



Key motivations for bank patronage in Ghana

Bank patronage
in Ghana

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Abstract

Purpose – Banking in Ghana is now an intensely competitive proposition. In a competitive environment, it becomes imperative not just to attract customers, but also to design strategies aimed at maintaining these customers. Drawing on data from over 2,000 retail bank customers in Ghana, this study aims at understanding the key motivations for maintaining accounts with banks in respect of Ghanaian bank customers.

Design/methodology/approach – Data were collected from customers of 22 retail banks in Ghana. A two-stage sampling technique was adopted in obtaining the sample. First, for each of the banks, two branches were randomly selected from the list of all functionally operating branches. In the second stage, customers of the selected branches were randomly intercepted in the banking halls and the survey instrument administered to them. A total of 2,000 respondents were attracted. Logistic regression modelling was employed in analysing the data.

Findings – Overall bank customers view proximity/accessibility as the most important factor in the opening and maintenance of accounts with banks in Ghana. Recommendations by friends appear to be the least important factor in Ghanaian bank consumers' decision to open and maintain a bank account in Ghana. The findings were strange to the extent that word-of-mouth marketing has been lauded as one of the most potent marketing communications tools in services marketing but the empirical findings from the study did not support this.

Practical implications – To the extent that proximity is a key factor in the opening and maintenance of bank relationships in Ghana, distribution management must be given a more strategic imperative in bank management in Ghana. Bank branches must be sited in catchment areas with the highest propensity to attract and maintain an existing profitable bank clientele.

Originality/value – The study is one of the few on bank marketing in Ghana that draws on a large bank consumer data set and utilizes robust statistical analysis to reach its conclusions.

Keywords Consumers, Ghana, Banking, Consumer behaviour

Paper type Research paper

Introduction

From transactions to relationships in financial services

The customer is central to all marketing activities of banks the world over. Customers range from retail through corporate to digital customers. Across the widest spectrum of customer audiences, banks are tuning and refining their marketing strategies to respond to the dynamic needs of their customer audiences. The marketing mix elements of product, price, promotions, place, people, process and physical evidence (Ennew *et al.*, 1995) typically encompass the range of marketing variables which are directly controlled



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by a bank. Banks seek to develop a balance between these elements, which reflect their competitive positions that are aimed at meeting the needs of the target market. Doyle (1994) indicates that the task of marketing in the exchange process is to seek to understand what buyers want to receive and what they are willing to pay. A transaction therefore takes place when an exchange is negotiated between the buyer and seller. Transaction marketing is a one-off negotiation that pays both parties to seek to maximize profits, though this changes if the parties are going to have a continuous relationship. Thus, relationship marketing that is a long term, continuous series of transactions between parties occurs when each trusts the other to deal fairly, reliably and helpfully. When a good working relationship is built, negotiating time and costs are reduced and the pattern of transactions becomes more predictable and secure. Hinson and Hammond (2006) observes that with the passage of the universal banking law in Ghana, all types of banking can be conducted under a single corporate banking entity and this greatly reorganizes the competitive scopes of several banking products in Ghana. The authors note further that the willingness and ability of managers of banks in Ghana to respond to changes in the banking sector will determine whether their banks survive and prosper. It would seem that the transaction marketing orientation in Ghana's banking sector might have to give way to a relationship orientation.

The transactional marketing mix is becoming obsolete because of saturated and mature markets, which have become more predominant, particularly in North America and Europe (Grönroos, 1996; Coviello and Brodie, 1998). Therefore the idea to replace transactional marketing activities by new concepts in order to increase customer retention has been generally claimed by (Berry, 1995; Mattsson, 1997). Several theoretical schools have informed the development of relationship marketing scholarship. Drawing on social exchange theory, (Bagozzi, 1975) pointed out that marketing might be conceptualised as involving different "types of exchanges" and associated "meanings" in the exchange process. In the study of economics, the most influential contribution to the study of relationships has been that of (Williamson, 1975) whose work on understanding the economic rationality of relationships and networks has focused on transaction costs theory. Transaction costs include costs of negotiating, monitoring and enforcing contracts with external entities, costs of co-ordination, and the costs or risks of power imbalances and opportunistic behaviour between firms.

In order to provide a seamless and memorable banking experience, banks need to manipulate several marketing variables. Table I provides a list of some these variables that have consistently been mentioned in the literature (Owusu-Frimpong, 1999; Al-Awadi, 2003). This article focuses on investigating how these variables affect bank consumption practices of banking consumers in Ghana. The purpose of this article is to help answer the question of whether factor $F_i, (i = 1, \dots, 11)$ will motivate bank customers to open or maintain a bank account with a particular bank in Ghana. Specifically, this study intends to:

- (1) help understand whether in deciding to open or maintain a bank account customers tend to attach equal importance to the factors listed in Table I. That is, we wish to test the null hypothesis:
 - H_0 : $p_{F1} = p_{F2} = \dots = p_{F11}$ against the alternative;
 - H_a : Not all $p_{F_i} (i = 1, \dots, 11)$ are equal.

Table I.
Factors for bank account
initiation and
maintenance

Motivational factor	Notation
Proximity/accessibility	F_1
Marketing initiative by the bank	F_2
Providing personalized services	F_3
Reputation of the bank	F_4
Interest rate	F_5
Access to credit	F_6
Local network	F_7
International/regional network	F_8
Recommended by friends	F_9
Foreign exchange transactions/funds transfer	F_{10}
Other motivational factors	F_{11}

- (2) investigate not only whether being motivated by factor $F_i (i = 1, \dots, 11)$ to open and maintain a bank account in a particular bank is influenced by age, sex, education and employment status, but also in what way.

Other motivational factors, F_{11} refers to all other possible motivational factors that are not listed in Table I. For example, it is not uncommon for an individual to open or maintain a bank account with a particular bank because the bank is owned by close relative of his or hers. For notational convenience, let $pF_i, (i = 1, \dots, 11)$ be the proportion of bank customers that are motivated by factor F_i (to open or maintain a banking account in Ghana).

Information on Ghana's banking sector

Ghana's banking sector is generally governed by the government-owned central bank: the Bank of Ghana (BOG). The Bank of Ghana evolved from the Bank of the Gold Coast (BGC), where its inception began. The genesis of the bank dates from the period of political agitation in Ghana for independence, in the mid-1950s. It was argued that a central bank was one institution, which would give true meaning to political independence being fought for during that era (www.bog.gov.gh). Today, the Bank of Ghana has overall supervisory and regulatory authority in all matters relating to banking and non-banking financial business with the purpose to achieve a sound, efficient banking system in the interest of depositors and other customers of these institutions and the economy as a whole. In the same vein, the BOG may restrict permissible activities of banks in general, or a class of banks or an individual bank or remove the restriction so imposed on it, as it considers appropriate. Throughout the 1957-1983 periods, governments have followed a policy of intervention in economic activity and held controlling interest in all banks.

Financial sector reforms were initiated in 1983 after the launching of the Economic Recovery Programm (ERP). From 1989-1991 therefore, Ghana's financial sector reform programme aimed at rehabilitating the country's financial system, which suffered from undue political influence, weak management, inadequate capital, backward information and accounting systems, poor internal controls, inefficiency, lack of competition and a large portfolio of non performing loans. The consequence of these reforms has led to some members of the top ten bracket of the Nigerian Banking Industry extending their presence and business frontiers in the sub region, specifically

into Ghana. Reasons for this include the political stability, consistency in implementing political and economic policies, stability of the currency and the entire economy of the country, the relatively lower minimum capital requirement of 70 billion cedis (\$ 7.5 million), and also due to the fact that a large number of international organizations displaced by the devastating wars in the sub region, in Sierra Leone and Liberia to be precise and multinationals and telecommunication giants were all attracted to do business in Ghana and have thus attracted them to harness the good business opportunities they have identified. To date, four Nigerian banks have set up shop in Ghana, actively and aggressively pursuing to carve out a sizable market share for themselves. These are namely:

- (1) United Bank for Africa formerly known as Standard Trust Bank, the first Nigerian bank to begin operations in Ghana in January 2005.
- (2) Zenith Bank, entered in September 2005.
- (3) Guarantee Trust Bank (GTB) obtained approval for its licence in February 2006.
- (4) Intercontinental Bank, having completed the consolidation of their four legacy banks into the Intercontinental bank Nigeria and taken over the Ghanaian Citi savings and loans Company.
- (5) Finally, Amalgamated Bank of Ghana has been bought into by the Ibru family of Nigeria, thus benefiting from a much welcome injection of capital but no brand name change has been made so far.

According to the Bank of Ghana web site and as presented in Table II, there are 25 licensed commercial, development and merchant banks operating in Ghana as at May, 2008. Local banks are not internationally known, except the Ecobank, which has a branch in Togo. Most of the newly established banks have no other branches other than the head office in the capital. For a country with a population of 18 million and rich in land and mineral resources, this number of branches is severely inadequate.

In an increasingly innovative and aggressive financial services sector, 24 banks diversified in geographical origin, corporate character and reach in the global financial

Commercial	Development	Merchant
1. Ghana Commercial	1. National Investment	1. Merchant Bank
2. Standard Chartered	2. Agricultural Development	2. Ecobank
3. Barclays	3. International Commercial	3. Continental
4. SG-SSB Ltd	4. The Trust bank	4. First Atlantic
5. Metropolitan Allied	5. Prudential	5. Continental Acceptance
6. The Trust Bank	6. Amalgamated	6. CAL
7. Zenith	7. ARB Apex Rural	
8. Intercontinental		
9. Standard Trust		
10. Fidelity		
11. Guaranty Trust		
12. Bank of Baroda		

Table II.
Types of banks in Ghana

markets have found themselves as active players in the field. With an ever-increasing branch network of over 600 branches for these 25 banks, the banking sector is a very competitive sector within which to operate.

Transaction and relationship marketing in financial services

Pfeffer and Salancik (1978) also developed resource dependence theory, the basic assumption of which is that inter-organizational relationships are the means that an organization uses to win access to resources that are perceived to be vital to the achievement of its objectives. This means that relationships established through a variety of formal and informal links with other firms are the mechanism that organizations need to respond to uncertainty and resource dependence because, generally, organizations are not self-sufficient. According to Emerson (1962), the relative power between two entities involved in an exchange relationship is determined by the resources that one party owns and controls relative to the other party.

Gummesson (2002) and Christopher *et al.* (1991), in the area of services marketing, developed Levitt's (1983) ideas on the links between relationship management and customer satisfaction, and the role of relationship marketing in keeping customers. Gummesson (2002) also recognized that, in the context of services marketing, there are continuous interactions during the process of production, selling and consumption, which are the consequence of intangibility and inseparability among those processes in many services. Thus, the quality of a relationship and the quality of a service are intimately intertwined and dependent on the efforts from both sides of the relationship, essentially because the consumer is a co-producer of the service. Other relational aspects mentioned by (Gummesson, 1987) include the concept of internal customer, internal marketing and relational quality, which were later explored by Christopher *et al.* (1991) and considered as forms of relational exchange in relationship marketing by Morgan and Hunt (1994). Consequently, the three pillars in the relationship marketing concept are:

- (1) marketing;
- (2) customer service; and
- (3) quality.

Looking at relationship marketing holistically within an organization, it is not surprising that quality constitutes one of the main aspects both in Christopher *et al.*'s (1991) concept of relationship marketing and Gummesson's (1987) questioning of the traditional marketing concept. In fact, the quality movement, much in vogue at the time of those contributions, with its emphasis on total quality management in all organizational functional areas as the means to provide customer satisfaction (instead of simply reducing defects), appeared to have an integrative role for relationship marketing. Although both contributions, and particularly Christopher *et al.*'s (1991) framework, represent a positive attempt to bring quality to the sphere of marketing and a valid conceptualisation of relationship marketing for services, it is reasonable to ask whether quality has yet acquired the major role conferred by this view of marketing. Additionally, though the integration of various aspects into only one framework has some originality, it may also be argued that none of these main issues (e.g. customer service, quality) are new in the marketing discipline.

Since the 1980s, relationship marketing has emerged as, potentially, one of the dominant paradigms in marketing theory (Grönroos, 1994). A different perspective is emerging within the terrain of relationship marketing as priorities for future research in relationship marketing. These are:

- *Rationale for relationships.* The rationale for establishing, developing, maintaining and terminating relationships; there is the need to clarify the concept of relationships, what are the variants involved and what forms of relationship are represented by the term relationship marketing (Blois, 1996 and Mattsson, 1997).
- *Relationship processes.* The processes, through which relationships are established, developed, maintained and terminated. In relation to relationship processes, it is crucial to develop explanations that take appropriate account of key relationship variables such as trust, commitment, adaptation, uncertainty, dependence, and reciprocity.
- *Relationship structures.* This refers to the structures appropriate to managing such processes. It is necessary to understand how firms organize and manage their relationships and which forms of network structure and governance are more or less useful for managing marketing relationships (Ebers, 1997).

There are interconnections between these three main areas of research which can be developed independently but also collectively and which provide the basis for this research into the rationale for bank patronage in Ghana.

Financial services marketing and determinants of quality service provision

The marketing of financial services is generally affected by the forces of deregulation, advancing technology and a general trend towards globalisation (Beckett *et al.*, 2000). These have greatly increased the competitive pressures within the financial services market and have in turn affected both the structure and operations of firms within the industry. Regulatory constraints in domestic markets may push firms to seek international markets as a means of achieving growth. Marketing development in the financial services sector, both as a business function and area of study was observed to be slow some years ago (Ennew *et al.*, 1995) and continues to be so. However, extensive changes in the business environments have led to marketing playing an increasingly important strategic role in guiding business development (Doyle, 2002). These changes are reflected, for instance, in the degree of customer orientation and a move towards a greater degree of segmentation and targeting (e.g. Garland, 2005). Each element of the marketing mix must be consistent with the others so that a coherent message is conveyed to the target market. A coherent and coordinated mix also produces synergistic effects so that the overall impact of the mix is greater than the sum of the individual parts (e.g. Melewar and Saunders, 2000). Thus these elements must not be seen in isolation, but rather constant cross-referencing is essential to ensure consistency with other elements in the mix. When managing the traditional elements of the marketing mix in the physical environment, marketers in the financial services sector pay particular attention to:

- the people delivering the service;
- the process by which the service is delivered; and

- the physical evidence which represents the service in part and is synonymous with the services marketing mix (e.g. Lovelock, 2001).

The “people” component has generally been recognized as significant in the purchase of a service as services may involve a potentially risky decision nor is it a particularly enjoyable process. George and Myers (1981) accordingly identify the significance of contact with individual staff in the purchase process. The purchase decisions is made on the basis of an overall service offer, although affected by the degree of trust a consumer associates with an organization and this in turn is heavily influenced by the individual who actually makes the initial contact with the consumer and carries out the sale. The importance of personal selling in financial services has often been considered essential; it being a two way process with an opportunity to adapt presentations to the needs and nature of the individual customer (Ennew *et al.*, 1995). The essence of the delivery system is based on people thus the sales force is an important component of this practice. The people factor therefore is very important in relation to the product, price, place and promotion of financial services. Ennew *et al.* (1995) assert that the “process” theme focuses on the mechanisms by which the service is delivered, including business policies for service provision, procedures, degree of mechanization and others.

The “physical evidence” component refers to the environment in which the service is delivered and the tangible items which are associated with that service, such as wallets for documents, cheque books, ATMs, interior décor, bank branch, etc. The process of branding as a tangible clue and the associated forms of peripheral evidence has become important in financial services as a mechanism for conveying information on the quality of a product and as a means to establish customer loyalty as discussed by (Saunders and Watters, 1993). Physical evidence is also crucial in creating clear corporate identity represented by a variety of visual symbols associated with promotional material, branch layout and design and staff appearance (O’Loughlin and Szmigin, 2007).

Howcroft and Lavis (1987) suggest that image is perhaps the most important form of branding available to the suppliers of personal financial services. A characteristic of bank service provision is the simultaneous production and consumption, necessitating interpersonal interactions between employees and customers. They have to set standards for performance with respect to all aspects of their marketing activities to include: sales and profitability, efficiency of systems and operations, the impact of advertising and promotion, customer satisfaction and service quality; and staff performance. Marketing research and information systems are key to the evaluation of the customer base. Kaynak and Whiteley (1999) indicate that competition in the financial services sector has made it necessary to introduce strategic marketing and research techniques and concepts into the sector. Banks have become more market oriented and focused with an almost universal mission to become customer driven. Some critical issues arise here, as to whether:

- A bank can provide the required banking services to its diverse customer segments.
- A bank’s existing objectives, resources, and competencies can match the existing and future needs and expectations of its target markets (Kaynak, 1986).

Applying the marketing concept to commercial banks for example requires that commercial banks should think in terms of what the banking experience means to customers, what type of services they desire and most importantly how customers want their services to be delivered (Kaynak and Whiteley, 1999). Commercial banks must have comprehensive knowledge of customers' attitudes, perceptions, knowledge structures and behavioural tendencies. According to Kaynak and Whiteley (1999), a commercial bank's marketing orientation is partially determined by the market segments in which it operates and performs, namely the:

- Security-oriented segments.
- Task-oriented segments.
- Interaction-oriented segments.

These in turn depend on the sector, which predominates in the country or region, which provides the banking context for the banks multitudinous activities (Holstius and Kaynak, 1995). Generally customers in country or regional banks have been shown to be security oriented. The demeanour of the bank and the banker must therefore be conservative and traditional. On the other end of the spectrum are the task-oriented bank customers who place their main emphasis on efficiency and professionalism. The mechanics and operations of the banking operations are therefore very critical and important to this market segment. Finally, interaction-oriented bank customers place a high value on the relationships between the bank and themselves. Factors such as the attitudes, patronage tendencies and ultimately the behavioural patterns of bank customers are affected by how commercial banks manage their portfolios, the credit facilities they make available to potential clients and the variety of services they offer (Kaynak and Whiteley, 1999).

Research design and methodology

The data used in this study were extracted from the 2007 Retail Survey of Ghana banking Awards conducted by KPMG. In this survey, data were collected from the customers of 23 retail banks currently operating in Ghana. The extracted data consists of responses from the customers of the 23 retail banks regarding whether (Yes or No) the factors or variables listed in Table I will motivate them to open or maintain a bank account in Ghana. Also, categorical data on demographics of customers including; gender (male, female), age (18-30, 31-44, 45-54, 55+), employment status (employed, unemployed, self-employed, student, pensioner) and educational level (none, basic, secondary, tertiary) were extracted as presented in Table III.

A two-stage sampling technique was adopted in obtaining the sample: First, for each of the banks, two branches were randomly selected from the list of all functionally operating branches. In the second stage, customers of the selected branches were randomly intercepted in the banking halls and the survey instrument administered to them. Two main survey instruments were used, namely Opinionmeter devices and paper questionnaires. A minimum sample of 60 respondents was required for each selected branch. It should be mentioned that, with exception of two banks, all the 23 retail banks surveyed met the sample requirement of a minimum of 60 respondents per branch. The two banks that did not meet the sample requirement mostly had corporate clients. These banks were however included in the sample and of a total of 2,881 respondents approached, 1988 co-operated for the study, thus generating a success rate of 69 percent.

Table III.
Demographic profile of
bank account opening
and maintenance

Variable	Description
1 Age ₁	Compares age group 18-30 with the 55 + age group
2 Age ₂	Compare age group 31-44 with the 55 + age group
3 Age ₃	Compares age group 45-54 with the 55 + age group
4 Employment ₁	Compares the employed group with the pensioners group
5 Employment ₂	Compares the unemployed group with the pensioners group
6 Employment ₃	Compares the self-employed group with the pensioners group
7 Employment ₄	Compares the student group with the pensioners group
8 Education ₁	Compares the no education group with the tertiary group
9 Education ₂	Compares the basic education group with the tertiary group
10 Education ₃	Compares the secondary education group with the tertiary group

Measurement

Let Y_{ij} be the binary response to the question of whether or not factor F_i , ($i = 1, \dots, 11$) will motivate the j th respondent to open or maintain a bank account with a particular bank. We define:

$$Y_{ij} = \begin{cases} 1 & \text{if factor } F_i \text{ does not motivate respondent } j \text{ to open} \\ & \text{or maintain a bank account with a particular bank} \\ 0 & \text{otherwise} \end{cases}$$

Then the estimate of the proportion of customers that are not motivated by factor F_i , ($i = 1, \dots, 11$) to open or maintain a bank account with a particular bank is given by:

$$q_{Fi} = \frac{\sum_{j=1}^n Y_{ij}}{n}, i = 1, \dots, 11$$

and hence the proportion of customers that are motivated by factor F_i , ($i = 1, \dots, 11$) to open or maintain a bank account with a particular bank is given by

$$p_{Fi} = 1 - q_{Fi}, i = 1, \dots, 11$$

We define the overall most "important" motivational factor F_i^* , by

$$F_i^* = \arg \max_{k \in \{1, \dots, i, \dots, 11\}} p_{Fk}$$

For $i = 1, \dots, 11$, note that $n - \sum_{j=1}^n Y_{ij}$ is the total number of individuals that are motivated by factor F_i to open or maintain bank accounts and $\sum_{j=1}^n Y_{ij}$ is the total number of customers that are not motivated by F_i . With the above summary data we test the hypothesis: $H_0: p_{F1} = p_{F2} = \dots = p_{F11}$ against the alternative H_a : Not all p_{Fi} ($i = 1, \dots, 11$) are equal, via the Chi-square test of homogeneity.

Chi-square test of independence was employed to determine whether or not there is a relationship between the factor F_i ($i = 1, \dots, 11$) and sex, educational level, employment status and age. Where relationships exist we further investigate the nature of these relationships via logistic regression modelling. In particular, we compute the odd ratios of the various levels of the predictor variables. The odd ratio is one of the range of statistics used to assess the risk of a particular outcome for a certain

group of individuals with similar characteristics. The odds ratio is a relative measure of risk, telling us how more likely it is that someone who belongs to the group of individuals under study to develop the outcome as compared to someone who does not belong to the group.

For simplicity, suppose a single predictor x is related to the binary outcome Y . We may define:

$$Y = \begin{cases} 1 & \text{if an individual doesnot have the characteristic of interest} \\ 0 & \text{otherwise} \end{cases}$$

The logistic regression model defines the probability $P(Y = 1)$ as:

$$P(Y = 1) = \frac{\exp(\beta_0 + \beta_1x)}{1 + \exp(\beta_0 + \beta_1x)} \quad (2)$$

and $P(Y = 0) = 1 - P(Y = 1)$.

Equation (2) may conveniently be expressed in terms of the odds of $Y = 1$ as:

$$\text{odds}(Y = 1) = \frac{P(Y = 1)}{P(Y = 0)} = \exp(\beta_0 + \beta_1x)$$

That is the log odds is simply the linear function $\beta_0 + \beta_1x$.

Now suppose x is a qualitative variable at two levels. The predictor x may be a variable of group membership defined by:

$$x = \begin{cases} 1 & \text{if the individual belongs to group 1} \\ 0 & \text{if the individual belongs to group 2} \end{cases}$$

Note that the odds $Y = 1$ for an individual in group 1 is $\exp(\beta_0 + \beta_1)$ and that for an individual in group 2 is $\exp(\beta_0)$. The ratio:

$$OR = \frac{\exp(\beta_0 + \beta_1)}{\exp(\beta_0)} = \exp(\beta_1)$$

which is typically referred to as the odds ratio, summarizes the impact of group membership on the response Y . The characteristic of interest is referred to as the predicted or the modelled event. It is important to note that the predicted or modelled event in this study is “not motivated by factor F_i , ($i = 1, \dots, 11$)”. When $OR > 1$ an individual in group 1 has an increased odds of the event $Y = 1$ than an individual in group 2. When $OR < 1$ an individual in group 1 has less odds of the event $Y = 1$ than an individual in group 2. When $OR = 1$ there is no group effect. It is easy to extend the above ideas to the case where the predictor x has $k > 2$ levels. Here, we choose one of the k levels as a comparison group. We then form odds ratios comparing the remaining groups to the comparison group. For instance if $k = 4$ and group 4 is taken as the comparison group, it can easily be shown that the odds ratios for comparing group $l = 1, 2, 3$ to group 4 is:

$$OR_l = \frac{\text{odds}(x = l)}{\text{odds}(x = 4)} = \exp(\beta_l), l = 1, \dots, 3$$

We can also compare group 1 with group 2 by computing the odds ratio:

$$OR = \frac{OR1}{OR2} = \exp(\beta1 - \beta2)$$

Analysis of results

To answer the specific question of whether customers tend to attach “equal importance” to the 11 motivational factors listed in Table I, a computed value of the Chi-square test of homogeneity generated 503.03 (using the statistical software R version 2.6.0), with a 10 degrees of freedom and a corresponding *p*-value of less than 0.0001. We therefore reject homogeneity with respect to “equal importance” in favour of in homogeneity at all conventional significance levels. Thus, one can confidently say that customers tend to attach unequal importance to the motivational factors considered in this paper.

The estimates of the proportion of customers that will be motivated by factor *F_i* (*i* = 1, ..., 11) to maintain a bank account with a particular bank, *pF_i* are shown in Table IV. These estimates provide us with a sense of the “importance” customers attach to factor *F_i* in choosing to maintain a bank account with a specific bank in Ghana. Overall, bank customers in Ghana view Proximity/Acessibility *F₁* as the most “important” factor that will make them maintain a bank account with a particular bank as indicated by the rank *R(F₁)* being one. About 64 per cent of the customers surveyed said Proximity/Acessibility *F₁* will motivate them to keep their bank accounts with a particular bank. The variable Recommended by friends *F₉* appears to the least “important” factor with only about 38 per cent of respondents saying a friend’s recommendation will motivate them to open or maintain a bank account with a particular bank.

The results of the Chi-square tests of association between the predictors (Sex, Employment status, Educational level and Age) and the motivational factors considered are summarized in Table V. The *p*-values of the above tests are also presented in Tables VI and VII.

As expected Sex cannot predict any of the 11 motivational factors considered. That is, a bank customers sex is not related to factors that tend to motivate individuals to open or maintain a bank account with a specific bank. This fact is depicted by the non-significance of the *p*-values of the Chi-square tests of association between Sex and all the 11 motivational factors in Tables V and VI.

With the exception of Reputation of the bank *F₄* and Other motivational factors *F₁₁*, the employment status (Employment) of a bank customer is associated with all the other motivational factors at a significance level of at most 5 per cent. In loose terms,

<i>i</i>	Motivational factors										
	1	2	3	4	5	6	7	8	9	10	11
<i>pF_i</i>	0.64	0.52	0.54	0.44	0.48	0.52	0.46	0.54	0.38	0.51	0.51
<i>R(F_i)</i>	1	4	2	10	8	4	9	2	11	6	6

Notes: *pF_i* represents the proportion of customers that are motivated by *F_i* to maintain their bank accounts with a specific bank, *pF_i* and *R(F_i)*, the rank of “importance” of factor *F_i*

Table IV.
Estimates of *pF_i* and *R(F_i)*
(*F_i*).2

there is no link between the employment status of a bank customer and the reputation of the bank he or she chooses to open an account with. Also, the educational level of a customer (Education) is related to all motivational factors except Foreign exchange transaction/funds transfer, F₁₀ and Other motivational factors, F₁₁. It is also revealed in Table V that the age of a bank customer has nothing to do with the likelihood of him or her being influenced by factors such as Proximity/Accessibility F₁, Providing personalized services F₃, Local network F₇, International/regional network F₈, Recommended by friends F₉ and Foreign exchange transaction/funds transfer F₁₀. As indicated by the *p*-value of less than 0.0001 in Table V, Age is highly related to Other motivational factors F₁₁. There also appears to weak association between age and both Access to credit, F₆ and Interest rates F₅ at a significance level of 10 per cent and some relationship between age and Marketing initiative by the bank, F₂ and Reputation of the bank, F₄ at 5 per cent significance level.

Table V.
Association between predictors and motivational factors

Predictor	Motivational factors										
	F ₁	F ₂	F ₃	F ₄	F ₅	F ₆	F ₇	F ₈	F ₉	F ₁₀	F ₁₁
Sex	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Employment (%)	1	1	1	NS	1	1	5	1	1	1	NS
Education (%)	1	1	1	5	1	5	1	10	5	1	NS
Age (%)	NS	5%	NS	5	10	10	NS	NS	NS	NS	1

Notes: NS – Non-significant; 1 per cent – Significant at 1 per cent significance level; 5 per cent – Significant at 5 per cent significance level; 10 per cent – Significant at 10 per cent significance level

Table VI.
Association between motivational factor *F_i*, (*i* = 1, ..., 5) and predictors

Motivational factor	Predictor	χ^2	DF	<i>p</i> -value
F ₁	Sex	0.38	1	0.53
	Employment	15.33	4	0.004***
	Education	14.79	3	0.002***
	Age	4.79	3	0.19
F ₂	Sex	0.08	1	0.78
	Employment	24.82	4	0.00***
	Education	23.9	3	0.00***
	Age	10.00	3	0.02**
F ₃	Sex	1.07	1	0.30
	Employment	19.1	4	0.001***
	Education	16.33	3	0.001***
	Age	4.51	3	0.21
F ₄	Sex	0.14	1	0.71
	Employment	6.74	4	0.15
	Education	10.10	3	0.02
	Age	9.63	3	0.02**
F ₅	Sex	0.38	1	0.54**
	Employment	31.74	4	0.00***
	Education	34.80	3	0.00***
	Age	7.2	3	0.07*

Notes: * Significant at $\alpha = 0.1$ level; ** Significant at $\alpha = 0.05$ level; *** Significant at $\alpha = 0.01$ level

Motivational factor	Predictor	χ^2	DF	<i>p</i> -value
F ₆	Sex	0.11	1	0.75
	Employment	17.73	4	0.001 ***
	Education	8.13	3	0.04 **
F ₇	Age	6.88	3	0.08 *
	Sex	0.23	1	0.63
	Employment	9.58	4	0.05 **
F ₈	Education	13.70	3	0.003 ***
	Age	2.61	3	0.46
	Sex	0.65	1	0.42
	Employment	13.53	4	0.01 **
F ₉	Education	7.23	3	0.07
	Age	1.90	3	0.59
	Sex	0.13	1	0.71
	Employment	16.05	4	0.003 ***
F ₁₀	Education	10.10	3	0.02 **
	Age	3.50	3	0.32
	Sex	0.65	1	0.42
	Employment	11.63	4	0.02 **
F ₁₁	Education	4.19	3	0.24
	Age	5.88	3	0.12
	Sex	0.34	1	0.56
	Employment	2.26	4	0.69
	Education	4.11	3	0.25
	Age	22.61	3	0.00 ***

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Table VII.

Association between
motivational factors F_i ,
($i = 6, \dots, 11$) and
predictors

Notes: * Significant at $\alpha = 0.1$ level; ** Significant at $\alpha = 0.05$ level; *** Significant at $\alpha = 0.01$ level

As indicated by the *p*-values of the Chi-square statistics shown in Tables VI and VII, factors such as Proximity/Accessibility F_1 , Marketing initiative by the bank F_2 , Interest rates F_5 , Access to credit F_6 , Local network F_7 and Recommended by friends F_9 tend to be associated with both employment status and educational level. For example, to answer the question of whether Proximity/Accessibility F_1 , is associated with employment status, we note that the Chi-square value of 15.33 with corresponding *p*-value of 0.004 indicates that an association exists between Proximity/Accessibility F_1 and employment status at 0.01 significance level. Finally, there is evidence of association between Reputation of the bank F_4 and both educational level and age at a significance level of 0.05.

The nature of the statistically significant associations were determined above via the binary logistic regression technique. The results of these findings are summarized in Tables VII-X. On the whole, it appears that the less educated the customers are the more they tend to be motivated by most of the factors listed in Table I to open or maintain a bank account with a particular bank in Ghana. This may be because more educated individuals tend to be a little prudent in their decision-making. The odds ratio of 0.45 for the dependent variable, Proximity/Accessibility F_1 , versus the independent variable, Education₁[1] is significant at 1 per cent. This implies that non-educated individuals are 0.45 times less likely not to be motivated by the factor Proximity/Accessibility F_1 to open or maintain a bank account with a particular bank than individuals with tertiary education. In other words, non-educated

Dependent variable	Independent variable	Odd ratio	Wald	p-value
F ₁	Employment		15.04	0.005 ***
	Employment ₁	1.15	0.17	0.68
	Employment ₂	0.49	2.94	0.09 *
	Employment ₃	1.24	0.38	0.54
	Employment ₄	1.03	0.01	0.93
	Education		15.00	0.002 **
	Education ₁	0.45	11.51	0.001 ***
	Education ₂	1.09	0.32	0.51
	Education ₃	0.85	3.47	0.06 *
	Constant	0.53	3.28	0.07
F ₂	Employment		21.83.04	0.00 ***
	Employment ₁	1.36	0.88	0.35
	Employment ₂	0.49	3.37	0.07 *
	Employment ₃	1.27	0.51	0.48
	Employment ₄	1.23	0.37	0.54
	Education		22.24	0.00 ***
	Education ₁	0.54	9.25	0.002 **
	Education ₂	1.14	0.81	0.37
	Education ₃	0.74	11.93	0.001 ***
	Constant	0.87	0.19	0.67
F ₃	Employment		18.85	0.001 ***
	Employment ₁	0.80	0.45	0.50
	Employment ₂	0.36	6.94	0.01 ***
	Employment ₃	0.72	1.02	0.31
	Employment ₄	0.60	2.21	0.14
	Education		10.00	0.001 ***
	Education ₁	0.47	13.55	0.00 ***
	Education ₂	1.10	0.36	0.55
	Education ₃	0.88	2.34	0.13
	Constant	1.38	0.98	0.32
F ₄	Education		10.29	0.02 **
	Education ₁	0.55	8.23	0.004 ***
	Education ₂	1.17	1.29	0.26
	Education ₃	0.96	0.21	0.63
	Age		8.84	0.03 **
	Age ₁	1.03	0.05	0.83
	Age ₂	0.99	0.01	0.93
Age ₃	0.74	3.10	0.08 *	
Constant	0.89	0.65	0.42	

Table VIII.
Regressing F_i ,
($i = 1, \dots, 4$) on
employment, education
and sex

Notes: * Significant at $\alpha = 0.1$ level; ** Significant at $\alpha = 0.05$ level; *** Significant at $\alpha = 0.01$ level

individuals are more likely to be motivated by Proximity/Accessibility F_1 to open or maintain a bank account with a particular bank than individuals with tertiary education. It was further observed that non-educated respondents are also more likely to be motivated by Marketing initiative by the bank F_2 , Providing personalized F_3 , Reputation of the bank F_4 , Interest rates F_5 , Access to credit F_6 , Local network F_7 and Recommended by friends F_9 to open or maintain a bank account with a particular bank than individuals with tertiary education. Also, individuals with secondary education

Dependent variable	Independent variable	Odd ratio	Wald	<i>p</i> -value
F ₅	Employment		24.66	0.00***
	Employment ₁	0.45	4.42	0.00***
	Employment ₂	0.22	12.21	0.00***
	Employment ₃	0.35	7.33	0.01***
	Employment ₄	0.33	7.74	0.01***
	Education		28.46	0.00***
	Education ₁	0.42	19.14	0.00***
	Education ₂	0.76	3.72	0.05**
	Education ₃	0.73	13.67	0.00***
	Constant	3.89	12.56	0.00
F ₆	Employment		15.96	0.003**
	Employment ₁	0.48	4.22	0.04**
	Employment ₂	0.40	5.11	0.02**
	Employment ₃	0.37	7.56	0.01***
	Employment ₄	0.38	6.73	0.01***
	Education		6.89	0.08*
	Education ₁	0.65	4.90	0.03**
	Education ₂	0.90	0.09	0.76
	Education ₃	0.86	3.10	0.08*
	Constant	2.72	7.84	0.01
F ₇	Employment		10.14	0.04**
	Employment ₁	0.78	0.59	0.44
	Employment ₂	0.53	2.87	0.09*
	Employment ₃	0.71	1.05	0.31
	Employment ₄	0.58	2.63	0.11
	Education		14.06	0.003***
	Education ₁	0.49	12.39	0.00***
	Education ₂	1.01	0.01	0.93
	Education ₃	0.87	2.64	0.10*
	Constant	1.39	1.01	0.32
F ₈	Employment		13.45	0.01**
	Employment ₁	0.79	0.53	0.47
	Employment ₂	0.57	2.17	0.14
	Employment ₃	0.75	0.77	0.38
	Employment ₄	0.53	3.33	0.07*
	Constant	1.60	2.04	0.15

Notes: * Significant at $\alpha = 0.1$ level; ** Significant at $\alpha = 0.05$ level; *** Significant at $\alpha = 0.01$ level

Table IX.
Regressing F_i ,
($i = 5, \dots, 8$) on
employment, education
and age

were more likely to be motivated by Interest rates F₅, Marketing initiative by the bank F₂ and Recommended by friends F₉ than individuals with tertiary education.

The significance of the *p*-values when the dependent variable Interest rates F₅ is regressed on the independent variables Employment₁, Employment₂, Employment₃ and Employment₄ and when Access to credit F₆ is regressed on Employment₁, Employment₂, Employment₃ and Employment₄ as shown in Table VIII are indications that customers who are employed, unemployed, self-employed or students are less likely not to be motivated by Interest rates F₅ or Access to credit F₆ than pensioners. It was also observed that students were less likely not to be motivated by Recommended by friends F₉ than pensioners. In fact, the odd ratio of 0.45 suggests that students are

Table X.
Regressing F_i ,
($i = 9, \dots, 11$) on
employment, education
and age

Dependent variable	Independent variable	Odd ratio	Wald	<i>p</i> -value
F ₉	Employment		16.48	0.002***
	Employment ₁	0.66	1.53	0.22
	Employment ₂	0.49	3.50	0.06*
	Employment ₃	0.53	3.54	0.06*
	Employment ₄	0.45	5.26	0.02**
	Education		10.40	0.02**
	Education ₁	0.63	5.22	0.02**
	Education ₂	1.01	0.01	0.94
	Education ₃	0.81	6.05	0.01**
	Constant	1.57	1.89	0.16
	F ₁₀	Employment		11.58
Employment ₁		0.89	0.12	0.73
Employment ₂		0.59	1.89	0.17
Employment ₃		0.77	0.53	0.45
Employment ₄		0.64	1.63	0.20
Constant		2.00	4.16	0.04**
F ₁₁	Age		22.53	0.00***
	Age ₁	1.62	9.98	0.002***
	Age ₂	1.20	1.41	0.24
	Age ₃	1.08	0.21	0.64
	Constant	0.74	4.56	0.03

Notes: * Significant at $\alpha = 0.1$ level; ** Significant at $\alpha = 0.05$ level; *** Significant at $\alpha = 0.01$ level

indeed 0.45 times less likely not to be motivated by Recommended by friends F₉ than pensioners. Unemployed individuals were more likely to be motivated by Providing personalized services F₃ than pensioners to open or maintain a bank account in Ghana.

To the question of whether Other motivational factors F₁₁ will motivate respondents to open or maintain a bank account, it was interesting to find that older respondents are more likely to be motivated by other factors than the younger ones. For example, the odds ratio of 1.62 for the dependent variable Other motivational factors F₁₁, versus the independent variable, Age₁, which is significant at 1 per cent implies that respondents in the 18-30 age group are 1.62 times more likely not to be motivated by Other motivational factors, F₁₁ to open or maintain a bank account than respondents in the 55 + age group.

Conclusions

The empirical evidence gathered suggests that most Ghanaians rank accessibility and proximity to a banking service as the most important and crucial factor that would encourage them to patronize a particular bank. Word-of-mouth recommendation was adjudged by respondents as the least important factor likely to patronize a bank. The conclusion here is that, most respondents place little credit in recommendation from friends in decisions such as patronizing a bank. In addition, it emerged that most of the factors identified had the most effect on the less educated. Thus, it appears that the more educated a person is the more independent-minded and sceptical he or she is likely to be. As a consequence, it can be argued that the more educated a person is, the less likely it is that he or she might consider any of the factors prior to opening and maintaining a bank account with a particular bank.

Again, the results of the study strongly indicate that, there is some relationship between proximity/accessibility and employment status. Thus, this could mean that the employment status of respondents is a major determinant of their proximity or accessibility to a bank. Another important trend that emerged from the results was that marketing initiatives by the bank had a positive relationship with employment status, educational level as well as age. The conclusion that can be drawn from this analysis is that the older the respondent was, the more likely it was that marketing initiative by the bank would propel him or her to open and maintain an account with the bank as well as factors such as employment status and educational status. Other motivational factors, as suggested by the results, appeared to be associated only with age. Thus, the possible explanation for this trend might be that on the basis of their experience, older respondents were likely to be motivated by other motivational factors.

Worthy of mention is the fact that there is some evidence of association between the reputation of the bank and the educational level and age only. This association could be ascribed to the fact that the more elderly and educated respondents were influenced more by the reputation of the bank in their decision to open and maintain an account with a particular bank. Another observation that can be made about the results is the fact that individuals with secondary education were more likely to be motivated by interest rates, marketing initiative by the bank and recommendation by friends than individuals with tertiary education. A plausible explanation for this is that for more well-educated people, it is less likely that their decision to open and maintain an account with a particular bank will be motivated by the aforementioned factors. Pensioners from the results appear to be more influenced by recommendation from friends than by recommendation from friends than students. A reasonable explanation for this could be that the elderly and aged, by virtue of their age, experience and special needs respond more positively to word-of-mouth recommendation in their decision to open and maintain an account with a particular bank.

Implications for Ghanaian banks and bank operating in Ghana, therefore in an increasing competitive banking sector, management teams of banks would have to carefully consider key motivations for bank account opening and maintenance to ensure their sustained profitability.

In respect of future research, we intend to develop and estimate a regression tree model for predicting (based on the demographics of bank customers) whether or not an individual will be motivated by factor F_i ($i = 1, \dots, 11$) to open or maintain a bank account with a particular bank. Also For any two factors of the 11 motivational factors considered, a natural question arises: If factor F_a motivates an individual to open or maintain a bank account with a particular bank, will factor F_a motivate the same individual to open or maintain a bank account with that same bank and vice versa? In other words, how similar are F_a and F_b in motivating customers to open or maintain bank accounts? The above question if well answered can help the management of banks to better manage these 11 factors with an overall goal of maximizing profit. We will attempt to answer the above question in our future research.

Note

1. See Table II for definition of the independent variable Education₁ and the definitions other relevant variables

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