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Access to Credit and Households' Borrowing Behavior in East Africa

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Abstract

The primary objective of this paper is to examine how the borrowing behavior of households in the East African region are influenced by their demographic characteristics- gender, age, income and education using Tobit regression. The paper employs survey data adapted from the World Bank's 2017 Global Findex. The results show that male-headed households borrow more often than female-headed households, and that older head of households are more likely to participate in borrowing activities than their younger counterparts. Generally, the results reveal that the household whose age is relatively small should be more indebted and will have a lower level of income, and consequently fewer physical assets. This is due to the life-cycle theory which suggests that younger households have expectations of their income to rise in the future as opposed to the older households, who are heading to retirement. So, they are more willing to borrow and acquire durables and other assets due to their hopes and expectation of getting more income in the future. On the other hand, the findings reveal that the education of the head of the household is the enabling factor for the household to borrow due to the financial literacy awareness one can derive from education. The income level of the household is also considered as the determining factor of the household's borrowing likely-hood. Since borrowing requires the guarantee in terms of borrower's income, the higher the income levels of the borrower the more likely the individual will receive the loan from the lenders.

Despite household's education, age and income the results also show that the gender of the households influences the borrowing behavior of the households and that women may not have the borrowing power and ability as compared to their men counterparts. This may be due to their inability to have collateral and guarantees used as loan back-up, their poor financial education awareness, and lower business experience. Therefore, understanding households' borrowing behavior in East Africa is very important, and the results of the study may be of policy interest towards the strengthening of the East African Community financial inclusion agenda. Also, the study commends governments of the East African region to promote households' borrowing and increase opportunities for household investment in achieving intended economic growth.

Keywords: Borrowing Behaviours, Age, Gender, Income, Education, Financial Inclusion

JEL Classification: E21

1. Introduction

The last two decades have seen a tremendous increase in borrowing activities by households across the world, and this has attracted massive attention in the financial industry due to its substantial implication in the micro-economy level Andreou (2011). The households' consumption is guided by the life-cycle theory which requires households to fairly smooth their pattern of expenditures and think about what they consume in future than just focusing on their present income, Campbell, and Mankiw (1990). According to Attanasio and Browning (1995), it is the credit

market which facilitates the households' consumption objective through the borrowing. According to the authors, when the household expects to receive some income in future but does not want to wait for the income to start consuming, he/she can borrow from the financial institution to start consuming the income not yet received at the cost of borrowing known as interest. The wise option is for the household who expects to receive income in future to borrow and acquire durable assets like building or motor vehicles to enjoy the services provided by such assets over time instead of saving money and accumulate amount enough to buy such asset, something which reduces lifetime expenditure.

The significant increase in household borrowing has been observed in recent time, especially in developing countries Guy Debelle (2004). According to the author, this increase is attributed to two major factors- the decline in the incidence of credit rationing following financial deregulation in most of the countries; and the fall in interest rates which is considered to be the factor for liquidity problem on households.

According to DeJuan and Seater (1999), the households' borrowing behavior is influenced by factors related to the characteristics of the households such as age, gender, income, and education. Even with the borrowing motives presented in the life-cycle theory, borrowing is also a function of fluctuation in the cost of borrowing, inflation, and changes in the business environment. If the future uncertainty is apparent households' ability to borrow is impaired because their expectation of reliable future income diminishes. Problems precipitate more during this kind of changing environment because unemployment rates increase, assets held by households reduce in value, and therefore, households may have worries of paying back their loans if they borrow during this period. Studying the factors influencing the borrowing behaviour of the households is of paramount importance because households improve the standard of their lives using loans they acquire, and this ultimately encourages the countries' economic development. Following the realization of factors governing households' desire and ability to borrow, governments have to improve borrowing environment for households to fulfill their desire.

This study, therefore, assesses the determinants of household borrowing in East Africa. The research on household borrowing behavior is widespread and biased in developed countries (e.g., Niankara and Muqattash, 2018) but very few studies have focused on the emerging markets such as East African region. Zins and Weill (2016) focused on determinants of borrowing and savings behaviours in Sub-Saharan Africa. Countries which make Sub-Saharan Africa are many in number, and diverse in a lot of aspects notably geographic diversity, which may attract significant differences in culture influencing their borrowing behaviour. East Africa is chosen because the countries composing this region are geographically close, and such geographical closeness may limit cultural differences which are pertinent in determining borrowing behaviours of households hailing from these countries. Therefore, understanding households' borrowing behavior in East Africa is very important, and the results of the study may be of policy interest towards the strengthening of the East African Community financial inclusion agenda.

2. Related Literature

From a theoretical perspective change in loans offered to households is usually associated to both demand and supply-side factors which can not be easily isolated from each other, because factors which explain demand side of loans and those of supply are often more or less similar. As one of the key determinants of an alternative to credit, literature such as Fernando Nieto (2007) points out what is called scale variables which include; expenses, income, which stands for the concept of permanent income. According to the author, households can choose going to lending institutions to get fund for investments and consumptions when their current income level is not enough the fund their consumptions and investment activities.

Another crucial factor is the cost of obtaining loans in terms of the interest rate the lenders charge on loan to compensate them for the resulted risk accumulating from lending activity. The decrease of interest rate shoots the demand for loanable funds while reducing the supply and vice versa. When the demand becomes high, consequently, there comes what is called credit rationing as advocated by Stiglitz and Weiss (1981).

Most importantly, is the demographic and labor-market related factors which influence the borrowing behaviour of the households across countries. In effect, an increase in household debt may be affected by improvement in employment status and change in demographic arrangement for households having more likelihood of being indebted, Fernando Nieto (2007). According to the authors, as far as credit restrictions are concerned, these factors may not have a linear relation effect. Consequently, for example, a growth in employment may render a rise in household debt, not only due to the growth of their expected income level but also due to the relaxing of the restrictions on the unemployed households concerning access to the credit market.

All nations all over the world aim at their economic growth, Barro (1991). The agenda of all Governments in the world is to reduce the poverty of its people through improvement, of the level of national income, Lewis, (2013). Several people require borrowing money to solve their daily economic challenges such as buying houses, taking care of their education requirements and solving their daily needs. However, not everyone can easily borrow from financial institutions. According to Niankara and Muqattash (2018), households with no bank account who participate in borrowing activity are faced with several hindrances, but the most significant obstacles which are highlighted in their study are the high cost of financial services and lack of resources.

Sadly, in emerging economies, credit markets are unable to offer loans to poor individuals who lack collateral, something which forces the poor households to have only informal credit facilities as their only available source of finance. Unfortunately, the informal credit market punishes the borrowers by imposing higher borrowing interest rates to compensate for the risk accrued from the borrowing activity, Kochar (1997b). To add on that, Basu (1997), in the analysis of Indian rural credit market, posits that banks and other financial institutions are not willing to extend loans to poor even if they have collateral, in terms of their future harvests, because such harvests are also subject to a lot of risks.

According to Laureti (2018), worldwide about nine-percent of adults take loans from formal sources of finance while fourteen-percent are from developed economies and eight-percent are from emerging economies. Furthermore, in developed countries about fifty-percent of adults hold credit cards as a source of short-term finance while only seven-percent of adults from developing economies use this source of finance.

Regarding sources of income, in households across the region, Niankara and Muqattash (2018) identify friends and family as the most common source of new loans, except with the high-income economies.

When it comes to Sub-Saharan Africa almost 30% of the adults borrow money from friends and family while only about 2% of them use a formal source of finance such as banks and other financial institutions.

Other literature such as Lewis (2013) pin-point interest rate as a key factor which affects households' saving and borrowing behaviors. However, the households' borrowing and saving behaviours are based on their own preferences, according to Laureti (2018).

Nieto Fernando (2007) in a study of Spanish household credit behaviour recognizes real spending, gross wealth and terms of repaying outstanding loans as factors which positively drive the behaviour of household in the long run. The author also reports a negative relationship between the cost of the loan and the rate of unemployment and borrowing behaviour of the household.

Apart from these macro-economic factors, Demirgüç-Kunt et al., (2014) point out religion as one of the crucial factors which dictate the households borrowing behaviour. According to the authors, religion is regarded as one of the impediments to access to loans by Muslims because their beliefs restrict conventional borrowing. Income level of the household is also a determining factor for the borrowing behaviour of the households. According to Allen *et al.*, (2016) households with relatively enough income can participate in borrowing activities because they may have the ability to show collateral to back the loans when required to do so compared to those households in the low-income bracket.

In their study on the determinants of rural household credit activity in Vietnam, Nguyeny (2007) found uniform credit access across rural communities. The author also found a negative u-shape effect on formal borrowing. It is shown that household with higher education participates more frequently in borrowing activities compared to those with lower education.

3. Methodology

3.1. Data

The data used in this study is adapted from the World Bank's 2017 Global Findex. The Global Findex database is a survey data constructed from a survey conducted by Gallup, Inc. through comprehensive interviews with more than 150,000 people worldwide nationally representative and randomly selected respondents. A unit of analysis in this study is a household who is a civilian aged from 15 years and above. The information provided in the database is categorized by demographic characteristics of the households such as age, gender, income level, and education. The database also provides the motives of household borrowings including business motive, education motive, future old-age motive, and medical motive. In this study, the sample of East Africa is selected with about 1000 respondents in each country. The countries involved include Tanzania, Kenya, Rwanda, Uganda, Burundi, and South Sudan.

3.2. Model Specification

The analysis of the data was conducted using regression analysis. Tobit Model (Tobin 1958) was applied to analyze key factors of household borrowing in East Africa by using STATA. The choice of this model was guided by the fact that the amount of household savings and borrowing tend to be censored at the lower limit of zero (Gujarati, 2007). The Tobit model specification is given as follows;

$$Y_i^* = X_i\beta + \varepsilon_i \text{ is a given individual: } 1, 2, \dots, n \text{----- (1)}$$

$$y_i^* = \begin{cases} y_i & \text{if } y_i > 0 \\ 0 & \text{if } y_i \leq 0 \end{cases} \text{----- (2)}$$

Where:

y_i = the observed amount of household Borrowing

Y_i^* = the latent variable which is not observed

β = Vector of unknown parameters

X_i = vector of independent variable affecting household borrowings

These variables are Gender, Age, income and education of the households

Therefore, the model is specified as follows;

$$Y_i^* = \alpha + \beta * GND + \sigma * AG + \phi * INC + \rho * EDU + \varepsilon_i$$

Where:

Y_i^* = Household Borrowing

ε_i = Error term of the model

GND = Dummy taking the value of 1 for a woman household and 0 otherwise

AG = Number of years

INC= (INC₁ and INC₂); INC₁ is dummy taking a value of 1 for a household whose income lies in low (40%) quintile, zero otherwise and INC₂ is dummy taking value of 1 for a household in high-income level (60%) quintile, zero otherwise

EDU= (EDU₁ and EDU₂); EDU₁ is a dummy taking a value of 1 for a household whose education lies in low (40%) quintile, zero otherwise and EDU₂ is a dummy taking a value of 1 for a household whose education lies in high (60%) quintile, zero otherwise. To examine the association between borrowing motives and demographic characteristics the paper employed cross tabulation. This is the statistical process that gives the summary of categorical data to generate contingency tables. In this study, a comprehensive contingency table is generated for borrowing motives and demographic characteristics. The paper also used bar charts to summarize the borrowing motives across the region.

3.1 Descriptive Analysis

3.3.1 Motives for Borrowing

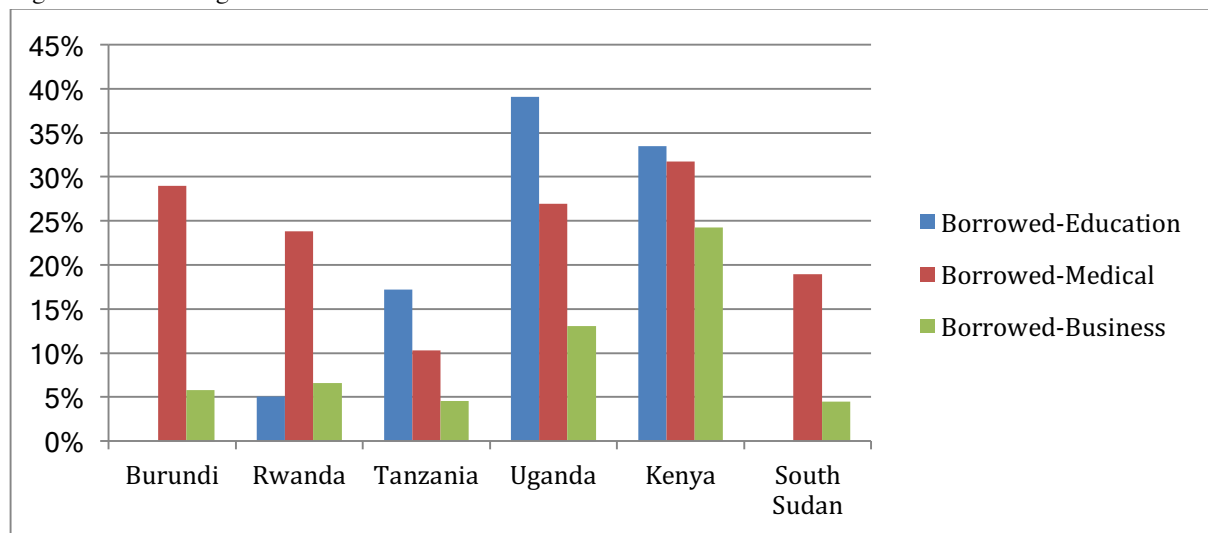
Individuals who wish to invest have two options to finance their intended investments, either they borrow, or they make upfront savings. When they make savings, they, in a way, postpone the current consumptions and when they borrow, they are obliged to repay back the loan. Global findex survey (2017) provides useful statistics to dig out the status of household borrowing and savings behavior across the world. According to the survey, worldwide, on average around 17% of the adults take loans and make savings for starting or improving their business activities. The survey extends that those who own business were more likely to report borrowing and savings for business motives than any other individuals. This confirms the research findings conducted in the USA that the savings rate of entrepreneurs is higher than the general population. Contrary to this, one would expect entrepreneurs to take more risk of borrowing for business activities, Demirguc-Kunt, (2014).

Some literature such as Okraku and Croffie (1997) argue that households depend primarily on their personal savings, and sometimes business profits, if any, for their financial needs. They have little or no access to formal external credit. Traditional financial institutions regard individual households' businesses as high risk. As a result, the financial needs of these households are not considered in the lending policy formulation of banks. Most of these individual households are denied access to financial assistance from traditional financial institutions. Therefore, they wouldn't have a choice than to turn to alternative sources of finance to cater to their financial needs. During the Global findex (2017) survey, the respondents from East Africa were asked whether they are willing to borrow if the needs arise, and results show that about 86% of the respondents said they would avoid borrowing if possible. The respondents were also asked whether they prefer saving their own money to use for business purpose or other use rather than borrowing, and about 88% of those who answered this question preferred saving money rather than borrowing. The households interviewed showed fear to borrow, and they indicated this fear when they were asked whether they would prefer delaying repaying loans when they borrow. About 94% said This has been supplemented by another question which required them to indicate the reasons why they don't want to borrow as about 81% either said they don't need to borrow (35%), they don't believe in borrowing (8%), or they fear to fail to repay the loan. Some reasons derived from this survey as to the reasons of households' reluctant to borrow include, lack of collateral, small business size and low awareness, limit of credit line etc. It is also revealed from the survey that households have a favorable attitude toward saving and investment, and a neutral (non-committal) attitude toward borrowing. The fact that they have a neutral attitude toward borrowing means that with proper incentives they are likely to borrow.

In understanding the behaviour of household borrowing, the survey asked households to tell their borrowing motives, and their response is presented in figure 1 below. In general, they identified three borrowing motives, namely; education motive, medical motive, and business motive. Figure 1 shows that the borrowing motive differs from one country to another. The highly ranked borrowing motive in Burundi, Rwanda, and South Sudan are medical while in Tanzania, Kenya and Uganda households borrow more for education purpose. Figure 1, further, shows that among all East African countries Uganda's households borrow more money for education (39%) than all other countries followed by Kenya (33%), then Tanzania (17%) and finally Rwanda (5%). Households from

Burundi and South Sudan did not borrow anything for education purpose. When it comes to borrowing for medical purpose Kenya is ranked high (32%) followed by Burundi (29%) and closely followed by Uganda (27%), and then Rwanda and South Sudan with 24% and 19% respectively of their households borrowing for medical purpose. The households in Tanzania rank last in borrowing for medical purpose. The motive which ranks the last is business motive. Figure 1 shows that Kenya is ranked higher than all other countries with 24% of its households borrowing for business purpose followed by Uganda (7%), Rwanda (6%), Burundi (5%), Tanzania (4%) and South Sudan (3%) in that order with their respective percentages in the brackets. Countries, where households borrow for the medical purpose, may be associated with poor medical insurance services.

Figure 1: Borrowing Motives



The analysis went further to categorize these motives on the basis of gender, age, income level and education level of the head of households and association between these motives with the demographic characteristics were established using cross-tabulation. Starting with gender; results presented in table 1 show that households headed by women borrow more for medical purpose in Kenya (37%), Burundi (31%) and Rwanda (26%) and those headed by men borrow more for medical purpose in Uganda (28%), South Sudan (23%) and Tanzania (11%). For comparison purpose, the education motive was not included in the contingency table because South Sudan and Burundi did not have borrowings for education.

In general, the contingency table 1 shows that across the region households borrow more for medical purpose as compared to business purpose. When it comes to business-motivated borrowing, in Tanzania, Kenya, Uganda, and Rwanda the households in which man is the head of the house borrow more as compared to households headed by women except in Burundi and South-Sudan where households headed by women record more business-motivated borrowings compared to their counterpart's male-headed households. Table 1 further shows that Kenyans' households borrow more often for business purpose than all other countries in the region regardless of the household's gender, age, income level or education followed by Uganda, Rwanda, and then Burundi in that order. The countries which borrow less for business purpose are Tanzania and South Sudan, which are almost at par when compared.

Furthermore, table 1 shows that households headed by women borrow more often for medical purpose than their male counterparts in Kenya, Rwanda, and Burundi while in Tanzania, Uganda and South Sudan men-headed households borrow for the medical purpose more often than women-headed households.

Generally, the contingency table 1 depicts the following important associations; *first*, male-headed households borrow more often for business purpose than female-headed households in four (Tanzania, Kenya, Rwanda, South Sudan) out of six countries studied in this paper. This may echo the level of women entrepreneurship in Burundi and Uganda. *Second*, the association between borrowing for business motive and age shows that older head of

households borrows more frequently for business purpose than younger ones. This may be due to the facts that younger head of households still have a lot of obligations to attend such as buying home assets, building houses and other requirements before they settle to start businesses. Also, we should not forget that borrowing for business needs some larger funds requiring collateral in terms of fixed assets, which younger heads of the household may not possess.

The age of the head of household may also be an advantage to him/her because with age his/her income may be on a higher side due to more experience and probably education, hence, possessing more assets, which can back-up his/her, loan. *Third*, consistently throughout the region, those heads of households with higher income borrow more frequently for business purpose compared to households whose heads have lower income. The reason is clear because individuals with higher income will probably own more valuable fixed assets which can be pledged as collateral for loans acquisition compared to individuals whose income status is questionable.

Table 1: A Cross-tabulation of Demographic Characteristics vs Major Household Borrowing Motives

COUNTRY	Borrowing Motive	Demographic Characteristics							
		GENDER		AGE		INCOME		EDUCATION	
		Female	Male	Old	Young	High	Low	>=SEC	<=PRM
TANZANIA	Medical Motive	10%	11%	10%	11%	11%	9%	11%	10%
	Business Motive	4%	5%	6%	2%	6%	2%	7%	4%
KENYA	Medical Motive	37%	26%	33%	29%	31%	33%	31%	32%
	Business Motive	21%	28%	29%	15%	27%	20%	27%	22%
UGANDA	Medical Motive	26%	28%	29%	24%	28%	25%	30%	25%
	Business Motive	14%	12%	15%	10%	15%	9%	16%	11%
BURUNDI	Medical Motive	31%	27%	34%	21%	30%	28%	20%	30%
	Business Motive	7%	5%	6%	5%	6%	5%	6%	6%
RWANDA	Medical Motive	26%	22%	24%	29%	23%	25%	16%	25%
	Business Motive	6%	7%	8%	4%	8%	4%	11%	6%
SOUTH	Medical Motive	15%	23%	20%	18%	23%	13%	32%	18%
SUDAN	Business Motive	4%	5%	4%	3%	6%	3%	6%	4%

3.4 Regression Results

The determinants of the households' borrowing behaviour were examined by focusing on the purpose for which the households borrowed money. To get this information the households were asked to indicate whether they borrowed money from any source in the last 12 months and if yes, for what purpose. Two major reasons for borrowing were captured namely, business motives and medical motives. The study then examined how these borrowing motives relate to households' demographic/individual characteristics; gender, age, income level, and education level. The Tobit regression was employed to examine how explanatory variables relate to borrowing motives of households.

The results presented in table 2 shows that, in general, borrowing motivations strongly differ from households' characteristics. Table 2 also shows that age is the only explanatory variable having similar relation with the two borrowing motives, medical and business. The relationship between households' age and borrowing motives takes a non-linear shape. The results show that the possibility of household borrowing for any purpose first increases until a certain age, then it decreases. Table 2 further shows that unlike age, other individual households' characteristics - gender, income, and education have different relations with the two loan-taking motivations of the households.

Concerning gender, table 2 shows that if a head of the household is a woman her likely-hood to borrow for business purpose decreases by 1.9% while this has got no significant impact with borrowing for medical purpose. This implies that, in East Africa, loans for business are more often requested by men than it is requested by women, but

gender is not relevant in as far as borrowing for medical purpose is concerned. This finding on gender is similar to those presented by Demirguc-Kunt et al. (2014) in their study on multiple economies (64 economies) who found a significant relationship between gender and borrowing motives of the households for business purpose. The results are also in line with Asli and Klapper Leora (2013) who confirmed that women are less likely to borrow for business purpose as compared to their men counterparts. Coming to households' income results, presented in table 2, shows that income is directly related to loans taken for medical purpose both for low- and high-income levels having higher coefficient in the low-income level. This may imply that poorer households tend to borrow more frequently than those households in a higher income bracket.

However, income is also reported to be negatively related to loans taken by households for business motives. The results show that as the income level of households increases the coefficients tend to decrease as observed in table 2 (when income level is high the coefficient is 0.5% while the coefficient increases to 1.5% for households in lower income bracket). Therefore, this, generally, shows that poor households are limited to borrow money for business purpose because their income level doesn't entitle them to enough physical assets which are required by lenders to be used as collateral when they ask for loans.

Table 2, further, shows that education level of households negatively relates to borrowing motives for medical purpose and positively for business purpose. High education level is shown to have higher coefficient (3.4%) than low education level (1.7%) in the medical motive equation, while the coefficients for high and low education levels are 1.9% and 2.6% respectively, for education motive equation. This shows that as the level of households' education increases their likely-hood to borrow for medical purpose tends to diminish and that for business purpose increases. The reason for this may be since the more education ladder one climbs, the more likely is the increase in individual's income which reverts to the previous discussion that individuals with more income can easily qualify to borrow for business purpose compared to the individual in the lower income bracket. Generally, the results reported in table 2 show that the household whose age is relatively small should be more indebted and will have a lower level of income, and consequently fewer physical assets. This is due to the life-cycle theory which suggests that younger households have expectations of their income to rise in the future as opposed to the older households, who are heading to retirement. So, they are more willing to borrow and acquire durables and other assets due to their hopes and expectation of getting more income in the future.

On the other hand, the education of the head of the household is the enabling factor for the household to borrow due to the financial literacy awareness one can derive from education. The income level of the household is also considered as the determining factor of the household to borrow because borrowing requires the guarantee in terms of borrower's income. The higher the income levels of the borrower the more likely the individual will receive the loan from the lenders. Despite household's education, age and income the gender of the household matters also in as far as the borrowing behavior is concerned. Consistent to Lotto, (2018), there is a gender gap in formal financial inclusion, and that women may not have the borrowing power and ability as compared to their men counterparts. This may be due to their inability to have collateral and guarantees used as loan back-up, their poor financial education awareness, and lower business experience.

Table 2: A regression Results on Determinants of the Borrowing

Independent Variables	Dependent Variables (Borrowing Motives)	
	MEDICAL	BUSINESS
Female	-0.000 (0.0032)	-0.019**(0.012)
Age	0.0075*** (0.000)	0.015*** (0.001)
Age ²	-0.001*** (0.0021)	0.03** (0.003)
Income – Low 40%	0.054** (0.045)	-0.015** (0.0076)
Income – High 60%	0.043*** (0.0002)	-0.0051*** (0.031)
Low Education	-0.017** (0.031)	0.016* (0.0011)
High Education	-0.034** (0.064)	0.029* (0.0042)
Observations	6000	5987
Pseudo R ²	0.015	0.021
Log likelihood	-17.38756	-25.9894

Predicted probability (at mean values)	0.1768	0.105
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NOTE: This table presents probit regression results of factors determining households borrowing motivations in East Africa. The top of each column shows the dependent variables which are business and medical motives while explanatory variables are gender, age, income, and education. Marginal effects are shown with stars on top while standard errors appear in brackets. * represent significant at 10% significant level, ** represent significant at 5% significant level and ***

4. A Concluding Remarks

The motive of this paper was to examine the borrowing behavior of households in the East African region and consider how the individual household characteristics affect the borrowing behavior of the head of household. The paper presents the following important results; *first*, male-headed households borrow more often for business purpose than female-headed households in four (Tanzania, Kenya, Rwanda, South Sudan) out of six countries studied in this paper. This may echo the level of women entrepreneurship in Burundi and Uganda. *Second*, the association between borrowing for business motive and age shows that older head of households borrows more frequently for business purpose than younger ones. This may be due to the facts that younger head of households still have a lot of obligations to attend such as buying home assets, building houses and other requirements before they settle to start businesses. Also, we should not forget that borrowing for business needs some larger funds requiring collateral in terms of fixed assets, which younger heads of the household may not possess.

The age of the head of household may also be an advantage to him/her because with age his/her income may be on a higher side due to more experience and probably education, hence, possessing more assets, which can back-up his/her, loan. *Third*, consistently throughout the region, those heads of households with higher income borrow more frequently for business purpose compared to households whose heads have lower income. The reason is clear because individuals with higher income will probably own more valuable fixed assets which can be pledged as collateral for loans acquisition compared to individuals whose income status is questionable.

Generally, the household whose age is relatively small should be more indebted and will have a lower level of income, and consequently fewer physical assets. This is due to the life-cycle theory which suggests that younger households have expectations of their income to rise in the future as opposed to the older households, who are heading to retirement. So, they are more willing to borrow and acquire durables and other assets due to their hopes and expectation of getting more income in the future.

On the other hand, the education of the head of the household is the enabling factor for the household to borrow due to the financial literacy awareness one can derive from education. The income level of the household is also considered as the determining factor of the household to borrow because borrowing requires the guarantee in terms of borrower's income. The higher the income levels of the borrower the more likely the individual will receive the loan from the lenders.

Despite household's education, age and income the results show that the gender of the household matters also in as far as the borrowing behavior is concerned and that women may not have the borrowing power and ability as compared to their men counterparts. This may be due to their inability to have collateral and guarantees used as loan back-up, their poor financial education awareness, and lower business experience. Therefore, understanding households' borrowing behavior in East Africa is very important, and the results of the study may be of policy interest towards the strengthening of the East African Community financial inclusion agenda.

Reference

Alexandra Zins and Laurent Weill, (2016) The determinants of financial inclusion in Africa. [Review of Development Finance](#), 6(1), 46-57

- Allen, Franklin, Elena Carletti, Robert Cull, Jun Qian, Lemma Senbet and Patricio Valanzuela. (2016) The African Financial Development and Financial Inclusion Gaps, *Journal of African Economies* 23, 614-42.
- Attanasio, O.P. and M. Browning (1995) Consumption over the Life Cycle and over the Business Cycle. *American Economic Review*, 85, 5, 1118-1137.
- Basu, S (1997) Why Institutional Credit Agencies are reluctant to lend to the poor: a theoretical analysis of the Indian rural credit market. *World Development*, 25, 2.
- Browning, M. and A. Lusardi (1996) Household Saving: Micro Theories and Micro Facts. *Journal of Economic Literature*, 34, 1797-1855.
- Campbell, J.Y. and N.G. Mankiw (1990) Permanent Income, Current Income, and Consumption. *Journal of Business & Economic Statistics*, 8, 3, 265-279.
- Cuong H. Nguyeny (2007) Access to Credit and Borrowing Behaviour of Rural Households in a Transition Economy. International Conference on Rural Finance Research, Moving Results into Policies and Practice. FAO Headquarters Rome, Italy
- DeJuan, P.J. and J.J. Seater (1999) The Permanent Income Hypothesis: Evidence from the Consumer Expenditure Survey. *Journal of Monetary Economics*, 43, 351-376
- Demirguc-Kunt, Asli, Leora Klapper, and Douglas Randall (2014) Islamic finance and financial inclusion: Measuring the use of and demand for formal financial services among Muslim adults. *Review of Middle East Economics & Finance* 10(2), 177.
- Demirguc-Kunt, Asli; Klapper, Leora; Singer, Dorothe; Ansar, Saniya; Hess, Jake Richard. (2018) *The Global Findex Database 2017: Measuring Financial Inclusion and the Fintech Revolution (English)*. Washington, D.C.: World Bank Group.
- Gujarati, D.N., (2007) *Basic Econometrics*. Fourth edition. Mc Graw-hill, Inc., New York.
- Guy Debelle, (2004). Household debt and the macro economy. *BIS Quarterly Review*
- Josephat Lotto, (2018) Examination of the Status of Financial Inclusion and Its Determinants in Tanzania. *Sustainability*, 10(8), 2873
- Kochar, A (1997b) An empirical investigation of rationing constraints in rural credit markets in India. *Journal of Development Economics*, 53, 339- 371.
- Laureti, Carolina (2018) Why do poor people co-hold debt and liquid savings? *The Journal of Development Studies* 54(2), 213–234.
- Lewis, W. A., (1954). *Economic Development with Unlimited Supplies of Labor*. The Manchester School. pp. 139-91.
- Niankara, I.; Muqattash, R, (2018) Financial Inclusion, Saving and Borrowing Behaviors in the United Arab Emirates and the United States: A Comparative Analysis. Preprints: 2018070445 (doi: 10.20944/preprints201807.0445.v1).
- Nieto, Fernando, (2007). The Determinants of Household Credit in Spain. [Banco de España Research Paper No. WP-0716](#)
- Okraku, F. D. and Croffie (1997) Entrepreneurship and Small Business: Policies and Programmes in Ghana” in Fadahunsi Glu and Tunji Daodu eds. *Small and Medium: Policies, Programmes, and Prospects*.
- Sofia N. Andreou, (2011) The Borrowing Behaviour of Households: Evidence from the Cyprus Family Cyprus. *Economic Policy Review*, Vol. 5, No. 2, pp. 57-83
- Stigli z J. and A. Weiss, 1981 Credit rationing in markets with imperfect information. *American Economic Review*. 71, pp 393-410.