Indian Journal of Applied Economics and Finance
Vol. 1, No. 1, 2026, pp. 1-30
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ISSN: 3107-667X
URL: http://www.pbjournals.com/ijaef

Household Economic Welfare: The Role of Financial Inclusion in Bamenda, Cameroon

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To Cite this Article

Nganje Sophie Nanyongo (2026). Household Economic Welfare: The Role of Financial Inclusion in Bamenda, Cameroon. *Indian Journal of Applied Economics and Finance,* 1: 1, pp. 1-30.

Abstract: *This study has as objectives: to evaluate the effect of women acquisition and operation of mobile money account on household economic welfare in Bamenda, to discuss the influence of women ownership and usage of ATM card on household economic welfare in Bamenda and to verify the effect of women borrowing money from a bank on household economic welfare in Bamenda. The study adopts a quantitative research design and made use of MLRT in STATA 14 via a sample of 127 women respondents collected using a well-structured questionnaire and with the application of a snowball sampling technique. The result showed that the acquisition of mobile money account and ownership and use of ATM card have a statistically positive significant relationship with household economic welfare in Bamenda town, Cameroon as oppose to women borrowing money from banks and other sources. Therefore, the study recommended that government through the Bamenda municipality intensify existing strategies to encourage the financial inclusion of women as it will positively affect poverty reduction. Considering that there is a growing inter-governmental commitment to accelerate financial inclusion for women and men globally, empirically, this study has closed the gap in the literature as it attempted to quantify the link between women financial inclusion and household economic welfare in Bamenda, Cameroon.*

Keywords: *Women, Financial Inclusion, household Economic Welfare, Bamenda Municipality*

1. Introduction

There is a growing international commitment to accelerate financial inclusion for women and men globally. Miles (2017) confirmed this at the international level in

Received: 10 February 2026 • **Revised:** 16 March 2026 • **Accepted:** 24 March 2026 • **Published:** 05 June 2026

2017 while the G20 reiterated its pledge to advance financial inclusion worldwide especially among the vulnerable groups and Small and Medium-sized Enterprises through its support for the work of the Global Partnership for Financial Inclusion. This is built on earlier international promises such as those made by the G7 which during its 2015 summit in Germany committed to achieve inclusive growth especially for women by fostering responsible financial inclusion. These commitments derived from the increasing recognition from policy makers, regulators and international development agencies of the importance of financial inclusion as an enabler of inclusive growth and poverty reduction as well as contribute towards women and girls' economic empowerment and welfare.

Bhatia and Singh (2019) argues that financial inclusion is considered to be a critical indicator for development and well-being of the society around the globe. Providing inclusive financial services that are affordable for all, has become a basic priority in many countries including developing countries. G-20 Nations have emphasized on financial inclusion as a facilitator for achieving gender equality and other sustainable development goals. Women empowerment is a radical approach concerned with transforming power relations in favor of female gender and considered essential for global progress. In the African continent, characterized by a low level of financial inclusion overall, the lack of access to financial services for women is acute when compared to men, Women's financial inclusion yields significant development impact such as more inclusive and sustainable growth through higher levels of productive investment and asset accumulation. At the household level, women are the primary financial managers in most families, ensuring intra-household resource allocation to meet ongoing basic needs and additional saving (Epstein and Grabel, 2006).

Miles (2017) continue to argue that persistent financial inclusion gender gap has placed women's financial inclusion more prominently on the financial inclusion policy agenda. For instance, internationally, the Alliance for Financial Inclusion (AFI), a global network of financial inclusion policy makers from developing countries, made a clear commitment in 2016 to close the gender gap in financial inclusion with the adoption of the Denarau Action Plan. The AFI network commitment to gender and women's financial inclusion sets out a series of actions AFI members must take to address the gender gap in financial inclusion. These actions include: collecting, analyzing and using sex-disaggregated data to promote financial inclusion, promoting gender diversity within member's own institutions

and strategies and setting specific financial inclusion targets for women within the framework of Maya Declaration and national financial inclusion strategies, with progress to be monitored and reported on a regular basis. According to Miles (2017) at a country level, many financial inclusion policy makers have been developing national financial inclusion strategies with sex-disaggregated quantifiable national financial inclusion goals and Maya Declaration commitments. Eight new gender focused Maya Declaration commitments were announced at the AFI's global policy forum to coincide with the announcement of the Denarau Action Plan. For instance, the Central Bank of Jordan has committed to reduce the gender gap from 53% to 35% by 2025 with decrease of 10% annually. In another example, the Reserve Bank of Fiji has committed to enhance data measurement and analysis by collecting disaggregated data on gender, age, and ethnicity by the year 2020. In addition, AFI has created a series of country specific case studies on policy changes to advance women's financial inclusion in Nigeria, Tanzania and Bangladesh.

According to Mabula (2016) the Denarau Action Plan is a platform to harness partnerships, share experiences and was created for members to work together to halve the gender gap in financial inclusion by 2021. The action plan was being implemented locally in countries to include more women in the formal financial system. In Zambia, where men still have more access to financial services than women, the Bank of Zambia worked to integrate the Denarau Action Plan in its 2016-2019 Strategic Plan by entrenching gender mainstreaming in the financial sector and increasing gender diversity in the Bank of Zambia and the regulated institutions under its scope. By early 2019, the Bank was committed to developing and advocating best practices in collecting, analyzing and using sex-disaggregated data to further promote financial inclusion for women.

As a network AFI made significant progress in implementing the Denarau Action Plan, evidenced by the country experiences and policy guidance. AFI members led the development of knowledge and practical tools to promote women's financial inclusion globally as committed at the 2016 AFI Global Policy Forum and greatly encouraged especially AFI's Working Groups. These groups led knowledge generation for the Denarau Action Plan since its creation, harnessing AFI's strength in policy leadership to promote women's economic empowerment and poverty alleviation through financial inclusion and commitments strengthened to halving the gender gap in member countries Hannig and Mabula (2017). According to Epstein and Grabel (2006) recently, the G20 has acknowledged the important role

that financial inclusion can play in development. Under the Korean presidency, at the Seoul Summit in November 2010, G20 leaders formally recognized financial inclusion as one of the nine key pillars of development and also committed to the launch of the Global Partnership for Financial Inclusion (GPFI). One area of the GPFI's work has been to establish the Global SME Finance Initiative, which aims to provide at least £5 billion of additional finance to over 200,000 SMEs, with at least 25 percent of loans reaching women-headed SMEs. Although the GPFI is concerned with financial inclusion for both men and women's access to finance (Epstein and Grabel, 2006).

According to Hunguana *et al* (2020) Cameroon ranked 163rd out of 190 countries in the World Bank's 2018 "Doing Business Report," a considerable improvement on its 172nd position in the previous year. The country is part of the Central African Economic and Monetary Community. Its financial sector is governed by a regional body, COBAC, and the National Credit Committee; while regulation is weak and in need of reform. The financial sector generally suffers from a lack of confidence, capacity and outreach. Major Banks, mostly foreign-owned, lend mainly to internationals, state-owned enterprises and the Government. The microfinance sector is small, fragmented and with limited outreach. Physical access points are well below the average for sub-Saharan Africa. Cameroon does not have a financial inclusion strategy, and does not seem to have reached out either to AFI- the Alliance for Financial Inclusion, or to international donors to assist in developing one. However, a Fin scope survey was undertaken which could usefully serve as a starting point. Principal financial services are dominated by remittances and informal savings. The position of women is weak, though there is a National Gender Equality Policy, which does not extend to women economic empowerment; customary laws limit women's access to and control of assets (Hunguana *et al*., 2020).

Financial inclusion, since the last decade, has become a core objective of many developing nations as a strategy to further develop their economies and financial systems. Also, a number of scholars have found that the prevailing poverty in less developed economies is directly linked to financial exclusion. This observation has made the drive towards financial inclusion stronger (Hunguana *et al*., 2020). The drive towards financial inclusion is spurred by the fact that half of the world's adult population does not have an account at a formal financial institution. Approximately 77 percent of adults living on $2 a day or less do not have bank account and there

are extreme disparities in access to and usage of formal financial services across and within countries.

In Cameroon, 65 percent of the population is unbanked. Women financial inclusion is poor in Cameroon, there exist no financial inclusion strategy and Cameroon does not belong to alliance for financial inclusion AFI. AFI, the worldwide association of central banks, in its 2015 report, does not list Cameroon either as a country having a national financial inclusion strategy, or in the process of developing one. The 2018 Annual Report of Bank for Central African States makes no reference to one (Hunguana *et al*., 2020). However, a Finscope survey was undertaken recently which could usefully serve as a starting point. Principal financial services are dominated by remittances and informal savings. The position of women is weak, though there is a National Gender Equality Policy. This doesn't extend to economic empowerment (Hunguana *et al*., 2020).

In terms of gap in the literature, the above discussion reveals that a handful of studies have been conducted in this domain in Cameroon and we are not aware of any major study targeting similar issues as ours in Bamenda equally very little has been done in other developing countries (Tambi, 2019). More over emphasis has been laid so far on entrepreneurship, agricultural production and empowerment yet, neglecting the link with household welfare this makes it problematic. This study therefore seeks to: evaluate the effect of women acquisition and operation of mobile money account on household economic welfare in Bamenda municipality, discuss the influence of women ownership and usage of ATM card on household economic welfare in Bamenda municipality and to verify the effect of women borrowing money from a bank on household economic welfare in Bamenda municipality.

2. Literature Review

Household economic wellbeing has been proven to be influence by many factors including financial inclusion, especially, as financial inclusion is intended to connect people to banks with consequential benefits. Access to financial system facilitates creating equal opportunities, enables economically and socially excluded people to integrate better into the economy and protect themselves against economic shocks. The government of a state is seen as general agent of development and state intervention in the area of policy and prescriptions for enabling faster economic development and consequent inclusive growth (Epstein and Grabel, 2006).

The ideology of financial inclusion in developing economies is different from that of developed economies. In developed economies the target group may be a microscopic minority, in the developing economies it could be a majority (Krugman and Venables, 1995), therefore, the subject of financial inclusion in developing economies assumes greater significance. Financial inclusion will happen on its own. Holvoet (2005) compared the gender effects of two subsidized credit programs in southern India and found that the decision-making influence of women increases only when credit transfers are made to women. Similar studies by Pitt *et al* (2006) revealed that there is positive correlation between FI programs targeting women and their well-being. This finding reinforced the fact that women could be active agents of change and play an important role in both the family and the society.

Microfinance in the recent past has emerged as a potential instrument for poverty alleviation and women empowerment. Majority studies have established that an increase in women's resources results in increased wellbeing of the family as a whole (Kabeer, 2012). Microfinance and Micro insurance programs have the potential to transform communities by alleviating poverty and empowering women. In the context of Bangladesh, using panel data, Islam *et al* (2015) observed that rural households access to microfinance reduces their incidence of borrowing from informal source. Berger (1995) found that after availing microfinance services women become able to make decisions about credit and savings through they can manage their income-consumption behavior in a better way the author also observed that this economic empowerment in turn lead to increased well-being of women.

Islam *et al* (2008) investigated the impact of poverty focused on none-government organizations (NGOs) programs on rural women and observed a wider disparity in employment and income, literacy and education, nutritional intake and access to health facilities which is obvious obstacle to inclusive growth of a country. Mazumder and Wencong (2013) explored positive association between women's access to credit and socio-economic variables such as neighbor's' respect, self-esteem, self-confidence, self-expression, ability to protest social injustice, capacity to solve social issues are applied to measure changes in social conditions of poor women. Malik and Luqman (2005) observed that microfinance raised women's economic status by assisting them to enhance their income through which they can experience more financial sovereignty. Both authors observed that micro credit enabled poor women to engage in numerous income generating activities. Looking

at several dimensions of women empowerment, Schurmann and Johnston (2009) study supports the positive linkage between microfinance and social performance, exemplified by microfinance's resilient positive effect on women's empowerment and a less verifiable impact on sexual and reproductive health**.** Hossain *et al* (2004) investigated the role of microfinance institutions in supporting rural livelihoods in Bangladesh and observed that microfinance is making significant involvement in uplifting the rural people's livelihoods.

Mayoux and Hartl (2009) observed that microfinance has contributed not only to goals of poverty reduction and financial sustainability, but also to economic empowerment, increased well-being and social and political empowerment for women themselves, thereby addressing goals of gender equality and empowerment. Narayan-Parker (2002) has strongly emphasized women empowerment as the processes by which women take control and ownership of their lives through expansion of their choices. Therefore, empowerment of women is an important goal of any development policy of an economy. However, Swamy (2014) did a detailed study on Financial Inclusion, Gender and Economic Impact analysis and concluded that financial inclusion programs did not aid in economic up-liftmen of the poor women.

Financial inclusion ensures that customers have access to a range of formal financial services, from simple credit and savings services to the more complex such as insurance and pensions. Financial inclusion also ensures that customers have access to more than one financial services provider that promotes a variety of competitive services. This suggests that 'financial exclusion' mean the inability of the disadvantaged to access financial services. Conversely, financial exclusion refers to a process whereby people encounter difficulties accessing and/or using financial services and products in the mainstream market that are appropriate to their needs and enable them to lead a normal social life in the society in which they belong (Kempson, 2006). Obstacles to financial exclusion include: unfriendly business environment, lack of sustainable growth; insufficient infrastructure; geography e.g. rural area - limiting physical access; psychology - fear of financial institution's staff, structures, complicated financial products, etc.; information -lack of knowledge regarding products and procedures; low income and poor financial discipline; and poor business practices (Shafi and Medabesh, 2012).

Increasing women's financial inclusion is especially important as women disproportionately experience poverty, stemming from unequal divisions of labor

and a lack of control over economic resources. Many women remain dependent upon their husbands, and about one in three married women from developing countries has no control over household spending on major purchases (WEMAN,2020).About one in 10 are not consulted about the way their own earnings are spent (WEMAN, 2020).In addition, women often have more limited opportunities for educational attainment, employment outside of the household, asset and land ownership, the inheritance of assets, and control over their financial futures in general. Despite important advances in expanding access to formal financial services in the developing world .in recent years, a significant access gap remains between men and women. This is illustrated through a basic measure of financial inclusion account ownership. Globally, only 58 percent of women hold an account in a formal financial institution compared to 65 percent of men (Zinsa and Weillb, 2016).

Financial services encompass financial intermediation offered by financial services firms including: investment firms, leasing enterprises, credit institutions, insurance and pension funding firms and other auxiliary services such as the financial markets administration, security broking, and fund management (Fadun, 2013). Financial services are fundamental to economic growth and development (WTO, 2012). Moreover, the expansion of financial services that can be accessed by the public can increase income growth thereby reducing the direct impact of poverty (Fadun, 2013), this therefore means that financial inclusion is closely linked to economic empowerment and consequently economic wellbeing.

3. Methodology

The study area of this work is Bamenda municipality. Bamenda city is the administrative seat of Mezam Division and Regional headquarters of the North West and the largest town in the North West Regions. It has a surface area of 5,250 kilometers square, a total of seven Sub Divisional councils. The vegetation here is known as the Sudan Savanna which covers the western highlands, the Benue Basin, the Diamare plain and the Mandara. This grassland is dominated by shrubs, which are resistant to drought and bush fires. This is a very fragile ecosystem and it is being ravaged by bush fires and intense grazing.

Bamenda municipality has an estimated population that stands at two million inhabitants (MINADER, 2015). The population of Bamenda municipality is largely cosmopolitan made up of indigenous Mankon, Nkwen and Ndzah people, migrants from all over the North West and West Regions, other regions of Cameroon and

Nigerians and a majority of the inhabitants do business for a living which is the main source of their income followed by agriculture, with a majority of people doing farming just for family consumption. Bamenda town is along the Cameroon Volcanic Line with two distinct relief features: a high lava Plateau of about 1,400m, and the Lower Plateau, with an average altitude of 1,100m above sea level both separated by a vast escarpment. Its municipalities' has a tropical climate with two seasons: a long rainy season of eight months (March-October) and a short dry season of four months and temperature varies between 15 - 31°C (see figure 1 for the Location of the Bamenda Town in Mezam Division, North-West Region, Cameroon).

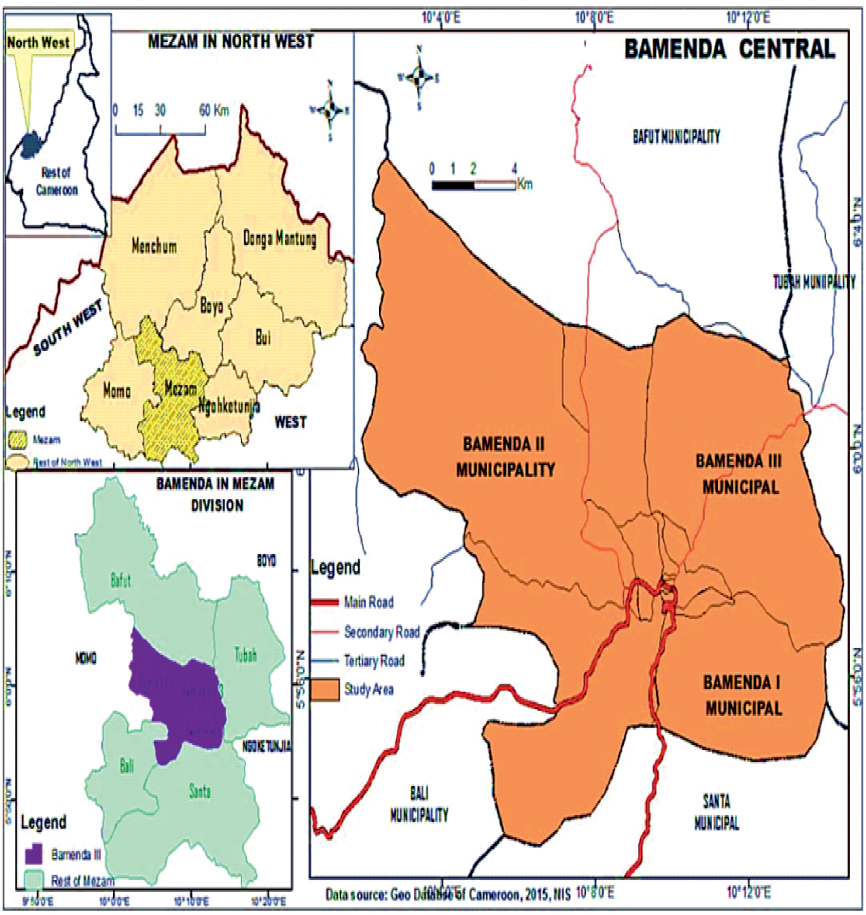


Figure 1: Location of the Bamenda Town in Mezam Division, North-West Region, Cameroon

Source: MINADER (2015)

Bamenda is known for its cool climate and scenic hilly location. The main industries are the production and processing of agricultural produce such as coffee, elementary food processing, handicraft, cottage industry, education (schools), tourism/hospitality, construction works and transport. The local museum and shops display a wide variety of local baskets, beads, woodcarvings and bronze statues in Bamenda. There are cultural sites such as the Bali Fon's palace with its ancient architectural structures. The mountainous terrain around the city affords scenic views such as that from the mountain and Sabga over the plain.

The city of Bamenda has road links to Mamfe, Yaoundé and Douala as well as an airport located in Bafut sub division. North of the city is the Bamenda ring road, a 367km circular rout through Cameroon highlands, along this road is Mount Oku 3000m, the Kimbi River game reserve, the Menchum Waterfalls, a huge Fon's palace at Bafut and a pyramidal thatched shrine at Akum (Aion, 2015). The natural sites serve as touristic sites which bring in tourists into Bamenda, consequently income from tourism though the present tourism situation is very bad due to the ongoing Anglophone crises. The North West region is the third most populated region in Cameroon with Bamenda as the regional capital. Bamenda is made up of Mankon, Bamendakwe and Nkwen tribes with so many migrants from other tribes of the north west region predominantly due to the displacements as a result of the ongoing Anglophone crises.

The traditional economy of the region is based on subsistence agriculture, animal breeding, and handicraft. The existence of fertile soils permits the cultivation of a variety of crops. Agriculture is a pre-occupation of women as well as men. Many crops like maize, plantains, cocoyam, and yams are grown everywhere as staple food crops. In addition to that, carrots, sweet potatoes, bananas and groundnuts are widely grown. The German colonial administration introduced the Irish potatoes into the region which today is cultivated in increasing quantities by almost all ethnic groups in the area, except the forest areas. The people have also recently begun growing grapefruits, papayas, oranges, guavas, soy beans, cabbage, tomatoes and pineapples.

This study was undertaken in the Bamenda municipality and the main question is to investigate the effect women financial inclusion on household economic welfare in Bamenda municipality. The study depended on the collection of qualitative and quantitative data from respondents and stakeholders in Bamenda. It was observed that no previous scientific research had been done on the phenomenon to examine the effect of women financial inclusion on household economic welfare in Bamenda

municipality. It should be noted that the Phone Access program in 2015 by Afrifams and Aion Sigma is a women financial inclusion program that took place in Mankon to encourage the use of financial services in 2015. The benefit of the program was to provide affordable smart phones to women entrepreneurs in Mankon, that is very beneficial in the line of business they are currently working in. With the phones, they had a chance to use formal financial services, promote their products and services on social media platforms like Facebook and Whatsapp. Additionally, the phones helped the women improve productivity by giving them access to basic financial services, improving communication with the customers, learning and developing new agricultural and business techniques, finding new markets, and in turn helping them to secure more customers and a better return on investments (Aion, 2015), unfortunately the outcome of this program is yet to be verified, reason why this study is very important.

The finance sector in Bamenda is characterized by many microfinance companies, few banks, insurance companies and the government treasury. There also exist in the informal sector so many 'njangi' houses. Micro finance institutions are very much larger in number than formal banks (there are 10 banks, 5 insurance companies, 25 micro finance institutions) a majority of the local population deal more with micro finance institutions and 'njangi houses' rather than banks. The educational sector also forms a big part of economic activities in Bamenda because many businesses provide services needed by students and because of the fact that education is a huge industry in Bamenda though recently the Anglophone crises has greatly disrupted this industry over the last six years.

Data Presentation

The sampling technique used in this study is snowball sampling. The questionnaires targeted 130 respondents comprising of women employees, employers, business owners and civil servants although at the end of data collection 3 respondents did not answer the questionnaires leaving the author with a data set of 127. The questionnaires comprised of 4 sections, section A meant to capture demographic data of participants, Section B to capture data on women financial inclusion, section C to captured data on household economic welfare and Section D deals with questions related to complementary information in Bamenda municipality.

Detailed semi-structured interviews were conducted with key participants being women with experience in financial issues. The questions were sent to participants

by distribution through individual visits/encounters. Firstly, a total of 130 women respondents were contacted to gather the needed data for the study. To encourage participation in the survey and increase the response rate, three reminders were sent to the participants by phone calls and SMS messages and at times physical presence of the researcher to remind them to fill the questionnaires. Besides interviews, about ten related case study articles mostly on financial inclusion, women empowerment, women in finance, poverty alleviation and economic welfare in the developing world were reviewed to establish a scientific foundation to the study. The scientific articles focused and based on world issues such as economic welfare, women financial inclusion, women empowerment, poverty alleviation and sustainable development goals.

The collected data came from semi- structured in-depth interviews and questionnaires from respondents; emphasis was laid on more open-ended questions in view of the research process because this is less restrictive on the kind of things that can be found out about the study. Bryman (2016) also stressed that semi-structured interviewing allows the researcher to keep an open mind about what needs to be known about the data and helps to answer research questions. According to Mason (2002) the choice of data collection will work when it best highlights the topic and is practical in its collection. Generated data collection method from participants allows them to describe personal or organizational context in which the issue is located and how they are related to it (Lederman, 1990). The significance of generated data collection gives participants a direct and explicit opportunity to convey their own meanings and interpretation through the explanations they provide in answer to the researcher's investigation.

Model Specification

The Multiple Linear Regression Technique (*MLRT*) was used to estimate the relationship between women financial inclusion (*WFI*) and household economic welfare (*HEW*) in Bamenda municipality. Frequency tables, were employed to present demographic data and main result. In this study the dependent variable is household welfare, the independent variable is financial inclusion (women acquisition and operation of mobile money account, women ownership and usage of ATM card and women borrowing money from a bank/friends/relatives). The control variables are: age group, profession and level of education and Experience in Financial operations. The analytical relationship between women financial

inclusion and household economic welfare can be expressed in the following equation:

$$HEW_i = \alpha_0 + \beta WFI_i + \lambda\chi_i + \varepsilon_i \qquad , i = 1,.....n \qquad \text{Equation 1}$$

Whereby *HEW* is the household economic welfare, α_0 is the constant term, *WFI* is the women financial inclusion, β, λ are the coefficients of parameter estimate, χ is the complementary exogenous characteristics (women level of education, age group, women profession and women experience in the use of financial operations) believe to be effecting household economic welfare while ε is the error term. This Equation 1 is used to the estimate the full sample results as express in Table 5 of the result section. This is not actually part of the objectives stated for this study, however, it permits to ensure robustness in the result. To render this variable usable, we make used of Multiple Correspondent Analysis (MCA) to create an index for financial Inclusion using the three components adopted for this study. The Table 1 shows how the variables were captured and use to generate a financial Inclusion index. The Multiple Correspondence Analysis approach have been popularized in the field of multidimensional poverty analysis and in current literature MCA is applied in the analysis of multidimensional welfare (agricultural production) (Asselin and Tuan, 2005).

Technically, MCA is obtained by using the standard correspondence analysis on an indicator matrix by selecting the synthetic variable as well as its different modalities comprising the variable. In our case, we used the Multiple Correspondence Analysis to construct the composite index for farmer's empowerment index. It should be noted that in this case, the modalities used to construct the synthetic variable respect the fundamental requirements as outlined in Asselin and Tuan (2005). The modalities or indicators use have an ordinal ordering consistent with their contributions in the first factorial axis as stated in the existing literature (Asselin and Tuan, 2005). Regarding our synthetic variable - financial Inclusion, we choose three variables with each having two modalities and place them in an increasing ordinal order. The variables selected for our financial inclusion indicator are as Table 1.

From these variables, our indicator was computed using the MCA and it's the constructed index that we used in this study to estimate the contribution of financial inclusion on household economic welfare. The detail of this indicator is summaries in Table 3 of the result section. As presented in our objectives of section one, the

Table 1: Variables use to construct the financial inclusion indicator

Variable	*Modality*		*Nature*
Women acquisition and operation of mobile money account	Yes	No	Dummy
Women ownership and usage of ATM card	Yes	No	Dummy
Women borrowed money from bank, friends, or relatives	Yes	No	Dummy

Source: Author, N/B: designed for the purpose of creating financial inclusion indicator

components of financial inclusion consider in this study are: women acquisition and operation of mobile money account, women ownership and usage of ATM card and women borrowing money from a bank/friends/relatives. Equation can be further decomposed as demonstrated in equation 2.

$$HEW_i = \alpha_0 + \beta_1 MM + \beta_2 ATM + \beta_3 BFR + \lambda\chi + \varepsilon_i$$

Equation 2

Where: is women acquisition and operation of mobile money account, is women ownership and usage of ATM card and is women borrowing money from a bank, friends or relatives. The estimate of equation 2 is presented is Table 4 of the result section. As intimated by Zinsa and Weillb (2016) about 40% of the world's female population do not have access to formal financial services. A woman is 20% less likely than a man to have a bank account and 17% less likely to have a formal loan. All these inequalities stem from social norms and prejudices still anchored in societies which restrict women's financial inclusion, employment and resources, and thus hinder their economic empowerment opportunities. Increasing access to and use of quality financial products and services is essential to inclusive economic growth and poverty reduction. Research shows that when people participate in the financial system, they are better able to manage risk, start or invest in a business, and fund large expenditures like education or a home improvement (Zinsa and Weillb, 2016), thus implying that if women participate in the financial system they stand a chance to fund large expenditures etc. as above which results in higher living standards for them and their households. Conceptually, equation 2 can be demonstrated graphically as:

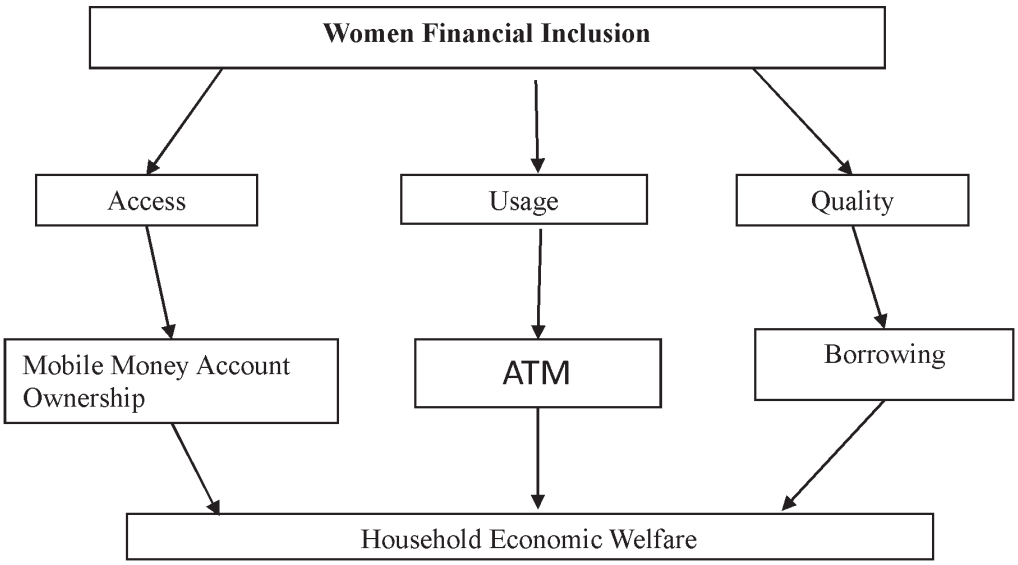


Figure 2: Linking Women Financial Inclusion to Household Economic Welfare

Source: Author

From figure 2 the hypothesis that this study seeks to realized are then formulated as:

- Women acquisition and operation of mobile money account is relatively not important in explaining household economic welfare in Bamenda municipality.
- The women usage of ATM card is relatively not accounting for household economic welfare in Bamenda municipality.
- Women borrowing money from the bank is not strongly associated with higher levels of household economic welfare in Bamenda municipality.

The econometric formula explaining the specific effect of each component of financial inclusion (women acquisition and operation of mobile money account, women ownership and usage of ATM card and women borrowing money from a bank, friends or relatives) on household economic welfare as presented in Table 5 of the result section are as follows:

$$HEW_i = \alpha_0 + \beta MM + \lambda\chi + \varepsilon_i \; i = 1,.....n \qquad \text{Equation 3}$$

$$HEW_i = \alpha_0 + \beta ATM + \lambda\chi + \varepsilon_i \; i = 1,.....n \qquad \text{Equation 4}$$

$$HEW_i = \alpha_0 + \beta BFR + \lambda\chi + \varepsilon_i \; i = 1,.....n \qquad \text{Equation 5}$$

From these equations deduced from equation 2, equation 3 presents the specific effect of women acquisition and operation of mobile money account on household economic welfare, equation 4 is the specific effect of women ownership and usage of ATM card on household economic welfare while equation 5 is the specific effect of women borrowing money from a bank, friends or relatives on household economic welfare. The MLRT estimate of these equations (3, 4 and 5) are all presented in Table 5 of the result section. The purpose of its presentation is to ensure robustness.

Measurement Issues

Household economic welfare as the outcome variable of this study, is a continuous variable captured as household expenditure per month in dollars, this continuous nature permitted us to use a multiple linear regression technique. The financial inclusion index is created using multiple correspondent analysis (MCA) and it gives a continuous variable, this index was used to estimate the full sample result with the goal of establishing robustness in our estimate. As not in our objective, financial inclusion was decomposed in to three variables, comprising the components of financial inclusion. As shown in Table 1, all the three variables (women acquisition and operation of mobile money account, women ownership and usage of ATM card and women borrowed money from bank, friends, or relatives) were all captured as a dummy, with 1 being yes if the respondent accepted the possibility and 0 if otherwise, all these three variable are otherwise called dichotomous variables (see Table 1 for clarity). The various exogenous characteristics (advanced level education, 36-45 years' age group, entrepreneurship profession and 2-3 years' experience in financial operations) are all dichotomous variables with value 0 and 1.

4. Results

Demographic Profile and Characteristics of Respondents

The respondent participants were women between the ages of 15 to 65 years and above. As noted in Table 2, 65 of the participants were between the ages of 15 and 25 years, making a total of 51.2% of the participants, implying the youthful women were more agile and willing to respond to the questionnaire than otherwise as they constitute the working age group. The lowest were those between the ages of 36-45 making a total of 3.1% of the participants. Between the ages of 26-35 the study observed 20 participants implying 15.7% participated. In total, there were 127 participants in the research with all being women. Most of the research participants

were either civil servants, business owners, employees and business managers, with the highest being employees (62.2%) while the lowest were business managers (6.3%). About 16.5% of the participants were civil servants while 15.0% were business owners. Table 2 gives statistical details of the profession of the respondents.

Table 2: Demographic Profile and Characteristics of Respondents

Modality	*Frequency*	*Percent*	*Valid Percent*	*Cumulative Percent*
Distribution according to Age group of respondents				
15-25	65	51.2	51.2	51.2
26-35	20	15.7	15.7	66.9
36-45	4	3.1	3.1	70.1
46-55	22	17.4	17.4	87.4
56-65	8	6.3	6.3	93.7
>=65	8	6.3	6.3	100.0
Total	**127**	**100.0**	**100.0**	**n/a**
Distribution according to the Profession of respondents				
civil servant	21	16.5	16.5	16.5
business owner	19	15.0	15.0	31.5
Employee	79	62.2	62.2	93.7
business manager	8	6.3	6.3	100.0
Total	**127**	**100.0**	100.0	n/a
Distribution according to Experience in financial Inclusion of respondents				
<=1year	78	61.4	61.4	61.4
2-3years	20	15.7	15.7	77.2
4-5years	16	12.6	12.6	89.8
>=6years	13	10.3	10.3	100.0
Total	127	100.0	100.0	n/a
Distribution according to the level of education of respondents				
FSLC/O/L	31	24.4	24.4	24.4
A/L	46	36.3	36.3	60.6
BSc	16	12.6	12.6	73.2
MSc	21	16.5	16.5	89.8
PhD	13	10.2	10.2	100.0
Total	127	100.0	100.0	n/a

Modality	*Frequency*	*Percent*	*Valid Percent*	*Cumulative Percent*
Distribution according to the Marital Status of respondents				
Married	35	27.6	27.6	27.6
Single	64	50.4	50.4	78.0
Divorced	28	22.0	22.0	100.0
Total	127	100.0	100.0	n/a
Distribution according to Financial Inclusion Strategy in Bamenda municipality				
Mobile Money	70	55.1	55.1	55.1
ATM card	49	38.6	38.6	93.68
Borrowing	8	6.3	6.3	100
Total	127	100.0	100	n/a

Source: Author

Majority of the participants (78) had work experience of 1 year or less (61.4%). About 20 of them had been working for 2-3 years giving 15.7%, while 16 of had been working for 4-5 years (12.6%). About 13 participants had been working for 6years and above (10.2%). According to analysis on Table 2, majority of the participants were Advanced level holders (46) with 36.2% of the total sample. 31 were FSLC holders, 16 were BSc holders, 21 were MSc holders and 13 were PhD holders. To find out the financial inclusion strategy for women in the Bamenda city council, questions were tailored around the various financial strategies that were identified such as ownership of a bank account, ownership of a mobile money account, the frequency of use of these accounts, the accessibility of the women to these accounts, the nearness of the financial services to the women, satisfaction with financial services, ownership of an insurance policy and the reliability of the various financial services. Following the various strategies identified, it is observed that majority of the women in the Bamenda city council are financially included 55.1% (70) and only 49 (38.6%) are not included financially.

Synopsis of Financial Inclusion Indicator

In order to construct the financial inclusion index, we use the multiple correspondence analysis (MCA) method given that financial inclusion is a multifaceted domain, it was therefore constructed using three different modalities such as; women acquisition and operation of mobile money account, women ownership and usage of ATM card and women borrowed money from bank, friends, or relatives. These

observations were reduced to one by the MCA method as seen in Table 3. From our observation, we realise that, all the variables contributed to the first dimension, with women acquisition and operation of mobile money account contributing about 3.1% to the total inertia, women ownership and usage of ATM card contributed 2.2%, while women borrowed money from bank, friends, or relatives contributed 4.5%. Our findings revealed that, most of the dimensions have significantly contributed to the total inertia. This may be due to the fact that, financial inclusion is a domain whereby no single factor plays a major role it's a combination of observations that help to increase the skills, abilities and knowledge of women in business permitting them to take part in marketing decisions.

Table 3: Synopsis of Financial Inclusion Indicator

Categories	*Overall*			*dimension_1*			*dimension_2*		
	mass	*quality*	*%inert*	*coord*	*sqcorr*	*Contrib*	*coord*	*sqcorr*	*Contrib*
Women acquisition and operation of mobile money account									
Yes	0.023	0.117	0.031	0.909	0.967	0.035	0.010	0.000	0.000
No	0.057	0.117	0.021	-0.684	0.967	0.027	-0.008	0.000	0.000
Women ownership and usage of ATM card									
Yes	0.028	0.775	0.022	1.455	0.557	0.059	2.432	0.218	0.166
No	0.072	0.775	0.031	-0.565	0.557	0.023	-0.945	0.218	0.064
Women borrowed money from bank, friends, or relatives									
Yes	0.065	0.723	0.045	-0.323	0.213	0.007	-1.334	0.510	0.115
No	0.035	0.723	0.043	0.588	0.213	0.012	2.429	0.510	0.209
Total inertia: 0.02233185									
Number of axes: 2									
Number of obs: 27									

Source: Author

It should be opined that the construction of indexes has been introduced by researchers and academicians since 1998 (Sahn and Stifel, 2003) and so far the most widely constructed index is the wealth index. This method employs data of household's assets such as durable and semi-durable goods to describe household welfare instead of using household's income or expenditure data. Its concept relies on evidence that money metric measure is too narrow for defining household welfare and this index is most likely to be consistent with the financial means. In addition, the index requires less data intensive collection which possibly results in smaller measurement error and being suitable for technical capabilities of government statistical offices. This would be a very useful tool for a national

household survey whose income and expenditure data are unreliable or difficult to be collected. Researchers at the World Bank and various academic institutes have experienced in using the index over the years. For example, Filmer and Pritchett constructed an asset index from the national family health survey in Indian states by using principal component analysis (PCA). They found that the asset index was robust, produced internally coherent results and provided a close correspondence with State Domestic Product and poverty rate data (Filmer and Pritchett, 1999). Likewise, Sahn and Stifel used factor analysis (FA) to construct weight for each asset instead of using PCA.

4.2. Linking Women Financial Inclusion effects on Household Economic Welfare

Considering the test statistics, the results presented in Table 4 shows that the F-statistics is 38.131[7; 0.000] implying that the global significant test is good; that is the overall result is relevant and valid. The R-squared is 58.7% implying that each covariate has a close relationship with the outcome variable. The constant term is 357.4% implying that if mobile money, ATM and borrowing are absent other complementary variables will still affect household economic welfare by 357.4% at 1% level of significance in Bamenda municipality, this is a strong complementarity effect.

The overall results show that women financial inclusion (mobile money, ATM, loan) has a strong positive effect on household economic welfare in Bamenda municipality. This meets the main research objective of the study which was to examine the effect of women financial inclusion (mobile money, ATM, loan) on household economic welfare in Bamenda municipality. This aligns with existing literature which states that women financial inclusion will results in poverty reduction and improved economic welfare. This result is consistent with that of Siddik (2017) who argues that women's financial inclusion can increase women's empowerment and consequently their welfare in many ways: firstly, by including them in the formal financial system women will have additional assets on their account which will intensify bargaining power within their households and also will have more ability to manage their daily financial matters .This will consequently improve consumption expenditure which is an indicator of household economic welfare. Secondly, outside of household, they will become abler to control their assets. Thirdly, women financial inclusion by means of insurance could assist

them to diversify risk and thus reduce their vulnerability. These are all key factors for economic empowerment and consequently poverty alleviation. Moreover, it's observed that in the Bamenda municipality, the problem of financial inclusion is more of an issue of women acquisition and operation of mobile money account and the ownership and use of ATM card phenomenon than borrowing money from relatives and friends. This phenomenon as observed in Bamenda is highly in line with the study of Islam *et al* (2015) and Berger (1995). This may be explained by the fact that borrowing entails collateral security and hence it becomes at times to access bank loans as to otherwise.

Table 4: Estimate of Women Financial Inclusion effects on Household Economic Welfare

Variables	*Estimation Method: MLRT*			
	Coefficient	*Standard Error*	*Robust t-statistics*	*P-value*
	Household Economic Welfare			
Acquisition and operation of Mobile Money Account	0.982***	0.317	3.10	0.000
Women Ownership and use of ATM card	0.137***	0.047	2.93	0.000
Borrowing money from Relatives and Friends	0.452	0.419	1.08	0.523
Education level (1= A/L, 0 otherwise)	0.435*	0.261	1.67	0.039
Age group of respondent (1= 36_45 years, 0 otherwise)	1.588***	0.506	3.08	0.004
Profession (1= entrepreneur, 0 otherwise)	0.340***	0.104	3.27	0.000
Experience in Financial operations (1= 2-3 years, 0 otherwise)	1.063*	0.622	1.71	0.087
Constant	3.574***	2.796	1.99	0.010
R-squared	0.587	n/a	n/a	n/a
F-Statistics	38.131[7; 0.000]	n/a	n/a	n/a
Total	127			

Source: Author. N/B: n/a = not applicable

Econometrically, linking operation of mobile money account and household economic welfare as not in Table 4, we observed that: $HEW_i = 3.574 + 0.137\,ATM + 0.047$ implying that the acquisition of mobile money

accounts is affecting household welfare by 98.2% and this result is significant at 1% level, therefore we reject the null hypothesis that the women acquisition and operation of mobile money account is not relatively important in explaining household economic welfare in Bamenda municipality. The magnitude of the coefficient of women acquisition and operation of mobile money account (MM) is 98.2% which signify that a unit change in MM will lead to a proportional increase of 98.2% in household economic welfare other variables being constant. The standard error is 31.7% which is far below 50% meaning minimal error. The p-value of 0.000 signify that the relationship between MM and household economic welfare in Bamenda municipality is highly statistically significant at 1% level. Further, we conclude that there is statistically significant positive association between mobile money account ownership (women financial inclusion) and household economic welfare in Bamenda municipality. Here, we reject the null hypothesis that women acquisition and operation of mobile money account is relatively not important in explaining household economic welfare in Bamenda municipality. Critically, this result is very important and revealing as Pitt *et al* (2006) had already revealed that there is a positive correlation between FI programs targeting women and their well-being though without clearly making allusion to mobile money account. It should be noted that on daily basis in Cameroon and Bamenda in particular, many more women are creating mobile money accounts as it facilitates the sending and receiving of money with minimal charges especially those in business and the agricultural sector.

Considering the relationship between ownership and use of ATM card and the household economic welfare as shown in Table 4, econometrically express as $HEW_i = 3.574 + 0.137ATM + 0.047$ shows that the usage of ATM is affecting household economic welfare by 13.7% and the result is significant at 1% level of significance. This simply means that, a unit change in ownership and use of ATM card will lead to 13.7% increase in household economic welfare other variables remaining constant. The standard error is 4.7% which is far below 50% meaning minimal error. The p-value of 0.000 signify that the relationship between ownership and use of ATM card and household economic welfare in Bamenda municipality is statistically significant at 1% level and we accept the null hypothesis that women ownership and usage of ATM card is relatively accounting for household economic welfare in Bamenda municipality. Therefore, we conclude that there is statistically significant positive association between ownership and use of ATM card (women

financial inclusion/women empowerment) and household economic welfare in Bamenda municipality.

The statistical significant value of the effect of financial inclusion on household economic welfare arising from operation of mobile money account and the ownership and use of ATM card is consistent with the views of Cull *et al* (2014) who argued that when people participate in the financial system, they are better able to manage risk, start or invest in a business, and fund large expenditures like education or a home improvement implying that if women participate in the financial system they stand a chance to fund large expenditures which results in higher living standards (improved economic welfare) for them and their households. In addition, from the analysis and due to complementarity hypothesis, it was observed that other factors affecting household economic welfare apart from the two discussed above include; level of education, age, profession and experience in the use of financial operations. The level of education is affecting household economic welfare by 43.5% and the result is significant at 10%. Age also affects household economic welfare by 158.8% and the result is statistically significant at 1%. Profession is affecting household economic welfare by 34% and the result is significant at 1%. Experience in financial operations is affecting household economic welfare by 34% and the result is statistically insignificant at 10%. Therefore, we conclude that level of education, age, profession and experience in the use of financial operations has a positive association with household economic welfare in Bamenda municipality.

Focusing on the link between borrowing of money and household economic welfare, econometrically: $HEW_i = 3.574 + 0.452BFR + 0.419$, the result shows that borrowing of money from friends and relatives is affecting household economic welfare by 45.2%, unfortunately this result is statistically insignificant. The standard error is 41.9% which is closer to 50% meaning minimal error is very high. The p-value of 52.3% signify that the relationship between borrowing money from relatives and friends and household economic welfare in Bamenda municipality is not statistically significant and so we accept the null hypothesis that women borrowing money from relatives and friends is strongly not associated with higher levels of household economic welfare in Bamenda municipality.

4.3. Household Economic Welfare Function: Full Sample and Sub Sample Results

Column 1 of Table 5 present the result of the full sample of Household Economic Welfare and it reveals that financial inclusion strongly affects household economic

welfare for about 11.84% and the result is significant at 1% level. This result confirms the observation in Table 4 where women acquisition and operation of mobile money account and the ownership and use of ATM card are found to be significant. Economically, women with an access to financial inclusion have a higher probability to acquire easily finances needed to run and manage business as well as invest in agriculture or other potential income generating and so ameliorating the household income. Other factors complementing financial inclusion t augmenting the economic welfare of households are: women education level, age group, women profession and women experience in financial operations (Table 5).

Table 5: Household Economic Welfare Function: Full Sample and Sub Sample Results

Variable	*Estimation Method: MLRT*			
	COL 1	*COL 2*	*COL 3*	*COL 4*
	Household Economic Welfare			
Financial Inclusion Index	0.1184*** (4.71)	n/a	n/a	n/a
Acquisition and operation of Mobile Money Account	n/a	0.0009* (1.67)	n/a	n/a
Ownership and use of ATM card	n/a	n/a	0.0823*** (2.97)	n/a
Borrowing money from Relatives and Friends	n/a	n/a	n/a	0.0626 (1.15)
Education level	0.0782** (2.31)	0.4851*** (5.44)	0.1031*** (2.73)	0.5412*** (5.36)
Age group	0.4711*** (4.67)	-0.1030*** (-2.70)	0.1030*** (2.90)	0.2309*** (3.49)
Profession	-2.8734*** (-15.02)	1.0632*** (13.07)	-1.0632 (0.31)	0.2132*** (8.96)
Experience in Financial operations	0.4924*** (8.11)	0.1620*** (6.06)	-0.1620*** (-6.63)	0.1100*** (3.24)
Constant	0.1031*** (2.73)	0.0226 (1.30)	0.0226 (1.55)	0.2718*** (4.20)
R-squared	0.6157	0.5736	0.6218	0.6104
Chi Squared	18.131 [8; 0.000]	12.21[5, 47; 0.0007]	22.81[5, 66; 0.0024]	11.57[5, 51; 0.008]
Total	**127**	**127**	**127**	127

Source: author. N/B: COL 1,2,3and 4 refers to full sample result of financial inclusion index (column 1), the sub sample result of Acquisition and operation of Mobile Money Account (column 2), Ownership and use of ATM card (column 3) and Borrowing from Relatives and Friends (column 4).

Column 2 present the sub sample result of the effect of women acquisition and operation of mobile money account on household economic welfare, Table 5 reveals that on 0.09% basis the acquisition and operation of mobile money account is positive and significantly influencing household economic welfare and the result is at a 10% significant level. This result is in line with what is obtained in Table 4, as can be expected, women access to mobile money account easily pave way for women to undertake many other money yielding economic activities and hence augmenting their wellbeing. The covariates contributing positively and significant to this effect are: education level, profession and experience in Financial operations. In the same vein, column 3 estimate the specific effect of ownership and use of ATM card on household economic welfare, the result shows that ATM is positively and significantly corroborating with household economic wellbeing at a percentage increase of 8.23% and significant at 1% level. This result is robust and confirms the result of Table 4. The covariates contributing to this effect are: education level and women age group, generally the more women studied the greater the awareness of being financially responsible and the more they aged the better they respond to better managerial behavior.

Column 4 present the result of the effect of borrowing money from banks, relatives and friends on household economic welfare, unfortunately the result of the relationship is not significant and non-corroborating. This result is strongly associated with that of Table 4 and hence robust. Generally, borrowing from the bank is associated with the risk of paying interest and principal amount while borrowing from family relatives and friends is associated with the risk of street embarrassment, interest and payment of the principal depending on the behavior of the lender. These two opportunities of borrowing may require the element of collateral security which be subject to the risk of seizure in case of failure to repay the money. These risks create fear and unwilling behavior on women from borrowing *ceteris paribus*. This explains why the effect of borrowing money from banks, relatives and friends on household economic welfare is insignificant. This observation was already made by Demirgüc-Kunt *et al* (2013a) talking about Islamic finance in relation to financial inclusion and family ties. Despite this insignificant relationship, Table 3 shows that the covariates: education level, age group, profession and experience in financial operations are all strongly corroborating with household economic welfare.

5. Conclusion

Considering that there is a growing inter-governmental commitment to accelerate financial inclusion for women and men globally, empirically, this study has closed the gap in the literature as it attempted to quantify the link between women financial inclusion and household economic welfare in Bamenda, Cameroon. The main objective of the study was to examine the effect of women financial inclusion (mobile money, ATM, loan) on household economic welfare in Bamenda municipality. This study targets as specific objectives: to evaluate the effect of women acquisition and operation of mobile money account on household economic welfare in Bamenda town, to discuss the influence of women ownership and usage of ATM card on household economic welfare in Bamenda and to verify the effect of women borrowing money from a bank on household economic welfare in Bamenda town, Cameroon. The study actually hinges on the following hypothesis: women acquisition and operation of mobile money account is relatively not important in explaining household economic welfare in Bamenda municipality; the women usage of ATM card is relatively not accounting for household economic welfare in Bamenda municipality and women borrowing money from the bank is not strongly associated with higher levels of household economic welfare in Bamenda municipality.

Methodologically, the study adopts both a qualitative and quantitative paradigm and made use of multiple linear regression estimation technique in STATA 14 via a sample of 127 women respondents collected using a well-structured questionnaire and with the application of a snowball sampling technique. The study actually created a financial inclusion index using multiple correspondent analysis from three major components as applied in this study including: women acquisition and operation of mobile money account, women ownership and usage of ATM card and women borrowing money from bank, friends and relatives. This permitted us to estimate the overall result of financial inclusion.

The full sample of result of financial inclusion and household economic welfare reveals that financial inclusion strongly affects household economic welfare for about 11.84% and the result is significant at 1% level. Other factors complementing financial inclusion t augmenting the economic welfare of households are: women education level, age group, women profession and women experience in financial operations. The sub sample result of the effect of women acquisition and operation of mobile money account on household economic welfare reveals that on 0.09% basis the acquisition and operation of mobile money account is positive and significantly influencing household economic welfare and the result is at a 10% significant level.

The covariates contributing positively and significant to this effect are: education level, profession and experience in Financial operations. The estimate of the specific effect of ownership and use of ATM card on household economic welfare, the result shows that ATM is positively and significantly corroborating with household economic wellbeing at a percentage increase of 8.23% and significant at 1% level. The covariates contributing to this effect are: education level and women age group, generally the more women studied the greater the awareness of being financially responsible and the more they aged the better they respond to better managerial behavior. The result of the effect of borrowing money from banks, relatives and friends on household economic welfare, unfortunately the result of the relationship is not significant and non-corroborating. Generally, borrowing from the bank is associated with the risk of paying interest and principal amount while borrowing from family relatives and friends is associated with the risk of street embarrassment, interest and payment of the principal depending on the behavior of the lender.

In terms of policy, based on our findings, the study recommends that, the government should work with alliance for financial inclusion and seek out international partners who could help define a financial inclusion strategy and embark on other means that will include women financially in the Bamenda municipality and Cameroon as a whole. In addition, the CEMAC, COBAC should review the whole regulatory system to provide clear direction, firm control and confidence in the system. They should evaluate which barriers for women's financial inclusion lie within their jurisdiction and study how these barriers can be relaxed or removed to further include women in the formal financial sector so that there should be overall improvement in economic welfare. Further research is also needed on how financial services can complement other interventions, such as improvements in social protection programs, basic infrastructure, and affordable healthcare since women generally have a weak position in society. Testing these strategies will require strong private/public partnerships and collaboration between financial service providers, governments, donors, and academic researchers to encourage innovation and to scale-up promising solutions to make women more financially inclusive.

References

Ajon H. L. (2015, March). A study of prevalence and risk factors of diabetic retinopathy in patients with non-arteritic anterior ischemic optic neuropathy (NA-AION). In *Seminars in Ophthalmology*. Vol. 30, No. 2, pp. 101-104.

Asselin L and Tuan A (2005): Multidimensional poverty in Vietnam 1993 – 1998, According to CBMS indicators; *Vietnam Socio-Economic Development Review*, No 41.

Berger, A. N., Herring, R. J., & Szegö, G. P. (1995). The role of capital in financial institutions. *Journal of Banking & Finance*, *19*(3-4), 393-430.

Bhatia, A. S., and Singh S. (2019). Matrix product state–based quantum classifier. *Neural computation*, *31*(7), 1499-1517.

Bryman, A. (2016). Social research methods. (Fifth edition). Oxford: Oxford University Press

Cull, Robert J., Tilman Ehrbeck, and Nina Holle (2014). "Financial inclusion and development: Recent impact evidence." CGAP Focus Note 92.

Demirgüc¸-Kunt, A., Klapper, L., Randall, D., 2013a. Islamic Finance and Financial Inclusion: Measuring Use of and Demand for Formal Financial Services among Muslim Adults (Policy Research Working Paper No. 6642). The World Bank, Washington, DC.

Epstein, G., & Grabel, I. (2006). Financial policies for pro-poor growth. study prepared for the United Nations Development Program (UNDP), International Poverty Centre, Global Training Programme on Economic Policies for Growth, Employment and Poverty Reduction.

Fadun, O. S. (2013). Risk management and risk management failure: Lessons for business enterprises. *International Journal of Academic Research in Business and Social Sciences*, *3*(2), 225.

Filmer D and Pritchett L (2009). Estimating Wealth effect without Expenditure Data or Tears: An Application to Educational Enrollments in States of India. *Demography* 38, no. 115-32

Hanning H and Mabula, J. B (2017). Financial literacy of SME Managers' on access to finance and performance: The mediating role of financial service utilization. *International Journal of Advanced Computer Science and Applications*, *9*(9).

Holvoet, N. (2005). The impact of microfinance on decision-making agency: evidence from South India. *Development and change*, *36*(1), 75-102.

Hossain, S., Eyre, B. D., & McKee, L. J. (2004). Impacts of dredging on dry season suspended sediment concentration in the Brisbane River estuary, Queensland, Australia. *Estuarine, Coastal and Shelf Science*, *61*(3), 539-545.

Hunguana, E., Dawson-Rose, C., Gutin, S. A., Mudender, F., & Kevany, S. (2020). Capacity building, local ownership and implementation of a multi-level HIV/AIDS positive health, dignity, and prevention initiative in Mozambique: approach, challenges and lessons learned. *Global Health Action*, *13*(1), 1769900.

Islam M., Ali N., Salehin, M. M., and Islam, A (2008). Rural women and poverty: A study on the role of RDRS for poverty alleviation in Bangladesh. Journal of the Bangladesh Agricultural University,

Islam, S., Ahmed, K., & Masunaga, S. (2015). Potential ecological risk of hazardous elements in different land-use urban soils of Bangladesh. *Science of the total environment*, *512*, 94-102.

Kabeer, N. (2012). Empowerment, citizenship and gender justice: a contribution to locally grounded theories of change in women's lives. *Ethics and Social Welfare*, *6*(3), 216-232.

Krugman, P., & Venables, A. J. (1995). Globalization and the Inequality of Nations. *The quarterly journal of economics*, *110*(4), 857-880.

Kempson, E., (2006). Measuring financial capability: An exploratory study for the Financial Services Authority. *Consumer financial capability: Empowering European consumers*, *39*, 44-76.

Kostov, P., Arun, T., Annim, S., 2015. Access to financial services: the case of the "Mzansi" account in South Africa.

Lederman, L. C. (1990). Assessing educational effectiveness: The focus group interview as a technique for data collection. *Communication education*, *39*(2), 117-127.

Malik, N. H., & Luqman, M. (2005). Impact of Micro Credit on women empowerment: A review paper. *Pakistan Journal of Agriculture Science*, *42*(3-4), 100-105.

Mabula, J. B. (2016). Clinicopathological pattern of benign breast diseases among female patients at a tertiary health institution in Tanzania. *Tanzania Journal of Health Research*, *18*(1).

Mason, J. (2002). *Researching your own practice: The discipline of noticing*. Routledge.

Mayoux, L., & Hartl, M. (2009). Reaching and empowering women: gender mainstreaming in rural microfinance: guide for practitioners. *Roma¬: Fondo Internacional de Desarrollo Agrícola*.

Mazumder, M. S. U., & Wencong, L. (2013). Micro-credit and poverty reduction: A case of Bangladesh. *Prague economic papers*, *22*(3), 403-417.

Miles, S. (2017). Stakeholder theory classification: A theoretical and empirical evaluation of definitions. *Journal of Business Ethics*, *142*(3), 437-459.

MINADER (2015). Department of Statistics, Ministry of Agriculture and Rural Development. Report from field survey in collaboration with Bamenda City Council, Cameroon. Working Document, No: 416, 2015

Narayan-Parker, D. (Ed.). (2002). *Empowerment and poverty reduction: A sourcebook*. World Bank Publications.

Pitt, L. F., Watson, R. T., Berthon, P., Wynn, D., & Zinkhan, G. (2006). The penguin's window: Corporate brands from an open-source perspective. *Journal of the Academy of Marketing Science*, *34*(2), 115-127.

Sahn D and Stifel D (2003): "Progress toward the Millennium Development Goals in Africa." World Development 31(1): 23–52.

Schurmann, A. T., & Johnston, H. B. (2009). The group-lending model and social closure: microcredit, exclusion, and health in Bangladesh. *Journal of health, population, and nutrition*, *27*(4), 518.

Shafi, M., & Medabesh, A. H. (2012). Financial inclusion in developing countries: Evidences from an Indian State. *International Business Research*, *5*(8), 116.

Siddik, M. N. A (2017). Impacts of capital structure on performance of banks in a developing economy: Evidence from Bangladesh. *International journal of financial studies*, *5*(2), 13.

Swamy, V. (2014). Financial inclusion, gender dimension, and economic impact on poor householdds. *World development*, *56*, 1-15.

Tambi DM (2019). Financial Inclusion and Agricultural Performance of Smallholder Farms in Mbankomo Community. *Hungarian Agricultural Engineering*, Vol. 11(34), pp 11 – 18.

WEMAN (2020). Women empowerment mainstreaming and networking for gender justice and economic development theory of change pp 3 (www.wemanglobal.org)

World Trade Organization (2012). WTO General Agreement on Trade in Services. www.wto.org/english/tratop_e/serv_e/0-gats_e.htm

Zinsa A and Weillb L (2016). The determinants of financial inclusion in Africa, *Review of Development Finance*. Vol 1(7) pp 6