Clement Boakye

cboakye@gimpa.edu.gh

Nana Ohemaa Afrakomah Amankwah

ohemaaa@gmail.com

Determinants of the demand for financial Products in Ghana

ABSTRACT

This paper researches the determinants of financial product usage in Ghana. It uses secondary data extracted from interviews conducted on 3643 nationals. The study finds financial literacy, educational level, income or expense stability, urban residence, access to electricity, access to communication channels and local's perception about inherent benefits of products, as factors that determine whether a person will use a financial product. The research concludes that financial education, financial products that cater for volatile cash flows, communication of inherent benefits derived from financial products and the use of mobile phones and internet to deliver services would improve take-up of financial products in Ghana.

keywords; financial products, Ghana, financial education, financial inclusion.

1. INTRODUCTION

There is little doubt when it comes to the argument of whether or not financial services play a key role in the development of national economies. Evidence from Sutton and Jenkins (2007) as well as Honohan (2007) suggest that countries that have well-established, efficient and properly utilised financial systems have less poverty. Several studies have concluded that deepening of the financial sector contributes to reduction in poverty. (Beck *et al* -2007; Jalilian and Kirkpatrick-2005; Quartey -2005).

Africa is a continent that is gifted with an abundance of natural resources. Though much has been done, a lot more needs to be done to combat the high levels of poverty on the continent. Elements that have been noted as the cause of the poverty in Africa include heavy indebtedness and declining terms of trade for major exports, weak public and private institutions, high illiteracy rates especially amongst women in the rural areas, etc. (Asiedu-Mante, 2005). The work of Odhiambo (2011) also depicted a distinct causal flow from financial development to poverty reduction in china, both in the short run and in the long run. These and many justify the conclusion that financial services are important in the fight against economic hardships in environments like Africa.

To combat poverty and enhance economic growth, the financial sector in most African economies, including Ghana, have undergone restructuring since the late 1980s with some positive results. The Ghanaian financial system has been profoundly transformed since the implementation of a joint IMF-World Bank Financial Sector Assessment Program (FSAP) assessment in the year 2000 (Bawumia et al , 2008). There is still however a huge gap in the percentage of the population that utilise the financial system in Ghana and other developing African economies. This has been attributed to causes such as lack of access to financial services, high

transaction costs, distance to financial institutions, illiteracy, household leadership status, wealth etc. (Fernando-2007).

According to FinScope Ghana (2010) survey on financial inclusion, only 56 per cent of Ghanaians aged 18 and above indulge in the financial system, with 44 per cent of the population totally excluded from the formal financial system. Similar surveys carried out for Nigeria in the year 2010 as well as Namibia in the year 2009 indicated that the percentage of the population that were excluded from the formal financial system were 45 per cent and 52 per cent respectively.(FinScope Ghana- 2010)

To create a fully inclusive financial system, there's the need to address the needs of all the different users of the system in order to make financial products attractive. Being able to identify the drivers of financial product usage will enhance take-up of financial products, deepen the local financial industry, stimulate economic growth and ultimately reduce poverty. This study uses secondary data extracted from a financial inclusion survey by FinMark Trust (FinScope Ghana - 2010). The survey captured responses and demographics of 3643 individuals residing in all parts of Ghana and thus fosters a more comprehensive understanding of the determinants of financial product usage in the Ghanaian environment. By understanding the drivers of demand for financial services, the reach and depth of the financial services delivery in Ghana could be greatly improved.

This study seeks to add to existing literature by looking at the determinants that are more likely to make a consumer in the Ghanaian environment take-up a financial product. It encompasses a broad array of financial products and also uses data that is representative of all ten regions of Ghana.

2. LITERATURE REVIEW

Financial products are simply services or instruments that are provided by financial institutions such as depository institutions, investment banks, pension authorities, insurance companies and the likes. These products are typically tailored to cater for savings, borrowings and risk management(www.economywatch.com). Fund transfers, bill payments and a few other uses of financial products have also become quite prevalent.

In developing environments, financial products may either be formal or informal. Formal financial services are provided by established and legally recognized financial institutions. These entities are typically regulated, subject to tax authorities and may provide other specialized or personalized services such as advisory, portfolio management or retirement planning (FinScope Ghana - 2010). Such services are quantifiable and their impact in the national economic environment can be measured or monitored. Common examples of formal financial products include: savings accounts, checking accounts, credit and debit cards, loans, lease products, insurance products, money transfer services, mobile banking, investment accounts, mutual funds, pension schemes, private and government bonds, stocks and mortgages. More recently, products offered by microfinance institutions have also been classified as formal financial products since the providers are also regulated (Bendig *et al* - 2009),

Informal financial products on the other hand are provided by friends, families, community groups and individuals. These are typically in the form of plain vanilla loans or savings programs with no extra services. Such services are characterized by irregularities and often fraught with huge losses resulting from theft, mismanagement or instances of fraud. These products also lack standardization and do not allow for easy classification. The services are

typically not regulated or legally recognized and hence assessing their contribution to national development is almost impossible.(IFAD Ghana - 2000)

Since a considerable majority of the people in the developing African economies live in the rural areas, formal financial services to these people are usually constrained by factors such as lack of education, income level, means of transportation, distance, banking formalities – proof of address and other documents required for formal financial services.

The ease or difficulty of obtaining financial services differs from country to country. Beck *et al*. (2007), confirms that even though there is a large amount of literature on the relationship between the financial sector and the economic growth of countries, there is not much knowledge on the breath of financial services across different countries, the extent to which different households use the financial services and what actually drives the demand for the financial services.

Requirements of financial service providers such as collateral, credit history, financial statements or business networks restrict the poor and small entrepreneurs from having access to a wide variety of financial services. Barslund and Tarp (2008) concluded that education, age, dependants, assets, credit history, and secure land rights have an effect on the demand for formal and informal loans. Household size and age were also found to have a significant positive influence on the demand for insurance according to Wang and Rosenman (2007) as well as Bhat and Nishant (2006). Other factors established include family size, primary economic activity of household head, interest rate, price of output, and area of operational holdings (Swain 2007).

On average, women have been classified as more risk averse than men and thus more likely to forego activities that offer higher returns if these opportunities require them to bear too much risk (Fletschner et al.-2010; Croson and Gneezy-2009). Research by Boucher et

al.(2008) also suggests that producers who are more risk averse are less likely to adopt new technologies or undertake projects that are expected to offer higher profits if it would expose them to more risk or cause them to lose their collateral. In essence, women are less likely to be interested in taking out loans even when credit is available to them since they consider borrowing against collateral as a risky transaction

Gaurav *et al.* (2011) uncover robust evidence in India to conclude that people who are literate in finance and insurance were more likely to adopt rainfall insurance. Interestingly, they also discovered that the offer of a money-back guarantee to consumers, an extremely efficient and highly attractive strategy in developed economies, had relatively limited efficacy in improving take-up of the same rainfall insurance.

The study by Bendig *et al.* (2009) considers usage of the savings, loans, and insurance products in Ghana. They find that education, asset ownership and regular (formal) employment status are conditions that enhance financial service uptake. They also conclude that consumption smoothing and income generation both seem to be important rationales for demanding formal financial services in the typical rural financial context of Ghana. Their study was however restricted to only one geographical area in Ghana and also excluded financial products such as money transfer services, investment products and other financial products which fall outside the savings, loans or insurance categories.

Lusardi (2008) proposed that people with low levels of financial literacy were less likely to participate in financial markets. The paper concludes that ignorance of basic financial concepts results in failure to plan for retirement, lack of participation in the stock market and poor borrowing behaviour. The report recommends that financial education programs can result in improved saving, borrowing and financial decision-making, A similar stance for

financial literacy was put forward by Cole *et al.* (2009). Their argument is that if individuals do not have the knowledge of a financial product, they will be uncomfortable in using it.

Having one financial service more often than not results in taking up another service due to the information that is usually made available to customers and also due to promotions that encourage existing customers to acquire other services. The work of Gockel and Jackson (2009) pointed out that individuals who had borrowed in the past were more willing to borrow again those who had not.

Rural households or individuals sometimes go in for informal financial services because of cultural and other beliefs. Informal savings groups such as burial societies have been known as important sources of income smoothing for rural households, especially for women, who face losing all assets upon a husband's death (Dercon et al., 2006; Mapetla et al., 2007). Additionally, self-help groups have also proven to be an effective avenue for connecting women with financial institutions; savings are collected from each member and either deposited in rural banks or loaned to other group members. After a group has demonstrated it had the capacity to collect loans, rural banks typically leverage the group's savings and provide additional capital that group members use mostly for agricultural purposes (Fletschner and Kenney 2010). There is also the flexibility and mostly the elimination of transaction costs that is associated with informal financial services since borrowing money from friends, family, social groups, comes with little or no transaction costs.

Majority of the population in the rural areas are on low income resulting in low or negative profit margins for the banks which in turn results in the closure of the banks (Osei-Assibey -2009). Banks and other financial institutions generally thus tend to penetrate more in the urban areas where they can easily make profit with lower fixed costs or tend to charge relatively higher costs to remain operational.

Aryeetey (2008) notes that the majority of the rural households in Ghana do not prefer formal financial services due to the transaction costs, minimum deposits, and other formalities required by the banks such as proof of address and identification; developing African environments typically lack effective address or even national identification systems.

Geographic constraint is a salient restraining factor whenever accessibility or usage of any service in a developing society is considered. Osei-Assibey (2009) finds that in Ghana, the psychological barriers to the use of banking services are greatly increased by the lack of physical access to banks. Findings of the World Bank Policy Research Report (2008) and also by Beck *et al*. (2007) however indicate that some households with physical access to banks still preferred the informal services. Thus while the decision on the physical location of bank branches is an important one, factors that will enhance the utilization of services provided should also be taken into consideration.

Breakthroughs in technology, such as electronic communication channels have greatly helped in the effective distribution of all kinds of services to even the most remote parts of Ghana. Duncombe (2009) highlights that technological innovations, such as prepaid cards and mobile phone plans made it easier for women to gain access to capital in Uganda. Such systems reduced the need to travel long distances, allowing them to sidestep social constraints that restrict the areas women could visit or the people with whom they had to interact.

Drifting from the environment and looking within the lives of individuals, Barslund and Tarp (2008) document that rural credit demand is determined primarily by easily observable variables such as the amount of agricultural land, number of livestock as well as strong and secure land rights. Gockel and Jackson (2009) also find that in rural Vietnam, the primary determinants of willingness to borrow more credit were gender, village location, commune, and the amount of agricultural land with red book value. They found that behavioural

constraints did not appear to be a significant factor in determining whether a person was willing to borrow more than they had previously borrowed.

Though the theory available provides great insights into factors that contribute to the demand for formal financial products in several parts of the world, very little work was found to have been done in Ghana. Considering the constraints to living standards in such environs, we will also consider social conditions such as access to electricity and the perception of nationals about financial services.

Most of the studies cited above are either constrained to a single geographical region within a country or very few financial products. This study encompasses a broad array of financial products and also uses data that is representative of all regions in Ghana. Insights drawn from the study would be used to direct studies in other developing African economies.

Hypothesis

Following the literature discussed**,** the decision to use a formal financial product in Ghana is hypothesized as not related to any of the following: financial literacy, highest level of education, level of contribution to household expenses, employment status, residence in urban or rural setting, access to electronic communication channels, access to electricity or perception about financial service providers.

3. METHODOLOGY

We restrict our definition of financial products to only those provided by the formal financial institutions. These include products offered by depository institutions, pension funds, leasing companies, venture capital funds, mortgage companies, insurance companies and investment companies.

3.1 Data

The study data is obtained from the FinScope Ghana (2010). FinScope Ghana (2010) was a funded survey by the Government of Ghana, UKAid and the World Bank. The study, which was carried out by FinMark Trust and Synovate-Ghana, collected data which was used to determine levels of financial inclusion within the country. The FinScope survey employed stratified sampling to select a total of 309 enumeration areas, with each being selected systematically from each region (urban/rural). The data collection was carried out using face-to-face interviews and in all, the study successfully interviewed 3,643 Ghanaians aged 15 years and older.

The survey captured household information and demographics, employment, income and expenditure, Access to infrastructure, financial literacy and awareness, attitudes and perceptions towards financial services, savings, borrowing, product penetration, banking, insurance, informal finance, remittances and psychographics. The fieldwork, including interviews, data processing and analysis were carried out between June and September 2010. The interviews were conducted in both English and local Ghanaian languages making them more comprehensive and richer in context.

Since the Ghanaian legislature does not allow individuals aged less than 18 years to access financial products without the authorization of a parent or guardian, the study will only

consider data from respondents aged 18 and above. Outliers, resulting from non-responses were also delineated. In all data from 3439 out of the 3643 respondents interviewed was used for this paper.

3.1.1 Dependent Variable

Individuals will either use or not use a formal financial product; hence the dependent variable will be a binary variable that represents usage as 'one' and non-usage as 'zero'. Usage could refer to patronage of a single financial product or multiple financial products. The 'Usage' variable also captures both previous and current users of financial products.

3.1.2 Independent Variables

From the hypothesis, we define the following independent variables:

Financial Literacy (FLIT)- general understanding of a common financial product; financial products mentioned to respondents include shares, debit cards, credit cards, hire purchase, microfinance, Islamic banking, cooperatives, cheque book, ATM, “E-Zwich”, Money transfer, mortgage, minimum balance and mobile banking.

Salaried (FEMP) **–** describes respondents who receive a salary and are employed full time.

BreadWinner (BWIN)– identifies respondent as being the highest contributor to household expenses**.**

Urban Setting (URB) **–** relates to whether respondent resides within an urban or rural jurisdiction.

Telecom (TCOM) **–** classifies respondents who have access or use of cell phones, landlines or internet services.

Electricity (ELEC) – identifies respondent as having use of electricity in the home.

Income stability(RINC) – classify respondent as having a regular or irregular source of income.

Loan Access Perception (LACESS) – individuals who believe that using a financial service improves their chance of getting a loan from the provider in the future.

Education(EDU) - represents a respondent's highest level of education at time of survey.

3.2 Data Analysis

The binary nature of our dependent variable warrants us to use any of the available binary choice models. We confine ourselves to the logit model which attempts to relate the probability of making a particular choice to various explanatory factors.(McFadden,1973) The conditional logit model is specified as:

$$Prob(Y_i = j) = \frac{e^{\beta' z_{ij}}}{\sum_{j=1}^{J} e^{\beta' z_{ij}}}$$

Where

Prob (Y_i = j) is the probability that the ”ith” individual chooses alternative “j”.

z_{ij} = attributes of the “ith” individual

The logit model is used in this analysis because of convenience, as the differences between the logit and probit models are slight (Maddala -1993; Greene -2003). The model was estimated by the maximum likelihood method, using STATA software.

Following the routine of Gan et al(2006), the proposed empirical model is written under the general form:

USE = f (FLIT, FEMP, BWIN, URB, TCOM, ELEC, RINC, LACCESS, EDU, ε)

where:

USE = '1' if respondent uses or has ever used a financial product; '0' if otherwise

FLIT = '1' if respondent is financially literate; '0' if other wise

FEMP = '1' if respondent is employed full time and receives a salary; '0' otherwise

BWIN = '1' if respondent is highest contributor to expenses in the home; '0' if otherwise

URB = '1' if respondent resides in an urban area; '0' otherwise

TCOM ='1' if respondent has access to electronic communication channels; '0' if other wise

ELEC = '1' if respondent uses electricity in the home; '0' if otherwise

RINC = '1' if respondent has a regular source of income, albeit self –employed or employed; '0' if otherwise

LACCESS – '1' if respondent believes they stand a better chance of being approved for loans if he/she uses a financial product; '0' if otherwise.

EDU = '1' for no formal education; '2' for pre-school education; '3' for some Primary education; '4' for primary education complete; '5' for some high school education; '6' for high school education complete; '7' for some secondary education; '8' for secondary education complete; '9' for some university education; '10' for university education complete; '11' for post graduate education; '12' for technical/training college; '13' for other education.

ε = error term

4. RESULTS AND DISCUSSIONS

4.1 Summary Statistics

From Table 1.1(appendix), we note that 59.2 per cent of the respondents had used or were still using financial products at the time of the survey. About 73 per cent of Ghanaians were aged 45 years or less and 54 per cent of the entire population indicated that they were married. The data also shows a slightly higher ratio for females than males (55% female), a situation typical in most developing countries.

We also note that 65 per cent of Ghanaians had completed primary school at the time of the survey while 35 per cent had not. A further breakdown of the education statistic indicates that 94 per cent of the population had secondary or high school education as their highest level of education attained, with only 6 per cent having some form of tertiary education. Despite the relatively low level of advanced education, 85 per cent of the population were identified as financially literate and a mere 15 percent were members of informal savings groups.

Like most developing African economies, the study found that about 67.5 per cent of Ghanaians earned a maximum of $5 per day (or up to $140 per month). Interestingly however, 77 per cent of the same populace said they had access to electronic communication channels such as cell phones, landlines and the internet.

Notwithstanding, the data however indicates that only 42 per cent of Ghanaians resided in urban areas, leaving a substantial portion of Ghanaian nationals in rural areas where there exists poor infrastructure, living and health conditions.

Table 1.2: Correlation matrix

	USE	FLIT	FEMP	BWIN	URB	TCOM	ELEC	RINC	LACCESS	EDU
USE	1.0000									
FLIT	0.2497	1.0000								
FEMP	0.2866	0.1336	1.0000							
BWIN	0.1443	0.0886	0.1690	1.0000						
URB	0.3072	0.1654	0.1988	-0.0203	1.0000					
TCOM	0.3138	0.2171	0.2227	0.0175	0.3596	1.0000				
ELEC	0.3290	0.2439	0.1723	0.0088	0.4384	0.3434	1.0000			
RINC	0.2127	0.0479	0.1226	0.0239	0.1179	0.1595	0.0702	1.0000		
LACCESS	0.2301	0.2184	0.0982	0.0752	0.0776	0.1138	0.0965	0.0443	1.0000	
EDU	0.3920	0.3538	0.3406	0.0215	0.3085	0.3819	0.3784	0.1334	0.1584	1.0000

The correlation Matrix above shows that none of the variables tested are highly correlated ensuring the absence of multicollinearity.

4.2 Regression Results

Table 1.3: Logistic Regression

Logistic regression — Number of obs = **3439**
LR chi2(**9**) = **1168.41**
Prob > chi2 = **0.0000**
Log likelihood = **-1738.6798** — Pseudo R2 = **0.2515**

USE	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
FLIT	.8312868	.1650484	5.04	0.000	.507798	1.154776
FEMP	.8365508	.1432433	5.84	0.000	.5557991	1.117303
BWIN	.6026535	.085556	7.04	0.000	.4349668	.7703402
URB	.525337	.0920806	5.71	0.000	.3448623	.7058117
TCOM	.5131881	.0977672	5.25	0.000	.3215679	.7048083
ELEC	.7782217	.1038806	7.49	0.000	.5746195	.981824
RINC	.9902293	.1211024	8.18	0.000	.7528729	1.227586
LACCESS	.7373652	.0855226	8.62	0.000	.569744	.9049865
EDU	.1570702	.0171895	9.14	0.000	.1233794	.1907609
_cons	-4.763949	.2136758	-22.30	0.000	-5.182746	-4.345153

The results of the logistic regression for the 3439 observations are depicted in the Table 1.3. In general the model fitted the data well. The chi-square test strongly rejected the hypothesis of no explanatory power with a highly significant p-value even at a 99 per cent confidence interval. All independent variables are also significant at 99 per cent. Other independent variables tested and found as not significant were not included in the final analysis.

4.2.1 Education

We observe from Table 1.3 that the highest level of education attained by an individual is positively related to the use of financial products in Ghana, even at a 99 per cent confidence interval. The results suggest that educated people are more likely to use a financial product; Cole, Paulson and Shastry (2012) found that individuals with higher levels of education were more financially prudent and also more likely to participate in financial markets. In Kenya and Tanzania, Ellis et al. (2010) also find that individuals with better education are more likely to borrow and save than those with less education.

4.2.2 Financial Literacy

Table 1.3 also shows a statistically significant and positive relation between financial literacy and usage of financial products in Ghana. This is consistent with existing literature which states that households with low levels of financial literacy often do not plan for retirement, borrow at higher rates or acquire fewer assets and thus are less likely to utilize financial products designed for such purposes (Lusardi and Mitchell-2007a; Lusardi and Tufano-2009; Stango and Zinman - 2009). Our results also agree with Cole *et al.*'s (2009) experimental work in India and Indonesia where financial literacy was seen as a strong predictor of the demand for financial services.

Information in Table 1.1(Appendix) shows 85 per cent of the respondents claiming that they are financially literate because they understood financial products offered in the Ghanaian financial market. Only 6 per cent of the same group of respondents however had acquired

some form of tertiary education at the time of the interview. Despite the high financial literacy level, the relatively small number of tertiary educated individuals appears to limit the full appreciation or in-depth understanding of financial products that might require a bit more knowledge than conventional savings and loans. Products like mortgages, pension schemes, mutual funds, stocks, bonds, insurance and the likes require that individuals seeking to access them be financially educated rather than just being financial literate. Financial education involves a better understanding of the use, risks and benefits of the products while financial literacy is just about gaining information about the products.

4.2.3 Stability in Cash flows

Full time salary earners, non salaried people with regular income streams, as well as those who were making the highest contributions to their household expenditures were all found to be more likely to use financial products. Since household expenses tend to be relatively stable, these three factors imply that some form of stability in an individual's income or expenses, propels him or her to use financial products. These observations are quite different from those of Bendig et al (2009) who indicated that poorer households in Ghana, as measured by assets owned by individuals, were less likely to use financial products.

Stability in cash flows coerces individuals to do some form of financial planning and enables such persons to become more likely to use financial products that would help them in their personal financial management.

Financial services such as mortgages, insurance, loans, pension funds and a few others also directly or indirectly dictate that users have stable revenue streams.

4.2.4 Reachability

Another interesting group of identifiers that were found to be associated with financial product take-up were indicators relating to how reachable an individual was. Residence in urban areas, access to electricity in the home as well as access to electronic communication channels such as cell phones, landlines and internet services, were all found to be positively related to the demand for financial products. Table 1.1 shows that a good 58 per cent of Ghanaians lived in rural communities at the time of the survey. With such a large percentage being rural dwellers, their probability of being reached by financial service providers or receiving financial product information could be quite minimal. Rural areas or areas with no electricity or communication channels are practically cut off from the rest of the nation and thus seldom interact with the financial service industry. Wahiu and Kiritu (2011) conclude that poor roads, power etc. makes it challenging for financial services to be provided to the rural areas. A good 77 percent of populate however does have access to cell phones landlines and internet services(Table 1.1 - Appendix). The significant penetration by electronic communication channels providers does present a huge opportunity for reaching people.

Fernando (2007) explains that cell phone companies offering innovative facilities like bill payments and money transfer services, made it easier and more convenient for people in the Philippines to use the services provided by the financial institutions. Our results are also supported by Duncombe(2009) who states that technological innovations make it easier for women to gain access to financial products.

4.2.5 Perceived Inherent Benefits

Finally, the regression results also suggested that individuals who had the perception that using financial products improved their chances of getting approved for loans, were more likely to take up financial products. This loan access perception, though true in some instance like the microfinance environment, does indicate that local's perception of inherent benefits provided by financial institutions, is a key contributor to the demand for financial products.

5. CONCLUSION/RECOMMENDATIONS

Instead of assessing financial institutions and determining what characteristics they perceive as the determinants of financial product usage, this paper used the attributes of individuals from all parts of Ghana to understand the factors that drive the usage of financial products. The study captured a wide array of products provided by legally recognized(formal) financial institutions in Ghana and not just the conventional savings, loans and insurance products. The study found that level of education, financial literacy, stability in cash flows, residence in urban areas, access to electricity, access to electronic communication channels and perceived social benefits of financial products were all positively related to the usage of financial products in Ghana.

Though a relatively large percentage of Ghanaians claimed to be financially literate (85%), the study noted that only 6 per cent of the same group had any form of tertiary education. The low level of education suggests that clients will have difficulty understanding complex financial products. Thus financial literacy, which only introduces the products to the clients but fails to address the use, risks and benefits of the products, is not enough for such environments. From the study it is recommended that government and financial institutions

should invest in financial education as a step to increase the understanding of the use, benefits and even risks of financial products. This would empower the nationals to go for products that will serve their specific needs and remove any fear or doubt that hindered their patronage in the past. Financial institutions should also consider designing products in local languages for the indigenes and to improve upon their understanding and appreciation of the products.

Our results also advocate that those who had stable income or expense streams, were more likely to use financial products. The reasoning is that, stable cash streams encourage people to carry out financial planning; person's with volatile cash flows find it somewhat difficult to plan their finances. Financial institutions worldwide have also been known to typically provide services and products that are tailored towards those who earn consistent and regular incomes. Since a good number of Ghanaians have seasonal or sporadic cash flows, financial houses should be innovative and come up with custom products that can cater for those who have uneven cash flows.

In a country where only 12 per cent(Table 1.1) are formally employed, the Central Bank should also promote policies that ensure that financial institutions channel part of their services towards people in the informal sector who typically have volatile cash flows. These measures will increase financial products usage and also help individuals improve in their financial planning.

The study also observed that while 77 percent of Ghanaians had access to electronic communication channels, a good 58 percent of the population still resided in rural areas(Table 1.1). Minimal access to electricity, infrastructure or social services in rural areas is a constraint that limits the level of reach achieved by marketing campaigns that done via conventional mediums like radio, television, bill boards, newspapers and the likes. As the nation waits to extend it's urbanization process, the extensive reach of cell phones, landlines

and internet service provide a good avenue for the delivery of financial products. The financial industry in Ghana needs to take advantage of this medium and design products that are easily accessible on these electronic communication channels. This would alleviate infrastructural impediments in rural areas that make it difficult and expensive for financial services to be delivered. The same channels should be used for marketing and other forms of interactions as it's highly convenient and less costly.

Finally, it was recorded that individuals who believed that using a financial product improved their chances of being approved for a loan were more willing to use financial services. This suggest that financial institutions should do a better job marketing any additional inherent benefits that clients will obtain from using their products. The cultural and low educational settings across the country hint that nationals would relate and respond better to inherent benefits, rather than the technical features of financial products.

6. LIMITATIONS AND FUTURE RESEARCH

This study was restricted to financial products and services offered by formal and legally recognized financial institutions; studies extending into informal financial products would help unearth greater insights about factors that drive the use of all kinds of financial products. Additionally, the secondary nature of the data limits the findings to only what can be extracted from the data. Getting the chance to ask respondents some more questions could have uncovered more insights.

References

Asiedu-Mante, E. (2005): "Integrating financial services into poverty reduction strategies: Institutional Experience of Ghana", Presented at workshop “Integrating financial services into poverty reduction strategies, by African Rural and Agricultural Credit Association.

Aryeetey, E. (2008): "From Informal Finance to Formal Finance in Sub-Saharan Africa: Lessons from Linkage Efforts", Presented at High-Level Seminar on African Finance for the 21st Century Organized by the IMF Institute and the Joint Africa Institute
Tunis, Tunisia, March 4 – 5, 2008.

Barslund, M. and Tarp, F. (2008): "Formal and Informal Rural Credit in Four Provinces of Vietnam". Journal of Development Studies, 44(4), pp. 485 - 503.

Bawumia, M., Owusu-Danso, T. and McIntyre, A. (2008): "Ghana’s Reforms Transforms its Financial Sector". Bank of Ghana and IMF Africa Department.

Beck, T., Demiguc-Kunt, A and Peria, M.S.M. (2007): "Reaching out: Access to and use of banking services across countries". Journal of Financial Economics, 85(1), pp. 234 - 26.

Beck, T., Demiguc-Kunt, A and Levine, R. (2007): "Finance, inequality and the poor". Journal of Economic Growth, 12(1), pp. 27-49.

Bendig, M., Giesbert, L. and Steiner, S. (2009): "Savings, Credit and Insurance: Household Demand for Formal Financial Services in Rural Ghana", Working Paper 94, German Institute of Global and Area Studies.

Bhat, R. and Nishant, J. (2006): "Factors affecting the demand for Health Insurance in a Micro Insurance Scheme", Working Paper 07-02, Indian Institute of Management.

Boucher, S., Carter, M., Guirkinger, C. (2008): "Risk rationing and wealth effects in credit markets: Theory and implications for agricultural development". American Journal of Agricultural Economics, 90(2), pp. 409–423.

Cole, S., Paulson, A. and Shastry, G.K. (2012): "Smart Money: The Effect of Education, on Financial behaviour", Working Paper 09-071, Harvard Business School.

Cole, S., Sampson, T. and Zia, B. (2009): "Prices or Knowledge? What Drives Demand for Financial Services in Emerging Markets?", Working Paper 09-071, Harvard Business School.

Croson, R. and Uri G., (2009): "Gender Differences in Preferences". Journal of Economic Literature, 47(2), pp. 448–74.

Dercon, S., De Weerdt, J., Bold, T. and Pankhurst, A. (2006): "Group-based funeral insurance in Ethiopia and Tanzania". World Development 34(4), pp. 685 - 703.

Duncombe, R. (2009): "Assessing the Potential for Mobile Payments in Africa: Approaches and Evidence from Uganda". Working Paper, no. 41, Centre for Development Informatics, University of Manchester.

Ellis, K., Lemma, A. and Rud, J. (2010): "Investigating the impact of access to financial services on household investment". Overseas Development Institute, London.

Fernando, N.A. (2007): "Low Income households' access to financial services. International Experience, Measures for Improvement and the Future". Available at <http://www.adb.org/Documents/Books/Low-Income-Households/low-income-household.pdf

Finmark Trust, (2010): Finscope Ghana Survey 2010. Government of Ghana.

Fletschner, D., Anderson, C. L. and Cullen, A. (2010): "Are women as likely to take risks and compete? Behavioural findings from central Vietnam". Journal of Development Studies (forthcoming).

Fletschner, D. and Kenney, L. (2010): "Rural Women and Access to Financial Services: Fighting Poverty by Empowering Women". Paper Commissioned for FAO's flagship publication: "The State of Food and Agriculture 2010", Food and Agriculture Organization, Rome.

Gan, C., Clemes, M., Limsombunchai, V. and Weng, A. (2006): "A logit analysis of electronic banking in New Zealand". Lincoln University Commerce Division Discussion Paper No. 108.

Gaurav S, Cole S, Tobacman J. (2011): "Marketing Complex Financial Products in Emerging Markets: Evidence from Rainfall Insurance in India". Journal of Marketing Research: Volume 48, Special Issue, pp. S150-162.

Greene, W. H. (2003): Economic analysis, 3rd Ed., Upper Saddle River, Prentice Hall.

Gockel, R. P. and Jackson H. M. (2009): "Credit and Risk: Analyzing Determinants of Willingness to Borrow More Credit in rural Vietnam". International Fund for Agricultural Development (IFAD) and the University of Washington.

Ho, S. and Odhiambo, N. M. (2011): "Finance and Economic Development in China: An Empirical Investigation". International Business and Economics Research Journal,10(8).

Honohan, P. (2007): "Cross-Country variation in household access to financial services". The World Bank, Trinity College Dublin and CEPR. Prepared for the conference "Access to Finance", Washington D.C.

http://www.economywatch.com/investment/financial-products.html

IFAD - Ghana, Rural Financial Services Project. (2000): "Re-Packing the Rural Finance Sub-sector in Ghana Poverty Gender and Rural Informal Sector Perspectives". Pre-appraisal Mission Working Paper. Available at http://www.ifad.org/gender/learning/sector/finance/41.htm

Jalilian, H. and Kirkpatrick, C. (2005): "Does financial development contribute to poverty reduction?". Journal of Development Studies, 41(4).

Lusardi, A. (2008). "Financial Literacy: An essential tool for informed customer choice?", Working Paper No. 14084, National Bureau of Economic Research.

Lusardi, A. and Tufano, P. (2009): "Debt literacy, financial experience and Overindebtedness", Working Paper No. 14808, National Bureau of Economic Research.

Lusardi, A, and Mitchell, O. S. (2007a): "Baby Boomer Retirement Security: The Roles of Planning, Financial Literacy, and Housing Wealth". Journal of Monetary Economics, 54(1), pp. 205-224.

Maddala, G. S. (1993): The Econometrics of Panel Data, Elgar, Brookfield, Vermont.

Mapetla, M., Matobo, T. and Setoi, S. (2007): "Burial as a social protection mechanism in Lesotho". Commissioned Study by Regional Hunger Vulnerability Programme of Lesotho.

McFadden, D. (1973): Conditional Logit analysis of qualitative choice behaviour. Frontiers in Econometrics. Academic Press.

Osei-Assibey, E. (2009): "Financial Exclusion: What drives supply and demand for basic financial services in Ghana?". Saving and Development Journal, 33(3).

Quartey, P. (2005): "Financial sector development, savings mobilization and poverty reduction in Ghana". United Nations University Research Paper 2005/71. London.

Stango, V. and Zinman, J. (2009): "What Do Consumers Really Pay on Their Checking and Credit Card Accounts? Explicit, Implicit, and Avoidable Costs". American Economic Review, 99(2).

Sutton, C. and Jenkins, B. (2007): "The role of the financial services sector in expanding economic opportunity". Corporate Social Responsibility Initiative Report No. 19. Cambridge MA: Kennedy School of Government, Harvard University.

Swain, R.B. (2002): "Credit rationing in rural India". Journal of Economic Development 27(2), pp. 1-20.

Wahiu R. and Kiritu H. (2011): "Financial Access: Opportunities for Africa". Presented at Marketing and Social Research Association Conference 2011.

Wang, H. H. and Rosenman, R. (2007): "Perceived need and actual demand for health insurance among rural Chinese residents". China Economic Review, 18(4), pp. 373-388.

World Bank Policy Research Report. (2008). "Finance for All? Policies and Pitfalls in expanding Access". Available at: http://siteresources.worldbank.org/INTFINFORALL/Resources/4099583-1194373512632/FFA_book.pdf>

Appendix

Table 1.1: Profile of Respondents

Variables	N		Frequency	Percent	Cumulative Percent
Financial Product	Valid	Does Not Use	1487	40.8	40.8

Usage		Products			
		Uses Products	2156	59.2	100
		Total	3643	100	
Age Bracket of Respondent	Valid	Less than 18 yrs	190	5.2	5.2
		18 - 20 yrs	273	7.5	12.8
		21 - 25 yrs	481	13.2	26.0
		26 - 30 yrs	557	15.3	41.4
		31 - 35 yrs	443	12.2	53.6
		36 - 40 yrs	410	11.3	64.9
		41 - 45 yrs	297	8.2	73.1
		46+ yrs	977	26.8	100.0
		Total	3628	99.6	100.0
	Missing	Not answered/Missing Data	15	.4	
Gender	Valid	Male	1643	45.1	45.1
		Female	2000	54.9	100.0
		Total	3643	100.0	

Education	Valid	Completed Primary	2374	65.2	65.2
		Not Completed Primary	1269	34.8	100
		No formal education	848	23.3	23.4
		Pre-school	60	1.6	25.0
		Some primary	346	9.5	34.6
		Primary complete	280	7.7	42.3
		Some Junior High/Secondary	362	9.9	52.3
		Junior High/Secondary complete	873	24.0	76.3
		Some Senior High/Secondary	196	5.4	81.7
		Senior high complete/Secondary	382	10.5	92.3
		Some university	60	1.6	93.9
		Graduate	94	2.6	96.5

		Post graduate	17	.5	97.0
		Technical/teacher training college	94	2.6	99.6
		Other	16	.4	100.0
		Total	3628	99.6	
	Missing	Not Answered/Missing data	15	.4	
		Total	3643	100.0	
Marital Status	Valid	Married	1972	54.1	54.1
		Never married	1093	30.0	84.1
		Divorced	146	4.0	88.1
		Separated	158	4.3	92.5
		Widowed	244	6.7	99.2
	Missing	Not Answered/Missing data	30	.8	100.0
		Total	3643	100.0	

Monthly Income	Valid	No income	493	13.5	13.6
Exchange rate of $1=GH¢1.43 (WDI-2010)		Below $140 per month	1963	53.9	67.5
		$141 - $280 per month	471	12.9	80.5
		$281 - $420 per month	113	3.1	83.6
		$421 - $560 per month	34	.9	84.5
		$561 - $700 per month	27	.7	85.2
		$701 - $840 per month	9	.2	85.5
		$841 - $980 per month	5	.1	85.6
		$981 - $1120 per month	8	.2	85.8
		$1121 - $1260 per month	2	.1	85.9
		$1261 - $1400 per	4	.1	86.0

		month			
		$1401 - $1540 per month	1	.0	86.0
		Over $1541 per month	4	.1	86.1
		Don't know	357	9.8	96.0
		Refused to answer	147	4.0	100.0
		Total	3638	99.9	
	Missing	Not answered/Missing Data	5	.1	
	Total	Total	3643	100.0	
Access to Electronic Communication		No	839	23.0	23.0
		Yes	2804	77.0	100.0
		Total	3643	100.0	
Household Financial Decision Maker	Valid	No	580	15.9	15.9

		Yes	3063	84.1	100.0
		Total	3643	100.0	
Financial Literacy	Valid	Illiterate	537	14.7	14.7
		Literate	3106	85.3	100.0
		Total	3643	100.0	
Urban/Rural Setting		Rural	2112	58.0	58.0
		Urban	1531	42.0	100.0
		Total	3643	100.0	
Commute Time to Social Amenities	Valid	more than 30 minutes	223	6.1	6.1
		less than 30 minutes	3420	93.9	100.0
		Total	3643	100.0	