
**TRUST AND BORROWING INCURRING JOINT VERSUS INDIVIDUAL LIABILITY: THE CASE OF
SELECTED TRIBES IN TANZANIA**

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ABSTRACT

Trust is an important factor that influences borrowing incurring joint liability. However, the challenge is whether trust exists among joint liability borrowers given the differences in the type of cultural setting. Also, there is some confusion in the literature, as it remains unclear which trust antecedents have the strongest relationship with trust. To address these challenges, a study was conducted from four ethnic groups namely, Gogo, Zaramo, Chagga and Kinga borrowed from PRIDE (T) and FINCA (T). The study employs explanatory research design involving 480 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 trust was low among joint liability borrowers, caused the majority of them to prefer borrowing incurring an individual liability. The results also indicate that benevolence has the strongest relationship with trust. Benevolence and trust propensity provide avenue for fostering trust, as they had significant unique relationships with trust and influence positively borrowing as a group. It is recommended that more emphasis should be put on the strategies that build trust, among joint liability borrowers. Trust building associated with cooperation among joint liability borrowers shall in turn make joint liability an appropriate lending model.

Key words: Trust, Borrowing, Joint and Individual liability, Tribes, Tanzania

1.0 INTRODUCTION

Trust is considered to be one of the major obstacles that hinder joint liability (Hernández, 2011). It is argued that without the potential for social sanctions and trust, joint liability lending model may offer a little or no advantage over individual liability lending model (Besley and Coate, 1995). The challenge is whether trust exists among the joint liability borrowers in Tanzania, given the differences in the type of cultural setting.

The microfinance lending models that currently dominate the microfinance industry are joint and the individual lending models (Attanasio *et al.*, 2013; Kodongo and Kendi, 2013). Joint liability model is the main lending model used by microfinance institutions to lend to poor people who lack conventional collateral (Ayagari *et al.*, 2010; Giné and Karlan, 2011). Joint liability lending allows the poor people to access credit by substituting social capital for physical capital (Barboni *et al.*, 2013).

The important factor in joint liability is that joint borrowers are made responsible for the repayment of other group members in case of default (Armendáriz and Morduch, 2010; Fischer, 2012). The joint liability lending model enables the poor people to get access to the financial institutions, because the joint liability acts as collateral. Under joint liability, clients screen each other, so that only trustworthy individuals are allowed into the group (Kono, 2006). However, the question researchers and practitioners are concerned with is, whether or not joint liability is a result of trust among group members, that is, whether or not trust existed among joint liability borrowers.

The trust literature distinguishes trustworthiness (the ability, benevolence and integrity of a trustee) and trust propensity (a dispositional willingness to rely on others) from trust (the intention to accept vulnerability to a trustee based on positive expectations of his or her actions (Mayer *et al.*, 1995). Benevolence with synonyms including loyalty, openness, caring/supportiveness and availability, is the extent to which a trustee is believed to want to do good for the trustor, apart from any profit motives. Integrity with synonyms including fairness, justice, consistency and promise fulfillment is the extent to which a trustee is believed to adhere to sound moral and ethical principles (Mayer *et al.*, 1995). Ability captures the knowledge and skills needed to do a specific job with the interpersonal skills and general wisdom needed to succeed in an organization (Autor and Dorn, 2013). These have been found to have a positive relationship with trust in the society (Mayer *et al.*, 1995).

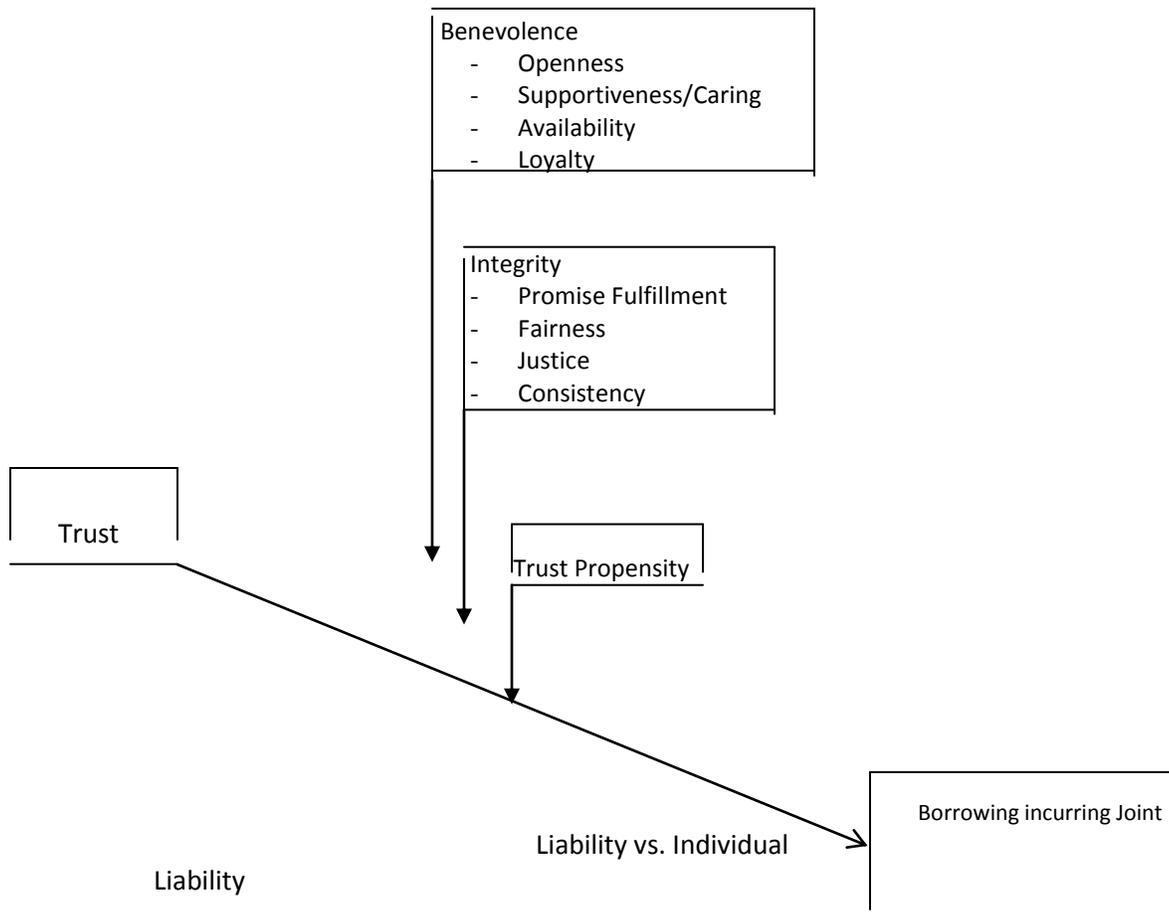
However, it remains unclear which trust antecedents have the strongest relationship with trust (Colquitt *et al.*, 2007). Although Mayer *et al.* (1995) demonstrate significant unique effects for all dimensions when predicting trust, some studies have failed to demonstrate significant unique effects for all dimensions when predicting trust (Jarvenpaa *et al.*, 1998; Mayer and Gavin, 2005), and these trustworthiness dimensions often are highly correlated. Moreover, some conceptualizations of trustworthiness combine benevolence and integrity into a single character variable (Mayer and Gavin, 2005), suggesting that those two dimensions might be redundant with each other.

This study use Mayer *et al.* (1995) integrative model of trust as a base theory. The theory claims that trust is the intention to accept vulnerability with a positive expectation. Mayer *et al.* definition of trust includes an expectation that another party will perform a particular action. The model proposed that one driver of that expectation is trustworthiness. Mayer *et al.*'s model separated trust from trustworthiness, with three characteristics of the trustee (ability, benevolence and integrity) appearing as antecedents of trust. In addition, Mayer *et al.* (1995) drew a distinction between trusts with trust propensity. The model claims that trust propensity affects the likelihood that a person will trust. Although the separation of trust, trustworthiness and trust propensity has clarified the structure of the literature as shown in figure 1.1, the questions which remain are: do all have significant relationship with trust? How strong are those relationships?

Therefore, the main objectives of this paper is to investigate whether or not joint liability is a result of trust among group member and whether trust moderated by benevolence, integrity and trust propensity has a positive effect on joint liability or not. Thus the working hypotheses state that:

Trust mediated by (a) benevolence (b) integrity (c) trust propensity influence positively the decision to borrow as a group and negatively as an individual.

Figure 1.1: Relationships between Trust, Trust antecedents and Borrowing Incurring Joint Liability vs. Individual Liability



Source: Author's Construction from Literature Review (2016)

2.0 METHODOLOGY

2.1 Study Area Selection Criteria

The study was conducted in four tribes within the country, the Chaga from Kilimanjaro Region, the Zaramo from Coast Region, the Kinga from Njombe Region and the Gogo from Dodoma Region borrowed from PRIDE (T) and FINCA (T). The selection of tribes, microfinance institutions and respondents were based on specific characteristics they possess, that are relevant to the purpose of this study. Therefore, sampling was guided by theoretical statistical sampling. Theoretical sampling means selecting a sample based on a certain characteristics they possess (Strauss and Cobin, 1998; Thompson, 1999).

Four tribes *Chaga, Zaramo, Kinga and Gogowere* selected purposively for this research in order to examine whether trust exists among joint borrowers from different ethnic groups in Tanzania. These tribes were selected for two reasons. The first consideration was the ethnic group where cooperation exists and secondly, the ethnic group where aggressiveness in business exist. Within the literature, the main factor in order for the joint liability model to operate well is the existence of trust associated with cooperation (Barboniet *al.*, 2013). Most of the loans from microfinance institutions are borrowed for business purposes (Attanasioet *al.*, 2013). Therefore, differences in cultural values that exist among ethnic groups were the main reason for the selection of these ethnic groups.

The first rationale for selecting the Chaga tribe from Kilimanjaro Region is that, the literature search shows that 'Chaga people have the culture of cooperation (Conzales, 2005). The second rationale is its aggressiveness in business, as many of them are entrepreneurs (Conzales, 2005).

The first rationale for selecting the Zaramo tribe from the Coast Region is cooperation (Mazrui and Shariff, 1994). Zaramo culture has been influenced by the Arab culture which emphasizes safety of the group, (Bryceson, 2010). The second rationale is that the majority are not aggressive in business (Velten, 2002).

The rationale for selecting the Kinga tribe from Njombe Region is that they are known for their good business skills and cooperation among themselves (Ilfiffe, 2008). Finally, the rationale for selecting the Gogo tribe from Dodoma Region is that business is less conducted by the majority of Gogo people and cooperation is less among themselves (Narayan, 1997).

The study examines whether cooperation still exists for those tribes which have the culture of cooperation and does it make the joint liability an appropriate lending model. For the tribe which literature search shows that cooperation does not exist, the study examines whether joint liability is an appropriate lending model in accordance to their specific cultural settings.

The microfinance institutions selected in this study were PRIDE (T) and FINCA (T). They 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 both group and an individual lending.

2.2 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. 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 480 respondents with 280 respondents from PRIDE (T) and 200 respondents from FINCA (T). This sample size was suitable to conduct an analysis with SEM for PRIDE (T) and FINCA (T) separately.

This study employed explanatory research design which requires developing causal explanations. Moreover, a cross-sectional design was employed through self-administered 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 and Peter (1984). Furthermore, the improvement was done by adoption of methods and instruments from past studies.

2.3 Quantification of the Variables

Trust is the independent variables for this study. The questions on trust were based on the perception of trust in the community/society and among joint liability borrowers, as proposed by World Values Survey (1990, 1995 – 7). Benevolence, integrity and trust propensity were the moderating variables contained items adopted from Mayer and Davis (1999). Ability was not considered in this study because ability captures the knowledge and skills needed to do a specific job and general wisdom needed to succeed in an organization (Mayer *et al.*, 1995). Joint vs. an individual liability are the dependent variables for this study. These were quantified by asking a question regarding borrowers' willingness to borrow incurring joint vs. an individual liability. The variables were measured using seven point Likert scale with end points of "strongly agree" (7) and "strongly disagree" (1) (Murray, 2013).

2.4 Data Analysis

The preliminary data analysis was performed before testing the hypotheses of the study. Preliminary analysis involved factor analysis and 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 the dimensions of trust and joint vs. an individual liability.

3.0 RESULTS AND DISCUSSION

3.1 Respondents' Characteristics

The summary of respondents' features is given in Table 1. According to the results, some of the Chagga and Kinga ethnic groups prefer to borrow incurring joint liability, whereby from PRIDE (T), Chagga and Kinga ethnic groups were found to be 27% and 29% out of 93 and 85 respondents respectively. For the FINCA (T), Chagga ethnic group were found to be 17% out of 48 respondents while Kinga ethnic group were found to be 29% out of 51 respondents. However, for the Zaramo ethnic group none of them prefer to borrow incurring joint liability, from both PRIDE (T) and FINCA (T). For the Gogo ethnic group, out of 56 respondents, only 2% from PRIDE (T) prefers joint liability while for the FINCA (T), all of them prefer an individual liability. This indicates that trust is low among joint liability borrowers because all of these borrowers borrow incurring joint liability; however, the majority of them prefer an individual liability.

With respect to sex of the respondents, from PRIDE (T), out of 48 male respondents, 8% prefer joint liability while 92% prefer an individual liability. On the other hand, out of 232 female respondents, 20% prefer joint liability while 80% prefer an individual liability. From FINCA (T), out of 15 male respondents, 20% prefer joint liability while 80% prefer an individual liability. Likewise, out of 185 female respondents, 11% prefer joint liability while 89% prefer an individual liability. These findings indicate that regardless of whether the borrower is male or female, the majority prefer borrowing incurring an individual liability. These findings also suggest that the majority of the borrowers from microfinance institutions are women

With respect to the ages of the respondents, from PRIDE (T), for the age group of 26 to 35, out of 57 respondents, 11% prefer joint liability while 89% prefer an individual liability. For the age group of 36 to 45, out of 150 respondents, 20% prefer joint liability while 80% prefer an individual liability. For

the age group greater than 45 years, out of 73 respondents, 21% prefer joint liability while 79% prefer an individual liability. From FINCA (T), for the age group of 26 to 35, out of 46 respondents, 9% prefer joint liability while 91% prefer an individual liability. For the age group of 36 to 45, out of 113 respondents, 12% prefer joint liability while 88% prefer an individual liability. For the age group greater than 45 years, out of 41 respondents, 12% prefer joint liability while 88% prefer an individual liability. These findings indicate that despite of their differences in the age groups, the majority of the respondents prefer borrowing incurring an individual liability. These findings also 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 regard to the level of education attained, from PRIDE (T), out of 23 respondents who have not attained any education, 13% prefer joint liability while 87% prefer an individual liability. For the respondents who have attained primary education, out of 240 respondents, 20% prefer joint liability while 80% prefer an individual liability. For the respondents who have attained O' level education, out of 17 respondents, 100% prefer an individual liability. From FINCA (T), out of 20 respondents who have not attained any education, 15% prefer joint liability while 85% prefer an individual liability. For the respondents who have attained primary education, out of 178 respondents, 11% prefer joint liability while 89% prefer an individual liability. For the respondents who have attained O' level education, out of 2 respondents, 100% prefer an individual liability. These findings suggest that despite of their differences in the level of education attained, the majority of the respondents from microfinance institutions prefer borrowing incurring an individual liability. These findings also 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 status, from PRIDE (T), Table 1 has shown out that out of 251 married respondents, 18% prefer joint liability while 82% prefer an individual liability. For the divorced, out of 9 respondents, 22% prefer joint liability while 78% prefer an individual liability. For the cohabiting respondents, out of 20 respondents, 25% prefer joint liability while 75% prefer an individual liability. From FINCA (T), out of 177 married respondents, 10% prefer joint liability while 90% prefer an individual liability. For the divorced, out of 9 respondents, 33% prefer joint liability while 67% prefer an individual liability. For the widowed, out of 6 respondents, 33% prefer joint liability while 67% prefer an individual liability. For the cohabiting, out of 8 respondents, 100% prefer an individual liability. These findings suggest that despite of their differences in marital status, i.e. whether the borrower is married, divorced, widowed or cohabiting, the majority of the respondents from microfinance institutions prefer an individual liability. These findings also 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 119 respondents who have received vocational training, 18% prefer joint liability while 82% prefer an individual liability. For the respondents who have not received any training, out of 161 respondents, 18% prefer joint liability while 82% prefer an individual liability. From FINCA (T), out of 68 respondents who have received vocational training, 13% prefer joint liability while 87% prefer an individual liability. For the respondents who have not received any training, out of 131 respondents, 11% prefer joint liability while 89% prefer an individual liability. In addition, only one respondent from FINCA (T) has received professional training and prefers an individual liability. These findings imply that regardless of whether the respondents have received training or not, the majority of the borrowers prefer an individual liability. Moreover, these findings also 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: Respondents Characteristics and Preference for Joint versus Individual Liability

		PRIDE (T)					FINCA (T)				
		Joint Liability (JL)		Individual Liability (IL)		JL+ IL	Joint Liability (JL)		Individual Liability (IL)		JL+ IL
		Freq.	%	Freq	%	Freq.	Freq.	%	Freq.	%	Freq.
Tribe	Chagga	25	27	68	73	93	8	17	40	83	48
	Zaramo	0	0	46	100	46	0	0	50	100	50
	Kinga	25	29	60	71	85	15	29	36	71	51
	Gogo	1	2	55	98	56	0	0	51	100	51
	Total	51		229		280	23		177		200
Sex	Male	4	8	44	92	48	3	20	12	80	15
	Female	47	20	185	80	232	20	11	165	89	185
	Total	51		229		280	23		177		200
Age	26-35	6	11	51	89	57	4	9	42	91	46
	36-45	30	20	120	80	150	14	12	99	88	113
	Greater than 45 years	15	21	58	79	73	5	12	36	88	41
	Total	51		229			23		177		200
	None	3	13	20	87	23	3	15	17	85	20

Highest Education Attained	Primary School	48	20	192	80	240	20	11	158	89	178
	O' Level	0	0	17	10 0	17	0	0	2	10 0	2
	Total	51		229		280	23		177		200
Marital Status	Married	44	18	207	82	251	18	10	159	90	177
	Divorced	2	22	7	78	9	3	33	6	67	9
	Widowed	0	0	0	0	0	2	33	4	67	6
	Cohabiting	5	25	15	75	20	0	0	8	10 0	8
	Total	51		229		280	23		177		200
Other Training Received	Vocational	22	18	97	82	119	9	13	59	87	68
	None	29	18	132	82	161	14	11	117	89	131
	Professional	0	0	0	0	0	0	0	1	10 0	1
	Total	51		229		280	23		177		200
Main Occupation	Business	51	10 0	229	10 0	280	23	10 0	177	10 0	200
	Total	51		229		280	23		177		200

3.2 Preliminary Analysis

3.2.1 Factor Analysis

For factor analysis, Costello and Osborne (2005) suggest that, the larger the sample, the better. They consider a sample of $n \geq 200$ as appropriate for the factor analysis. Hence, $n=280$ from PRIDE (T) and $n=200$ from FINCA (T) were suitable for the analysis. To perform the factor analysis, principal components subjected to Oblimin rotation was used to allow for possible correlations between factors. The number of factors retained were those with initial Eigenvalues >1 (Bryman and Cramer, 2001). The results of the factor loading for PRIDE (T) and FINCA (T) reveal that most of the factors have high values of loadings ranging from 0.6 – 0.9 suggesting that it is a well-defined structure Hair and colleagues (2005) as shown in Table 2 below.

Table 2: Factor Loadings Using OBLIMIN Rotation with Kaiser Normalization

S/NO.	Dimensions	PRIDE (T)		FINCA (T)	
		Component			
		1	2	1	2
1	Propensity to Trust	0.969	0.097	0.970	0.096
2	Trust	0.976	0.094	0.982	0.107
3	Benevolence	0.971	0.035	0.977	0.058
4	Integrity	0.963	0.024	0.976	0.048

3.2.2 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 χ^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 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): The Influence of Trust on the Decision to Borrow by Incurring Joint Liability

Model	CMIN	RMR	GFI	AGFI	NFI	RFI	IFI	TLI	CFI	RMSEA
Modified Model	4.94, DF 2, P = 0.084, χ^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): The Influence of Trust on the Decision to Borrow by Incurring Joint Liability

Model	CMIN	RMR	GFI	AGFI	NFI	RFI	IFI	TLI	CFI	RMSEA
Modified Model	1.414, DF 2, P = 0.493, χ^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): The Influence of Trust on the Decision to Borrow by Incurring an Individual Liability

Model	CMIN	RMR	GFI	AGFI	NFI	RFI	IFI	TLI	CFI	RMSEA
Modified Model	2.201 DF 2, P = 0.333, χ^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): The Influence of Trust on the Decision to Borrow by Incurring an Individual Liability

Model	CMIN	RMR	GFI	AGFI	NFI	RFI	IFI	TLI	CFI	RMSEA
Modified Model	2.152 DF 2, P = 0.341 χ^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

3.3 Final Analysis

The summaries of the results of testing hypothesis for PRIDE (T) and FINCA (T) with the decision to borrow incurring joint liability are presented in Tables 7 and 8. The results indicate a statistically significant ($p \leq 0.05$) positive relationship between trust and borrowing incurring joint liability supporting the hypothesis with $\beta = 0.758$ for PRIDE (T) and $\beta = 0.795$ for FINCA (T). The findings imply that joint liability is an appropriate lending model when joint borrowers trust each other. According to Besley and Coate (1995) trust is considered to be very important for borrowing incurring joint liability.

Table 7: Results of Testing Hypothesis (Joint Liability) for PRIDE (T)

	Standardized Regression Weight	Standard Error (S.E)	Critical Ratio (C.R)	P
Trust <--- Propensity to Trust	0.320	0.011	29.090	***
Trust <--- Benevolence	0.665	0.011	60.455	***
Trust <--- Integrity	-0.042	0.101	-0.415	0.680
Joint Liability <--- Trust	0.758	0.064	11.844	***
Standardized Indirect Effect with Joint Liability:				
Propensity to Trust = 0.253***				
Integrity = -0.033				
Benevolence = 0.531***				
$R^2 = 0.963$				
F Value = 1792.208***				

Note: Mark *** indicates p value = 0.000

Table 8: Results of Testing Hypothesis (Joint Liability) for FINCA (T)

	Standardized Regression Weight	Standard Error (S.E)	Critical Ratio (C.R)	P
Trust <--- Propensity to Trust	0.326	0.012	27.170	***
Trust <--- Benevolence	0.706	0.012	58.833	***
Trust <--- Integrity	-0.051	0.079	-0.646	0.552
Joint Liability <--- Trust	0.795	0.066	12.045	***
Standardized Indirect Effect with Joint Liability:				
Propensity to Trust = 0.233***				
Integrity = -0.041				
Benevolence = 0.561***				
R ² = 0.972				
F Value = 1700.625***				

Note: Mark *** indicates p value = 0.000

With respect to the moderators of trust and the decision to borrow incurring joint liability, the findings indicate that benevolence and trust propensity were significant ($p \leq 0.05$) confirming that they were significant predictors of trust. The path coefficients for benevolence shows stronger association with $\beta = 0.665$ for PRIDE (T) and $\beta = 0.706$ for FINCA (T). Trust propensity was found to have $\beta = 0.320$ for PRIDE (T) and $\beta = 0.326$ for FINCA (T). These findings are consistent with Colquitt *et al.* (2007), whereby they found out that benevolence has a strongest relationship with trust.

However, integrity variable was not significant ($p > 0.05$) and weaker in magnitude with $\beta = -0.042$ for PRIDE (T), and $\beta = -0.051$ for FINCA (T). The negative coefficient for integrity may be an artifact of the high multicollinearity, among the trustworthiness facets (Jarvenpaa *et al.*, 1998; Mayer and Gavin, 2005). The insignificant relationship between trust and integrity was caused by the effects of the two character facets of trust (benevolence and integrity), being redundant with each other (Jarvenpaa *et al.*, 1998; Mayer and Gavin, 2005). In support of this notion, some studies using both variables (i.e. benevolence and integrity) have failed to uncover significant unique effects for both (Jarvenpaa *et al.*, 1998; Mayer and Gavin, 2005).

Likewise, benevolence and trust propensity support the hypothesis that they influence positively the decision to borrow incurring joint liability. The path coefficients for benevolence shows stronger association with $\beta = 0.531$ for PRIDE (T) and $\beta = 0.561$ for FINCA (T). Trust propensity was found to have $\beta = 0.253$ for PRIDE (T) and $\beta = 0.233$ for FINCA (T). These findings support the hypothesis that when trust exists, joint liability becomes an appropriate lending model. In this case also, integrity variable was not significant ($p > 0.05$) and weaker in magnitude with $\beta = -0.033$ for PRIDE (T), and $\beta = -0.041$ for FINCA (T).

However, although trust moderated by benevolence and trust propensity influence positively borrowing incurring joint liability; the results from Table 1 reveal that only a few of them trust their co-borrowers. Likewise, in other ethnic group trust among group members does not exist at all. These findings imply that what causes them to borrow incurring joint liability was not necessarily trust, but 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 trust varies from people with different cultural backgrounds.

With regards to the decision to borrow incurring individual liability, the results indicate a statistically significant ($p \leq 0.05$) negative relationship between trust and borrowing incurring an individual liability with $\beta = -0.871$ for PRIDE (T) and $\beta = -0.779$ for FINCA (T). These findings support the hypothesis that trust among joint borrowers influence negatively borrowing incurring an individual liability. Similar result were observed by Gine` and Karlan (2010) that joint liability is an appropriate lending model and work effectively when the joint borrowers screen each other so that only trustworthy individuals are allowed into the program. The summaries of the results of testing hypothesis for the decision to borrow incurring individual liability for PRIDE (T) and FINCA (T) are presented in Tables 9 and 10.

Table 9: Results of Testing Hypothesis (Individual Liability) for PRIDE (T)

	Standardized Regression Weight	Standard Error (S.E)	Critical Ratio (C.R)	P
Trust <--- Propensity to Trust	0.316	0.038	8.316	***
Trust <--- Benevolence	0.698	0.111	6.307	***
Trust <--- Integrity	-0.071	0.100	-0.715	0.475
Joint Liability <--- Trust	-0.871	0.070	-12.485	***
Standardized Indirect Effect with Individual Liability:				
Propensity to Trust = -0.188***				
Integrity = 0.007				
Benevolence = -0.420 ***				
$R^2 = 0.963$				
F Value = 1792.20***				

Note: Mark *** indicates p value = 0.000

Table 10: Results of Testing Hypothesis (Individual Liability) for FINCA (T)

	Standardized Regression Weight	Standard Error (S.E)	Critical Ratio (C.R)	P
Trust <--- Propensity to Trust	0.291	0.011	26.455	***
Trust <--- Benevolence	0.685	0.011	62.272	***
Trust <--- Integrity	-0.046	0.080	-0.576	0.565
Individual Liability <--- Trust	-0.779	0.066	11.803	***
Standardized Indirect Effect with Joint Liability:				
Propensity to Trust = -0.197***				
Integrity = 0.032				
Benevolence = -0.465***				
$R^2 = 0.972$				
F Value = 1700.625***				

Note: Mark *** indicates p value = 0.000

With respect to the moderators of trust and the decision to borrow incurring individual liability, the findings indicate that benevolence and trust propensity were significant ($p \leq 0.05$) confirming that they were significant predictors of trust. The path coefficients for benevolence shows stronger association with $\beta = 0.698$ for PRIDE (T) and $\beta = 0.685$ for FINCA (T). Trust propensity was found to have $\beta = 0.316$ for PRIDE (T) and $\beta = 0.291$ for FINCA (T). However, integrity variable was not significant ($p > 0.05$) and weaker in magnitude with $\beta = -0.071$ for PRIDE (T), and $\beta = -0.046$ for FINCA (T).

Similarly, benevolence and trust propensity support the hypothesis that they influence negatively the decision to borrow incurring individual liability. The path coefficients for benevolence shows $\beta = -0.420$ for PRIDE (T) and $\beta = -0.465$ for FINCA (T). Trust propensity was found to have $\beta = -0.188$ for PRIDE (T) and $\beta = -0.197$ for FINCA (T). However, integrity variable was not significant ($p > 0.05$) with $\beta = 0.007$ for PRIDE (T), and $\beta = 0.032$ for FINCA (T). These results are contrary to Mayer *et al.* (1995) model which demonstrate significant unique effects for all three dimensions when predicting trust. The findings of this study support the conceptualization of Jarvenpaa *et al.* (1998) and that of Mayer and Gavin (2005), as this study failed to demonstrate a significant relationship between trust and integrity. One explanation may be, because of the high multicollinearity among the trustworthiness facets. Furthermore, this study found that benevolence has the strongest relationship with trust. In addition, trust often requires a leap beyond benevolence and integrity (Mayer *et al.*, 1995). Trust propensity may drive that leap (Mayer *et al.*, 1995). The findings of this study showed that trust propensity was significantly related to trust. This is consistent with the conceptualization of Mayer *et al.* (1995), that trusting parties perceive more good reasons to trust.

4.0 CONCLUSION AND RECOMMENDATIONS

The existence of trust among joint liability borrowers is important for the joint liability to be an appropriate lending model. However, the findings of this study reveal that trust is low among joint liability borrowers as the majority of them did not trust their group members. The low trust among joint liability borrowers results in majority of them to prefer borrowing incurring individual liability.

This paper provides valuable insight to the policy makers, in terms of aspects of providing financial services to the poor people. Based on this study finding that trust is low among joint liability borrowers; policy makers should place emphasis on the strategies that build trust, among joint liability borrowers. Trust building associated with cooperation among joint liability borrowers, shall in turn make the joint liability an appropriate lending model. Trust building strategies include; honest and openness among joint borrowers, supportiveness, showing care and concern for other people, availability when required, loyalty, promise fulfillment, fairness, justice and consistency in actions.

This paper also contributes to the relationship between trust and its antecedents which are benevolence, integrity and trust propensity. The results failed to demonstrate a significant relationship between trust and integrity because of the high multicollinearity among the trustworthiness facets. The results found that benevolence has the strongest relationship with trust. Thus, given the importance of trust on joint liability, these antecedents' of trust can provide a guide for increasing trust among joint liability borrowers. Benevolence and trust propensity provide avenue for fostering trust, as they had significant unique relationships with trust and influence positively borrowing as a group.

5.0 ACKNOWLEDGMENTS

The author would like to thank my employer, the University of Dodoma for giving me permission to undertake this work and for funding this research.

6.0 REFERENCES

- 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.
- Armendáriz de Aghion, B. and Morduch, J. (2010). *The Economist of Microfinance*, MIT Press, Cambridge.
- 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.
- Autor, D. and Dorn, D. (2013). Growth of Low Skill Service Jobs and the Polarization of the US Labor Market, *American Economic Review*, Vol. 103, No.5, 1553-1597.
- Ayagari, M.T., Beck, T. and Dermiguc-Kunt, A. (2010). *Small and medium enterprises across the globe: A new database*, Unpublished Report, World Bank policy research working paper.
- Barboni, G., Cassar, A., Trejo, R. A. and Wydick, B. (2013). *Adverse Selection and Moral Hazard in Joint Liability Loan Contracts: Evidence from an Art factual Field Experiment*, *Journal of Economic and Management*, Vol.9, No.2, 153-184.
- Bentler, P.M. (2004). *EQS 6 Structural Equations Program Manual*, Multivariate Software, Inc Encino, CA.
- 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.
- Bryceson, F.D. (2010). Dar es Salaam as a Harbour of Peace in East Africa: Tracing the Role of Creolized Urban Ethnicity in Nation State Formation, United Nation University, *World Institute for Development Economic Research*, Vol. 19, No. 1, 1-15.
- Bryman, A. and Cramer, D. (2001). *Quantitative Data Analysis with SPSS Release 10 for Windows*, Rutledge, London.
- Carnevale, D.G. (1995). *Trustworthy Government Leadership and Management Strategies for Building Trust and high Performance*, Jossey-Bass Publishing, San Francisco.
- Churchill, G. and Peter, J. (1984). "Research Design Effects on the Reliability of Rating Scales: A Meta-Analysis", *Journal of Marketing Research*, Vol. 21, No. 1, 360-375.
- Colquitt, J. A., LePine, J. A., Piccolo, R. F. and Rich, B. L. (2007). *Justice, Trust, and Uncertainty: When Does Fair Treatment Matter Most*, Unpublished Manuscript.
- Conzaes, R.M. (2005). *Society, Religion and History: Central East Tanzania and the World they Created, C.200 BCE to 1800 EE*.
- Costello, A.B. and Osborne, J.W. (2005). Best Practices in Exploratory Factor Analysis, *Journal of Practical Assessment, Research and Evaluation*, Vo. 10, No. 7, 1-9.
- Giné, X. and Karlan, D. S. (2010). *Group versus Individual Liability: Long Term Evidence from Philippine Microcredit Lending Groups*, Economic Growth Center, Discussion Paper 970, Philippines
- Giné, X. and Karlan, D. S. (2011). *Group versus Individual Liability: A Field Experiment in the Philippines*, Unpublished Paper, Innovation for Poverty Action and Jameel Poverty Action Lab, Philippines, 1 – 44.
- Hair, J., Black, B., Babin, B., Anderson, R. E. and Tatham, R. L. (2005). *Multivariate Data Analysis*, (Sixth Edition), Prentice Hall, Inc. Englewood Cliffs, New Jersey.
- Hernández-Ortega, B. (2011). The Role of Post-Use Trust in the Acceptance of a Technology: Drivers and Consequences, *Technovation*, Vol. 31, No. 10-11, 523-538.
- Hoyle, R.H. and Panter (1995). *Structural Equation Modeling: In Relation to AMOS Software*, Sage Publications, Inc. Thousand Oaks, CA.
- Iliffe, J. (2008). *Kinga: A History of Modern Tanzania*, Unpublished Report, Tanzania.

-
- Jarvenpaa, S. L., Knoll, K., and Leidner, D. E. (1998). Is Anybody Out There? Antecedents of Trust in Global Virtual Teams, *Journal of Management Information Systems*, Vol. 14, No. 1, 29–64.
- Kenny, D. A. (2012). Measuring Model Fit, Unpublished Paper, University of Connecticut.
- Kodongo, O. and Kendi, L.G. (2013). Individual Lending Versus Group Lending: An Evaluation with Kenya's Microfinance Data, *Review of Development Finance*, Vol. 3, No. 1, 99–108.
- Kono, H. (2006). Is Group Lending a Good Enforcement Scheme for Achieving High Repayment Rates? Evidence from Field Experiments in Vietnam, Unpublished Paper, Institute of Developing Economies (IDE), JETRO, Japan, 1-33.
- Lewicki, R. J., McAllister, D. J. and Bies, R. J. (1998). "Trust and Distrust: New Relationships and Realities", *Academy of Management Review*, Vol. 23, No. 3, 438-458.
- 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.
- Mayer, R.C., Davis, J.H. and Schoorman, F. D. (1995). An Integrative Model of Organizational Trust, *Academy of Management Review*, Vol. 20, No. 3, 709-734.
- Mayer, R. C. and Davis, J. H. (1999). The Effect of the Performance Appraisal System on Trust for Management: A Field Quasi-Experiment, *Journal of Applied Psychology*, 84, Vol. 1, 123–136.
- Mayer, R. C. and Gavin, M. B. (2005). Trust in Management and Performance: Who Minds the Shop While the Employees Watch the Boss, *Academy of Management Journal*, Vol. 48, No. 1, 874–888.
- Mazrui, A. M. and Shariff, I.N. (1994). Swahili: Idiom and Identity of an African People, Trenton, African World Press.
- Murray, J. (2013). Likert Data: What to Use, Parametric or Non-Parametric? *International Journal of Business and Social Science*, Vol. 4, No. 11, 258-264.
- Narayan, D. (1997). Voices of the Poor: Poverty and Social Capital in Tanzania, Environmentally and Socially Sustainable Development Studies and Monograph Series 20, Unpublished Report, World Bank, Washington DC.
- Strauss, A. and Corbin, J. (1998). Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory, (Second Edition), Sage Publications, Thousand Oaks, CA R2107.
- Thompson, C. (1999). Qualitative Research into Nurse Decision Making: Factors for Consideration in Theoretical Sampling, *Qualitative Health Research*, Vol. 9, No. 6, 815–828.
- Velten, C. (2002). Zaramo: Tanzania Notes and Records, *Journal of the Tanzania Society*, Pugu Hills, Vol. 77, No. 2, 1-50.
- World Values Survey (1990 and 1995-7). Cross-Cultural Study of Generalized Societal Trust.