Service quality and customer satisfaction in Ghanaian retail banks: the moderating role of price

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Abstract

Purpose – Various models and scales exist in the literature to measure retail bank service quality without any attempt at integrating them and the moderators have often been under explored. The purpose of this paper is to integrate the SERVQUAL and BSQ models and moderated the resulting scale with price in order to examine service quality and customer satisfaction with retail bank services in Ghana.

Design/methodology/approach – The study is quantitative and the survey methodology was used to collect data from 560 retail bank customers. The result was analyzed through structural equation modeling.

Findings – The study provides an expanded model for measuring retail bank service quality as seven of the eight latent constructs emerged as service quality dimensions when moderated with price. It is significant to also note that five of the constructs – tangibles, reliability, assurance, empathy and price – from the direct relationship emerged as the dimensions of retail bank service quality that positively and significantly predicted customer satisfaction.

Practical implications – The study provides insight into customer behavior with the quality of retail bank services in Ghana. The resulting broader dimensions provide an integrated and expanded model as well as pointers to bank managers on service quality and customer satisfaction cues to enable them attract, serve and retain customers.

Originality/value – The study is the first of its kind to integrate two of the popular models to measure retail bank service quality and to use price as a moderator of this relationship. The resulting scale, which comprised of variables from the two models, provides support for the approach used in the current study.

Keywords SERVQUAL, Ghana, Service quality, Customer satisfaction, BSQ, Retail banks

Introduction

The quest for service quality has been an essential strategic consideration for banks attempting to survive and prosper in today’s hyper competitive environment. Research has demonstrated that service quality is positively related to customer satisfaction (Gera, 2011), customer loyalty (Siddiqi, 2011), financial performance (Agathee, 2010; Jain and Gupta, 2004) and competitive advantage (Wang et al., 2003; Kelley et al., 2002). This makes the subject of service quality an important area of business research (Mersha et al., 2012; Kumar et al., 2009), and prompted Sangeetha and Mahalingam (2011) to conclude that service quality has been at the fore front of academic and practitioner research in services marketing.

Service quality in retail banking has been well researched and an over flogged research area (Mersha et al., 2012; Abdullah et al., 2011; Aldlaigan and Buttle, 2002). A search through the literature reveals that various models and scales have emerged in the literature on the subject. These include the well-known SERVQUAL model (Parasuraman et al., 1988; Mersha et al., 2012; Kumar et al., 2009), the BSQ model (Bahia and Nantel, 2000; Abdullah et al., 2011) and the SYSTRAC-SQ model (Aldlaigan and Buttle, 2002). Recently, this stream of research has even been extended to include retail bank hybrid services (Ganguli and Roy, 2010) and electronic platforms (Narteh, 2013a; Katono, 2011). A comprehensive review by Sangeetha and Mahalingam (2011) has shown that as at 2006, as many as 14 models have been used to measure retail bank services quality. Choudhury (2013) after an extensive study of retail bank service quality and purchase intentions, recommended the need to modify existing...
scales in order to provide a better measure of bank service quality. A review of the extant 
literature revealed that researchers have adopted or adapted the existing models without 
any attempt at integrating them in order to measure retail bank service quality.

Moreover, Brick et al. (2010) after studying retail bank service quality in ten African 
countries concluded that service quality perceptions vary among countries in Africa and 
called for specific country studies to provide further insight into customer perceptions of 
service quality. A review of the literature indicates that apart from the works of 
(Hinson et al., 2006; Okoe et al., 2013), not much has been done in the subject area. To cap it 
all, Sangeetha and Mahalingam (2011) concluded from their reviews that the relative 
importance of the service quality dimensions varied across cultural contexts and called for 
country-specific studies that could address the issue of service quality dimensions in retail 
banks. Moreover, prior studies have often assumed a direct relationship between service 
quality dimensions and customer satisfaction (Ladhari et al., 2011; Priluck and Lala, 2009). 
The moderators of this relationship have often been ignored even though literature argues 
that price expectations for instance, influence service quality perceptions of customers 
(Toncar et al., 2010; Kim et al., 2006). This means that actual price paid for services by 
customers could impact on their service quality perceptions but this price-quality 
relationship has often been under studied (Kim et al., 2006). The current study proposes to 
address these research gaps. First, we integrate the SERVQUAL model (Parasuraman 
et al., 1988) and the BSQ model (Bahia and Nantel, 2000), two of the dominant models to 
measure retail bank service quality and customer satisfaction. Second, we moderated the 
relationship with price in order to help rekindle the old argument of price-quality 
epectation among customers. Such a study will provide bank managers with further and 
deeper insight into service quality, price expectations and customer satisfaction with retail 
bank services.

The study is expected to make two major contributions to the literature on retail bank 
marketing. First, it provides an integrated model for investigating perceived service quality 
and customer satisfaction in retail banks. Second, the moderating role of price is introduced 
to help understand the influence of price on the relationship between service quality 
dimensions and customer satisfaction. Moreover, the study will also contribute to the stream 
of ongoing research (Narteh and Kuada, 2014; Hinson et al., 2011; Katono, 2011) on service 
quality and customer satisfaction with retail bank services and respond to the call by Bricks 
et al. (2010) for country-specific studies on retail bank service quality in Sub-Saharan Africa.

The paper after the background discussions continues with the literature review on 
service quality, bank service quality and customer satisfaction in retail banks. This is 
followed by the conceptual framework and hypothesis development for the study. The next 
section is used to discuss the methodology guiding the empirical investigation. This is 
followed by the data analysis, results and discussions. The last section discusses the 
implication of the findings and the paper ends with possible limitations and directions for 
future studies.

**Literature review**

**Service quality**

One attribute that has gained the attention of researchers in services marketing is service 
quality (Parasuraman et al., 1988; Day, 1969; Wong and Zhou, 2006; Olorunniwo et al., 2006; 
Petridou et al., 2007). The extant literature suggests that service quality is determined by 
the difference between customer expectations of service provider’s performance and the 
evaluation of the actual service received (Parasuraman et al., 1988). Service quality has also 
been conceptualized as a focused evaluation that reflects the customer’s perception of 
specific dimensions of service (Hinson et al., 2006). In addition, Parasuraman et al. (1985) 
defined service quality as the degree and direction of discrepancy between consumer’s
perception and expectations in terms of different but relatively important dimensions of service. Service quality in the banking industry has been measured with different dimensions resulting in different scales. These are discussed below.

**Bank service quality models**

Service quality in retail banks has attracted wide researchers and practitioners attention (Lee et al., 2011; Korda and Snoj, 2010). A detailed review of the literature indicates that various models and scales have been used to study service quality in retail banks. The field could be divided into threefold: SERVQUAL advocates, modified SERVQUAL advocates and new model advocates. The review below sheds light on some of the major studies in these fields.

**SERVQUAL model.** The SERVQUAL model, postulated by Parasuraman et al. (1988), has received wide research attention and application in the retail bank service quality literature. The model is anchored on the position that service quality is measured using five major factors of reliability, tangibles, empathy, assurance and responsiveness (Parasuraman et al., 1988). Using the model to study retail bank service quality, the authors found reliability as the most significant dimension of service quality that predicted customer satisfaction. Studies by Asubonteng et al. (1996) confirmed the reliability and validity of the SERVQUAL model.

Using the SERVQUAL scale, Ravichandran et al. (2010) in India measured service quality and customer satisfaction and found that only responsiveness was significant in predicting customer satisfaction. Ladhari et al. (2011) discovered that empathy and reliability dimensions of service quality have strong influence on re-purchase intentions, satisfaction and loyalty in Canada while, reliability and responsiveness were the highest in determining customer satisfaction and loyalty in Tunisia. Arashi et al. (2005) in Greek Cypriot examined also service quality in banks and found out that reliability was the strongest predictor of service quality and customer satisfaction. Studies by Newman (2001), using the SERVQUAL model in the UK has shown that, an un-weighted SERVQUAL measure failed to gauge customer’s priorities across the five service quality dimensions and was insensitive to customer product ownership and service encounter. The list of studies is almost endless.

**Modified SERVQUAL models for bank service quality**

Due to the criticisms against the SERVQUAL model (Cronin and Taylor, 1992), other researchers have modified the dimensions by adding or deleting variables in order to determine service quality. Narteh (2013a) used a modified scale consisting of reliability, responsiveness, ease of use, convenience, fulfillment, security, and accuracy, which he termed, ATMqual, to measure ATM service quality. The results of the study showed that only security and privacy were not major ATM service quality issues in the Ghanaian context. Further, investigation by Yavas et al. (1997) in Turkey applied three dimensions in the SERVQUAL model: tangibles, responsiveness and empathy to examine the effects of service quality on customer satisfaction, complaint behavior and commitment. The findings of the study showed that, empathy mostly predicted customer satisfaction, complaint behavior and commitment. The study also echoed the need to examine the cultural context within which the SERVQUAL model could be applied. Bloemer et al. (1998) in the Netherlands used reliability, empathy, efficiency, interest rates, procedures, expertise, access to money to examine service quality and satisfaction and its impacts on customer loyalty. Reliability was observed to be the most important variable influencing customer loyalty. In addition, studies by Hossain and Leo (2009) in Qatar, using four variables of reliability, tangibles, competence and empathy to measure customer perception of service quality showed that tangibles had high ratings on service quality in retail banks. Other researchers (Korda and Snoj, 2010), also modified the SERVQUAL to measure service quality in retail banks in Slovenia.
New models used for bank service quality

The inability of both the SERVQUAL and the modified SERVQUAL instruments to capture all the dimensions of retail bank service quality motivated other researchers to develop models and new scales to measure retail bank service quality. Aldlaigan and Buttle (2002) developed the SYSTRA-SQ model consisting of system/organizational and transactional dimensions of service performance and quality, to measure service quality in UK banks. The study found that, the organization service system and transactional quality of banks significantly predicts service quality and satisfaction of customers. Similarly, Bahia and Nantel (2000) developed the BSQ model, consisting of 31 items and six dimensions; tangibles, price, access, effectiveness and assurance, service portfolios and reliability, to measure bank service quality in Canada. The study concluded that, effectiveness, price and reliability were dominant and significant dimensions of service quality. In addition, the study concluded that dimensions in the BSQ model were more reliable than SERVQUAL dimensions.

Like the SERVQUAL model, the BSQ model has also been widely applied to measure service quality in retail banks. For instance, Glaveli et al. (2006) used the BSQ model to measure service quality in the context of five Balkan countries (Bulgaria, Albania, FYROM, Serbia and Greece) and found out that the indicators performed differently based on the context of the study. The findings from these studies revealed that, effectiveness, assurance and service portfolio were highly significant in Greece, while, tangibles, reliability and service portfolio were significant dimensions in the Bulgarian context (Petridou et al., 2007). In addition, price and assurance (Serbia), service portfolio, reliability (Albania), effectiveness and price (FYROM) were found to be significant dimensions of bank service quality in these countries. Moreover, Petridou et al. (2007) also used the BSQ scale to measure service quality in the retail banks of Greece and Bulgaria. The study found differences in customer evaluations of the dimensions of the model and attributed this to differences in the economic environment of the two countries. Earlier on, McDougall and Levesque (1994) used outcome, process, competitive interest rates, convenience and tangibles to measure service quality and found that all the indicators significantly measured retail banking service quality in Canada. In addition, Avkiran (1994) examined service quality and satisfaction, with the constructs of staff conduct, communication, credibility, responsiveness, access to branch management and teller services. The findings of the study showed that out of the six dimensions conceptualized, four dimensions were found to be significant in influencing customer satisfaction. Staff conduct, communication, access to teller services and credibility, significantly predicted customer satisfaction. Karatepe et al. (2005) and Karatepe (2011), examined service quality in Cyprus using service environment, reliability, empathy and interaction quality and found that interaction quality was rated high in determining service quality. Moreover, Hossain et al. (2014) validated some scales of Karatepe (2011) with studies in Australia and Bangladesh, and found that interaction quality has the greatest significance in influencing service quality and customer satisfaction. With regard to differentiation between private and public banks, Kamble et al. (2011) used effectiveness, access, tangibles, price, and reliability to measure service quality in private and public banks in India, and found that the private banks performed better under effectiveness, access, and tangibles while public banks performed better in price and reliability.

The review revealed that reliability, tangibles and assurance are the most commonly used variables to measure retail bank service quality (Ladhari et al., 2011; Arasli et al., 2005; Narteh, 2013b; Bloemer et al., 1998; Bahia and Nantel, 2000; Petridou et al., 2007; Glaveli et al., 2006). Moreover, the most popular models used are the SERVQUAL and the BSQ models. These models were used independent of the other without any attempt at integration. This study set out among others to address this research gap by integrating the
SERVQUAL and the BSQ models to measure retail bank service quality. This approach responds to the call by Choudhury (2013) for modification of existing scales in order to measure retail bank service quality.

Bank service quality and customer satisfaction
Customer satisfaction is an important concept in consumer research. It is linked to a number of business outcomes such as customer loyalty resulting in the payment of premium prices, re-purchase intentions and positive word-of-mouth (Jamal and Naser, 2002; Al-Eisa and Alhemoud, 2009; Senić and Marinković, 2014) and provides the basis for sustained competitive advantage (Midoro et al., 2005). There is general agreement in the literature that customer satisfaction is a post consumption experience and as such, Olorunniwo et al. (2006) cited in Al-Eisa and Alhemoud (2009) conceptualized customer satisfaction as a customer’s fulfillment response following the consumption experience. In the same way, customer satisfaction is viewed as the individual’s perception of the performance of the product or service in relation to expectations (Torres and Kline, 2006). Similarly, Kotler and Keller (2013, p. 110) defined customer satisfaction as “a person’s feeling of pleasure or disappointment which resulted from comparing a product’s perceived performance or outcome against his or her expectations.” Two issues of satisfaction have often been raised in the literature, whether to evaluate it on a transaction-specific basis or evaluate it in terms of overall or cumulative experience (Theodoridis and Chatzipanagiotou, 2009). While the former considers satisfaction to be a “post-choice evaluative judgement of a specific purchase occasion” (Anderson et al., 1994), the later views satisfaction across a series of purchase occasions, thereby resulting in an overall evaluation over time.

Retail banking is a high involvement service characterized mostly by frequent and long-term interactions. As a result, customers are likely to visit their banks over a number of times within a period to enable them conduct their transactions which makes it imperative to evaluate their satisfaction over time across a number of transactions. As a result, the current study views satisfaction as an overall judgment of customers of a firm’s products and services over a defined period. This means the study adopts the cumulative measure of satisfaction which is consistent with the works of (Oliver et al., 1997; Torres and Kline, 2006; Theodoridis and Chatzipanagiotou, 2009). The nine variables which measure bank service quality are posited to have a positive relationship with customer satisfaction and are discussed in the hypothesis in the next section.

Model and hypothesis development
The aim of the study is to develop an integrated framework for measuring retail bank service quality. An integration of the SERVQUAL and BSQ models resulted in nine variables which formed the basis of the framework for the study. The nine constructs are tangibles, reliability, assurance, empathy, responsiveness, access, price, effectiveness and service portfolios. Price on the other hand is seen as a moderator of this relationship. Tangibles and reliability appeared in both scales and were therefore used only once. The model is illustrated in Figure 1. The next section is used to discuss variables of the model and the hypothesized relationships.

![Research model](image_url)
Tangibles. Mersha et al. (2012) opined that the tangible dimension is what makes a product or service practical and usable for customers. In most cases, tangible evidence is limited to the service provider’s physical facilities, equipment, and personnel (Parasuraman et al., 1985, p. 42). Mukherjee et al. (2003) found that investing in tangible features alone cannot solve customer dissatisfaction problems in banks. A study conducted in Tunisia and Canada showed that the tangible dimension was of little consequence to customer service quality perception (Ladhari et al., 2011). Brady and Cronin (2001) also concluded that the tangibles dimension is not identified as a descriptor because customers use tangibles as a proxy for evaluating service outcomes. However, the studies of Petridou et al. (2007) in Bulgaria found the importance of tangibles in predicting customer satisfaction in retail banks. The need for further clarity is on the construct is obvious. Therefore, the first hypothesis for the study is stated as:

**H1.** Tangibles is significantly and positively related to customer satisfaction in the Ghanaian retail banks.

Reliability. Reliability is one of the most used indicators to measure service quality and has mostly been found to be the strongest predictor of customer satisfaction (Wolfinbarger and Gilly, 2003). It is described as the ability of service organizations to deliver good quality service (Abukhalifeh and Som, 2012). Reliability represents service firms’ ability to perform promised services dependably and accurately (Parasuraman et al., 1988). Reliability of banking service therefore means that there must be accuracy in billing; keeping accurate records as well as performing the service at the designated time. Kumar et al. (2010) found that reliability greatly influences customer perception of bank service quality in Malaysia while Chi Cui et al. (2003) also noted it to be a significant service quality in Korean banking institutions. Similarly, Ladhari et al. (2011) found that it predicts customer satisfaction in both an advanced Western country of Canada and an emerging African developing economy of Tunisia. Choudhury (2013) in India also found reliability to be the greatest in predicting customer satisfaction. This shows its universal relevance in predicting service quality in retail banks. The second hypothesis guiding the study is given as:

**H2.** Reliability significantly predicts service quality and customer satisfaction in retail banks in Ghana.

Responsiveness. Responsiveness describes the desire, willingness and readiness of service providers to assist customers and deliver prompt service (Abdullah et al., 2011). It requires bank services such as mailing a transaction slip, calling the customer back, and complaint handling to be delivered timeously. Responsiveness is critical for customer perception of bank service quality and that, banks must ensure that they are responsive in all fronts of customer engagements (Abdullah et al., 2011; Kumar et al., 2009). Kumar et al. (2009) note that, the “ability to conduct transaction in a short waiting period greatly influence customer perception of service quality and results in the reduction in loss of customers’ loyalty and the opportunities of cross-selling as well as customer attrition.” Responsiveness also measures the extent to which banks recover failed service (Priluck and Lala, 2009) and has a positive relationship with customer satisfaction (Magnini et al., 2007). In retail banking, Ravichandran et al. (2010) and Ladhari et al. (2011) found the importance of the construct in predicting customer satisfaction. Ghanaian retail banks are quick at responding to customer complaints and are using various techniques to manage queues in the banking industry. As such, we hypothesize that:

**H3.** Responsiveness of banks will be positively and significantly related to customer satisfaction in the Ghanaian retail banks.

Assurance. Service quality assurance presupposes that employees have knowledge about the bank products and services, are courteous toward customers and can inspire trust and
confidence among customers (Kumar et al., 2010; Arasli et al., 2005). Thus, assurance is born out of the interaction between customers and bankers. The expression of respect, gratitude, friendliness and willingness to help customers in the service arena culminate in customer judgment of service quality (Kumar et al., 2009). Kumar et al. (2009) found assurance as an indicator which influences service quality perception in Malaysian banks and that it also influenced customer’s judgment of employee competence which is crucial in building customer trust. Assurance was found as a highly significant service quality dimension in Greece (Petridou et al., 2007) and in Serbia (Glaveli et al., 2006). Similarly, studies by Siddiqi (2011) in Bangladesh also confirmed that assurance highly predicts customer satisfaction. Therefore, we hypothesize that:

**H4.** Assurance by retail banks to customers will positively predict satisfaction with retail bank services in Ghana.

**Empathy.** Empathy concerns the provision of care and individualized attention to customers (Parasuraman et al., 1988). Thus, customers must be contacted on personalized basis and prefer services to be rendered to suit their preferences (Abukhalifeh and Som, 2012). Tsoukatos and Rand (2006) argued that service firms such as those in the banking industry, show empathy by ensuring customers are given individual attention; service operating hours are convenient and services rendered with customers’ best interests at heart as well as understanding specific needs of each customer. Kumar et al. (2009) posit that Malaysian customers place much premium on convenient working hours by banks. Similarly, studies by Siddiqi (2011) in Bangladesh confirmed that empathy highly predicts customer satisfaction. Ghana as country is noted to show high care and individual attention to people. This behavior if reflected in bank customers can lead to customer satisfaction. The next hypothesis is stated as:

**H5.** Empathy shown to customers will significantly influence their satisfaction with retail banking services in Ghana.

**Access.** Convenient access is of prime importance to banks and their customers as most customers expect to transact with their banks freely everywhere they go. This is a contribution to the prevailing thinking that today’s customers are demanding and stress on high service quality. Consequently, banks have considered the option of introducing SSTs (Eriksson and Nilsson, 2007) such as the ATMs (Narteh, 2013a), telephone banking (Akturan and Tezcan, 2012) and internet banking (Laforet and Li, 2005). These innovations improve general access to retail bank services and could impact positively on customer satisfaction. Access also relates to the ease with which customers can visit their bank branches and transact with tellers. The BSQ model views access as a critical service quality dimension (Bahia and Nantel, 2000). Avkiran (1994) found in Australia that access to bank branches and teller services greatly influenced customer satisfaction. However, access was lowly ranked as a service quality dimension in the studies of Petridou et al. (2007) and Glaveli et al. (2006). The Ghanaian Banking industry has 28 banks with a number of bank branches which are well equipped with teller services. This will likely improve customer satisfaction with access to retail bank services in Ghana. It is therefore stated for this study that:

**H6.** Access will improve service quality and positively increase customer satisfaction with retail bank services in Ghana.

**Service portfolios.** Service portfolio represents the bouquet of services that the service provider offers. Consumers perceive bundled services as likely to perform better than non-bundled ones due to the fact that individual services in the portfolio are thought to function together (Liu and Hu, 2011). Bahia and Nantel (2000) in the BSQ model defined service portfolio as the range, consistency and innovation products. In the banking industry,
customers expect a complete range of services and these must be communicated and provided to them appropriately. The service quality perception of a bank which keeps on introducing new and innovative products is likely to be rated high by most customers. New product development is a constant phenomenon in the Ghanaian banking industry (Ghana banking Survey, 2011). The influence of technology has helped to drive new processes, products and services in the sector. For instance, cheque clearing time has reduced drastically among banks, while mobile and telephone banking opportunities abound. The availability of ATMs, internet banking and SMS alert has also brought new communication techniques with customers. These are likely to have positive developments on customer behavior in the retail banks. The study states that:

H7. Service portfolios will significantly influence customer satisfaction in the retail banks in Ghana.

Effectiveness. Effectiveness refers to the effectual delivery of service and the ability of staff to inspire feeling of security (Spathis et al., 2004). It can further be interpreted to be the existence of harmony among personnel, the successful delivery of service, and the ability to incite feelings of safety. Due to the fact that banking is a service based sector, constrained by the peculiar characteristics of service, the customer-employee contact and its effectiveness has a major impact on the formation of customer perception of the service quality received (Gummerson, 1998). Effectiveness is closely connected to confidence in the banking system (Spathis et al., 2004). Previous research has shown that a high touch in the service delivery characterized by personal connectivity, rather than a high-tech approach (Malhotra et al., 2005) accentuate the role that effectiveness play in having a satisfied bank customer. This is consistent with both the majority of SERVQUAL studies (Tsoukatos, 2009) and the BSQ study in which effectiveness was found to be the most important dimension of service quality (Bahia and Nantel, 2000). Tsoukatos and Mastrojianni (2010) however opined that effectiveness is not the most important dimension of service quality in the banking sector. In spite of that, most studies concur that effectiveness is a key dimension of service quality in the banking sector. This leads to this hypothesis of the study that:

H8. Effectiveness is positively and significantly related to customer satisfaction in retail banks in Ghana.

The moderating role of price

Price is the monetary value placed on goods and services offered by the service providers to their customers. Gerrard and Cunningham (2001) are of the view that pricing incidents have to do with high prices, price increases, unfair and deceptive pricing and general problems associated with fees, charges, rates and price deals related to the service. Banks generally have a wide range of pricing options and the price that customers pay is generally dependent on volume and value of transactions, personal relationship with the bank and bargaining power of the customers. Research indicates that the price-quality link has not been well researched (Kim et al., 2006; Toncar et al., 2010). Prior studies have shown that high prices lead to high consumers’ perception of high quality of goods and services and vice versa. In a recent study, Toncar et al. (2010) found out that the degree to which customer’s price expectations are met influences their service quality perceptions. This makes us believe the price customers expect to pay will have a bearing on their service quality expectations. Expected price is defined as the price which a consumer thinks he/she will have to pay for a defined service (Toncar et al., 2010).

Pricing has been a contentious issue in the Ghanaian banking industry and most customers believe that the services are overpriced. Researchers like Gockel and Mensah (2006)
found that there is a wide spread between savings and lending rates in the Ghanaian banking industry which makes the cost of funds very expensive. Kim et al. (2006) indicate that price fairness influences trust and satisfaction of the customer to the service provider. If customers perceive that they are being overcharged, they will not trust the bank; and will be more likely to switch (Andaleeb and Caskey, 2007). Narteh (2013b) found out that pricing is a factor that influence customer switching of retail banks in Ghana. We therefore argue that prices will influence customer service quality expectations in the bank and influence their future behavioral intentions.

H9. Price moderates the relationship between service quality and customer satisfaction with retail bank services in Ghana.

Methodology

Research setting

The study aims at investigating service quality and customer satisfaction with retail bank service. Consistent with most studies on bank service quality (Petridou et al., 2007; Glaveli et al., 2006; Hinson et al., 2011), the current study is quantitative, using the survey method to gather data from respondents. The sample frame for the study is all the 28 banks operating in Ghana as at June 2015. Letters were sent to all the banks, explained the rationale of the study and requested their permission to participate. At the end of three weeks, 18 banks responded favorably to the requests and were used in the study. A list of customers who have opened current or savings accounts with the banks for at least one year (so they can rate the banks’ service quality and satisfaction) were obtained from the participating banks to serve as the respondents of the study. In total, 1,800 respondents (50 from each bank) was used.

Questionnaire was the data collection tool. The items of the questionnaire were anchored on a five-point Likert scale with 1 labeled as “strong disagree” and 5 labeled as “strongly agree.” The questionnaire was divided into three sections as: personal information on respondents; dimensions of bank service quality; and customer satisfaction. The items of the questionnaires were adopted from the SERVQUAL model (Parasuraman et al., 1988); BSQ index (Petridou et al., 2007; Glaveli et al., 2006; Abdullah et al., 2011). Customer satisfaction was conceptualized as an overall satisfaction rather than transaction-specific post purchase evaluation. A five-item questionnaire was adopted from the works of Al-Eisa and Alhemoud (2009), Theodoridis and Chatzipanagiotou, 2009) and Fornell (1992). The five items explored both customer’s overall satisfaction as well as their intention to continue to do business with the bank. To reduce potential bias resulting from forced response, “N/A” was included on each question as an option.

To ensure the validity of the questionnaire these steps were undertake. Two professors with special research focus on bank marketing were first contacted to review the research instrument in terms of contents and wording. Their recommendations were used to restructure the questionnaire. The resulting questionnaire was pilot-tested with 20 Executive MBA students of the University of Ghana Business School with wide experience in banking. Their responses further ensured that the contents and wording was improved to reflect the banking sector. Thus the research instrument was considered valid to be administered. As English language is the official language in Ghana, the respondents, both native and foreign spoke and understand a fair amount of the language and therefore there was no need for translation of the research instrument.

Two research assistants were hired and trained in the survey design and questionnaire administration. At the end of one month, a sample size of 560 respondents was collected out of a total 860 questionnaires administered to respondents. The Ghanaian banking industry has an almost equal number of foreign and local banks. Ten of the banks contacted were
local banks while the remaining eight were foreign owned. However, all the banking halls were manned by Ghanaian staff which ensured that services delivered was almost homogenous across the banks. The approach adopted is consistent with earlier studies by Narteh and Owusu-Frimpong (2011), Blankson et al. (2009) and Hinson et al. (2011) in the Ghanaian banking industry.

**Control**

Studies have shown that demographic variables normally impact on customer satisfaction behaviors (Jamal and Naser, 2002; Omar, 2008; Strombeck and Wakefield, 2008). As such, to partial out the effects of the demographic variables on the relationship between service quality and customer satisfaction, we controlled for the effects of age, education, gender, occupation and ownership of banks.

Based on the recommendations of Hair et al. (2010), confirmatory factor analysis (CFA) using AMOS version 22.0 was used to estimate the relationship between bank service quality and customer satisfaction.

**Demographic profile of the respondents**

Descriptive analysis indicates that 50.9 percent of the respondents were male while 49.1 percent were female. Majority of the respondents (52.4 percent) were aged from 20 to 30 years. There were also 33.0 percent within the ages of 31-40 and about 12.1 percent within the ages of 41-50. Approximately 1.2 percent each of the sampled respondents were below 20 years or above 50 years, respectively. On the education, majority of the respondents (86.9 percent) had degrees or post graduate degrees. Similarly, about 65.5 percent of the respondents were salaried employees, 26.7 percent were students while 7.6 percent were self-employed with only 0.3 percent described as unemployed. Furthermore, nationality statistics of the respondents indicated that 80.9 percent were Ghanaians whereas the remaining 19.1 percent were foreigners.

Finally, about 82 percent had dealt with their banks for more than five years. The remaining 18 percent were customers who have dealt with their banks for either five years or below. Table I represents the demographic profile of the sampled respondents for the survey.

**CFA**

Structuring equation modeling (SEM) using Amos 22.0 was used for measurement scale validation and structural analysis. The two-step process, as suggested by Anderson and Gerbing (1988), using a CFA and structural analysis was adopted. The estimation of the structural model is done after the measurement model is assessed (Hair et al., 2010). The measurement model involves conducting a CFA for assessing the contribution of each indicator variable and for measuring the adequacy of the measurement model. Model specification is the first step in which the adequate sample size of 560 and the multivariate normality distribution in the data set guaranteed the use of the maximum likelihood method in the estimation (Byrne et al., 2010).

In the second stage, an iterative model specification is done in order to develop the best set of items to represent a construct through refinement and retesting. At this stage, items that do not meet the validity and reliability tests are dropped (Byrne et al., 2010). The final stage is the estimation of the goodness of fit parameters of the overall model to test the extent to which the data support the research model. The most commonly used parameters are the likelihood ratio $\chi^2$, the ratio of $\chi^2$ to degrees of freedom ($\chi^2$/df), the root mean square error of approximation (RMSEA), and comparative fit index (CFI). As indicated in Table II, the measurement model results showed a very good model fit with $\chi^2 = 708.66$ (df = 428), $\chi^2$/df = 1.66, CFI = 0.958, TLI = 0.952 and NFI = 0.902. The RMSEA was 0.045, PCFI = 0.827 and PNFI = 0.778.
Reliability and validity test

Two types of reliability tests were used in this study and they include internal consistency and construct reliability (Fornell and Larcker, 1981; Hair et al., 2010). Cronbach’s α coefficients, through SPSS version 20.0 was used to test the internal consistency of the instrument. The α coefficient measures the extent to which the multiple indicators for a latent variable cluster together. For unidimensional scales, a Cronbach’s α value of 0.6 or more is considered acceptable (Nunnally, 1978). The results indicate high Cronbach’s α results for the items ranging between 0.6 and 0.9 as provided in Table II. For SEM, construct reliability is measured using composite reliability (CR) because it is more parsimonious than the Cronbach’s α (Bagozzi and Yi, 1988). Thus, in Table II CR values also range from 0.8 to 0.9, which are in excess of the recommended threshold value of 0.7 (Hair et al., 2010).

According to Hair et al. (2010), validity measures the extent to which the set of indicators accurately represent a construct. In this study, two measures of validity were tested; convergent validity and discriminant validity. Convergent validity measures the degree to which the items truly represent the intended latent construct. Convergent validity is therefore assessed by factor loadings and average variance extracted (AVE) (Hair et al., 2010). A rule of thumb is that the factor loadings should be at least 0.50 and ideally 0.7 or higher while all factor loadings should be statistically significant (Hair et al., 2010). Following the rules described above, nine items were deleted from their indicators because...
of low loadings, re-specifications and retesting. In addition, the AVE from items by their respective constructs should be greater than the variance unexplained (i.e. AVE > 0.50). The results presented in Table III indicate AVE values between 0.5 and 0.79. The values are all greater than 0.50, thereby meeting the AVE criteria set by Fornell and Larcker (1981). The loadings and the AVE results indicated convergent validity.

<table>
<thead>
<tr>
<th>Item description</th>
<th>Loadings (t-value)</th>
<th>Cronbach’s α</th>
<th>CR</th>
<th>AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Tangibles</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The physical facilities are visually appealing</td>
<td>0.71 (fixed)</td>
<td>0.70</td>
<td>0.78</td>
<td>0.54</td>
</tr>
<tr>
<td>Staff at my bank are professional and neat in appearance</td>
<td>0.75 (11.30***)</td>
<td>0.75</td>
<td>0.78</td>
<td>0.50</td>
</tr>
<tr>
<td>My bank has modern equipment</td>
<td>0.75 (11.30***)</td>
<td>0.75</td>
<td>0.78</td>
<td>0.50</td>
</tr>
<tr>
<td><strong>Reliability</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Staff at my bank perform services at the right time</td>
<td>0.79 (fixed)</td>
<td>0.74</td>
<td>0.78</td>
<td>0.54</td>
</tr>
<tr>
<td>Staff tell customers exactly when services will be performed</td>
<td>0.78 (14.20***)</td>
<td>0.78</td>
<td>0.80</td>
<td>0.54</td>
</tr>
<tr>
<td>My bank provides a precise filing system</td>
<td>0.62 (11.15***)</td>
<td>0.74</td>
<td>0.87</td>
<td>0.54</td>
</tr>
<tr>
<td><strong>Responsiveness</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Staff at my bank give prompt service to customers</td>
<td>0.72 (fixed)</td>
<td>0.72</td>
<td>0.86</td>
<td>0.54</td>
</tr>
<tr>
<td>Staff are never too busy to respond to customers request</td>
<td>0.69 (12.23***)</td>
<td>0.69</td>
<td>0.86</td>
<td>0.54</td>
</tr>
<tr>
<td>Staff at my bank have convenient hours for all their customers</td>
<td>0.68 (11.90***)</td>
<td>0.68</td>
<td>0.86</td>
<td>0.54</td>
</tr>
<tr>
<td>Staff are consistently courteous with their customers</td>
<td>0.77 (13.67***)</td>
<td>0.77</td>
<td>0.86</td>
<td>0.54</td>
</tr>
<tr>
<td>Staff understand the specific needs of their customers</td>
<td>0.72 (12.65***)</td>
<td>0.72</td>
<td>0.86</td>
<td>0.54</td>
</tr>
<tr>
<td>Staff at my bank are always willing to help customers</td>
<td>0.81 (14.33***)</td>
<td>0.81</td>
<td>0.86</td>
<td>0.54</td>
</tr>
<tr>
<td><strong>Service portfolio</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My bank provides internet banking</td>
<td>0.82 (fixed)</td>
<td>0.76</td>
<td>0.78</td>
<td>0.64</td>
</tr>
<tr>
<td>My bank provides SMS banking</td>
<td>0.77 (8.67***)</td>
<td>0.77</td>
<td>0.80</td>
<td>0.77</td>
</tr>
<tr>
<td><strong>Assurance</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Customers feel safe while services are being provided by my bank</td>
<td>0.88 (fixed)</td>
<td>0.88</td>
<td>0.80</td>
<td>0.77</td>
</tr>
<tr>
<td>I have a feeling of safety when doing bank transactions</td>
<td>0.87 (16.03***)</td>
<td>0.87</td>
<td>0.80</td>
<td>0.77</td>
</tr>
<tr>
<td><strong>Price</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest on loans are reasonable</td>
<td>0.62 (fixed)</td>
<td>0.77</td>
<td>0.77</td>
<td>0.55</td>
</tr>
<tr>
<td>The bank contacts me whenever there is a service charge review</td>
<td>0.77 (11.14***)</td>
<td>0.77</td>
<td>0.77</td>
<td>0.55</td>
</tr>
<tr>
<td>The bank provides me with good explanations of service fees</td>
<td>0.87 (12.08***)</td>
<td>0.87</td>
<td>0.77</td>
<td>0.55</td>
</tr>
<tr>
<td>The bank provides reasonable fees for administration of accounts</td>
<td>0.76 (11.03***)</td>
<td>0.76</td>
<td>0.77</td>
<td>0.55</td>
</tr>
<tr>
<td>The bank keeps me informed whenever there is new service solution</td>
<td>0.76 (11.01***)</td>
<td>0.76</td>
<td>0.77</td>
<td>0.55</td>
</tr>
<tr>
<td>There is precision on my account statements</td>
<td>0.64 (9.71***)</td>
<td>0.64</td>
<td>0.77</td>
<td>0.55</td>
</tr>
<tr>
<td><strong>Empathy</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Staff show sincere interest in solving customers problems</td>
<td>0.84 (fixed)</td>
<td>0.87</td>
<td>0.81</td>
<td>0.59</td>
</tr>
<tr>
<td>Staff have knowledge to answer customers questions</td>
<td>0.69 (13.66***)</td>
<td>0.87</td>
<td>0.81</td>
<td>0.59</td>
</tr>
<tr>
<td>Staff have customers best interest at heart</td>
<td>0.77 (15.61***)</td>
<td>0.87</td>
<td>0.81</td>
<td>0.59</td>
</tr>
<tr>
<td><strong>Access</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Waiting time is not too long in my bank</td>
<td>0.81 (fixed)</td>
<td>0.81</td>
<td>0.80</td>
<td>0.76</td>
</tr>
<tr>
<td>Queues at the bank move quickly during transactions</td>
<td>0.93 (15.31***)</td>
<td>0.93</td>
<td>0.80</td>
<td>0.76</td>
</tr>
<tr>
<td><strong>Customer satisfaction</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am satisfied with the services of my bank</td>
<td>0.90 (fixed)</td>
<td>0.90</td>
<td>0.92</td>
<td>0.79</td>
</tr>
<tr>
<td>This bank meets my expectations</td>
<td>0.91 (26.24***)</td>
<td>0.90</td>
<td>0.92</td>
<td>0.79</td>
</tr>
<tr>
<td>I will remain with this bank for a long time</td>
<td>0.87 (23.27***)</td>
<td>0.87</td>
<td>0.92</td>
<td>0.79</td>
</tr>
<tr>
<td>I will patronize other services of my bank</td>
<td>0.85 (22.24***)</td>
<td>0.85</td>
<td>0.92</td>
<td>0.79</td>
</tr>
<tr>
<td>Overall, I am satisfied with the service quality of the bank</td>
<td>0.90 (25.49***)</td>
<td>0.90</td>
<td>0.92</td>
<td>0.79</td>
</tr>
<tr>
<td><strong>Effectiveness</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My bank has well trained personnel at their disposal</td>
<td>0.842 (fixed)</td>
<td>0.82</td>
<td>0.84</td>
<td>0.69</td>
</tr>
<tr>
<td>There is consistency in the actions and decisions of my bank’s personnel</td>
<td>0.840 (7.976***)</td>
<td>0.84</td>
<td>0.84</td>
<td>0.69</td>
</tr>
<tr>
<td>My bank is effective in carrying out its services</td>
<td>0.872 (8.456***)</td>
<td>0.84</td>
<td>0.84</td>
<td>0.69</td>
</tr>
</tbody>
</table>

**Notes:** AVE, average variance extracted; CR, composite reliability; SD, standard deviation; α, Cronbach’s α. ***p < 0.001

Table II. Measurement model: constructs, items, loadings and reliability estimates
Discriminant validity measures the extent to which latent factors are distinct, i.e. they should not correlate so highly that they seem to measure the same underlying dimension (Siekpe, 2005). Discriminant validity is established if the AVE of a variable (within factor shared variance) is larger than the squared correlation coefficients between variables (Fornell and Larcker, 1981). The results in Table III provide support to indicate strong discriminant validity.

Structural model
The hypothesized structural model was then estimated to assess path estimates and overall model fit. The analysis demonstrated an acceptable fit to the data. The major fit indices are: $\chi^2 = 708.66$, $\chi^2/df = 1.66$, CFI = 0.958, TLI = 0.952, NFI = 0.92, RMSEA = 0.045, PNFI = 0.778. The constructs and the specified paths account for a significant portion of the variance in the endogenous constructs posited.

The result of the hypothesis testing is indicated in Table IV. In the initial model (i.e. direct relationship), five of the proposed hypothesis were significant in predicting customer satisfaction. In order of importance, the results reveal that customer satisfaction is influenced by “Empathy” ($\beta = 0.665$, $p < 0.001$), “Reliability” ($\beta = 1.681$, $p < 0.01$), “Price” ($\beta = 1.408$, $p < 0.001$), “Tangible” ($\beta = 1.034$, $p < 0.01$) and “Assurance” ($\beta = 1.408$, $p < 0.001$). The result shows that service quality dimensions explained 0.69 or 69 percent variation in customer satisfaction.

In the second model, the moderated result indicates that in addition to the four (less price) service quality dimensions that were already significant in predicting customer satisfaction, three others, namely access, service portfolio and responsiveness were also significant predictors of customer satisfaction.

Discussion
This study was conducted to determine the dimensions of bank service quality and how they predict customer satisfaction in the Ghanaian banking industry. An integration of the SERVQUAL and the BSQ scales was used to measure bank service quality and how they predicted customer satisfaction with the result being moderated with price. The results indicate that, a 29-item scale, consisting of the five constructs of the SERVQUAL scale (tangibles, reliability, assurance, responsiveness and empathy) and four factors from the BSQ scale (service portfolio, access, effectiveness and price) determined bank service quality in the Ghanaian banking industry. The finding resonates with authors who have advocated for a modification of the SERVQUAL scale in other to measure bank service quality (Choudhury, 2013). The banking environment in Ghana keeps changing due to government legislations and the influence of technology on service delivery and as such, customer satisfaction...
perceptions of what constitutes service quality keep changing over time. It is necessary for regular assessment of service quality in order to identify and implement measures that meet and exceed customer needs. All the nine service quality factors found in this study have their own unique characteristics embedded in the Ghanaian banking sector.

In addition, the results of the direct model indicated that the five service quality indicators (tangibles, assurance, reliability, empathy, price) predicted customer satisfaction in the banking industry in Ghana. This finding supports the burgeoning field of research that has shown positive relationships between service quality dimensions and customer satisfaction in retail banking (Arasli et al., 2005; Ladhari et al., 2011; Ravichandran et al., 2010; Siddiqi, 2011; Hossain et al., 2014). Customer satisfaction is a major goal for the management of retail banks because of its positive impact on employee behavior (Gera, 2011; Siddiqi, 2011) and firm performance (Agathee, 2010; Jain and Gupta, 2004).

The moderated result indicates that seven service quality dimensions predicted customer satisfaction. Three more indicators (responsiveness, access, service portfolios) in addition to the four factors already mentioned (price was used as the moderator), became significant predictors of customer satisfaction. Only effectiveness was not significant in both cases. This indicates that the introduction of prices as a moderator improved the model and made more indicators significant predictors of customer satisfaction.

The controls also provided some insight into the model. Age, education and occupation were significant while gender and bank ownership were not significant. On bank ownership, the results may be an indication that both local and foreign banks have similar levels of service delivery. The use of training and technology has reduced differences in service delivery among these banks. The introduction of self-service technologies such as ATMs, internet banking and SMS alerts, which are to some extent dependent on the performance of external network service providers have blurred service delivery gaps among the banks.

<table>
<thead>
<tr>
<th>Path</th>
<th>Hypothesis</th>
<th>Std. $\beta$</th>
<th>SE</th>
<th>$t$-value</th>
<th>$p$-value</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tangible $\rightarrow$ Satisfaction</td>
<td>1</td>
<td>1.034</td>
<td>0.265</td>
<td>6.403</td>
<td>***</td>
<td>Supported</td>
</tr>
<tr>
<td>Reliability $\rightarrow$ Satisfaction</td>
<td>2</td>
<td>1.681</td>
<td>0.236</td>
<td>7.136</td>
<td>***</td>
<td>Supported</td>
</tr>
<tr>
<td>Responsiveness $\rightarrow$ Satisfaction</td>
<td>3</td>
<td>-0.426</td>
<td>0.244</td>
<td>-1.747</td>
<td>0.081</td>
<td>Not supported</td>
</tr>
<tr>
<td>Assurance $\rightarrow$ Satisfaction</td>
<td>4</td>
<td>1.408</td>
<td>0.163</td>
<td>2.506</td>
<td>***</td>
<td>Supported</td>
</tr>
<tr>
<td>Empathy $\rightarrow$ Satisfaction</td>
<td>5</td>
<td>0.665</td>
<td>0.202</td>
<td>3.288</td>
<td>***</td>
<td>Supported</td>
</tr>
<tr>
<td>Access $\rightarrow$ Satisfaction</td>
<td>6</td>
<td>-0.006</td>
<td>0.104</td>
<td>-0.060</td>
<td>0.952</td>
<td>Not supported</td>
</tr>
<tr>
<td>Service portfolio $\rightarrow$ Satisfaction</td>
<td>7</td>
<td>-0.159</td>
<td>0.130</td>
<td>-1.217</td>
<td>0.223</td>
<td>Not supported</td>
</tr>
<tr>
<td>Price $\rightarrow$ Satisfaction</td>
<td>8</td>
<td>1.408</td>
<td>0.243</td>
<td>5.791</td>
<td>***</td>
<td>Supported</td>
</tr>
<tr>
<td>Effectiveness $\rightarrow$ Satisfaction</td>
<td>9</td>
<td>0.008</td>
<td>0.128</td>
<td>0.066</td>
<td>0.947</td>
<td>Not supported</td>
</tr>
<tr>
<td>Price $\times$ tangible $\rightarrow$ Satisfaction</td>
<td>10</td>
<td>0.189</td>
<td>0.102</td>
<td>1.988</td>
<td>**</td>
<td>Supported</td>
</tr>
<tr>
<td>Price $\times$ reliability $\rightarrow$ Satisfaction</td>
<td>11</td>
<td>-0.832</td>
<td>0.151</td>
<td>-5.506</td>
<td>***</td>
<td>Supported</td>
</tr>
<tr>
<td>Price $\times$ responsiveness $\rightarrow$ Satisfaction</td>
<td>12</td>
<td>0.526</td>
<td>0.154</td>
<td>3.407</td>
<td>***</td>
<td>Supported</td>
</tr>
<tr>
<td>Price $\times$ service portfolio $\rightarrow$ Satisfaction</td>
<td>13</td>
<td>0.491</td>
<td>0.150</td>
<td>3.027</td>
<td>***</td>
<td>Supported</td>
</tr>
<tr>
<td>Price $\times$ assurance $\rightarrow$ Satisfaction</td>
<td>14</td>
<td>-0.189</td>
<td>0.100</td>
<td>-1.898</td>
<td>**</td>
<td>Supported</td>
</tr>
<tr>
<td>Price $\times$ empathy $\rightarrow$ Satisfaction</td>
<td>15</td>
<td>-0.409</td>
<td>0.111</td>
<td>-3.688</td>
<td>***</td>
<td>Supported</td>
</tr>
<tr>
<td>Price $\times$ access $\rightarrow$ Satisfaction</td>
<td>16</td>
<td>-0.289</td>
<td>1.113</td>
<td>1.057</td>
<td>***</td>
<td>Supported</td>
</tr>
<tr>
<td>Price $\times$ effectiveness $\rightarrow$ Satisfaction</td>
<td>17</td>
<td>0.018</td>
<td>0.082</td>
<td>0.222</td>
<td>0.824</td>
<td>Not supported</td>
</tr>
</tbody>
</table>

**Controls**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Std. $\beta$</th>
<th>SE</th>
<th>$t$-value</th>
<th>$p$-value</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>-0.019</td>
<td>0.142</td>
<td>0.072</td>
<td>0.971</td>
<td>NS</td>
</tr>
<tr>
<td>Age</td>
<td>-0.241</td>
<td>0.169</td>
<td>2.413</td>
<td>** S</td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>0.253</td>
<td>0.241</td>
<td>3.343</td>
<td>*** S</td>
<td></td>
</tr>
<tr>
<td>Occupation</td>
<td>0.209</td>
<td>0.203</td>
<td>2.016</td>
<td>** S</td>
<td></td>
</tr>
<tr>
<td>Ownership of bank (foreign/local)</td>
<td>-0.084</td>
<td>-0.209</td>
<td>-1.132</td>
<td>0.203</td>
<td>NS</td>
</tr>
</tbody>
</table>

**Notes:** Std. $\beta$, standardized regression coefficient; SE, standard error; $p$-value, significance; NS, not significant; S, significant. *$p < 0.1$; **$p < 0.05$; ***$p < 0.001$

### Table IV.
Analysis of hypothesized relationships
The other significant results on occupation, education and occupation are consistent with the literature (Jamal and Naser, 2002).

Assurance was the highly ranked bank service quality indicator that predicted customer satisfaction. The two variables that loaded on the assurance factor denotes how employees feel safe while conducting their banking transactions and the confidence that customers repose in the skills and knowledge of employees to respond to their needs and requests. Banking transactions are full of risks and employees must feel safe in using the services such as ATMs and internet banking and should not be amenable to fraudulent deals. Moreover, service failure in banking is almost inevitable and employees must have the skill and knowledge to address them. The findings confirmed the results from the studies of Petridou et al. (2007) and Siddiqi (2011) who found support for assurance as a significant retail bank service quality indicator.

Pricing was also significant in predicting customer satisfaction. The pricing indicator loaded with four variables, which shows the importance of pricing to the customers of an emerging market like Ghana. Pricing in retail banking is a major issue in Ghana as most customers are of the view that bank charges and other rates are unfair and unreasonable (Narteh, 2013b). The study found that the way prices are fixed, the charges that are levied on services provided by the banks and the extent to which price reviews are communicated to customers are significant quality dimensions cherished by Ghanaian retail bank customers. The results indicate that the price customers pay has an indication on their quality perception of banking services in Ghana. Price communicates quality in the absence of further cues. The result confirms the study of Narteh (2013b) who found poor pricing to be a factor that influenced customer’s switching banks in Ghana. The results also support the works of Kim et al. (2006) who found a positive and significant relationship between price fairness and customer satisfaction.

Moreover, tangibility also emerged as a bank service quality factor that predicts customer satisfaction. The buildings and other physical facilities of the bank, modern looking equipment and above all, the general appearance of staff were all critical in improving customer satisfaction. A clean environment and physical facilities as well as neat appearance of employees create good image of the bank which impacts positively on customer satisfaction with retail bank services. Tangibility has consistently appeared as a critical retail bank service quality dimension which significantly influences the service behavior of customers (Petridou et al., 2007; Glaveli et al., 2006; of Hossain and Leo, 2009. For instance, tangibility was found to be an important service quality dimension among Bulgarian retail bank customers (Glaveli et al., 2006). In addition, the study also confirms the results of Hossain and Leo (2009) in quarter who found tangibility as an important service quality dimension. Our results run counter to other studies (Ladhari et al., 2011; Mukherjee et al., 2003; Brady and Cronin, 2001) who found that Tangibility has no impact on customer satisfaction in retail banking services. The result may be an indication that the Ghanaian banking industry is still growing and tangible issues are still critical to customers.

Access, was also significant in predicting retail customers’ satisfaction with bank services in Ghana. Access involves the availability of teller services and networked bank branches (Narteh, 2013a) which provide customers with opportunities to obtain the banking services. Moreover, it also measures the queuing system in the banks- whether queues are slow and whether a fair system of first-come-first-serve is practiced in the banks. Access was found as a middle rank retail bank service quality dimension in this study which is consistent with previous research (Glaveli et al., 2006, Bahia and Nantel, 2000).

The issue which accessibility seems to address is either taken for granted or seen to form part of the core service delivery of the banks. For instance, it is taken for granted that all retail banks will have adequate branches, tellers and electronic products and manage the queuing system very well.
Reliability connotes the ability of customers to deliver error free services as and when promised. The indicator has been consistently used to measure service quality in retail banking. Two variables that loaded on the reliability factor deals with the promise by the banks to deliver error free services at the right time. The need to have clear service standards, communicated through service blue prints provide a measure of what customers expect as they visit their retail banks. The study confirms findings from the researches (Berry et al., 1988; Bloemer et al., 1998; Arasli et al., 2005; Gera, 2011; Ladhari et al., 2011) who found that reliability is an important service quality dimension which also influences customer satisfaction in retail banks.

Conclusions and implications of the study
The current study has made a major theoretical contribution to service quality in retail banking literature. Choudhury (2013) called on researchers to modify existing scales in order to help address the issues of retail bank service quality because not all the dimensions of the SERVQUAL model are relevant in every context for examining service quality. The current study has taken a giant step toward realizing this goal and has proposed and tested a new model, which is an integration of the SERVQUAL and BSQ models to measure retail bank service quality. The nine-factor model consisting, of five factors of the SERVQUAL model (empathy, assurance, reliability, responsiveness and tangible) and four factors of the BSQ model (service portfolio, price, effectiveness and access) is a significant addition to the literature. Prior to this study, the scales were treated differently and were never integrated for any study. We have shown from this study that an integration of existing scales provides a broader scale and promise for retail bank service quality research.

Moreover, prior studies have often assumed a direct relationship between retail bank service quality dimensions and customer satisfaction (Ladhari et al., 2011; Priluck and Lala, 2009). When we moderated the relationship with price, we saw a significant improvement in responsiveness, access and service portfolios in predicting customer satisfaction. This means that the price customers pay for their retail bank services heightens their service quality expectations. Managers of retail banks who intend to shape the service quality perceptions of their customers could integrate this with appropriate pricing mechanisms in order to realize this goal. Similarly, the study has answered the call by Bricks et al. (2010) for specific country studies of service quality in retail banks in Sub-Saharan Africa. The current study focused on Ghana, one of the promising and emerging countries in the sub-region.

In addition, the direct and moderated models found that eight service quality indicators used in this study have positive impact on customer satisfaction. A practical implication of the results is that it has provided critical issues for bank mangers to focus on in order to compete favorably in the Ghanaian banking sector to help delight customers. Managers of banks must focus and communicate their service quality in terms of reliability, price, access, tangibles, assurance, empathy, responsiveness, effectiveness and service portfolios in order to meet customers’ expectation, satisfy and retain them.

Finally, the study has some limitation which must be considered when interpreting the results. The study was conducted in one city – Accra using mostly an elitist clientele. The views of the extended population from other cities and including the less educated were not considered. Future research could replicate such studies in other countries with more a mixture of different respondents. Moreover, Hossain et al. (2014) argued that changes in economic conditions can affect customers’ quality perceptions and called for more longitudinal studies to capture service quality perceptions of customers over time. This study supports such sentiments since the current study was cross-sectional. The study found out that ownership of banks did not affect the significance of the results. This is intuitively surprising as one might think that foreign banks with their sophisticated
technology, management style and capital may deliver superior service quality than local banks. A further study could compare service quality dimensions among local and foreign banks in order to clarify and throw more light on this issue. Finally, the study has integrated just two models-BSQ and SERVQUAL models. Marketing literature has identified many service quality models such as BANKSERV, SYSTRAQ, etc. Future studies must consider integrating such models so that the field can benefit from broader scales for measuring service quality in retail banks. It is our hope that the field of marketing will benefit more with this approach.

References


Further reading


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