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The Effect of Credit on the Wealth Status of the Individual Entrepreneuer: Evidence from Saccos in Mbeya District, Tanzania

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Abstract:
Credit as an investment capital is an important determinant of economic growth at the individual and national levels. Credit at the individual level influences income generation and employment creation, which can uplift the wealth status of the individual. Existing literature suggest that the effect of credit on the wealth status has not been well understood and measured. This study was conducted to assess the effect of credit from SACCOS on the individuals' wealth status by comparing the wealth status of SACCOS' members and non-members. Longitudinal Data were collected from a sample of 480 respondents in Mbeya district. Multistage and simple random sampling techniques were used to select the study area and respondents. Data analysis employed both descriptive statistics and regression methods where Pooled OLS and the DID in OLS methods were used. The findings reveal a significant positive impact of credit on the wealth status of the individual beneficiaries. Thus, concur with the life cycle theory of saving and consumption. The study recommends early involvement in lifelong savings at young age.

Keywords: *Effect of credit, Wealth status, SACCOS, Tanzania*

1. Introduction

The economy of Tanzania is facing an increasing need for investment emerging from the individual to national level to sustain the widespread demand for goods and services in both rural and urban areas. Even though the government has taken coherent steps to build robust financial sector to meet the need of investors of Tanzania including those in small and medium enterprises (URT, 2002), still many people in developing countries are merely struggling to survive under very low economic levels without any engagement in economic activities; this is simply because most of them do not have capital and they cannot save any significant amount for a valued investment. Lack of capital has been indeed recognized to be a major obstacle for many to start one's own business in countries with less developed economy (Conning and Udry, 2005; Maldonando, 2004; Beck and Demirguc-Kunt, 2006 and Chandler, 2009). Low income earners are normally excluded from accessing credit owing to their inability to meet the requirements set by lenders. Such requirements range from having a guarantor to possessing physical collateral. For instance, in Nigeria, formal banks have been able to serve only 35% of the active population (IFPRI, 2010). Likewise, in Tanzania, access to credit from the formal sector is very low (Milinga, 2012; NFIF, 2014) serving only 17% of the potential market. The lowest access of about 8.5% is experienced in the rural areas as opposed to 23% in the urban areas (NFIF, 2014), which leaves the deprived underserved in the informal sector. Credit from SACCOS appears to be the most reliable source of capital for micro and small investment at the individual level both in urban and rural areas. These SACCOS are widely distributed in Tanzania accounting for 43% of all the financial institutions covering 5% of the existing potential market (NFIF, 2014).

This study seeks to analyze the particular importance of SACCOS credit to the beneficiaries in terms of the attained wealth status at the individual level. The outcome of the study portrays to policy makers and the public at large the effects of credit from SACCOS on the member's wealth status

2. Literature Review

2.1. Methods Employed to Measure Wealth

This study seeks to analyze and assess the effect of credit from SACCOS on the individual wealth status by looking at the differences in wealth status between the SACCOS members and non-members using repeated measures. In order to capture the wealth status of an individual client, weighting method was used so as to create an outcome variable which was then used to measure the impact of credit. This method imposed a set of weights (using for example real prices of various assets) to construct an index of individual wealth (Filmer and Pritchett, 2001; Moser and Felton, 2007), incorporating the value of an asset makes the weights more meaningful and portrait real economic status.

Given that an individual's wealth index which is a proxy for the wealth status of the individual clients can be measured in terms of number **I** of the types of capital, $\mathbf{C}^{\mathbf{i}}$, where **i** is [1, 2, 3,…..…**I**]. Each type of wealth index $\mathbf{C}^{\mathbf{i}}$ is composed of **J** types of assets $a^{i,1}$… $a^{i,J}$. Each of these assets is measured using a cardinal variable. To assign a weight **w** to each item, we sum up the weighted variables to arrive at $\mathbf{C}^{\mathbf{i}}$ "the wealth index."

$$C_{n,t}^{i} = \sum_{i=1}^{j} W_{t}^{i,j}\, a_{n,t}^{i,j} \qquad \text{…….....…… (1)}$$

Where; n = household number, i = type of capital, j = type of assets and t = time period.

Assets can be weighted using monetary value, so that $w^{i,j}= p^{i,j}$ where $p^{i,j}$ is the price or any other monetary measure of value of assets (i,j) at time *t* purchased after borrowing or using returns from investment financed through credit from SACCOS. The sum $\sum_{j=1}^{J} W_{t}^{i,j}\, a_{n,t}^{i,j}$ is the total monetary value of the household asset adjusted with the effect of general price level changes over time which is the real value of wealth status of the individual client to be employed in the analysis. Real values convert the nominal values as if prices were constant in each year, and thus accounting for the differences in the quantity of bundle of goods and services that the money income could buy in each year. Therefore, the price deflates the nominal value of wealth to derive a real value that reflects the difference in time period. The price deflator is the value of price index in year *t*.

2.2. Theoretical Issues

2.2.1. Keynesian Liquidity Theory

One of the Keynes ideas was on the speculative motive which put much attention on the desire to keep cash in order to be able to exploit investment opportunities requiring cash expenditure that might arise.This happen because in micro economic view acquiring credit create an income effect; (Aghion and Morduch, 2005), the additional income is expected to be used wisely by the rational economic agent to initiate a certain level of consumption expenditures. Individual entrepreneur being rational aimed to maximize utility given a budget constraint. The motive inspires an individual to store cash in order to take advantages of investment opportunities that may arise. Another Keynes idea in the history of liquidity preference is bestowed in the precautionary motive which exemplifies the desire to hold cash in order to be able to cover unexpected contingencies that require cash expenditure. The liquidity theory is regarded as important determinant for wealth accumulation (Samuel, 1996; Caballero, 1991; Kennickell and Lusardi, 2003).

3. Methodology

3.1. Sample Selection

In assessing the effect of credit from SACCOS on the wealth status of the individual, the focus was on SACCOS members. This population was given much concern due to the requirement of obtaining better empirical evidence in Tanzania. To disentangle the effect of credit a control group was used which included non SACCOS members located in the same areas where sampled SACCOS are found. Multistage random sampling was used to select the study area, followed by purposive sampling in order to identify SACCOS members and non-members for inclusion into the study, then simple random sampling was used to select the respondents.

3.2. Sampling of SACCOS Members

The population consist of 3118 members of SACCOS, obtained from Lulu SACCOS (248), Wasamba SACCOS (329), Kasi mpya SACCOS (206) and Neema SACCOS (613). Others were Ilemi SACCOS (120), Nuru SACCOS (405), Juhudi SACCOS (396) and Mwanjelwa SACCOS (801). A sample size of 239 SACCOS members was drawn which is 7.66% of the population.

The total number of respondents was estimated using estimation method given by Yamane (1967) as;

$$n = {}^{N}/_{1 + N(e)^{2}} \qquad \text{…….. (2)}$$

Where: n = sample size, e = error level; e = 1 – confidence level and N is the estimated total population of the target group.

Assuming 95% confidence level, e = 0.05. A sample size of 239 of SACCOS members were selected for the study. Repeated observations were then made from the same respondents over the period of one year and six months, especially September, 2011 to march, 2013. A total of three repeated observations were taken with the time span of six-month interval between observations to make up longitudinal data.

A list of respondents both members of SACCOS and non-members constituted a sampling frame. The list was obtained from the surveyed SACCOS. While for non-members the sampling frame was obtained from their respective area leaders, which includes the chairmen of the markets and Hamlet/ villages. To isolate the effect of SACCOS credit to the members, consideration has been made to insure inclusion of clients from non-workers SACCOS. Apart from this, the selected clients are the ones who have not taken credit from any other source apart from SACCOS, or benefited from programs of free inputs in the case of gardeners and livestock keepers. This is because calculating the impacts of microfinance requires disentangling its role from the simultaneous roles of all other attributes (Aghion and Morduch, 2005).

3.3. Data Collection

This study used a structured questionnaire to collect longitudinal data; the questionnaires were administered at the interval of six months for a period of one year and six months; (excluding time used in pre-testing the questionnaires), to the same respondent. Secondary data were collected to complement the available information about the impact of credit to the beneficiaries' wellbeing.

3.4. Quantitative Modelling of the Impact of Credit

From the literature, the Keynesian consumption function shows that current consumption expenditures are determined by current disposable income, so that the Keynesian consumption function is written in linear form:

$C = a + bY_t$ ……...…….…..… (3)

b = coefficient called marginal propensity to consume (amount by which consumption increases as current disposable income rises) which is the $\frac{dC}{dY}$.

Consumption and savings are linearly and directly related to current disposable income also called absolute income hypothesis (Parker, 2010; Blundell, 1983), which is as similar as the permanent income theory equation (4). The relationship can be put as follows;

$S = saving; = disposable\ income\ (Y_t) - C$ ……..... (4)

$S = (Y_t) - a - bY_t$ …….. (5)

$S = a + (1 - b)Y_t$ ……..… (6)

Through saving, ability to accumulate wealth is enhanced. In harmony with precautionary and speculative demand for liquidity, saving is deduced to be direct and linearly related to disposable income as indicated in equation (6) and thus to asset accumulation in accordance to the permanent income theory (Parker, 2010; Alan, 2006; Blundell, 1983). In the permanent income theory wealth is directly related to the permanent income. Wealth influences the consumption pattern but consumption is determined by market access, demographic characteristics (age, sex, past experience, education level and marital status) and access to finance (membership in SACCOS and frequency of credit acquisition). The current study analyze the contribution of credit from SACCOS on the wealth status of the borrower, the above relationship guides the analysis, whereby the effect of credit is measured by the outcome variable wealth as *wealth status* from equation (1) using the explanatory variables as deduced from the underlying theories. The specification aims to test the hypothesis which proclaims that *SACCOS credit has no significant effect on the wealth status of the individual member*.

This specification was modified from Coleman (1999) and Green (2012), and found to be adequate in measuring the impact because it controls bias that can arise from self-selection, to obtain better estimate of the effect of SACCOS credit on the individual wealth status.

Consider the following empirical specification which uses both members and non-members;

$$\boldsymbol{Y_{ij} = \alpha X_{ij} + \beta V_j + gM_{ij} + \delta T_{ij} + V_{ij}} \quad \text{……..……..…… (7)}$$

where $\boldsymbol{Y_{ij}}$ is an individual-level impact on wealth for individual *i* in village *j* on which we want to measure the impact; $\boldsymbol{X_{ij}}$ is a vector of individual characteristics, $\boldsymbol{V_j}$ is a vector of village characteristics; $\mathbf{M_{ij}}$ is a membership dummy variable equal to 1 if individual *i* is actually a member of the SACCOS, and 0 if otherwise; but $\mathbf{T_{ij}}$ is a dummy variable which is equal to 1 if a self-selected member has already had an access to SACCOS loans, and 0 if otherwise. In this specification, δ measures the average impact of SACCOS on Y_{ij}. With this specification, α, B, g, and δ which are the parameters to be estimated; and $\boldsymbol{v_{ij}}$ is an error term representing unmeasured characteristics that determine borrowing and outcome.

This study uses wealth status to measure the impact of credit in order to overcome the complexity associated with estimating individual income. The wealth status has been constructed using asset data of the individual entrepreneur; each asset was assigned weight as indicated in equation number (1).

Equation (8) can now be improved upon by recognizing that some treatment members may have received loan longer than others.

$Y_{ij} = \alpha X_{ij} + \beta V_j + gM_{ij} + \delta NORC_{ij} + \mu_{ij}$ …….…… (8)

where the treatment dummy variable T_{ij} is replaced by $NORC_{ij}$, the number of times at which SACCOS credit has been available to the participants, $NORC_{ij}$ is thus zero for non SACCOS members and a number of times (frequency) by which SACCOS credit has been available to the member. $NORC_{ij}$ is thus a more precise measure of expected benefit than T_{ij}, and δ can now measure the impact per credit consumed.

To test a DID approach as derived in equation (7), equation (8) can be modified as follows to specify that the variables are measured in a given time period t:

$Y_{ijt} = \alpha X_{ijt} + \beta V_j + gM_{ij} + \delta T_{ijt} + v_{ijt}$ …….....……... (9)

The dependent variable $\boldsymbol{Y_{itj}}$ is the wealth status of individual *i* in village *j* at time *t*; $\mathbf{X_{itj}}$ captures individual characteristics at *t*, $\boldsymbol{V_j}$ and $\boldsymbol{M_{ij}}$ are assumed to be unchanging over time.

Assume the same variables collected in period *t+1*:

$Y_{ijt+1} = \alpha X_{ijt+1} + \beta V_j + gM_{ij} + \delta T_{ijt+1} + v_{ijt+1}$…….....…….... (10)

Then, we can subtract equation (9) from equation (10) to obtain:

$Y_{ij} = \alpha \Delta X_{ij} + \delta \Delta T_{ij} + v_{ij}$..... (11)

Where Δ indicates a change in the variables between periods t and t + 1, the parameter δ, measures the impact of the credit from SACCOS on the wealth status of the recipient. In this model, T_ij is a variable that is zero in the pre-treatment period and one after the treatment and X_(ij)equals to one of those individuals who received treatment. In order to identify the impact of credit, a comparison of within difference of treatment and control is necessary. The average outcome of those who did not experience the intervention and the difference in the means of the two are compared using the treatment indicator variable (Greene, 2012). Using the DID method, the village dummies drop out as do fixed and unobservable individual specific characteristics. Thus, the estimates of the impact of SACCOS credit can also be obtained using a differencing method in equation (11) which compares the within difference of treatment (SACCOS members) and control group (non-members) over time.

From equation (11), the responding variable "LNDIDwealth" indicates the impact of credit after controlling the broad economic changes occurring without accessing credit. LNDIDwealth is the natural logarithm of the difference in wealth status at the initial and final phase of the study. The parameters associated with the independent variables "ΔX" which stands for individual characteristics which were expected to change with the effect of credit were hypothesized to have positive impact on the wealth status. These variables were "lnDFCAPITAL" (the natural logarithm of the differences in the invested capital at the final and initial phase of the study) and "LNDFTE" (the natural logarithm of the differences in the business returns at the final and initial phase of the study), they stand for the effect of invested capital and returns from investment obtained per month on wealth status of the individuals. Where T_ij indicates the effect of credit on the variable of interest.

Next is another alternative approach that employs pooled OLS regression to measure the impact of credit with fixed village and individual attributes

$$Y_{it+1} = \alpha X_{it} + \emptyset X_{it+1} + hC_{it} + kC_{it+1} + \beta V_j + \varphi T_j + V \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots(12)$$

Where $\boldsymbol{Y_{it+1}}$ is the real wealth owned by an individual at final phase of data collection, $\boldsymbol{X_{it}}$ and $\boldsymbol{X_{it+1}}$ indicate the previous and current observable individual attributes that include education level of the respondent, age, household size and the average enterprise earnings per month, $\boldsymbol{C_{it}}$ and $\boldsymbol{C_{it+1}}$ are the previous and current capital invested in the business observed throughout the length of the study period, $\mathbf{V_j}$ is the village effects and $\boldsymbol{T_j}$ is the variable whose coefficient measure the impact credit. The coefficients φ measure the impact of SACCOS on the individual wealth status. $\boldsymbol{V}$ is the error term, while α, φ, h, k, β, ϕ and γ, are the coefficients to be estimated.

The dependent variable **"LNENDWLTH" ($\boldsymbol{Y_{it+1}}$)** is the amount of wealth owned by an individual during the final phase of the study.

4. Results and Discussion

4.1. Description of Selected Interval/ Ratio Scaled Variables by Membership

The findings (Table 1) show that the average age of the sampled respondents was 38.73 years, and where for the case of SACCOS members the mean age was 40.03 years, and for non-members was 37.44 years. The mean ages indicate that on average the sampled entrepreneurs were young individuals. Young age indicates the presence of a labor force for productive investment.

Furthermore, the findings show that the average amount of initial loan borrowed by the SACCOS members was 2568970.71 Tshs with a maximum loan amount of 100 million. The loan size received reflects the amount of saving individual members deposited in their respective SACCOS; and thus, it is an indication of the members' ability to invest and store wealth.

In addition, the findings in Table 1 illustrate distance to the nearest marketing area as an indication of availability of market was found to be 6.63Km on average, with a minimum distance of 0.5Km and a maximum distance of 27Km. Variation of distance was a result of the inclusion of both urban and rural areas. These variables will later be included in the empirical analysis of the effects of credit from SACCOS on the wealth status of the individual respondent.

	Descriptive Statistics					
Initial loan borrowed	**N**	**Min**	**Max**		**Mean**	**Std. deviation**
Members	239	50000	100000000		2568970.71	1060000
Distance to the nearest shopping centre (Km)						
Members	239	0.5	25.0		6.021	5.287
Non-members	241	1.0	27.0		7.245	7.876
Total	480	0.5	27.0		6.635	6.734
Age of the respondent						
Members	239	22	71		40.03	9.320
Non members	241	18	76		37.44	10.893
Total	480	18	76		38.73	10.212

Table 1: Description of Selected Ratio Scaled Variables by Membership
Source: own survey, 2012

4.2. Empirical Evidence of the Effect of Credit from SACCOS on the Level of Wealth Status of the Individual

4.2.1. Impact of SACCOS Credit using Pooled – OLS Regression

The findings Table 2 indicates that the explanatory variables accounted for 55.61% of the variation in the outcome variable, the model was significant at P<0.001 level of significance, implying that the explanatory variables have successfully explained the response variable. The Durbin-Watson value of 1.716, which is closer to 2, shows that the stochastic is serially independent meaning that the disturbance occurring at one point of a set of observations is not correlated with any other disturbance occurring at another point of the set of observations. Therefore, successive values of the error term are mutually independent. The Breusch-Pagan / Cook-Weisberg test for heteroskedasticity for the fitted values indicates a chi-square of 1.14 which is not significant at a probability level of 0.2852 allows accepting the null hypothesis of homoskedasticity. This meant the estimated variance of the residues from regression does not depend on the values of the independent variables, therefore, heteroskedasticity is not a problem in the fitted values.

The mean variance inflation factor (VIF) of 1.45 which indicates the absence of the problem of multicolineality in the fitted data.

The analysis of the panel data using pooled OLS regression (Table 4) reveals that access to credit improves wealth status; the regression parameter that stands for the number of times at which SACCOS credit has been available to the client influences the wealth status of the individual positively. The findings show that as members receive more and more SACCOS credit their wealth status improves from time to time; these findings provide substantial evidence to support this intimation at $P < 0.05$ level of significance. The results are in consistence with the finding of many past studies that that assessed the impact of credit such as Kiiru (2007), Khandker (2005) and Coleman (1999).

The regression coefficient that stands for market access acquired a negative sign as it was predicted indicating that individuals who are located far from the town center may experience little impact of credit compared to those located nearer the city centers. This is attributed by the availability of customers who seem to be more concentrated in town centers than in the rural areas. The coefficient provides insufficient evidence to support the trend that the statistics are significantly different from zero. Thus, location has little influence on wealth status.

The amount of capital available at the initial and final phases of the study shows a highly significant positive impact on the wealth status of an individual at P<0.01 level of significance. This implies that an improvement in access to capital is essential for lifting up the standard of living and the status of wealth. The positive effect of capital on wealth creation has been also observed by Aubrey (1955), Qin and Ndiege (2013).

With respect to education, the study findings indicate that the regression coefficients D1educ, D2educ and D3educ that stands for individuals who lack formal education versus those with secondary education, those with adult education versus secondary education and those with primary education versus secondary education acquired negative signs as they were hypothesized. This means that individuals with secondary education acquired more wealth than their counterparts in the reference category. The coefficient D1educ and D2educ were significant different from zero at 5% level of significant. For the case of individuals with college education versus secondary education the findings show a positive effect of credit on their wealth status. These findings imply that the level of education attained by individual respondents has a positive influence on the wealth status of the respondents. However, the coefficient D3educ and D4educ were not significant different from zero, indicating that higher education has little effect on the wealth status of the individual, this means ability to read and write is just suitable for the entrepreneurial activities. Related findings have been reported by Pitt and Khandker (1998) and Hossain (1988).

The results indicate further that business have significant effect on the wealth status of an individual entrepreneur. The findings provide sufficient evidence at 1% level of significance to support the crucial role which the accrued business returns have on asset accumulation and to the subsequent existing wealth status. The findings conform to those of Aubrey (1955), Rupasingha and Contreras (2010).

The regression coefficient attached to age of the respondent acquired a positive sign as hypothesized, indicating that there is a direct positive relationship between age of the respondent and the wealth increment. The findings were significant at P<0.001 level, implying that age of the individual has strongly significant influence on the wealth status of the entrepreneur. The results support the life cycle theory of saving and consumption which proclaim a positive relationship of age and wealth increment up to a point just before retirement. Using the life cycle theory, it is true that in the early period the individual joins SACCOS and borrows for investment, in the middle period, they experience higher returns which enable them to save more and accumulate wealth. In their old days, these individuals may have much to use but as they cannot invest anymore, so the returns fall and the wealth declines. They show a hump shaped life cycle of wealth status. The positive relationship between age, savings and asset accumulation has been also observed by Carpenter and Jensen (2002) and Sai *et al.* (2010).

Explanatory variable	Coefficient	Std Error	t- value	P[|Z|>z]	Expected sign	VIF	1/VIF
Rural versus urban	-0.031	0.111	-0.28	0.78	-	1.16	0.864
Age of the client	0.031	0.006	5.42	0.000***	+	1.28	0.781
Household size	-0.241	0.025	-9.42	0.000***	-	1.22	0.820
Business returns at the initial phase	0.216	0.049	4.39	0.000***	+	1.44	0.693
Invested capital at the initial phase	0.129	0.041	3.20	0.001***	+	1.71	0.585
Business returns at final phase	0.229	0.046	5.00	0.000***	+	1.68	0.595
Invested capital at final phase	0.029	0.100	2.88	0.000	+	1.76	0.567
Frequency of credit	0.225	0.101	2.22	0.027	+	1.60	0.627
DIeduc	-0.618	0.252	-2.45	0.015	-	1.31	0.763
D2educ	-0.661	0.304	-2.17	0.030	-	1.44	0.693
D3educ	-0.019	0.127	-0.15	0.883	-	1.56	0.641
D4educ	0.037	0.299	0.12	0.902	+	1.19	0.838
Cons	3.078	0.846	3.64	0.000***			
Mean Variance Inflation Factor (VIF) = 1.45							
Durbin-Watson (DW) = 1.716							
F(12, 445) 46.45							
Prob > F 0.0000***							
R-square 0.5561							
Adjusted R – square 0.5441							
Number of observations 458							

Table 2: Impact of SACCOS credit on wealth status using pooled - OLS Regression results
Dependent variable = Real wealth status at the final phase of the study
Source: own survey, 2012

4.2.2. Impact of SACCOS Credit using Difference in Difference Method

In order to analyze further the impact of credit on the clients, a comparison of within difference of treatment and control was done, this is a regression equation without a constant. From Table 3 the study findings reveal a significant positive impact of SACCOS credit on the individual wealth status. The coefficient that measure the impact of credit on the entrepreneurs' wealth status acquired a positive sign as predicted; this shows that a unit increase in frequency of acquisition credit increases the impact by 46.9% to the borrower. The regression coefficient was statistically significant at P<0.001 level of significance. The findings are consistent with the findings from many impact studies such as Pitt and Khandker (1998), Coleman (1999), Fasoranti (2010), Bashir *et al.,* (2010) who also found a positive impact of credit to the beneficiaries.

With respect to the regression coefficient for the total earnings, the findings show a positive relationship between the enterprise earnings and the wealth status of the entrepreneur at P < 0.001 level of significance. This implies that as business returns increase the wealth holding of an individual tends to increase too. This verifies the usefulness of credit for the growth of an enterprise and the ultimate wealth accumulation as observed between SACCOS members and non-members. The positive relationship observed conform to the life cycle and the permanent income theory which suggest a positive relationship between earning and wealth accumulation. Over the life cycle of an individual increment in earning has a direct relationship with consumption of goods and services which ca comprise durable, non-durable or both durable and non-durable goods. When consumption of durable goods is enhanced then wealth status of the individual increases as well.

The findings further show that the amount of capital available for investment has a significant positive effect on the wealth status of an individual implying that a large capital enhances positive improvement on the wealth status of an individual business practitioner. This is because it enables the entrepreneur to take advantages of business opportunities without being constrained by limited capital.

Explanatory variable	Coefficient	Std Error	t - value	P> | t |	Expected sign
Effect of capital	0.568	0.0 29	19.41	0.000***	+
Effect of earnings	0.199	0.038	5.16	0.000***	+
Effect of credit	0.469	0.115	4.08	0.001***	+
	Number of observation 458				
	F (3, 455) 506.66				
	Prob > F 0.0000***				
	R – squared 0.7696				
	Adjusted R - squared 0.7681				

Table 3: Impact of SACCOS credit using DID method in OLS regression (with no constant)
Dependent variable: Natural logarithm of the difference in wealth status at the initial and final phase of the study which measures the impact of credit
Source: own survey, 2012

5. Conclusion and Recommendations

5.1. Conclusion

The findings reveal a significant positive effect of credit on the wealth status using the Pooled OLS regression. Frequency of credit acquisition from SACCOS indicates a significant positive effect on the wealth status of the borrower. The findings are in consistent with the many of the past scholars who assessed the impact of credit on the household income and poverty reduction who see similar thing, in particular, positive effect of credit on the wellbeing of the borrowers (Coleman, 1999; Pitt and Khandker, 1998; Qin and Ndiege, 2013; Kushoka, 2013, Mwakajumilo, 2011; Magali, 2013a and Mavimbela *et al.*, 2010).

With regard to the amount of capital invested in the business at the initial and final phases of the study, the findings show invested capital has strongly significant positive influence on the wealth status of an individual entrepreneur. For the case of returns from investment, the results reveal a highly significant influence on the wealth status of the respondent supporting the permanent income hypothesis.

Meanwhile demographic characteristics such as age and household size were found to be among the most important factors that determines the wealth status of the respondent. The positive relationship indicated by the respondent age on wealth status concur with the life cycle theory of saving and consumption which declares that the young has little wealth, this wealth tend to increase with age up to a time just before retirement where it begins to deteriorates. The negative relationship existing between household size and wealth status indicates that a large household diverge resources from production into consumption of non-durable goods, thus affecting their wealth status. This is due to the fact that large household size increases the demand for consumption good, as a matter of fact spend more on consumer goods needed for the family and leave little or none for investment.

The DID method as another method of assessing the impact of credit from SACCOS provides sufficient evidence to confirm the existence of a positive effect of SACCOS credit on wealth status. The findings indicate that the DID method identifies the true causal effect, DID method illustrates a positive and significant impact of credit to the beneficiaries. The findings reveal that access to credit from SACCOS, invested capital and the overall enterprise earnings have a significant positive impact on the wealth status of the borrower.

This then verify the worth of establishing more SACCOS to increase the involvement of people in borrowing and thus uplift their standard of living and store wealth as a precaution for future consumption, and/or, for further re-investment in harmony to the speculative motive.

5.2. Recommendations

Based on the conclusion drawn from the study the following recommendations are made.

Since the age of the entrepreneur has been found to be a factor in the type of investment and that capital for investment as per the life cycle theory of saving and consumption diminishes on reaching old age/retirement period as a result of consumption. Thus, the study recommends early involvement in lifelong savings at young age, and that welfare department need to launch public awareness campaigns on the value of early lifelong savings among the people. This is because many people are still unaware of what SACCOS is. The surveyed entrepreneurs in Mbeya District reveals the need of facilitating thoroughly understanding of the paramount importance of joining in SACCOS in order to get more access to financial services that may boost the present gains from existing investment and improve their wealth status. Even those who know the functions of SACCOS lack basic understanding on how to join; this information could have been given by their respective cooperative officers, this has not been the case due to lack of funds.

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