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### Effect of Service Quality on Customer Satisfaction and Loyalty in Ethiopian Private Banks

Alemayehu Balcha

South Agricultural Research Institute, Hawassa Agricultural Research Centre, Hawassa, Ethiopia, P.O.Box 06, Hawassa,  
Ethiopia

Corresponding Author: Alemayehu Balcha

#### Abstract

In Ethiopia, information on service quality, customer satisfaction, and loyalty in the banking sector in general and in private banks in particular is scarce. The primary objectives of this study were to determine whether customers of private banks in Hawassa, Ethiopia, are satisfied and loyal to their services, and to determine whether customer satisfaction plays a mediating role between service quality and customer loyalty. A self-administered questionnaire was used to collect primary data from 238 customers of nine private banks (response rate of  $195 = 81.93\%$ ). The questionnaire contained 18 items for the

five dimensions (tangibility, reliability, responsiveness assurance and empathy) of the SERVPERF model, and five items each for customer satisfaction and loyalty. Service quality, customer satisfaction, and loyalty were significantly correlated with service quality dimensions. Customer satisfaction was a strong partial mediator between service quality and customer loyalty. Present study showed that greater attention on reliability, responsiveness, and assurance dimensions would increase customer satisfaction and loyalty toward private banks.

**Keywords:** Customer Satisfaction, Loyalty, Private Banks, Service Quality, SERVPERF Model

#### Introduction

Customers' satisfaction and loyalty are important variables that determine the long-term profitability and survival of a business in an increasingly competitive market (Bhat *et al.*, 2018) <sup>[4]</sup>. Customer satisfaction is influenced by the dimensions of service quality, namely tangibility (physical facilities, equipment, appearance of employees), reliability (ability to consistently deliver the promised service), responsiveness (willingness to help customers and provide prompt service), assurance (knowledge and courtesy of employees and their ability to inspire trust), and empathy (caring and individualized attention that the company provides to its customers) (Parasuraman *et al.*, 1988) <sup>[24]</sup>. Customers using the same service will nevertheless have different levels of satisfaction because services are intangible, inseparable, perishable, and heterogeneous (Kotler and Keller, 2012) <sup>[17]</sup>. Several studies have shown that service quality influences customer loyalty through customer satisfaction (Siddiqi, 2011; Ngo and Nguyen, 2016; Kasiri *et al.*, 2017; Pakurár *et al.*, 2019; Supriyanto *et al.*, 2021) <sup>[26, 21, 16, 23, 29]</sup>. The delivery of high-quality services is essential for retaining existing customers as well as attracting new ones. Poor service quality, on the other hand, leads to dissatisfied customers who are more likely to switch to a competitor, and are less willing to recommend the company to others (Kotler and Keller, 2012) <sup>[17]</sup>.

There is limited information about service quality, customer satisfaction, and loyalty in Ethiopian banking sector in general, and in private banks in particular. The evaluation of existing service quality, customer satisfaction, and loyalty would help to improve these aspects in a business environment which is characterized by rapidly growing technologies, unstable economic conditions, fierce competition, and increasingly demanding customers (Kotler and Keller, 2012) <sup>[17]</sup>. Therefore, the primary objectives of this study were to determine whether customers of private banks in Hawassa, Ethiopia, are satisfied and loyal to their services, and to determine whether customer satisfaction plays a mediating role between service quality and customer loyalty.

## Literature Review

### Service Quality

A service is any act or performance offered to another that is essentially intangible and does not result in the possession of anything. The production of a service may or may not involve physical products (Kotler and Keller, 2012) [17]. On the other hand, service quality refers to the difference between customers' expectations of the service and their perceptions of the performance of the service actually offered (Parasuraman *et al.*, 1988) [24]. Customers' expectations are influenced by their knowledge of a company's products or services, marketing strategies used by the company, psychological state of the customer at the time of service offering, and customers' norms, values, backgrounds, and their relationships with the other companies (Kant and Jaiswal, 2017) [15].

The SERVQUAL model, developed by Parasuraman *et al.* (1988) [24], has been usually used to evaluate the quality of services. This model has five dimensions, namely tangibility, reliability, responsiveness, assurance, and empathy. Each of these dimensions consists of four or five questions, resulting in a total of 22 pairs of questions to test customers' expectations and perceptions simultaneously.

It has been reported that the evaluation of service quality using the SERVQUAL gap, which is perceptions minus expectations, has limited use. This is because answering similar questions about expectations and perceptions leads to fatigue, confusion, and low response rates in respondents. Moreover, simultaneous rating of expectations and perceptions influences how respondents view subsequent questions (Tourangeau and Rasinski, 1988) [31]. Respondents generally assign a higher score to the expectations component of the questionnaire than to the perceptions component (Smith, 1995) [28]. However, the SERVPERF model, a performance-only instrument, or the service perception component of the SERVQUAL model, better captures differences in the customers' overall perceptions of service quality (Cronin and Taylor, 1992; Brady *et al.*, 2002) [7, 5].

### Customer Satisfaction

Customer satisfaction is an emotional response that depends in intensity on how well a customer's expectations were met during or after the use of a particular good or service (Giese and Cote, 2000) [10]. Customers' perceptions of products or services performing better than expected leads to positive disconfirmation, inadequate performance leads to negative disconfirmation, and performance that meets expectations leads to zero disconfirmation (Furrer *et al.*, 2000; Sureshchandar *et al.*, 2002) [9, 30].

Customer satisfaction is influenced by the service quality dimensions (tangibility, reliability, responsiveness, assurance, and empathy), although the extent of influence of each dimension may vary from one situation to the other (Parasuraman *et al.*, 1988; Arasli *et al.*, 2005; Shanka, 2012; Gnawali, 2016; Kant and Jaiswal, 2017; Supriyanto *et al.*, 2021) [24, 2, 25, 12, 15, 29]. For example, the presence of physical equipment and the appearance of employees, as well as their communication skills, politeness, willingness, and ability to provide the promised service in a timely and accurate manner, influence customer satisfaction. However, due to the intangibility, inseparability, perishability, and heterogeneity of services, customer satisfaction is more influenced by the human aspects of service quality than by

the tangibles (Parasuraman *et al.*, 1988; Lenka *et al.*, 2009) [24, 18].

### Customer Loyalty

Customer loyalty includes both attitudinal and behavioral loyalty. Attitudinal loyalty refers to the positive propensity of customers toward goods and services based on their experiences. These customers are more likely to switch to a competing brand if it offers better quality at a lower price. In contrast, behavioral loyalty refers to customers' commitment to purchase a particular good or service despite competing alternatives in the market (Dick and Basu, 1994; Lenka *et al.*, 2009) [8, 18]. Indicators of loyalty generally include customers' lower intentions to switch to competitors (Chakravarty *et al.*, 2004) [6], as well as repurchase intentions and positive word-of-mouth referrals (Lenka *et al.*, 2009; Supriyanto *et al.*, 2021) [18, 29]. Although studies have shown that customer loyalty is positively correlated with service quality and customer satisfaction (Siddiqi, 2011; Ngo and Nguyen, 2016; Supriyanto *et al.*, 2021) [26, 21, 29], not all customers satisfied with service are always loyal (Supriyanto *et al.*, 2021) [29].

### Conceptual Framework and Hypotheses

Based on the literature review, the conceptual framework for the present study was presented in Fig 1, which begins with measuring service quality dimensions, namely tangibility, reliability, responsiveness, assurance, and empathy. It shows that service quality is an independent variable, customer satisfaction is a mediator, and customer loyalty is a dependent variable. In this study, the following hypotheses were investigated:

- 1) **H1:** Service quality significantly affects customer satisfaction.
- 2) **H2:** Service quality significantly affects customer loyalty.
- 3) **H3:** Customer satisfaction significantly affects customer loyalty.
- 4) **H4:** Service quality significantly affects customer loyalty in the presence of customer satisfaction.

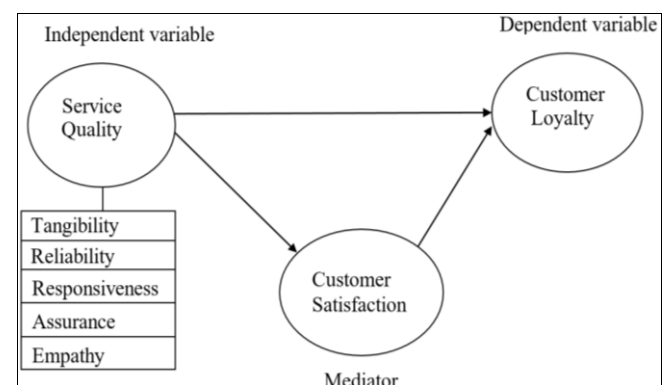


Fig 1: Conceptual framework for the study

## Research Method

### Description of the Study Area

This study was conducted in Hawassa, the capital city of the regional state of Sidama, which is 275 km south of Addis Ababa, the capital city of Ethiopia. The population of Hawassa is estimated to be 436,992 (<https://www.hawassa.gov.et/en/city/people>). At the start of this study in February, 2023, there were two public banks

(Commercial Bank of Ethiopia and Development Bank of Ethiopia) and 28 private banks in Hawassa. This study was based on conveniently selected customers from main branches of nine private banks, namely Addis International, Awash International, Bank of Abyssinia, Berhan, Dashen, Debub Global, Hibret, Nib International, and Wogagen banks, which differ in the number of branches they have, the number of years they have been in the market, and their financial performance ([https://en.wikipedia.org/wiki/List\\_of\\_banks\\_in\\_Ethiopia](https://en.wikipedia.org/wiki/List_of_banks_in_Ethiopia)). The main branches of these banks were selected for their high level of activity compared to other branches.

### Sample Size and Data Collection

According to Hair *et al.* (2019) [13], an acceptable sample size is one that includes at least 50, but preferably 100 or more observations. Alternatively, they recommend a minimum number of 5 to 10 respondents for each questionnaire item. Although a minimum of 140 respondents was required to complete the present questionnaire, which contained 18 items for service quality dimensions (Parasuraman *et al.*, 1988) [24] and five items for each of customer satisfaction and loyalty concepts (Lenka *et al.*, 2009; Mohsan *et al.*, 2011; Bhat *et al.*, 2018; Islam *et al.*, 2020) [18, 11, 4, 14], 238 self-administered questionnaires were conveniently distributed to volunteer customers who were able to complete the questionnaires. The questionnaire also included six personal profile questions.

Respondents were selected from each main branch bank based on their proportion of the total number of 198,000 customers in the main branches of nine private banks considered at the start of the study in February, 2023. A five-point Likert scale with the options: 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, and 5=strongly agree, was used to assess customers' perceptions of the services and their satisfaction and loyalty.

### Data Analysis

Data were analyzed using IBM SPSS statistics, version 23 (IBM Corporation, 2015) [32]. Pearson correlation analysis was performed between service quality, service quality dimensions, customer satisfaction and loyalty. In addition, a regression analysis was performed to determine the effects of the service quality dimensions on customer satisfaction and loyalty. Both simple and multiple regression analyses were conducted to examine the mediating role of customer satisfaction in the relationship between service quality and customer loyalty (Baron and Kenny, 1986) [3].

## Results

### Response Rates

After excluding incomplete responses, the valid response rate was 195 (81.93%) for 238 questionnaires. Awash International (15.15%), Bank of Abyssinia (12.63%), and Dashen (20.20%) banks accounted for most of the respondents because of their extensive customer bases (Table 1).

**Table 1:** Number of customers, sample size, frequency of responses, and response rate for main branches of nine private banks, Hawassa, Ethiopia, 2023

Bank	Number of customers	Percent	Frequency in the sample	Frequency of responses	% Response rate
Addis International	15000	7.58	18	13	7.56
Awash International	30000	15.15	36	32	15.13
Bank of Abyssinia	25000	12.63	30	28	12.61
Berhan	20000	10.10	24	17	10.08
Dashen	40000	20.20	48	44	20.17
Debub Global	15000	7.58	18	12	7.56
Hibret	17000	8.59	21	14	8.82
Nib International	16000	8.08	19	17	7.98
Wogagen	20000	10.10	24	18	10.08
Total	198000	100.00	238	195	100

Source: Researcher's survey, 2023

### Profiles of Respondents

Respondents' profile information included gender, age, occupation, education, experience with the bank, and type of account (Table 2). Male respondents accounted for 64.1% of the sample, while females accounted for 34.9%. The age groups 20-29 (17.9%), 30-39 (37.2%), and 40-49 (22.1%) years accounted for 77.20% of the respondents. 54.4% of respondents were government employees, followed by self-employed (26.7%) and business owners (17.4%), while the majority of respondents had 1-5 years (51.8%) and 6-10 years (25.6%) years of experience in using private bank services. Most respondents held a bachelor's (46.7%) and master's (29.7%) degree, while 10.8% had a diploma level of education. Most respondents had a saving account (52.8%) and a current account (44.6%), while a fixed account (3.6%) was the least common.

**Table 2:** Profiles of customers (n=195) of nine private banks, Hawassa, Ethiopia, 2023

Items	Frequency	Percent
<b>Gender</b>		
Male	127	65.1
Female	68	34.9
<b>Age</b>		
Below 20 years	4	2.1
20-29 years	35	17.9
30-39 years	92	37.2
40-49 years	43	22.1
50 years and above	21	10.8
<b>Occupation</b>		
Government employee	106	54.4
Student	3	1.5
Business owner	34	17.4
Self employed	52	26.7

<b>Education</b>		
Primary school	11	5.6
High school complete	14	7.2
Diploma	21	10.8
Bachelor's degree	91	46.7
Master's degree	58	29.7
<b>Experience with the bank</b>		
Less than one year	22	11.3
1- 5 years	101	51.8
6-10 years	50	25.6
11-15 years	17	8.7
More than 15 years	5	2.6
<b>Type of account</b>		
Savings account	103	52.8
Current account	86	44.1
Fixed account	6	3.1

Source: Researcher's survey, 2023.

### Validity and Reliability Tests

A valid measurement accurately measures the concept it is supposed to measure (Hair *et al.*, 2019) [13]. A pre-test of the questionnaire using 20 selected private bank customers showed that all 18 items of service quality, and 5 items for each of customer satisfaction, and loyalty were found to be valid.

When variables measure the same construct consistently, they are said to be reliable. The internal consistency of items which measure the same construct should be highly inter-correlated, and is commonly evaluated with the minimum Cronbach's alpha value of 0.70 (Hair *et al.*, 2019) [13]. In the present study, the service quality dimensions, customer satisfaction and loyalty had Cronbach's alpha values greater than 0.70 (Table 3 and Table 4), confirming the internal consistency of items employed to measure these concepts. Perhaps, the reliability of an instrument will be low when there are confusing questions, as well as when the respondents are unfamiliar with or do not care about the questions (Marczyk *et al.*, 2005) [19].

### Service Quality Dimensions

Table 3 showed that the mean scores for tangibility items ranged from 3.74 (the appearance of the physical facilities of the bank is keeping with the type of services provided) to 4.19 (bank's employees are well dressed and appear neat), whereas the mean scores for reliability items ranged from 3.51 (when the bank promises to do something by a certain time, it does so) to 4.08 (the bank is dependable). Similarly, the mean scores of responsiveness items ranged from 3.71 (employees of bank are never too busy to respond to customer requests promptly) to 4.06 (employees of bank are always willing to help customers). The mean scores for the assurance items were 3.78 (you can trust employees of the bank), 3.91 (you feel safe in your transactions with the bank's employees), and 3.83 (employees of the bank are polite), whereas that of empathy items ranged from 3.35 (the bank has your best interests at heart) to 3.65 (employees of the bank understand what your needs are). The mean score of tangibility, reliability, responsiveness, assurance and empathy was 4.01, 3.78, 3.94, 3.84, and 3.53, respectively.

**Table 3:** Cronbach's alpha values, mean, and standard deviations of service quality dimensions for customers (n = 195) of nine private banks, Hawassa, Ethiopia, 2023

Dimension	Cronbach's alpha for dimensions	Cronbach's alpha if item deleted	Mean	SD <sup>1</sup>
<b>Tangibility</b>	<b>0.777</b>		<b>4.01</b>	<b>0.698</b>
The bank has up-to-date equipment		0.735	4.09	0.844
Bank's physical facilities are visually appealing		0.718	4.02	0.905
Bank's employees are well dressed and appear neat		0.727	4.19	0.908
The appearance of the physical facilities of the bank is keeping with the type of services provided		0.712	3.74	0.945
<b>Reliability</b>	<b>0.790</b>		<b>3.78</b>	<b>0.749</b>
When the bank promises to do something by a certain time, it does so		0.737	3.51	1.012
The bank is dependable		0.736	4.08	0.870
The bank provides its service at the time it promises to do so.		0.719	3.59	0.987
The bank keeps its records accurately		0.760	3.92	0.949
<b>Responsiveness</b>	<b>0.834</b>		<b>3.94</b>	<b>0.807</b>
You receive prompt service from bank's employees		0.769	4.04	0.946
Employees of bank are always willing to help customers		0.741	4.06	0.871
Employees of bank are never too busy to respond to customer requests promptly		0.802	3.71	0.974
<b>Assurance</b>	<b>0.850</b>		<b>3.84</b>	<b>0.818</b>
You can trust employees of the bank		0.761	3.78	0.966
You feel safe in your transactions with the bank's employees		0.795	3.91	0.895
Employees of the bank are polite		0.813	3.83	0.936
<b>Empathy</b>	<b>0.873</b>		<b>3.53</b>	<b>0.819</b>
The bank give you individual attention		0.825	3.62	0.979
Employees of the bank give you personal attention		0.825	3.49	0.981
Employees of the bank understand what your needs are		0.846	3.65	0.980
The bank has your best interests at heart		0.855	3.35	0.904

<sup>1</sup>SD = standard deviation.



**Customer Satisfaction and Loyalty**

Table 4 showed that the mean scores for the customer satisfaction items ranged from 3.71(I am satisfied with individual attention and complaint handling of the bank, and I am satisfied with products and services offered by my bank) to 4.05 (Overall, I am satisfied with the physical

setting of the bank), whereas the mean scores for the customer loyalty items ranged from 3.35(I have no intention to switch over to other) to 3.77 (I will continue to use this banking service in the future). The mean score of customer satisfaction and loyalty was 3.87, and 3.59, respectively.

**Table 4:** Cronbach’s alpha values, mean, and standard deviations of customer satisfaction and loyalty for customers (n = 195) of nine private banks, Hawassa, Ethiopia, 2023

Dimension	Cronbach's alpha for dimensions	Cronbach's alpha if item deleted	Mean	SD <sup>1</sup>
<b>Customer satisfaction</b>	<b>0.878</b>		<b>3.87</b>	<b>0.741</b>
Overall, I am satisfied with the physical setting of the bank		0.843	4.05	0.817
I am satisfied with the banking skills, courtesy and friendliness of bank employees		0.842	4.02	0.861
I am satisfied with individual attention and complaint handling of the bank		0.859	3.71	0.832
I am satisfied with employees’ response and prompt services provided by my bank		0.847	3.88	1.023
I am satisfied with products and services offered by my bank		0.867	3.71	0.969
<b>Customer loyalty</b>	<b>0.857</b>		<b>3.59</b>	<b>0.807</b>
I recommend this bank to families, relatives and friends		0.830	3.68	0.931
I will continue to use this banking service in the future		0.812	3.77	0.947
I often tell positive things about my bank to other people		0.819	3.59	1.043
I have no intention to switch over to other		0.852	3.35	1.056
I prefer this bank over other banks		0.820	3.54	1.075

<sup>1</sup>SD = standard deviation.

**Correlation Analysis**

Table 5 showed that the five service quality dimensions were positively correlated with service quality (r = 0.738 to 0.807, p < 0.01), customer satisfaction (r = 0.545 to 0.743, p < 0.01), and customer loyalty (r = 0.513 to 0.649, p < 0.01). The within-service quality dimensions correlation coefficients were also positive (r = 0.365 to 0.596, p < 0.01).

**Table 5:** Pearson correlation coefficients among service quality dimensions, service quality, and customer satisfaction and customer loyalty for customers (n = 195) of nine private banks, Hawassa, Ethiopia, 2023

Items <sup>1</sup>	REL	RES	ASS	EMP	SQ	CS	CL
TAN	0.596**	0.529**	0.466**	0.365**	0.738**	0.545**	0.513**
REL		0.559**	0.556**	0.469**	0.805**	0.651**	0.578**
RES			0.510**	0.548**	0.807**	0.743**	0.649**
ASS				0.575**	0.800**	0.638**	0.581**
EMP					0.766**	0.601**	0.522**
SQ						0.813**	0.727**
CS							0.821**

<sup>1</sup>TAN = tangibility; REL = reliability; RES = responsiveness; ASS = assurance; EMP = empathy; SQ = service quality; CS = customer satisfaction; CL = customer loyalty; \*\* = significant at p < 0.01 probability level.

**Regression Analysis**

F-test showed that the effects of tangibility, reliability, responsiveness, assurance, and empathy explained 68.9% of the variation in customer satisfaction and was significant (p = 0.000) (Table 6).

**Table 6:** Significance of regression model of service quality dimensions on customer satisfaction for customers (n = 195) of nine private banks, Hawassa, Ethiopia, 2023

Source of variation <sup>1</sup>	Sum of squares	df	Mean square	F	P
Regression	73.359	5	14.672	83.606	0.000
Residual	33.167	189	0.175		
Total	106.526	194			

<sup>1</sup>Dependent variable = customer satisfaction (CS); independent variables: tangibility, reliability, responsiveness, assurance, and

empathy; df = degree of freedom; R<sup>2</sup> = 0.689; standard error of the estimate (SE) = 0.419.

Table 7 demonstrated that each dimension of service quality had a statistically significant effect on customer satisfaction, except for tangibility. The unit change in reliability, responsiveness, assurance and empathy would increase customer satisfaction by 0.203, 0.385, 0.187 and 0.123 units, respectively. The standardized regression coefficient (β), or direct effect of reliability, responsiveness, assurance, and empathy on customer satisfaction was 0.205, 0.420, 0.206, and 0.132, respectively. Moreover, the tolerance and variance inflation factor (VIF) measurements of multicollinearity were more than 0.10 and less than 10, respectively.

**Table 7:** Regression coefficients for relationship between service quality dimensions and customer satisfaction for customers (n = 195) of nine private banks, Hawassa, Ethiopia, 2023

Model	Unstandardized coefficients		Standardized coefficients		P	Multicollinearity	
	B	SE	β	t		Tolerance	VIF <sup>1</sup>
(Constant)	0.202	0.197		1.022	0.308		
Tangibility	0.059	0.057	0.056	1.040	0.300	0.578	1.729
Reliability	0.203	0.057	0.205	3.587	0.000	0.505	1.979
Responsiveness	0.385	0.051	0.420	7.559	0.000	0.535	1.871
Assurance	0.187	0.050	0.206	3.747	0.000	0.542	1.843
Empathy	0.123	0.048	0.136	2.540	0.012	0.576	1.736

<sup>1</sup>VIF = variance inflation factor; SE = standard error of the estimate.

F-test showed that the effects of tangibility, reliability, responsiveness, assurance and empathy explained 54.4% of the variation in customer loyalty and was significant (p = 0.000) (Table 8).

**Table 8:** Significance of regression model of service quality dimensions on customer loyalty for customers (n = 195) of nine private banks, Hawassa, Ethiopia, 2023

Source of variation <sup>1</sup>	df	Sum of squares	Mean square	F	P
Regression	5	68.672	13.734	45.017	0.000
Residual	189	57.663	0.305		
Total	194	126.335			

<sup>1</sup>Dependent variable = customer loyalty (CL); independent variables: tangibility, reliability, responsiveness, assurance, and empathy; df = degree of freedom; R<sup>2</sup> = 0.544; standard error of the estimate (SE) = 0.552.

Table 9 showed that reliability, responsiveness and assurance dimensions had a statistically significant effect on customer loyalty, except for tangibility and empathy. The unit increase in reliability, responsiveness, and assurance would increase customer loyalty by 0.176, 0.343, and 0.209 units, respectively. The direct effect (β) of reliability, responsiveness, and assurance dimensions on customer loyalty was 0.163, 0.343, and 0.212, respectively.

**Table 9:** Regression coefficients for relationship between service quality dimensions and customer loyalty for customers (n = 195) of nine private banks, Hawassa, Ethiopia, 2023

Model	Unstandardized coefficients		Standardized coefficients		P
	B	SE	β	t	
(Constant)	-0.037	0.260		-0.144	0.886
Tangibility	0.115	0.075	0.099	1.538	0.126
Reliability	0.176	0.075	0.163	2.357	0.019
Responsiveness	0.343	0.067	0.343	5.103	0.000

**Table 10:** Significance of regression models to test customer satisfaction as a mediator between service quality and customer loyalty for customers (n = 195) of nine private banks, Hawassa, Ethiopia, 2023

Model <sup>1</sup>	Dependent variable	Independent variable(s)	Source of variation	Sum of squares	df	Mean square	F	P	R <sup>2</sup>	SE
1	CS	SQ	Regression	70.463	1	70.463	377.1	0.000	0.661	0.432
			Residual	36.063	193	6.187				
			Total	106.526	194					
2	CL	SQ	Regression	66.859	1	66.859	216.957	0.000	0.529	0.555
			Residual	59.476	193	0.308				
			Total	126.335	194					
3	CL	CS	Regression	85.15	1	85.15	399.027	0.00	0.674	0.462
			Residual	41.185	193	0.213				
			Total	126.335	194					
4	CL	CS, SQ	Regression	86.483	2	43.242	208.332	0.000	0.685	0.456
			Residual	39.852	192	0.208				
			Total	126.335	194					

<sup>1</sup>CS =customer satisfaction; CL = customer loyalty; SQ = service quality; df = degree of freedom; SE = standard error of the estimate.

Table 11 showed that, in simple regression, a unit increase in service quality would increase customer satisfaction by 0.988 and customer loyalty by 0.962, whereas a unit increase in customer satisfaction would increase customer

Assurance	0.209	0.066	0.212	3.176	0.002
Empathy	0.099	0.064	0.100	1.548	0.123

**Customer Satisfaction as a Mediator**

The following three simple linear regressions and one multiple regression were conducted to assess the role of customer satisfaction (mediator) in the relationship between service quality (independent variable) and customer loyalty (dependent variable) (Baron and Kenny, 1986) <sup>[3]</sup>.

- 1) **Model 1:** Service quality significantly affects customer satisfaction
- 2) **Model 2:** Service quality significantly affects customer loyalty
- 3) **Model 3:** Customer satisfaction significantly affects customer loyalty
- 4) **Model 4:** Service quality insignificantly affects customer loyalty in the presence of customer satisfaction

Complete mediation occurs when all four conditions are met, and partial mediation occurs only when the first three conditions are significant (Baron and Kenny, 1986) <sup>[3]</sup>. Simple regression analysis showed that the effect of service quality on customer satisfaction and loyalty, and that of customer satisfaction on customer loyalty were significant (p =0.000) and had moderate R-square (R<sup>2</sup> = 0.529 to 0.674) values. Multiple regression analysis also showed significant effects of service quality and customer satisfaction on customer loyalty (p = 0.000) (Table 10).

loyalty by 0.894. The direct (standardized) effects of service quality on customer satisfaction and customer loyalty were 0.813 and 0.727, respectively, while that of customer satisfaction on customer loyalty was 0.821.

**Table 11:** Significance of regression coefficients for relationship between service quality, customer satisfaction, and customer loyalty for customers (n = 195) of nine private banks, Hawassa, Ethiopia, 2023

Model <sup>1</sup>	Dependent variable	Independent variable(s)		Unstandardized coefficients		Standardized coefficients		t	P
				B	SE	β			
1	CS	SQ	Constant	0.099	0.197			0.505	0.614
			SQ	0.988	0.051	0.813		19.419	0.000
2	CL	SQ	Constant	-0.087	0.253			-0.344	0.731
			SQ	0.962	0.065	0.727		14.729	0.000
3	CL	CS	Constant	0.126	0.176			0.715	0.475
			CS	0.894	0.045	0.821		19.976	0.000
4	CL	CS, SQ	Constant	-0.160	0.208			-0.772	0.441
			SQ	0.234	0.092	0.177		2.534	0.012
			CS	0.738	0.076	0.677		9.724	0.000

<sup>1</sup>CS =customer satisfaction, CL = customer loyalty; SQ = service quality; SE = standard error of the estimate.

## Discussion

Using the criteria of strongly disagree (1.00 -1.80), disagree (1.81- 2.60), neutral (2.61-3.40), agree (3.4-4.20), and strongly agree (4.21-5.00) (Nyutu *et al.*, 2021) [22], the respondents agreed with the presence of tangibility, provision of accurate and dependable services at promised times, less waiting to obtain services, employees' trustworthiness and politeness in handling customers, and presence of individual attentions and understanding customers' needs by private banks and their employees. This study also showed that customers were generally satisfied with the private banks' service offerings and were loyal to them.

The correlations among service quality dimensions were positive suggesting that the improvement in one dimension would have a positive influence on the other. Using the criteria of correlation coefficient ( $r$ ) as  $r = 0.1$  is small,  $r = 0.3$  is medium, and  $r = 0.5$  or more is large (Gravetter *et al.*, 2020) [11], the correlation coefficients of service quality with customer satisfaction ( $r = 0.813$ ,  $p=0.01$ ) and customer loyalty ( $r = 0.727$ ,  $p < 0.01$ ), and that between customer satisfaction and customer loyalty ( $r = 0.821$ ,  $p < 0.01$ ) were strong. It has also been reported that improving overall service quality and its dimensions will result in satisfied and more devoted customers (Lenka *et al.*, 2009; Siddiqi, 2011; Shanka, 2012; Ali and Raza, 2015; Slack and Singh, 2020; Supriyanto *et al.*, 2021) [18, 26, 25, 1, 27, 24].

The coefficient of determination ( $R^2$ ) value for the regression of service quality dimensions on customer satisfaction ( $R^2=0.689$ ) and customer loyalty ( $R^2=0.544$ ) was moderate according to the criteria of  $R^2$  value of 0.75, 0.50, and 0.25 is substantial, moderate, and weak, respectively (Hair *et al.*, 2019) [13]. The standardized regression coefficient ( $\beta$ ) uses standardized data and shows the direct effect of independent variable on dependent variable (Hair *et al.*, 2019) [13]. The direct effect of reliability, responsiveness, assurance, and empathy on customer satisfaction was 0.205, 0.420, 0.206 and 0.132, respectively, suggesting that any improvement in these dimensions would increase customer satisfaction. The significant impact of reliability (Ali and Raza, 2015; Gnawali, 2016) [1, 12], and that of responsiveness, assurance and empathy (Shanka, 2012; Ali and Raza, 2015; Gnawali, 2016; Kant and Jaiswal, 2017) [25, 1, 12, 15] on customer satisfaction have also been reported in previous studies.

Despite the fact that poor tangibles would lead to customer disappointment (Parasuraman *et al.*, 1988; Arasli *et al.*, 2005) [24, 2], the insignificant effect of tangibility on customer satisfaction could be because private banks might have similar offers in terms of up-to-date equipment, visually appealing facilities, and neat and well-dressed employees. The insignificant effect of tangibility on customer satisfaction has also been reported in previous studies (Arasli *et al.*, 2005; Shanka, 2012) [2, 25].

Tolerance and the variance inflation factor (VIF) are commonly used to assess multicollinearity, or the degree of correlation in independent variables. Tolerance is determined as  $1-R^2$ , i.e., the variability of an independent variable that cannot be explained by the other independent variables, after regressing independent variables on another independent variable, and it should be more than 0.10 to demonstrate that the independent variables do not contribute significantly to the variation of that independent variable. Variance inflation factor (VIF), which should be generally

less than 10, is an inverse of the tolerance value and its square root indicates the degree to which the standard error would be increased (Hair *et al.*, 2019) [13]. Thus, tolerance value of more than 0.10 and variance inflation factor of less than 10, for the preset study, suggested the low multicollinearity problem among service quality dimensions.

The present study showed that customer satisfaction was a partial mediator between service quality and customer loyalty. The substantial reduction in the direct effect of service quality on customer loyalty from the value of 0.727 in simple regression to 0.177 in multiple regression in the presence of customer satisfaction, and the significant indirect effect ( $0.813 \times 0.677 = 0.550$ ) according to Sobel test ( $Z = 7.776$ ,  $p = 0.000$ ) would show that customer satisfaction is a more crucial factor for customer loyalty than service quality. The role of customer satisfaction as a mediator between service quality and customer loyalty has also been reported in previous studies (Siddiqi, 2011; Ngo and Nguyen, 2016; Kasiri *et al.*, 2017; Pakurár *et al.*, 2019; Slack and Singh, 2020; Supriyanto *et al.*, 2021) [26, 21, 16, 23, 27, 29].

Although customer satisfaction is a strong mediator, the significant effect of service quality on customer loyalty in the presence of customer satisfaction would show that multiple mediating factors might occur between service quality and customer loyalty (Baron and Kenny, 1986) [3]. It has also been reported that satisfied customers are not always loyal (Bhat *et al.*, 2018; Supriyanto *et al.*, 2021) [4, 29]. For instance, Bhat *et al.*, (2018) [4] suggested that satisfaction can lead to loyalty when customers build trust.

## Conclusion

This study showed that all service quality dimensions (tangibility, reliability, responsiveness, assurance, and empathy) and overall service quality had positive correlation with customer satisfaction and loyalty. This suggests that enhancing service quality would increase customer satisfaction and loyalty in private banks. However, reliability, responsiveness, and assurance dimensions had significant influence on customer satisfaction and loyalty, indicating that improving them will assist to both keep current customers and attract new ones. The non-significant effect of tangibility on both customer satisfaction and loyalty, and that of empathy on loyalty would suggest that implementing strategies to differentiate these dimensions would give private banks competitive advantages. Moreover, the strong mediating role of customer satisfaction between service quality and loyalty would suggest that implementing service quality improvement measures which guarantee customer satisfaction will, in return, lead to loyalty.

## Limitations and Future Research

This study was limited to private banks in Hawassa, one of the largest cities in Ethiopia. Future research should include more banks and respondents, drawing a sample from different major cities in Ethiopia. Even though customer satisfaction strongly mediated the relationship between service quality and customer loyalty in this study, other factors affecting this relationship should also be studied.

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## References

1. Ali M, Raza SA. Service quality perception and customer satisfaction in Islamic banks of Pakistan: The modified SERVQUAL model. *Total Quality Management & Business Excellence*, 2015. Doi: 10.1080/14783363.2015.110051
2. Arasli H, Mehtap-Smadi S, Turan Katircioglu S. Customer service quality in the Greek Cypriot banking industry. *Managing Service Quality: An International Journal*. 2005; 15(1):41-56.
3. Baron RM, Kenny DA. The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of personality and social psychology*. 1986; 51(6):1173-1182.
4. Bhat SA, Darzi MA, Parrey SH. Antecedents of customer loyalty in banking sector: A mediational study. *Vikalpa*. 2018; 43(2):92-105.
5. Brady MK, Cronin Jr JJ, Brand RR. Performance-only measurement of service quality: A replication and extension. *Journal of business research*. 2002; 55(1):17-31.
6. Chakravarty S, Feinberg R, Rhee EY. Relationships and individuals' bank switching behavior. *Journal of Economic Psychology*. 2004; 25(4):507-527.
7. Cronin Jr JJ, Taylor SA. Measuring service quality: A reexamination and extension. *Journal of marketing*. 1992; 56(3):55-68.
8. Dick AS, Basu K. Customer loyalty: Toward an integrated conceptual framework. *Journal of the academy of marketing science*. 1994; 22:99-113.
9. Furrer O, Liu BSC, Sudharshan D. The relationships between culture and service quality perceptions: Basis for cross-cultural market segmentation and resource allocation. *Journal of service research*. 2000; 2(4):355-371.
10. Giese JL, Cote JA. Defining consumer satisfaction. *Academy of marketing science review*. 2000; 1(1):1-22.
11. Gravetter FJ, Wallnau LB, Forzano LAB, Witnauer JE. *Essentials of statistics for the behavioral sciences*, 10<sup>th</sup> ed., Cengage Learning, USA, 2020.
12. Gnawali A. Effects of Service Quality on Customer Satisfaction in Nepalese Commercial Banks. *Journal of Development and Administrative Studies*. 2016; 24(1-2):1-16.
13. Hair Jr JF, Black WC, Babin BJ, Anderson RE. *Multivariate data analysis*. 18<sup>th</sup> ed., Cengage Learning, EMEA, Hampshire, United Kingdom, 2019.
14. Islam R, Ahmed S, Rahman M, Al Asheq A. Determinants of service quality and its effect on customer satisfaction and loyalty: An empirical study of private banking sector. *The TQM Journal*. 2020; 33(6):1163-1182.
15. Kant R, Jaiswal D. The impact of perceived service quality dimensions on customer satisfaction: An empirical study on public sector banks in India. *International Journal of Bank Marketing*. 2017; 35(3):411-430.
16. Kasiri LA, Cheng KTG, Sambasivan M, Sidin SM. Integration of standardization and customization: Impact on service quality, customer satisfaction, and loyalty. *Journal of Retailing and Consumer Services*. 2017; 35:91-97.
17. Kotler P, Keller K. *Marketing Management*, 14<sup>th</sup> ed., Pearson Education Limited, 2012.
18. Lenka U, Suar D, Mohapatra PK. Service quality, customer satisfaction, and customer loyalty in Indian commercial banks. *The Journal of Entrepreneurship*. 2009; 18(1):47-64.
19. Marczyk GR, DeMatteo D, Festinger D. *Essentials of research design and methodology*. John Wiley & Sons, Inc, USA, 2005.
20. Mohsan F, Nawaz MM, Khan MS, Shaukat Z, Aslam N. Impact of customer satisfaction on customer loyalty and intentions to switch: Evidence from banking sector of Pakistan. *International journal of business and social science*. 2011; 2(16):263-270.
21. Ngo VM, Nguyen HH. The relationship between service quality, customer satisfaction and customer loyalty: An investigation in Vietnamese retail banking sector. *Journal of competitiveness*. 2016; 8(2):103-116.
22. Nyutu EN, Cobern WW, Pleasants BA. Correlational Study of Student Perceptions of Their Undergraduate Laboratory Environment with Respect to Gender and Major. *International Journal of Education in Mathematics, Science and Technology*. 2021; 9(1):83-102.
23. Pakurár M, Haddad H, Nagy J, Popp J, Oláh J. The service quality dimensions that affect customer satisfaction in the Jordanian banking sector. *Sustainability*. 2019; 11(4):p1113.
24. Parasuraman A, Zeithaml VA, Berry LL. SERVQUAL: A multiple-item scale for measuring customer perceptions of service quality. *Journal of Retailing*. 1988; 64:12-40.
25. Shanka MS. Bank service quality, customer satisfaction and loyalty in Ethiopian banking sector. *Journal of Business Administration and Management Sciences Research*. 2012; 1(1):001-009.
26. Siddiqi KO. Interrelations between service quality attributes, customer satisfaction and customer loyalty in the retail banking sector in Bangladesh. *International journal of business and management*. 2011; 6(3):p12.
27. Slack NJ, Singh G. The effect of service quality on customer satisfaction and loyalty and the mediating role of customer satisfaction: Supermarkets in Fiji. *The TQM Journal*. 2020; 32(3):543-558.
28. Smith AM. Measuring service quality: Is SERVQUAL now redundant? *Journal of marketing management*. 1995; 11(1-3):257-276.
29. Supriyanto A, Wiyono BB, Burhanuddin B. Effects of service quality and customer satisfaction on loyalty of bank customers. *Cogent Business & Management*. 2021; 8(1):p1937847.
30. Sureshchandar GS, Rajendran C, Anantharaman RN. The relationship between management's perception of total quality service and customer perceptions of service quality. *Total Quality Management*. 2002; 13(1):69-88.
31. Tourangeau R, Rasinski KA. Cognitive processes underlying context effects in attitude measurement. *Psychological bulletin*. 1988; 103(3):p299.
32. IBM Corporation, 2015. *IBM SPSS statistics*, version 23, Armonk, New York.