applying Hofstede's cultural model on microfinance institutions lending models. This study integrates Hofstede's cultural model with borrowing decisions incurring joint vs. individual liability. To address these challenges, a study is conducted from two microfinance institutions namely, PRIDE (T) and FINCA (T) located in two regions within Tanzania namely, Dodoma and Arusha. The study employs explanatory research design involving 420 respondents. Selection of respondents was conducted using systematic technique. Questionnaires were used to collect information. The Structural Equation Modeling was used to perform the analysis. The findings have shown that individualism exist among the majority of joint liability borrowers and influences negatively borrowing incurring joint liability making joint liability an inappropriate lending model. Likewise, collectivism was found to exist among few joint liability borrowers and influences positively borrowing incurring joint liability, making joint liability an inappropriate lending model. Therefore, cultural values influence the appropriateness of the microfinance institutions lending model. It is recommended that more emphasis should be put on improving the microfinance institutions lending model to take into consideration differences in cultural values. This will in turns encourage the majority of low income people to borrow from microfinance institutions, thereby improving the chances for the achievement of the goal of poverty alleviation.*

**Key words:** *Hofstede's Cultural Model, Borrowing, Joint Liability, Individual liability, Tanzania.*

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**1.0 Introduction:** Hofstede's cultural model has been considered by many scholars as an excellent theory in understanding differences in cultural values and its influence on individual's decision making (De Mooij and Hofstede, 2010; Frijns *et al.*, 2011). Researchers had applied Hofstede's cultural model in other areas such as corporate takeover decisions (Frijns *et al.*, 2011), acceptance and diffusion of innovation in the market (Tolba

*Hofstede's Cultural Model and Borrowing Incurring Joint Versus Individual Liability...* Pendo N. S. Kasoga and Mourad, 2011), mobile phone adoption (Van Biljon and Kotzé, 2008) etc. However, researchers had overlooked applying Hofstede's cultural model on microfinance institutions lending models.

According to Hofstede (2001), the main cultural differences between nations/ethnic and people lie in their values. In order to understand how values affect people's behaviors or decisions Hofstede *et al.* (1999) used five cultural dimensions. First, power distance denoting the extent to which less powerful members expect and accept unequal power distribution within a culture, and scaling from high power distance to low-power distance. Second, masculinity vs. femininity referring to gender roles, not physical characteristics, as commonly characterized by the levels of assertiveness or tenderness in the user, and scaling from masculine to feminine. Third, individualism vs. collectivism: referring to the role of the individual and the group, and is characterized by the level of ties between an individual in a society, and scaling from individualistic to collectivistic. Fourth, uncertainty avoidance: referring to the way in which people cope with uncertainty and risk, and scaling from high uncertainty avoidance to low uncertainty avoidance. Fifth, time orientation, referring to people's concerns with the past, present and future and the importance they attach to each, and scaling from short term orientation to long-term orientation.

However, this study focus on one cultural dimension of individualism vs. collectivism and their influence on borrowing incurring joint vs. individual liability among the joint liability borrowers. Based on existing studies social ties has been identified as the influential factor affecting borrowing decisions incurring joint vs. individual liability (Besley and Coate, 1995; Tesfay and Gardebroek, 2008; Huerta, 2010; Fischer, 2012). As a consequence, it was necessary to examine whether collectivism associated with strong social ties exist among the joint liability borrowers.

The empirical researches on whether social ties exists among joint liability remain limited (Epstein and Yuthas, 2011; Attanasio *et al.*, 2013; Barboni *et al.*, 2013). Previous studies did not examine the existence of social ties among microfinance borrowers based on Hofstede cultural model. Likewise, borrower behavior characteristics differ from one country to another, even within the same country. Moreover, studies were conducted in their respective markets. The applicability of the findings may be limited. This suggests that the microfinance industry needs to perform more research to examine whether the markets is going through similar experience. Furthermore, existing research is a suitable starting point but microfinance specific research will be required to confirm and extend the findings. As a consequence, more research is needed to investigate the existence of social ties among joint liability borrowers based on individualism vs. collectivism in a specific geographic and examines whether joint liability lending model is an appropriate lending model among joint liability borrowers.

Theoretical studies on microfinance institutions lending models have mainly focused on explaining how and why joint liability lending model works, offering competing predictions on its benefits (Ghatak, 1999; Stiglitz, 1990; Varian, 1990; Besley and Coate, 1995;

*Hofstede's Cultural Model and Borrowing Incurring Joint Versus Individual Liability... Pendo N. S. Kasoga* Armendáriz and Gollier, 2000). For instance, theories of asymmetric information in credit markets specialize in particular aspects of the group lending model, e.g. screening of borrowers i.e. self-selection of borrowing groups based on localized information to reduce adverse selection problems (Ghatak, 1999, Van Tassel, 1999; Armendáriz and Gollier, 2000; Ghatak, 2000). Other theories posit that peer monitoring between jointly liable borrowings mitigates the different aspects of moral hazard endemic to credit transactions Stiglitz (1990), Varian (1990), Banerjee *et al.* (1994), Wydick (2001) and enforcement of sanctions Besley and Coate (1995), which are largely based on simple assumptions about group behavior. Indeed, the question of whether or not Hofstede cultural model can be applied to microfinance institutions lending models remains largely unanswered in the empirical microfinance literature.

Therefore, this paper seeks to examine whether or not individualism exists among the joint liability borrowers and establish the relationship of the coefficient of the explanatory variable, whether or not individualism versus collectivism influence borrowing incurring joint vs. individual liability.

**2.1 Theoretical Framework:** Empirical evidence supports relevance of Hofstede's cultural framework for the individual's decision making (Ford *et al.*, 2003; De Mooij, 2010). In order to understand how values affect people's behaviors or decisions Hofstede *et al.* (1999), used five cultural dimensions. However, for the sake of this study which aims at understanding the concept of social ties among joint liability borrowers; the study discusses only individualism versus collectivism.

**2.1.1 Individualism versus Collectivism:** Individualism versus Collectivism is the most critical factor that affects individual's decision making (Triandis, 1995; Hofstede, 2001; Flight *et al.*, 2011). According to Hofstede's individualism pertains to societies in which ties between individuals are loose: everyone is expected to look after himself or herself and his or her immediate family. Collectivism on the other hand, pertains to societies in which people from birth onwards are integrated into strong, cohesive in-groups. According to Oyserman *et al.* (2002), the core elements of individualism are personal uniqueness and independence, whereas duty to the in-groups and maintaining harmony are the main constituents of collectivism.

While, Triandis (1994) adds that each culture results in different norms and values, consequently, the process that trustors use to decide who to trust and whether to trust may be dependent on a society's culture. Therefore, Triandis (1994) identifies four universal dimensions that form the basis for the distinctions between collectivism and individualism. In the first instance, in an individualistic society the definition of the self is independent whereas it is interdependent in collectivism.

Secondly, individuals functioning in a collectivistic context concentrate on the communal goals than individual goals. Thirdly, much of the social behavior in collectivist cultures is guided by cognitions that focus on norms, obligations and duties, and in individualistic cultures, the focus is on personal needs, rights and contracts. Finally, an

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emphasis on relationships even when disadvantageous is common in collectivist culture, whereas the emphasis in individualist cultures is on rational analysis of the advantages and disadvantages of maintaining a relationship.

In addition, the Hofstede model suggests that norms and values associated with individualism/collectivism reflect the way people interact, such as the importance of individual versus group goals, the strength of social ties, respect for individual accomplishment, and tolerance of individual opinion.

Therefore, this study examines whether or not social ties exists among the joint liability borrowers as explained by Hofstede cultural dimension of individualism vs. collectivism; and whether Hofstede cultural model can be applied in the area of microfinance institutions lending models. Thus the working hypothesis states that:

**H<sub>1</sub>:** *Collectivism influences positively the decision to borrow as a group and negatively as an individual.*

**H<sub>2</sub>:** *Individualism influences negatively the decision to borrow as a group and positively as an individual.*

### **3.0 Methodology**

**3.1 Study Area Selection Criteria:** The study was conducted in two regions within the country, Arusha and Dodoma. These regions were selected because they are regions in Tanzania where by microfinance institutions services have been growing rapidly with more micro borrowers. The joint liability lending model was selected because it is the main lending model used by microfinance institutions to provide financial services to the poor people. PRIDE (T) and FINCA (T) were selected for two reasons. First, they are microfinance institutions which have a wide outreach throughout the country as compared to other microfinance institutions. Secondly, they are among the microfinance institutions whose methodology of lending, is based on joint liability.

**3.2 Sampling and Data Collection:** The researcher met the respondents who borrowed using joint liability lending model at PRIDE (T) and FINCA (T). The selection of respondents, who participated in this study, was conducted using systematic sampling without replacement with the step of 3. Systematic sampling was used as a proxy of simple random sampling, when no list of the population exists or when the list is in roughly random order (Churchill, 1995). The sample size for the study was based on the method of analysis. This study used Structural Equation Modeling for the analysis (SEM). SEM requires a sample size of 200 and above to have confidence in goodness of fit test. Less than 200 participants are regarded as the insufficient sample size to test the hypothesis with SEM (Bentler, 2004). Therefore, the sample size for the study was 420 respondents with 210 respondents from PRIDE (T) and 210 respondents from FINCA (T). This sample size was suitable to conduct an analysis with SEM for PRIDE (T) and FINCA (T) separately.

This study employs explanatory research design which requires developing causal explanations. Moreover, a cross-sectional design was employed through self-administered

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questionnaire. Before the actual survey, pre-testing of the questionnaire was done to check its relevance and appropriate modifications were made accordingly. The validity and reliability of all the measures in the study instrument were improved by employing a seven point Likert scale as suggested by Churchill (1995). Furthermore, the improvement was done by adoption of methods and instruments from past studies.

**3.3 Quantification of the Variables:** Individualism vs. collectivism contained items adopted from Taras (2006). Although culture refers to society, the conclusions of Hofstede on the dimension of culture and the subsequent indexing, of societies were drawn from examining values and relations in the work place. However, other researchers have proposed research instruments of cultural characteristics of individuals that are based on values and relations in the wider social environment (Taras, 2006). Following this thinking while abiding by Hofstede, this study considers cultural dimensions at the level of individuals rather than employing the aggregate cultural scores. These variables were measured using seven point Likert scale with end points of “strongly agree” (7) and “strongly disagree” (1).

**3.4 Data Analysis:** The preliminary data analysis was performed before testing the hypotheses of the study. Preliminary analysis involved a models fit test. The final data analysis tested the hypothesis of the study by the use of Structural Equation Modeling (SEM). In estimating the parameters under SEM, AMOS version 20 was used. AMOS was used because it is user friendly in terms of creating the structural models and defining the required statistics (Ame, 2005). Therefore, once the model had attained an acceptable fit to the observed data, the causal path analysis or relationships among variables were determined. Path analysis was employed for studying the relationship between individualism vs. collectivism and joint vs. an individual liability.

## **4.0 Results and Discussion:**

**4.1 Respondents' Characteristics:** The summary of respondents' features is given in Table 1. With regard to sex of the respondents, from PRIDE (T), out of 105 respondents from Arusha region, 29% were male while 71% were female. On the other hand, out of 105 respondents from Dodoma region, 19% were male while 81% were female. From FINCA (T), out of 105 respondents from Arusha region, 37% were male while 63% were female. Similarly, out of 105 respondents from Dodoma region, 28% were male while 72% were female. These findings suggest that the majority of the borrowers from microfinance institutions are women. According to microfinance policy paper (2000), microfinance institutions prefer lending to women than men because they consider men to be more risky due to non-repayment.

With respect to the ages of the respondents, from PRIDE (T), out of 105 respondents from Arusha region, 12% were in the age group of 18 to 25, 29% in age group of 26 to 35, 45% in the age group of 36 to 45 and 14% were in the age group greater than 45 years. From Dodoma region, out of 105 respondents, 6% were in the age group of 18 to 25, 19% in age group of 26 to 35, 54% in the age group of 36 to 45 and 21% were in the age group

greater than 45 years. From FINCA (T), out of 105 respondents from Arusha region, 10% were in the age group of 18 to 25, 17% in age group of 26 to 35, 54% in the age group of 36 to 45 and 19% were in the age group greater than 45 years. From Dodoma region, out of 105 respondents, 13% were in the age group of 18 to 25, 23% in age group of 26 to 35, 43% in the age group of 36 to 45 and 21% were in the age group greater than 45 years. These findings suggest that the majority of the borrowers from microfinance institutions were in the 36 to 45 years range. These findings imply that the age groups of 36 to 45 years were dominant participants in the microfinance institutions, since they have reached maturity and have responsibilities in their families and society as a whole.

With respect to the education of the respondents, from PRIDE (T), out of 105 respondents from Arusha region, 88% have attained primary education while 12% have reached O' level. From Dodoma region, out of 105 respondents 97% have attained primary education while 3% have reached O' level. From FINCA (T), out of 105 respondents from Arusha region, 87% have attained primary education while 13% have reached O' level. From Dodoma region, out of 105 respondents 90% have attained primary education while 10% have reached O' level. These findings suggest that the majority of the respondents were less educated people having attended primary school. The results therefore suggest that it was the poorer part of the targeted population that benefited from the microfinance institutions.

With respect to marital statuses of the respondents, from PRIDE (T), out of 105 respondents from Arusha region, 82% were married, 12% divorced while 6% were widowed. From Dodoma region, out of 105 respondents 89% were married, 5% divorced while 6% were widowed. From FINCA (T), out of 105 respondents from Arusha region, 83% were married, 4% divorced while 13% were widowed. From Dodoma region, out of 61 respondents 79% were married, 11% divorced while 10% were widowed. These findings suggest that the majority of the respondents were married people, because they have responsibilities in their families and society as a whole.

With regards to other training received, from PRIDE (T), out of 105 respondents from Arusha region, 83% have not received any training while 17% have received vocational training. From Dodoma region, out of 105 respondents 90% have not received any training while 10% have received vocational training. From FINCA (T), out of 105 respondents from Arusha region, 87% have not received any training while 13% have received vocational training. From Dodoma region, out of 105 respondents 77% have not received any training while 23% have received vocational training. These findings suggest that the majority of the respondents had not received any training. This is the challenge to the microfinance institutions, because poor people need business skills in order to be effective in expanding their business.

As far as the main occupation of the respondents was concerned, all of them were business people (100%). These findings imply that microfinance institutions targeted borrowers who are already engaged in business.

**Table 1: Demographic Characteristics of the Respondents**

		PRIDE (T)				FINCA (T)			
		Arusha Region		Dodoma Region		Arusha Region		Dodoma Region	
		Freq	%	Freq	%	Freq	%	Freq	%
<b>Sex</b>	Male	30	29	20	19	39	37	29	28
	Female	75	71	85	81	66	63	76	72
	<b>Total</b>	<b>105</b>	<b>100</b>	<b>105</b>	<b>100</b>	<b>105</b>	<b>100</b>	<b>105</b>	<b>100</b>
<b>Age</b>	18-25	13	12	6	6	10	10	14	13
	26-35	30	29	20	19	18	17	24	23
	36-45	47	45	57	54	57	54	45	43
	Greater than 45 years	15	14	22	21	20	19	22	21
	<b>Total</b>	<b>105</b>	<b>100</b>	<b>105</b>	<b>100</b>	<b>105</b>	<b>100</b>	<b>105</b>	<b>100</b>
<b>Highest Education</b>	Primary School	92	88	102	97	91	87	94	90
	O' Level	13	12	3	3	14	13	11	10
	<b>Total</b>	<b>105</b>	<b>100</b>	<b>105</b>	<b>100</b>	<b>105</b>	<b>100</b>	<b>105</b>	<b>100</b>
<b>Marital Status</b>	Married	86	82	94	89	87	83	83	79
	Divorced	13	12	5	5	4	4	12	11
	Widowed	6	6	6	6	14	13	10	10
	<b>Total</b>	<b>105</b>	<b>100</b>	<b>105</b>	<b>100</b>	<b>105</b>	<b>100</b>	<b>105</b>	<b>100</b>
<b>Other Training Received</b>	None	87	83	94	90	91	87	81	77
	Vocational	18	17	11	10	14	13	24	23
	<b>Total</b>	<b>105</b>	<b>100</b>	<b>105</b>	<b>100</b>	<b>105</b>	<b>100</b>	<b>105</b>	<b>100</b>
<b>Main Occupation</b>	Business	105	100	105	100	105	100	105	100
	<b>Total</b>	<b>105</b>	<b>100</b>	<b>105</b>	<b>100</b>	<b>105</b>	<b>100</b>	<b>105</b>	<b>100</b>

**4.2 Joint Borrowers' Preference to Borrow Incurring Joint vs. Individual Liability:** With respect to borrowers' preference to borrow incurring joint vs. individual liability, Table 2 reveals that only few joint borrowers from both regions Arusha and Dodoma prefer to borrow incurring joint liability. This study has found out that among joint borrowers from Arusha region, 17% of respondents from PRIDE (T) and 19% from FINCA (T), were found to prefer borrowing incurring joint liability, while 83% of respondents from PRIDE (T) and 81% from FINCA (T), were found to prefer borrowing incurring individual liability.

Among joint borrowers from Dodoma region 19% of respondents from PRIDE (T) and 23% from FINCA (T) were found to prefer borrowing incurring joint liability, while 81% of respondents from PRIDE (T) and 77% from FINCA (T), were found to prefer borrowing incurring individual liability.

These findings suggest that majority of the joint borrowers prefer to borrow incurring individual liability. These findings raise the question of screening among joint liability borrowers. All of these borrowers borrow incurring joint liability but only a few of them prefer to borrow incurring joint liability. The joint liability theory has posited that joint liability lending model is able to mitigate problems of adverse selection, through its ability to screen high risk borrowers from the lending pool (Ghatak and Guinnane, 1999; Van Tassel, 1999). It further posited that group self-formation provides a screening mechanism that can help to reduce adverse selection (Ghatak and Guinnane, 1999). This study does not contradict this hypothesis because the intention was not to measure the impact of borrowers on screening. However, by using the results from this study, these findings suggest that the problem of adverse selection among joint liability borrowers exists, across these four ethnic groups in Tanzania. These findings imply that the appropriateness of the lending models depends on the cultural settings. Since, cooperation associated with trust varies from people with different cultural backgrounds.

**Table-2: Preference of Joint vs. Individual Liability**

	PRIDE (T)				FINCA (T)				Reasons
	Arusha Region		Dodoma Region		Arusha Region		Dodoma Region		
	Freq	%	Freq	%	Freq	%	Freq	%	
<b>Preference of Joint Liability</b>	18	17	20	19	20	19	24	23	In case of default they can benefit from other group members.
<b>Preference of Individual Liability</b>	87	83	85	81	85	81	81	77	First, it is very difficult to determine the intention of other group member if is benevolent. Secondly, other group members do not pay their loans.
<b>Total</b>	<b>105</b>	<b>100</b>	<b>105</b>	<b>100</b>	<b>105</b>	<b>100</b>	<b>105</b>	<b>100</b>	

The reason given by respondents for their preference to borrow incurring joint liability was that they could benefit from other group members in case they failed to repay their loan (Table 2). These findings suggest that borrowers prefer to borrow incurring joint liability



because they want to hedge against risk of non-repayment in case they face problems and fail to repay their loans. These findings imply that borrowers may also derive positive utility out of group contracts: peer support works like an insurance against repayment problems of a borrower. If s/he had to manage her/his problems independently, as in the individual approach, s/he might have failed. These findings are also in line with the study conducted by Ross and Savanti (2005) in India, on the empirical analysis of the mechanisms of group lending. Their findings revealed that some clients prefer to borrow on joint liability lending scheme because of the ability to receive support in periods of financial difficulty.

The reasons given by respondents for their preference to borrow incurring an individual liability was that it is very difficult to determine the intention of other person if is benevolent. They further revealed that they did not prefer to borrow incurring joint liability because they fail to predict if the other person can pay or not (Table 2). This is important because if one member fails to repay, other group members suffer the default consequences and loose access to future loan, unless they pay the loan for the defaulters. They point out that it happens that some fellow group members are not able or willing to pay their installments. As a consequence, the group members takes the responsibility to repay for the delinquent partner, because the whole group will be excluded from access to further loans, irrespective of their individual ability to repay their own loans. These findings concur with Tesfay and Gardebroek (2008) that conducted an empirical study from rural microfinance in Ethiopia and investigated joint liability borrowing decisions under risk. Their results showed that preference for borrowing incurring joint liability declines and borrowers appear to prefer an individual liability.

These findings imply that if the group members' intentions are not benevolent and members believed that the group would aid them in case of default, it would be possible for some members to shirk their responsibility, default on their loans and hope that the group would repay for them in the excuse that uncontrollable situation had arisen. Thus in the context of imperfect information, joint liability becomes an inappropriate lending model.

These findings are also supported with Hofstede cultural theory which states that lack of cooperation in the society reduces the ability of one party to predict the intention of another party. Furthermore, determining another party's intention as benevolent is facilitated when the group shares values and norms that allow one party to understand the other party's objective and goals. Thus, one party may pursue individual goals which may be inconsistent with the other party's goal (Hofstede, 2001).

#### **4.3 Preliminary Analysis:**

**4.3.1 Model Fit Test:** A Confirmatory factor analysis that is in the SEM was performed to test whether the data fit the hypothesized models. The intention is to confirm if the models are adequate enough to be used as the basis for testing the research hypotheses. For the findings to indicate that the predicted model is congruent with the observed data, it is recommended for the  $\chi^2$  to be non-significant ( $p > 0.05$ ), (Hoyle and Panter, 1995), CMIN/DF in the range of 2 to 1 or 3 to 1 indicate acceptable fit between the hypothetical

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model and the sample data (Kenny, 2012). Furthermore, for the hypothetical model to indicate acceptable fit to the sample data, the fit indices should be as follow; GFI>0.90, AGFI>0.90, CFI>0.90, TLI>0.90, NFI>0.90, IFI>0.90, RFI>0.90, RMR<0.05, RMSEA; good fit (0.00–0.05), fair fit (0.05–0.08), mediocre fit (0.08–0.10), and poor fit (over 0.10), PCLOSE should be > 0.05 to conclude close fit of RMSEA (Ibid). The models fit summaries- CMIN, CMIN/DF, RMSEA, GFI, AGFI, RMR, NFI, RFI, IFI, TLI and CFI, all indicate that the models serve as a good fit. The overall results of the models fit are as shown in Table 3 to 6 below.

**Table 3 Fit Indices for PRIDE (T) and Borrowing Incurring Joint Liability**

Model	CMIN	RMR	GFI	AGFI	NFI	RFI	IFI	TLI	CFI	RMSEA
Modified Model	4.94, DF 2, P = 0.084, $\chi^2/df = 2.471$	0.016	0.994	0.999	0.999	0.989	0.999	0.993	0.999	0.073 PCLOSE = 0.237

**Table 4 Fit Indices for FINCA (T) and Borrowing Incurring Joint Liability**

Model	CMIN	RMR	GFI	AGFI	NFI	RFI	IFI	TLI	CFI	RMSEA
Modified Model	1.414, DF 2, P = 0.493, $\chi^2/df = 0.707$	0.007	0.998	0.975	0.999	0.995	1.000	1.002	1.000	0.000 PCLOSE = 0.641

**Table 5 Fit Indices for PRIDE (T) and Borrowing Incurring Individual Liability**

Model	CMIN	RMR	GFI	AGFI	NFI	RFI	IFI	TLI	CFI	RMSEA
Modified Model	2.201 DF 2, P = 0.333, $\chi^2/df = 1.100$	0.011	0.997	0.973	0.999	0.995	1.000	1.000	1.000	0.019 PCLOSE = 0.550

**Table 6 Fit Indices for FINCA (T) and Borrowing Incurring Individual Liability**

Model	CMIN	RMR	GFI	AGFI	NFI	RFI	IFI	TLI	CFI	RMSEA
Modified Model	2.152 DF 2, P = 0.341, $\chi^2/df = 1.076$	0.007	0.996	0.962	0.999	0.993	1.000	0.999	1.000	0.020 PCLOSE = 0.504

**4.4 Final Analysis:** The summaries of the results of testing hypotheses for PRIDE (T) and FINCA (T) with the decision to borrow incurring joint liability vs. individual liability are presented in Tables 7 and 8. The results indicate a statistically significant ( $p \leq 0.05$ ) negative relationship between individualism and borrowing incurring joint liability supporting the hypothesis with  $\beta = -0.28$  for PRIDE (T) and  $\beta = -0.253$  for FINCA (T). Similarly, the study found out a statistically significant ( $p \leq 0.05$ ) positive relationship between individualism and borrowing incurring an individual liability supporting the hypothesis with  $\beta = 0.34$  for PRIDE (T) and  $\beta = 0.323$  for FINCA (T). These findings imply that when social ties associated between individuals are loose, joint liability becomes an inappropriate lending model and borrowers prefer borrowing incurring an individual liability. According to Hofstede's (2001) individualism pertains to societies in which ties between individuals are loose: everyone is expected to look after himself or herself and his or her immediate family. These findings support the Hofstede cultural theory that in cultures where social ties between individuals are loose cooperation does not exist. These findings suggest that although all of these borrowers borrow incurring joint liability, other borrowers do not trust their group members, hence preference for borrowing incurring an individual liability.

**Table 7 Results of Testing Hypotheses for PRIDE (T)**

			<b>Standardized Regression Weight</b>	<b>Standard Error (S.E)</b>	<b>Critical Ratio (C.R)</b>	<b>P</b>
Joint Liability	<---	Individualism	-0.280	0.022	12.727	***
Joint Liability	<---	Collectivism	0.390	0.035	11.143	***
Individual Liability	<---	Individualism	0.340	0.048	7.083	***
Individual Liability	<---	Collectivism	-0.270	0.035	7.714	***

Note: \*\*  $p < 0.05$ , \*\*\*  $p = 0.000$

Joint Liability:  $R^2 = 0.78\%$ , F Value = 179.23\*\*\*

Individual Liability:  $R^2 = 0.71\%$ , F Value = 172.46\*\*\*

**Table 8 Results of Testing Hypotheses for FINCA (T)**

			<b>Standardized Regression Weight</b>	<b>Standard Error (S.E)</b>	<b>Critical Ratio (C.R)</b>	<b>P</b>
Joint Liability	<---	Individualism	-0.253	0.028	9.036	***
Joint Liability	<---	Collectivism	0.384	0.025	15.360	***
Individual Liability	<---	Individualism	0.323	0.025	12.920	***
Individual Liability	<---	Collectivism	-0.281	0.019	14.789	***

Note: \*\*  $p < 0.05$ , \*\*\*  $p = 0.000$

Joint Liability:  $R^2 = 0.78\%$ , F Value = 179.23\*\*\*

Individual Liability:  $R^2 = 0.71\%$ , F Value = 172.46\*\*\*

With respect to collectivism and the decision to borrow incurring joint liability, the study has found out a statistically significant ( $p \leq 0.05$ ) positive relationship between collectivism and borrowing incurring joint liability, supporting the hypothesis with  $\beta = 0.39$  for PRIDE (T) and  $\beta = 0.384$  for FINCA (T). Similarly, the study found out a statistically significant ( $p \leq 0.05$ ) negative relationship between collectivism and borrowing incurring individual liability supporting the hypothesis with  $\beta = -0.27$  for PRIDE (T) and  $\beta = -0.28$  for FINCA (T). These findings imply that when cooperation existed among group members, it influenced positively the decision to borrow incurring joint liability and negatively incurring an individual liability. These findings support the Hofstede cultural model which suggests that people are more likely to cooperate with each other when they have social ties that provide a foundation for mutual trust. Strong social ties associated with cooperation, create trust which in turn influences borrowers to prefer borrowing incurring joint liability.

Although collectivism influences positively borrowing incurring joint liability; the results from Table 2 reveal that cooperation associated with strong social ties exists on a few of them, because majority of the joint borrowers shows preference for an individual liability. These findings imply that what causes them to borrow incurring joint liability was the need for credit. This happens because poor people lack an alternative source of finance. Poor people cannot access formal financial institutions because they lack physical collateral. According to Littlefield *et al.* (2003) the interest rate charged by informal financial institutions (other money lenders) is very high; thus the only alternative for the poor people to access credit is the microfinance institutions. These findings suggest that the problem of adverse selection among joint liability borrowers exists. These findings also imply that cooperation associated with strong social ties varies from people with different cultural backgrounds which provide a challenge to the joint liability lending model. These findings imply that without the potential for trust and perfect information among group members, joint liability no longer becomes a viable option since moral hazard can arise.

**5.0 Conclusion and Recommendations:** Based on the findings of this study it is concluded that majority of the joint borrowers prefer to borrow incurring individual liability which raise the question on the screening among joint liability borrowers. Similarly, individualism vs. collectivism has a significant influence on borrowing decision incurring joint vs. an individual liability. This dimension has been examined under a new perspective of borrowing assuming joint vs. an individual liability among joint liability borrowers. The findings of this study indicate that collectivism influences positively borrowing incurring joint liability. Similarly, individualism was found to influence negatively borrowing incurring joint liability, making joint liability an inappropriate lending model. Hence, cultural values have an effect on borrowing decisions incurring joint versus individual liability. The findings of this study suggest microfinance institutions should improve their lending model to take into consideration differences in cultural values in the areas in which they operate. This will in turns encourage the majority of low income people to borrow from microfinance

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institutions, thereby improving the chances for the achievement of the goal of poverty alleviation.

## 6.0 References:

1. Ame, A. M. (2005). The Effect of Quality on Satisfaction and its Consequences on Customer's Behavioral Intentions: A Study of Selected Service Firms in Tanzania: PhD Thesis, University of Dar es Salaam.
2. Armendáriz de Aghion, B. and Gollier, C. (2000). Peer Group Formation in an Adverse Selection Model, *Economic Journal*, Vo. 110, No. 1, 632-643.
3. Attanasio, O., Augsburg, B., Haas, D.R., Fitzsimons, E. and Harmgart, H. (2013). Group Lending or Individual Lending: Evidence from a Randomized Field Experiment in Mongolia, Working Paper No. W11/20, 1-47, University of Mongolia.
4. Banerjee, A., Besley, T. and Guinnane, T. (1994). Thy Neighbor's Keeper: The Design of a Credit Cooperative with Theory and a Test, *Quarterly Journal of Economics*, Vol. 109, No. 2, 491-515.
5. Barboni, G., Cassar, A., Trejo, R. A. and Wydick, B. (2013). Adverse Selection and Moral Hazard in Joint Liability Loan Contracts: Evidence from an Actual Field Experiment, *Journal of Economic and Management*, Vol.9, No.2, 153-184.
6. Bentler, P.M. (2004). *EQS 6 Structural Equations Program Manual*, Multivariate Software, Inc Encino, CA.
7. Besley, T. and Coate, S. (1995). Group Lending Repayment Incentives and Social Collateral: *Journal of Development Economics*, Elsevier, Amsterdam- Lausanne-New York- Oxford-Shannon-Tokyo Vol. 46, No. 1, 1-18.
8. Churchill, G.A. (1995), *Basic Marketing Research*, Havcourt Brace College Publishers, New York.
9. De Mooij, M. (2010). *Global Marketing and Advertising, Understanding Cultural Paradoxes: (Third Edition)*, Thousand Oaks, CA: Sage.
10. De Mooij, M. and Hofstede, G. (2010). The Hofstede Model: Applications to Global Branding and Advertising Strategy and Research, *International Journal of Advertising*, Vol. 29, No.1, 85– 110.
11. Epstein, J. M. and Yuthas, K. J. (2011). Critical Role of Trust in Microfinance Success: Identifying Problems and Solutions, *Journal of Development Entrepreneurship*, Vol. 16, No. 4, 477.
12. Fischer, G. (2012). Contract Structure, Risk Sharing and Investment Choice, Unpublished Paper, London School of Economics, Mimeo, 1-68.
13. Flight, R., Allaway, A., Kim, W. and D'Souza, D. (2011). A Study of Perceived Innovation Characteristics across Cultures and Stages of Diffusion, *Journal of Marketing Theory and Practice*, Vol. 19, No. 1, 109-125.
14. Ford, D., Connelly, C., and Meister, D. (2003), "Information Systems Research and Hofstede's Cultures's Consequences: An Uneasy and Incomplete Partnership", *IEEE Transactions on Engineering Management*, Vol. 50, No. 1, 8-25.

15. Frijns, B., Gilbert, A., Lehnert, T. and Touran i- Rad, A. (2011). Cultural Values, CEO Risk Aversion and Corporate Takeovers, Auckland University of Technology, Unpublished Paper, Auckland, New Zealand, 1–37.
16. Ghatak, M. (1999). Group Lending, Local Information and Peer Selection, *Journal of Development Economics*, Vol. 60, No. 1, 27-50.
17. Ghatak, M. (2000). Screening by the Company you Keep: Joint Liability Lending and the Peer Selection Effect, *The Economic Journal*, Vol. 110, No. 465, 601-631.
18. Hofstede, F., Steenkamp, J. and Wedel, M. (1999). A Cross-National Investigation into the Individual and National Culture Antecedents of Consumer Innovativeness, *Journal of Marketing*, Vol. 63, No. 1, 48-54.
19. Hofstede, G. (2001). *Culture' Consequences: Comparing values, Behaviors, Institutions and Organizations across Nations*, Sage Publications, and Thousand Oaks, London, CA.
20. Hoyle, R.H. and Panter (1995). Structural Equation Modeling: In Relation to AMOS Software, Sage Publications, Inc. Thousand Oaks, CA.
21. Huerta De La A. (2010). Microfinance in Rural and Urban Thailand: Policies, Social Ties and Successful Performance, Unpublished Paper, University of Chicago, U.S.A.
22. Kenny, D. A. (2012). Measuring Model Fit, Unpublished Paper, University of Connecticut.
23. Littlefield, E., Morduch, J. and Hashemi, S. (2003). Is Microfinance an Effective Strategy to Reach the Millennium Development Goals? Unpublished Report, Consultative Group to Assist the Poor, World Bank, Washington, DC.
24. Microfinance Policy Paper (2000). *Rural Savings and Credit Cooperative Societies in Tanzania: Report of a Survey: Status of Rural SACCOs in Tanzania*, Unpublished Report, By International Cooperative Alliance, Regional Office for East, Central and Southern Africa, January, 2001.
25. Oyserman, D.C., Coon, H.M. and Kemmelmeier, M. (2002). Rethinking Individualism and Collectivism: Evaluation of Theoretical Assumptions and Meta – Analyses, *Psychological Bulletin*, Vol. 28, No. 1, 3–72.
26. Ross, A. and Savanti, P. (2005). *Empirical Analysis of the Mechanisms of Group Lending*, Centre for Microfinance Research Working Paper Series, Kennedy School of Government, Havard University.
27. Stiglitz, J. (1990). Peer Monitoring and Credit Markets, *World Bank Economic Review*, Vol. 62, No. 3, 539 – 591.
28. Taras, V. (2006). Instruments for Measuring Cultural Values and Behaviors. Available [http://ucalgary.ca/%7Etaras/\\_private/Culture\\_Survey\\_Catalogue.pdf](http://ucalgary.ca/%7Etaras/_private/Culture_Survey_Catalogue.pdf), accessed at 25/7/2011.
29. Tesfay, B. G. and Gardebroek, C. (2008). Joint Liability Borrowing Decisions Under Risk: Empirical Evidence from Rural Microfinance in Ethiopia, Unpublished Report, and Paper Presented at the 12th EAAE Congress, Gent, Belgium.

30. Tolba, H.A. and Mourad, M. (2011). Individual and Cultural Factors Affecting Diffusion of Innovation, *Journal of International Business and Cultural Studies*, American University in Cairo, Vol. 1, No. 1, 1- 16.
31. Triandis, H.C. (1994). *Culture and Social Behavior*, McGraw – Hill, USA.
32. Triandis, H. C. (1995). *Collectivism and Individualism*, Westview Press, Boulder, CO.
33. Van Biljon, J. A. and Kotzé, P. (2008). Cultural Factors in a Mobile Phone Adoption and Usage Model, *Journal of Universal Computer Science*, Vol. 14, No. 16, 2651–2679.
34. Van Tassel, E. (1999). Group Lending Under Asymmetric Information, *Journal of Development Economics*, Vol. 60, No.1, 3-25.
35. Varian, H (1990). Monitoring Agents with Other Agents, *Journal of Institutional and Theoretical Economics*, Vol. 146, No. 1, 153-174.
36. Wydick, B. (2001). Group Lending Under Dynamic Incentives as a Borrower Discipline Device, *Review of Development Economics*, Vol. 5, No. 1, 406-420.