

The Impact of Informal Group Saving on Household Welfare

(A Case Study in Taungoo Township, Bago Region)

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ABSTRACT

This study aims to identify the impact of informal group saving on household welfare especially in Taungoo Township. The objectives of this study are to identify the savings pattern of informal groups, and to examine the impact of informal group saving on the group members' household welfare. This research used both primary and secondary data to achieve the above objectives. The primary data were collected by two-stage random sampling technique and by the use of structured questionnaire. The sample size is 110 respondents which was (5%) of households randomly selected from (3) quarters which was (10%) of urban area. The descriptive research methods and multiple regression model were used to analyze the impact of informal group saving on the group members' household welfare in Taungoo Township. Individual characteristics, household characteristics, informal saving group characteristics are considered as independent factors. The household welfare was categorized by physical assets, social capital and human capital. The results show that the saving groups in the study areas are very strong with the size of group above 40 maximum group numbers, their duration of the membership over 10 years and their saving contribution 6 lakhs MMK while the return backed amount nearly 20 lakhs MMK maximum. Finally the study found that there are relationship between household characteristics and saving group and household welfare to the some extent. Therefore, the study suggested that the responsible financial institutions should focus the informal saving groups to be involved in formal financial sectors.

Keywords: Informal Group Saving, Impact, Household Welfare, Social Capital, Human Capital

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Introduction

Savings, which is defined as the part of incomes not immediately consumed, but reserved for future consumption. Investment or saving for unforeseen contingencies is considered as an indispensable weapon for economic growth and development. Savings are significant at micro and macro level as well. The savings provide a secure future at the micro level, promote thrift, and help meet emergency needs without being burdened by crippling debt. The country benefits from savings at the macro level becoming the conduit to finance country investment. Accumulation of individual savings also become financial resources that can be converted to productive assets and help the country move forward on the economic front.. Empirically, it has been found that investment in domestic capital is leading to higher, sustainable growth rates(Myanmar Insider, 2018).

Only depending the foreign resources to fund projects in the developing countries does not achieve a sustainable growth rate. Given its stage of development and the need for domestic capital to fund basic infrastructure, savings are even more relevant in Myanmar than in the other countries. Myanmar provides restricted access to basic financial services until very recently. It explains the low structured savings rates in part. Many people in rural areas record no savings and save at home or with people they know (Myanmar Insider, 2018).

Until 2011, a single institution, the United Nations Development Program (UNDP), legally allowed citizens in Myanmar's rural areas to provide micro loans and savings services. Myanmar Financial Institutions (MFIs) began the international pact for NGOs. A distinct microfinance field was established with the promulgation of the Microfinance Law (2011). The market has opened up to hundreds of international players and a variety of domestic players. There are primarily two savings options in the microfinance sector: mandatory and voluntary.

According to UNCDF, 2015, people with low income communicate each other and form informal saving groups for their financial needs. There are numerous informal saving communities that have been around for hundreds of years in Myanmar. The saving ethics is alive and well in Myanmar, resulting in optimistic savings growth forecasts.

Still, Myanmar's people prefer to save outside rather than formal financial institutions. Reasons for informal savings include a wide spectrum of perceived

drawbacks of having a bank account, with the main of them being the following: income is too small to justify depositing it into a formal account, a lack of trust in the banking system, lack of bank knowledge and out-of-reach bank branches (Trust, FinMark and UNCDF, 2013).

Myanmar's history is marked by many demonetizations that have led to Myanmar's people ' common perception that' money received from earning is for purchases, not savings.' (Chipchase, Jan, and others, 2014). According to the diagnosis of Making Access, 26 percent of Myanmar's adults save informally and mostly at home or in physical properties (livestock, jewelry, gold etc.) or as savings group members (Chamberlain and others, 2014).

People have been solving their financial problems in diverse ways for a long time. They have invented a variety of solutions to their savings and borrowings that do not fall into the sphere of regulated formal institutions. People self-tend to save their money in informal service like savings clubs/groups, they are managed by other people, e.g. religious or welfare organizations or salary-paid-commercial managers, and informal providers such as money lenders, pawnbrokers or deposit takers.

Informal mechanisms are still the most important in many poor communities and development workers would do well not to dismiss them as inappropriate or exploitative as they are often vital to people's livelihood strategies. Promoting self-help groups (SHG) is now a very common development strategy. They may function as small village "banks" in their own right (or) provide a guarantee system for members to borrow from other institutions.

The SHG bank linkage model in India has become famous and the Village Savings and Loan Associations, initially promoted by CARE in Africa, have become widespread. Another model, initially promoted by FINCA, is known as Village Banking. Many SHGs remain small and informal; some create to federations as legal entities and thus move on to become formal member-owned institutions. Some donor interventions lead to the creation of community-managed loan funds, although it is rarely clear if these are meant to be temporary or permanent structures (Rural Finance and Investment Learning Centre Report, 2018).

This study is conducted with the following objectives: to identify the saving behavior of informal groups in Taungoo Township and to examine the impact of informal group saving on the group household welfare. The study will be beneficial

for financial institutions to motivate the informal saving groups and offer new financial products to the members in order to improvement of the community welfare.

Literature Review

Theories for Saving Behavior

The study is embedded on two theories which are in line with the subject under investigation. The theories in focus are Rational Choice Theory and Sustainable Livelihood Approach Theory.

Rational Choice Theory

The concept of rational choice theory claims that people make rational choices using objective judgments and achieve results that are consistent with their own personal goals. Such findings are also related to the best self-interests of a person. Using the principle of rational choice theory, the results are expected to give people the greatest benefit and satisfaction given the choices available. This theory is based on assumptions that individual selections are aimed at optimization of their pleasure or profit; they tend to act with rationality when making selections and that they their behaviors are based on rational calculations.

Sustainable Livelihood Approach Theory

Chambers and Conway (1992), Elsevier and Lindenberg (2002) mostly derived definitions of livelihood security. In general, household livelihood security is defined, according to Frankenberger (1996), as adequate and sustainable access to income and other resources to allow households to meet basic needs (including adequate access to food, portable water, health facilities, educational opportunities, housing, time for community involvement and social integration, etc.). "Livelihood" is a broad concept that covers many components including income, management of resources and risk opportunities, social relationships and negotiation, and household and community management of social networks.

The idea of livelihood is quickly gaining popularity as a practical means of understanding the factors affecting the lives and well-being of people. It is made up of

the resources, properties and activities required for livelihoods. A life will be sustainable if it can cope with and recover from stress and shocks and preserve or increase its potential and properties, both now and in the future, without sacrificing the foundation of natural resources (Carney, 1998).

This research used the prospect theory to accurately measure members of the informal saving community in Taungoo Township and their financial activities, such as the reversal of risk aversion or attitude effect and the recognition of risks in either gains or losses. If properly applied in economic transactions, an important use of prospect theory may directly or indirectly influence the expected value or the actual one. This theory applies to a number of economic issues that appear to be incoherent in the status quo bias, rationality, the premium stock problem, gambling, betting puzzles and endowment effect.

Livelihood Assets

According to Bebbington (1999), people require a variety of assets to achieve their self-defined goals, whereas no single capital endowment is adequate to yield the desired results on its own. Assets are of particular interest to academic research in order to decide if those who have been able to escape poverty have begun with a combination of capital and whether such a combination could be transferred to other living conditions. Livelihood assets include: human capital (educational skills, knowledge; labor and health skills), social capital (networks and networking, membership of associations/groups), natural capital (natural resource stocks/base land, water, forests, air quality, security against erosion, etc.), physical resources (basic infrastructure and consumer products needed to support livelihoods affordable).

Livelihood Outcomes

Livelihood outcomes are the accomplishments of livelihood approaches, such as increased income (e.g. cash), increased well-being (e.g., non-material goods, such as self-esteem, health status, access to services such as education, sense of inclusion), reduced vulnerability (e.g. enhanced resilience by increasing asset status), improved food security (e.g. increase in financial capital to buy food) and an increase in food protection. The findings provide us with an idea of how people are likely to respond to new opportunities and which performance indicators should be used to assess support activities (Serrat, 2008).

Household Welfare

According to Phusit (2006), socio-economic status (welfare) strategies can be divided into two major groups, namely income-metric measures and alternative approaches. Money-metric measures (income or expenditure) is a term that economists generally use as it is easy to measure in a monetary sense and is widely understood by the public. Practical issues associated with the accuracy of quantifying income or expenditure, however, have emerged, especially in developing countries, leading to a quest for non-monetary household welfare proxies. One of the alternatives is the use of the index of household assets.

The Impact of Informal Group Saving on Household Welfare

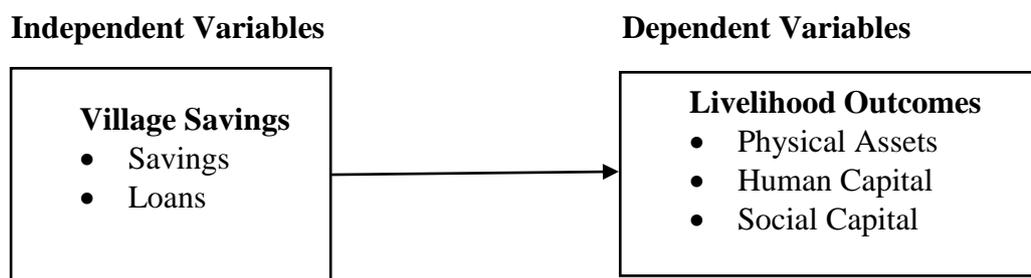
There are several studies regarding the impact of group savings at the households. DAI (2010) articulates that at the household level, analyses examine the kinds of livelihood activities that savings group members undertake, and their results in terms of asset accumulation. In general, savings and credit together should result in asset accumulation. DAI (2010) continues to argue that the group savings support the

protection of income and better household management of income and assets across time, while credit from the group supports increases in income.

According to the study of Odokonyero Tonny, 2012 showed that Village Savings and Loan Associations (VSLAs) which are part of informal savings schemes are enhancing the Socio-Economic Status (SES) or welfare of rural households (participants) in Amuru district, Northern Uganda. The main aim of the current study is conducted with a focus to know the impact of informal group saving. And the effect of informal group savings on household welfare in rural area will be the central theme of this thesis, which aims at providing a thorough analysis of the relation between them.

Wycliffe Mochoge, Nyamongo (2016) showed that services offered by village savings such as savings frequency, obtaining a village savings loan together with a moderating variable, namely personal characteristics like age and a member's education level, can decide women's livelihood outcomes in Kisii County. The study found that VSL groups have a significant impact on rural women's livelihood outcomes as they can lend money to many of their members to build permanent homes, buy motor vehicles, purchase land, medical expenses, and pay school fees. For the purpose of sustaining rural women's livelihoods, village savings and loan groups train their members on savings and loans benefits, which could enhance this trend's growth. The conceptual model as shown in the Figure (1).

Figure (1) Village Saving Group and Their Livelihood Outcomes



Source: Nyamongo Wycliffe Mochoge, 2016

It is proposed that VSL groups play a key role in promoting the creation of permanent houses for members. Members living in decent village houses are likely to attract non-members to join financial

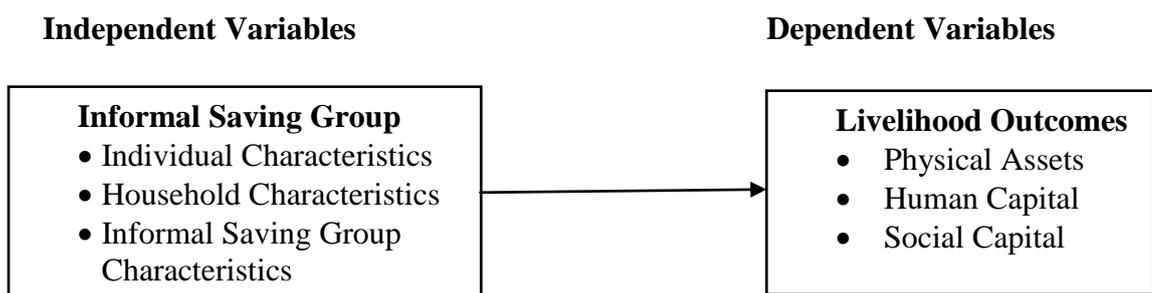
groups because they represent the advantages of these financial groups. Education is a critical part of the nation's growth. For this reason, VSL groups should play a key role in raising awareness of the importance of education by providing funds to their members to enable them to continue their education and that of their dependents.

Research Methods

As discussed in the previous studies, Wycliffe Mochoge Nyamongo (2016) examined that services offered by village savings such as savings duration, obtaining a loan from village savings along with moderating variable namely personal characteristics that include a member's age and level of education, can decide women's livelihood outcomes in Kisii County. The study explored into ways that a project or organization affects people's livelihood directly or indirectly and will therefore concentrate on the impact of village savings on physical assets, human capital and social capital and how they help transform women's lives in Kisii County.

The present study focused on informal saving groups on Taungoon Township and examines the impact of the group by using these models proposed in the previous research paper. Figure (2) shows the conceptual framework of the study.

Figure (2) Conceptual Framework of the study



Source: Own Compilation, 2019

The conceptual framework for the study is constructed by considering independence variables which are individual characteristics, household characteristics and informal saving group characteristics; number of family member, number of dependent, family income, expenses of the family, experience of membership, monthly saving, amount returned from group saving and distance to the nearest bank. These variables are assumed to determine the impact of household welfare; physical assets, social capital and human capital. To evaluate the increment in physical assets where land, home, motorcar, motorcycle, electronic equipment, expand the business/ machinery for business, mobile phone, gold and jewelry/ cash in hand are considered. To evaluate more develop in social capital where group member donation in the community, cover the loan repayment and supporting their friends/ relative are considered. To evaluate more develop in human capital where effort for children education, their ability to cover medical care expenses and effort for career development are used to measure in the study and measured by the 5-point likers scale.

Population and Sample

This research is carried out primarily to identify the saving behavior of informal groups and to examine the impact of informal group saving on the group household welfare in Taungoo Township. The case study is conducted with both primary data and secondary data collected from Taungoo Township. There are (27) quarters in urban area having a total population of 108,589 in Taungoo township. These quarters are classified by the number of household range and there are 3 groups; small size (186 to 500 households), the middle size (501 to 1,000 households) and large size (1,001 to 2,591 households). Out of them, (1) quarter from each group is randomly selected from them and 5% of total households is selected from each quarter by using two-staged random sampling method. The (110) sample households are interviewed by using structured questionnaire. For this study secondary data is collected through various sources such as internet, social media, newspaper, journal and articles.

Data Collection and Analysis

Descriptive statistics method and Multilinkers regression method are used in testing the selected variables to determine their significance in this research. The selected variables are gender, age, marital status, education and occupation under individual characteristics, number of family member, income of the family and expenses of the family under household characteristics and numbers of years/ participation in informal saving group, saving per month and amount returned back from informal saving group under the saving group characteristics.

Results and Discussion

The data collected from the survey are by summarized tables and analyzed by using descriptive statistics method.

Table 1 Demographic Characteristics of Respondents

Variables	Characteristics	Member		Non-member	
		Number	Percent	Number	Percent
Gender	Male	27	29	4	24
	Female	66	71	13	76
Age	≤ 25	5	5	3	18
	26 – 35	23	25	1	6
	36 – 45	22	24	4	23
	≥ 46	43	46	9	53
	Single	28	30	7	41
Marital Status	Married	55	59	7	41
	Divorced	2	2	-	-
	Widowed	8	9	3	18
	Primary	17	18	4	24
Educational Level	Secondary	33	36	5	29
	Passed Matriculation	11	12	4	24
	Diploma	3	3	1	6
	Degree	29	31	3	17
Occupation	Dependent	10	11	3	17
	Shopkeeper	40	43	7	41
	Government Staff	8	8	2	12
	Employee	10	11	4	24
	Business Owner	23	25	1	6
	Others (Carrier)	2	2	-	-

Source: Survey Data (2019)

Table 1 shows demographic characteristics of respondents which are gender, age, marital status, educational level and occupation. The gender of distribution of the respondent showed that the female dominated in the informal saving group members with 71% against the male with about 29%. This result is in consonance with the norm of the study area where females are more willing to join the informal saving

group for saving. The age of respondents is grouped into four classes which are under 25 years, 26 years to 35 years, 36 years to 45 years and over 46 years. According to table 1 both the informal saving group members and non-members' age are over 46 years. It's 46% of the respondents and it can also be said that most of the informal saving group member are aged people.

Household Characteristics of Respondents

In Table 2, the family members of the respondents can be classified into three categories which are one to three, four to six and seven to nine. Most of the respondents have few family members which state that one to three family members 43% and four to six family members 45% indicating that they can more effort for savings and to participate in informal saving group.

Also, the number of dependent from family member can classified into three groups no dependent, one to three and four to six. Among these, one to three dependents is 58% and no dependent is 34%. Majority of the respondents who participate in informal saving group have no children and no aged people. It shows that no children 53% and no aged people 65% which indicate there have less children and aged people, they may have less usage in medical expenses, education expenses and relative expenses. So, they can more effort to participate in informal group saving.

Table 2 Household Characteristics of Respondents

Characteristics	Member		Non-member	
	Number	Percent	Number	Percent
Number of Family Member				
1 – 3	40	43	5	29
4 – 6	42	45	10	59
7 – 9	11	12	2	12
Total	93	100	17	100
Number of Dependent				
Nil	32	34	4	23
1 – 3	54	58	11	65
4 – 6	7	8	2	12
Total	93	100	17	100
Number of Children				
Nil	49	53	7	41
1	26	28	3	18
2	15	16	5	29
3	3	3	2	12
Total	93	100	17	100
Number of Aged People				
Nil	60	65	11	64

1	17	18	3	18
2	13	14	3	18
3	1	1	-	-
4	2	2	-	-
Total	93	100	17	100

Source: Survey Data (2019)

Household Income of Respondents

According to table 3, most the respondents' average household income per month is between 200,001 to 500,000 MMK (47%) as nearly half of total respondents. On reviewing this data, highest income earners and middle-class earners; 500,001 and 800,000 are with 19% and 24% respectively. It reflects that more earners have to save more money with the informal saving group. The non-member of informal group saving usually have average household income as nearly half of the respondents (47%) that is within the amount of 200,001 to 500,000 MMK (47%). The remaining earners class range is three class; below 200,000 MMK (29%), 500,001 to 800,000 MMK (12%) and 800,001 to 1,100,000 MMK (12%) respectively. There has no highest earner in the non-member respondents.

Table 3 Average Household Income of Respondents

Average Income of the family per month (MMK)	Member		Non-member	
	Number	Percent	Number	Percent
≤ 200,000	7	8	5	29
200,001 – 500,000	44	47	8	47
500,001 – 800,000	22	24	2	12
800,001 – 1,100,000	2	2	2	12
≥ 1,100,001	18	19	-	-
Total	93	100	17	100

Source: Survey Data (2019)

Household Expenses of Respondents

Table 4 shows that the percentage of household expenses on income per month, The biggest usage amount of household expenses per month present with (7%) and the other class range zero percent to twenty percent of household expenses is (28%), twenty-one percent to forty percent of household expenses is (34%) and forty-one percent to sixty percent of household expenses is (29%) respectively.

Table 4 Percentage of the Household Expenses per Month

Percentage of the Household Expenses per Month	Member		Non-member	
	Number	Percent	Number	Percent
0 – 20	26	28	1	6

21 – 40	32	34	2	12
41 – 60	29	31	10	59
61 – 80	6	7	4	23
Total	93	100	17	100

Source: Survey Data (2019)

Education Expenditure of Respondents

Education Percentage of the respondents is within the range between 1% and 40% per month. Table 5 shows average percentage of the education expenses per month of the respondents. It shows that informal saving group member used maximum to 30% on education expense and the non-member used 40% maximum. Most the respondent member' education expenses per month is below 10 percent per month (86%) and over the half of total respondents as the non-member.

Table 5 Percentage of the Education Expenditure per Month

Percentage of the Education Expenditure Per Month (%)	Member		Non-member	
	Number	Percent	Number	Percent
Below 10	80	86	9	53
11 – 20	11	12	5	29
21 – 30	2	2	2	12
31 – 40	-	-	1	6
Total	93	100	17	100

Source: Survey Data (2019)

Healthcare Expenses of Respondents

According to the survey data, most of the member respondents (85%) used a little percent of the family income for healthcare which represented below 10 percent

Table 6 Percentage of the Healthcare Expenses per Month

Percentage of the Healthcare Expenses Per Month (%)	Member		Non-member	
	Number	Percent	Number	Percent
Below 10	79	85	13	76
11 – 20	11	12	2	12
21 – 30	2	2	2	12
31 – 40	1	1	-	-
Total	93	100	17	100

Source: Survey Data (2019)

Informal Saving Group Characteristics

Duration of Membership

This study asked respondents to state the duration of which they have been members of their respective informal saving group. From the response given in table 9, it can presume that most of the respondents (40%) have been group members for a

period of 1 to 3 years. 31 percent said that their group membership have lasted for a duration ranging from 4 to 6 years. 18 percent were found to have been members of informal saving group for a period of 7 to 10 years while 11% indicate that their membership in informal saving group has over 11 years having enough experience among the informal saving group. The table 7 shows the survey result.

Table 7 Duration of Membership

Number of Years	Number	Percent
1 – 3	37	40
4 – 6	29	31
7 – 10	17	18
≥ 11	10	11
Total	93	100

Source: Survey Data (2019)

Size of Informal Saving Group

From the results given the number of members in informal saving group can be classified into 10 to 20 members, 21 to 30 members, 31 to 40 members and 41 members and above. Most of the member respondents are between 21 and 30 members group (60%) as over half of total respondents. As described in Table 8, 10 to 20 members (15%), 31 to 40 members (11%), and 41 members and above (14%) respectively.

Table 8 Size of Informal Saving group

Number of Members	Number	Percent
10 - 20	14	15
21 – 30	56	60
31 - 40	10	11
41 and above	13	14
Total	93	100

Source: Survey Data (2019)

Saving Amount and Return-back amount of the Respondents

On the inquiry of the saved amount of members per month, the study established five ranges. Among these, below 150,000 MMK range saved by informal saving group member is (60%) as shown in Table 9. The maximum amount saved by members is even over 600,000 MMK which represents (13%) of the total respondents.

Table 9 Each Member's Contribution/Saving per Month

Each Member's Contribution/ Saving per Month (MMK)	Number	Percent
Below 150,000	60	65
150,001 – 300,000	15	16

300,001 – 450,000	2	2
450,001 – 600,000	4	4
600,001 and above	12	13
Total	93	100

Source: Survey Data (2019)

According to the group contract, the total saving amount contributed together by group members, are returned and distributed back to each member of a group by drawing lots per month. Table 10 shows the total saving amount per month which the member returned back from their respective saving group of the respondents.

Table 10 Saving Amount Returned Back from Group

Total Saving Amount returned (MMK)	Number	Percent
Below 600,000	22	24
600,001 – 1,050,000	12	13
1,050,001 – 1,500,000	26	28
1,500,001 – 1,950,000	1	1
1,950,001 and above	32	34
Total	93	100

Source: Survey Data (2019)

The survey results show that the minimum returned back amounts under 600,000 MMK and the maximum amount is over 1,950,000 kyats. The largest percentage is consisting with 34% of the total respondents who returned back the maximum saved amounts of MMK 19.5 lakhs followed by the 10.5 lakhs – 15.0 lakhs with 28% of the total.

Distance to the Nearest Banking Institution

It is essential for study to find out how far the banking institutions are from the members so as to establish whether it can be a reason for an increase in saving or a barrier. The results on this question are as indicated in Table 11. The findings provided show that the average distance to the nearest banking institution is 0.89 kilometer. The minimum distance to the banking institution is 0.65 kilometer and the future is 1 kilometer.

Table 11 Distance to the Nearest Banking Institution

Response	Number	Minimum	Maximum	Mean	Std. Deviation
Distance to the nearest banking institution (km)	93	0.65	1	0.8924	0.1299

Source: Survey Data (2019)

Impact on the Household Welfare of the Respondents

The study identified the impact on the household welfare of the respondents with the five-point Likert scale. The welfare are divided into three parts: increase in physical assets, social capital and human capital. The results are shown in Table 12, 13 and 14 respectively.

Table 12 Mean value for the Impact on Physical Assets

Statement	Mean	Std. Deviation
(a) Increase in Assets (eg. House, Land, Farm, Motorcar, air-con, refrigerator, motorcycle, phone,etc)	2.45	1.9
(b) Increase in Gold and Jewelry	4.08	1.68
(c) Expand your business	2.8	1.74
Overall Mean	3.11	

Source: Survey Data (2019)

According to Table 12, the average mean value is moderate with 3.11 scores. The members mostly purchased the gold and jewelry with the saved amount represented by 4.08 scores.

Table 13 Mean value for the Impact on Social Capital

Statement	Mean	Std. Deviation
(a) Can cover the loan repayment	2.99	1.99
(b) Can donate more in your community	3.04	1.87
(c) Can support/help more your friend/ relative	2.85	1.92
Overall Mean	2.96	

Source: Survey Data (2019)

According to Table 13, the average mean value is moderate with 2.96 scores. The returned-back amount is spent for their donation, support to relatives and pay back the loan to group members which represents with the medium level.

Table 14 Mean value for the Impact on Human Capital

Statement	Mean	Std. Deviation
(a) Better effort for children education	2.28	1.64
(b) Ability to cover medical care expenses	2.45	1.72
(c) Better effort for career development	1.59	1.28

Overall Mean	2.11	
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Source: Survey Data (2019)

Finally, Table 14, the average mean value is low level with 2.11 scores. The spending for all considered human capital development on children education, medical care expenses and career development is with the low level within the range of between 1-6 to 2,5 scores signing that the members may not have used for their children education and for themselves as well.

Regression Analysis for Impact of Informal Group Saving on Household Welfare

The multiple linear regression method was used to analyze the impact of the independents of informal group saving on household welfare. The individual characteristics, household characteristics and informal saving group characteristics are considered as influencing factors for household welfare. The variables includes number of family member, number of household dependents, family income, expenses of the family, experience of membership, monthly saving, amount returned from group saving and distance to the nearest bank. The household welfare is dependent variable which is divided into three variables: physical assets, social capital and human capital. The computed results of the analysis on the independent variables of the household welfare are shown in each Table respectively.

Table 15 shows that the regression model generated two significant variables among eight variables considered. The results for physical assets indicates that the independent variables have a significant effect on physical assets as shown with the value of R^2 for the function was equal to .092 revealing the 9% change of the physical assets is explained by the independent variables.

Table 15 Regression Results for Physical Assets

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	2.558	.522		4.901	.000
Number of family member	.112	.065	.203*	1.719	.089
Number of household dependent	-.229	.091	-.314**	-2.524	.013
Percentage of monthly					

household expenses	.001	.006	.017	.137	.891
Monthly household income (MMK)	.094	.119	.122	.791	.431
Duration of membership (Year)	.039	.021	.198*	1.852	.068
Monthly saving amount (MMK)	3.596E-7	.000	.334	.478	.634
Return from saving group (MMK)	-4.051E-8	.000	-.263	-.357	.722
Distance to the nearest bank (km)	.006	.013	.054	.463	.645
N= 93, R= .413, R ² = .171, Adjusted R ² = .092, F= 2.163** (p value = 0.039)					

***, **, * Statistically significant at 1%, 5% and 10% level.

Source: SPSS Result (2019)

Based on the Table 15, the number of family member, number of household dependents and the duration of group membership have the significant effect on physical assets of. These results suggest that the number of household dependents has a negative 5% significance level implying that if the household dependents increase 1 percent, then the physical assets will decrease at .314. The coefficients of the number of family member has a positive 10% significance level indicating that 1% increase in number of family member will increase the household assets by .198 points. The regression coefficient of duration experience of membership is .198 at 10% significance level which means that 1% increase in experience of membership will increase the household assets by .203 points.

Table 16 shows the regression results for social capital showing that the independent variables have a significant effect on social capital as shown with the F value of 1.983 at significant 10% level. The estimated R² was equal to .079, implying that the 8% change of the social capital is explained by the independent variables.

Table 16 Regression Results for Social Capital

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	3.329	.430		7.739	.000
Number of family member	-.053	.054	-.119	-.997	.322
Number of household dependent	-0.50	.075	-.084	-.671	.504

Percent of monthly household expenses	.000	.005	.005	.037	.971
Monthly household income (MMK)	-.081	.098	-.128	-.823	.413
Duration of membership(Year)	-.006	.017	-.040	-.369	.713
Monthly saving amount(MMK)	1.342E-6**	.000	-1.522	-2.162	.033
Return from saving group (MMK)	1.730E-7*	.000	1.373	1.850	.068
Distance to the nearest bank (km)	.006	.011	.061	.523	.602
N= 93, R= .399, R ² = .159, Adjusted R ² = .079, F= 1.983 (p value = 0.058)					

***, **, * Statistically significant at 1%, 5% and 10% level.

Source: SPSS Result (2019)

Table 16 shows that the return from saving group and monthly saving amount of members have the significant effect on the social capital. The value of standardized coefficient for return from saving group (1.373) is the highest among variables at the 10% significance level. It can be said the return from saving group has the positive impact on social capital which means that 1% increase in the return from saving group increase the social capital by 1.37 points. The standardized regression coefficient of monthly saving is - 1.522points impact on social capital at 5% significance level meaning that 1% increase in monthly saving decrease in social capital by 1.52%.

Table 17 shows the regression results for human capital in which the independent variables have a significant effect on human capital with the F value of 1.983 at significant 10% level. The estimated R2 was equal to .089, implying that the 9% change of the human capital is explained by the independent variables.

Table 17 Regression Results for Human Capital

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	2.424	.472		5.134	.000
Number of family member	-.027	.059	-.055	-.467	.642
Number of household dependent	.090	.082	.137	1.100	.275

Percentage of monthly household expenses	.006	.006	.125	1.002	.319
Monthly household income (MMK)	.102	.108	.147	.952	.344
Duration of membership (Year)	-1.864E-6***	.000	-1.917	-2.738	.008
Monthly saving amount (MMK)	2.816E-7***	.000	2.025	2.745	.007
Return from saving group (MMK)	-.005	.012	-.050	-.434	.666
Distance to the nearest bank (km)					
N= 93, R= .410, R ² = .168, Adjusted R ² = .089, F= 2.124** (p value = 0.042)					

***, **, * Statistically significant at 1%, 5% and 10% level.

Source: SPSS Result (2019)

In Table 17, there are two significant variables which are monthly saving and return from saving group. The negative sign of monthly saving means that the 1% increase in monthly saving decreases in human capital by 27.38%. The value of standardized coefficient for return from saving group (2.025) is the highest among variables. It can be said 1% increase in return from saving group is the greatest impact on human capital by 27.45%.

Conclusion

The objective of the study was to investigate the effect of informal group saving on the household welfare of the group member in Taungoo Township. The study found that majority are female with medium aged (over 45 years). More than half of the respondents are married. More than seventy percent are just with primary and secondary education level. The majority of respondent are operating in the business affairs; nearly seventy percent are business owners and shop keepers. Regarding their household characteristics, majority are with the medium family size

of (4-6) members and (1-3) dependents number of the households including children and aged people.

As to the household income and expense of the respondents, majority earns family income with medium income level ranging from MMK 200,000 to 800,000 per month, majority spend (21-40) percentage of household expenses on the income; however the majority of the member spending on the education and health expenditure with very low level of under 10% of the household family income. Concerning the group characteristics, the survey found that the size of the groups ranges are varied from minimum 10 to maximum over 40 in which more than half group member are with medium size of (21-40) members. Moreover the duration of the members in the group is from 1 year to more than 11 years; majority experiences 37 percent about 1-3 years and 29 percent about 4-6 years respectively. The distance between the their living house and the banking institutions is not too far represented by .65 km minimum and 1 km maximum.

Regarding their saving amount and the amount returned back from group members, about 65% members contributed less than 150,000 MMK per month for saving while there is a 13% respondents who contributed more than 600,000MMK. From the saving group 34% of the total respondents that nearly 20lakhs MMK as a return amount. The survey found that there is a moderate effect of households' welfare regarding the participation in informal saving group. They stated that they can buy gold and jewelry, make more donation/ contribution to their community and they cover medical expenses by their returned back amount.

According to multiple regression analysis, the three variables (number of family members, number of dependents and experience of membership) have significantly explained 9% of physical assets, the two variables (monthly saving and return from saving group) have significantly explained 8% of social capital and the two same variables have significantly explained 9% of human capital. The research of the study align with the previous research findings that informal savings affect the household welfare of the group members in the respective urban areas.

The results of the study are very useful for financial sectors to attract the group members to make deposit to the banks and also to purchase others financial products portfolio or services while the returned back amount are unused left. The banks can create fixed deposit, postal saving services and life and non-life insurance products

and sell back to the group members. The study suggested that the responsible financial institutions should try to focus the informal groups and make effort for increasing financial inclusion ultimately making the market work better for their community welfare.

There are some limitations of the study. This study only focused the impact of informal group saving on household welfare in Taungoo Township. The study area covers Taungoo Township only. Thus, the result for the study may not reflect the overall situation in Myanmar. Moreover the study is constrained with the positive effect of their saving in informal group and not considered the possible negative effects resulted from misused of the returned saving amount. Therefore, if future study can be conducted on more sample size and the whole Myanmar areas, and consider negative effects of the informal saving groups, the paper would be more contributed to community of the urban and rural areas.

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