Sri Lankan Journal of Banking and Finance

*An endeavor to share knowledge*

Volume: 4 Issue: 01 June: 2021

# CUSTOMERS' SATISFACTION TOWARDS BANK SERVICES: AN EMPIRICAL ANALYSIS IN THE PERSPECTIVE OF TRANSACTION COST

Madubashini H I[1], Ranatunga R V S P K[2] and Priyanath H M S[3]

Department of Economics and Statistics, Sabaragamuwa University of Sri Lanka[1, 3]
Center for Computer Studies, Sabaragamuwa University of Sri Lanka[2]

hewarathnageishara95@gmail.com[1], spkr@ccs.sab.ac.lk[2], piya@ssl.sab.ac.lk[3]

## ABSTRACT

**Acting as the driving force in the financial sector of Sri Lanka, the modern banking system plays a key role in the development of the trade and commerce sectors. In this context, the main purpose of this study is to examine the impact of Transaction Costs (TC) on customer satisfaction in bank services in both public and private sector which has not been adequately studied by scholars. The study was conducted using a sample of 152 bank customers both private and public sector banks as well as collected data through a structured questionnaire having face-to-face and telephony interviews. Partial Least Square Structural Equation Model was used to evaluate the data. The research explored four hypothetical relationships between four dimensions of TC and customer satisfaction of the bank services. The results indicated that there is a significant negative relationship between searching cost and customer satisfaction in both public and private banks. Negotiation costs of private banks have a significant negative effect on customer satisfaction. Although a significant negative correlation between monitoring cost and customer satisfaction in the public banks founded, there is no effect on private banks. Policy and enforcement costs of both public and private banks have a significant**

**negative relationship with customer satisfaction. The study finally found that the TC of public banks was slightly higher than private banks. Hence, the banking sector can enhance customer satisfaction and minimize TC by accelerating suitable strategies and efficient services through a suitable corporate plan.**

**Keywords – Bank services, Customer satisfaction, Transaction cost**

## 1. INTRODUCTION

The banking industry has reached vital changes due to the implementation of innovative practices with Information and Communication Technology throughout the world, and Sri Lanka is no exception to such a situation. Therefore, it is one of the leading financial sectors in Sri Lanka as well as it plays a major financial role in the economy (Tharanikaran et al., 2017). According to the Central Bank of Sri Lanka (2018), the Sri Lankan banking system is the fastest growing and more complex service sector among others. The banking sector mainly depends on two objectives and the former is to increase the opportunities to customers by providing the customer requirements such as applying for accounts and loans, payment of bills, transfer money, and querying various information on their activities. The latter objective is to reduce the cost of banking operations especially by combining the technology (Al-Shbiel & Al-Olimat, 2016). A significant competition throughout the industry also can be seen and therefore, bankers who involved in the industry should attempt to provide more values to the customers and it is developing as one of the major aspects which significantly facilitate firms to face the gravity of competition as well as provide different services among competitors especially, in the banking sector (Al-Shbiel & Al-Olimat, 2016; Keneth & Jane, 2013). This value creation directly focuses on customer care and satisfaction with bank services because customers are the major building block (Bena, 2010; Montazemi & Qahri-Saremi, 2015). Therefore, in the competitive world customer satisfaction is the area where all organizations are focusing on. As well as it is customer satisfaction that will decide whether the organizations will survive in the market or not.

Howard & Sheth (1969, p. 145) had defined customer satisfaction: "the buyer's cognitive state of being adequately or inadequately rewarded for the sacrifices he has undergone." Customer satisfaction factors in the service industry are different from any other industry. According to Eggert & Ulaga (2002), evaluating such customer satisfaction in the banking sector is been increased and therefore, it became a major research area and consequently, it is a multidimensional aspect that is widely used in different contexts (Bharadwaj & Mitra, 2016; Kumar, 2016).

In the complex socio-economic environment, customers expect to save their financial, material, labor, and time cost as much as possible by using alternatives (Kaleem & Ahmad, 2009). Nevertheless, customers in the banking sector have been engaged with some extra cost which is due to incompleteness of employee performance and various inefficiencies (Meramveliotakis & Milonakis, 2010). According to Williamson (1979) people are bounded rational due to the scarcity of information and therefore, opportunism appeared in the transactions. The opportunistic behavior distributes the hazards to the transaction parties and avoiding these hazards increases the cost of transactions. Financial, material, labor, and time cost for searching detailed information about different bank services, contacting with banks, negotiating with banks, and maintaining bank activities are called TC of the bank services (Fox, 2007). Some factors such as poor conditions in the banks especially in the public sector, lack of information, shortcomings in outdated technical tools, employee ethics, market weaknesses in service delivery affect to increase the cost in the banking system (Central Bank of Sri Lanka, 2018; Wanninayake & Dissanayake, 2007). Mostly, people move to the informal sector because the cost of borrowing is high in banking systems (Anjalika & Priyanath, 2018). As well as customers are discouraged by bank deposits due to travel costs and time off (Ladman & Jerry, 1984).

The banking sector must understand how to reduce costs by using specific tools, materials and devices to enhance the efficiency of bank services. Therefore, this study attempts to understand the concept of TC minimization, a profile that has not been covered by studies especially in the Sri Lankan context, which enables the banking industry to create greater interconnectedness and greater cognitive value in the customer perspective.

Theoretically, it is important to study the costs of the transaction mixing variables such as TC, customer satisfaction, and bank services. Most of the findings (Yasuda, 2005; Frank & Henderson, 1992) considered how TC affects several industrial sectors but empirically, there are not enough studies examined the impact of TC on bank services' effect on customer satisfaction. Therefore, this study aims to explore how the TCs of bank services affect customer satisfaction in both public and private sector banks in Sri Lanka. The article adopts the following outline in order to accomplish this goal. The next part integrates the literature review and synthesizes the research model. Subsequently, the material and methodology are described and the empirical findings are discussed. Finally, the study will address key observations, theoretical and practical consequences, as well as some research weaknesses and potential directions for future research.

## 2. LITERATURE REVIEW

Researchers who empirically studied the customer satisfaction especially, in the banking sector considered several dimensions. The recent studies have mostly attempted to reveal the relationship between technology used in the banks like internet banking and e-banking and the customer satisfaction of bank services (Bena, 2010; Ejigu, 2017; Kombo, 2015; Kundu & Datta, 2015; Mobarek, 2007). Some other researchers like Chochol'áková, Gabcová, Belás, & Sipko, (2015) and Kaura, Prasad, & Sharma (2015) examined customer satisfaction which depends on the customer loyalty and type of banks as public, private, and foreign. Lopez, Kozloski & Rampersad, (2007) empirically tested the relationship between ethnicity and customer satisfaction. However, the scarcity of scholarly articles on cost-based approach, especially direct relationship between customer satisfaction and TC is an empirical gap found in the literature.

**Customer Satisfaction:** When building relationships with customers, satisfaction characterizes as the foundation. Satisfaction is a feeling generated by customers because of fulfilling their expectations (Kotler, 1997). When services provided in a quality manner, it upgrades customer satisfaction, and business organizations launch their researches or developments to this profile to enhance the competition level in the market space (Heskett, Sasserjr & Hart (1990). Moreover, according to Hom (2000) and Perera & Priyanath (2018), satisfaction is the experience or motivation to buy back into a product or service that is in the mind of the customer or triggers a repurchase. Customer satisfaction defined by Anderson, Fornell & Mazvancheryl (2004) said that it is an evaluation process that a product or service consumes over a long period. Whether it is a product or services which go beyond the customer expectations, it determines customer satisfaction (Zairi, 2000).

Customer satisfaction with a bank is a long-term positive attitude in the customer and also it is the customer's perception of a bank's continuous services and its performance (Kombo, 2015). Customer satisfaction under the services can be measured by the confidence of service, fast delivery, protection of service, employee activities, and comfortable access (Anjalika & Priyanath, 2018; Habibi, et al., 2013). According to Hoyer & Maclnnis (2001), emphasize that feeling like the happiness of acceptance of delight services. Accelerating of facilitating in bank services conduct based on the satisfaction level of the customer and also it is built up by favorable working conditions of the service place (Mihelis, et al., 2001). When customer satisfaction declines, customers withdraw from banks due to their inability to retain customers, which also has a profound effect on the future growth of the business as well as dissatisfaction is a significant factor that drives customers away. Some previous researches have looked at the factors that determine

customer satisfaction, and it depends on the culture of different countries and the customer's view of service. According to studies by Hokanson (1995), fast and efficient service, business confidentiality, banking board friendliness, billing accuracy, service quality, and timeliness affect customer satisfaction. According to Almossawi (2001), the customer is more concerned with the ease of the transaction than the reputation of a bank which means that there are less TCs. Under this context, the customer pays close attention to factors such as the convenience of parking, convenient location, and ATM 24 hours a day. Gerrard & Cunningham (1997) emphasize that customer satisfaction was reduced due to the reduction in the quality of the banking service and the poor quality of service. Customer satisfaction is the result of a customer's understanding of the outcome of a transaction or relationship compared to the price and acquisition cost of a particular product or service (Fraering & Minor, 2006; Perera & Priyanath, 2018). Service quality is an engine of the successive business performance and also in the banking sector, banks should henceforth improve the quality of service to provide outstanding service in current, it will be even better for future (Ejigu, 2017).

**Bank Services**: Kotler (2003) has defined services as an intangible action provided by one to another and it may or may not be connected to a physical object and also service can be an intangible act generated by individuals or machines, or both to create a better perception among users. While services are carried out jointly by service provider and service gainer, service gainer is the person who estimates their perception and value (Rao, 2007). A service is an interaction, an intangible activity that always happens (Gronroos, 2000). A comprehensive analysis of the services shows that it is a non-physical or non-construction product where its value increases in terms of convenience, timeliness, and hygiene. According to Quinn, Baruch & Paqette (1987), the service contains essential elements for people, which are elementary to very sophisticated such as food, clothing, sleep, banking, sports, telecommunication, etc.

Banking is a customer-focused service sector, and due to intense competition, customer satisfaction has become the most important aspect of any banking business (Munusamy, Chelliah & Mun, 2010). Bank services is a company that provides financial intermediary services and It covers a wide range of financial services, including savings and payment services, and represents a wide range of activities in the economy (Rose & Hudgins, 2008). Generally, banking functions include cash creation, payment mechanism, savings, loan extension, foreign financial facility, securities, and brokerage services. In global banking, financial services span a wide range, with equity transactions occurring through credit, and bank services as intermediaries and liquid financial instruments, bond equity affiliations, investment management, consulting services, and insurance services (Heffernan, 2005). Bank services

have gone into financial diversification, such as selling housing loans, mortgages, personal consumption loan funds, and trustees, as emerging financial products to win over the consumer (Heffernan, 2005). Also, internet banking, smart payments, international remittances, have been introduced today and these are the services that have been enhanced with the advancement of technology (Koch & MacDonald, 2006).

**Transaction Cost**: The concept of TC first introduced by Ronald Coase in 1937 further concluded and said there is some additional cost other than the production cost for searching relevant prices, negotiating, and making a contract (Coase 1992, Coase 1988, Coase 1960). Another contribution made by Williamson (1985) has developed the theory called Transaction Cost Economics by introducing the economic actors and their activities as behavioral assumptions such as opportunism and bounded rationality and determinant factors such as asset specificity, uncertainty, frequency. This theory generally examined the customer-supplier relationship in the context of a contractual arrangement and it introduced this entire relationship associated with cost called TCs such as costs of searching information, negotiation with partners, contract administration and monitoring, and finally, enforcement (Artz, 1999; Heide & Stump, 1995; Melese & Franck, 2005).

TC include all of the costs related to doing transactions in the businesses and it has been divided into two and the former is ex-ante TC or search and contracting costs as well as the latter is ex-post contracting costs, or monitoring and enforcement costs (Dyer & Chu, 2003; Hennart, 1993; North, 1990; Williamson, 1985). According to Dyer (1997, p. 536) explained, "search costs include the costs of gathering information to identify and evaluate potential trading partners".

The search cost has been divided into two as external and internal. External cost includes financial expenditure for obtaining information about the partners, and the opportunity cost of the time period spent for searching. Contracting costs are related to making agreements to negotiate the transaction (Dyer, 1997; Dyer & Chu, 2003). The monitoring costs relate to observing the agreement to confirm that each party fulfills the necessary requirements of the predetermined agreement. Finally, the enforcement cost associated with ex-post bargaining and sanctioning which influences the transaction partner who does not follow the instructions according to the predetermined agreement (Dyer, 1997; Dyer & Chu, 2003). These costs included many everyday forms such as transport, meetings, sales calls, postages, bidding rituals, and their primary objective is to execute the transaction of goods and services (Dyer & Chu 2003; Heide & Stump 1995; Huimin, David & Zhuofu, 2013).

## 3. CONCEPTUAL FRAMEWORK AND HYPOTHESIS

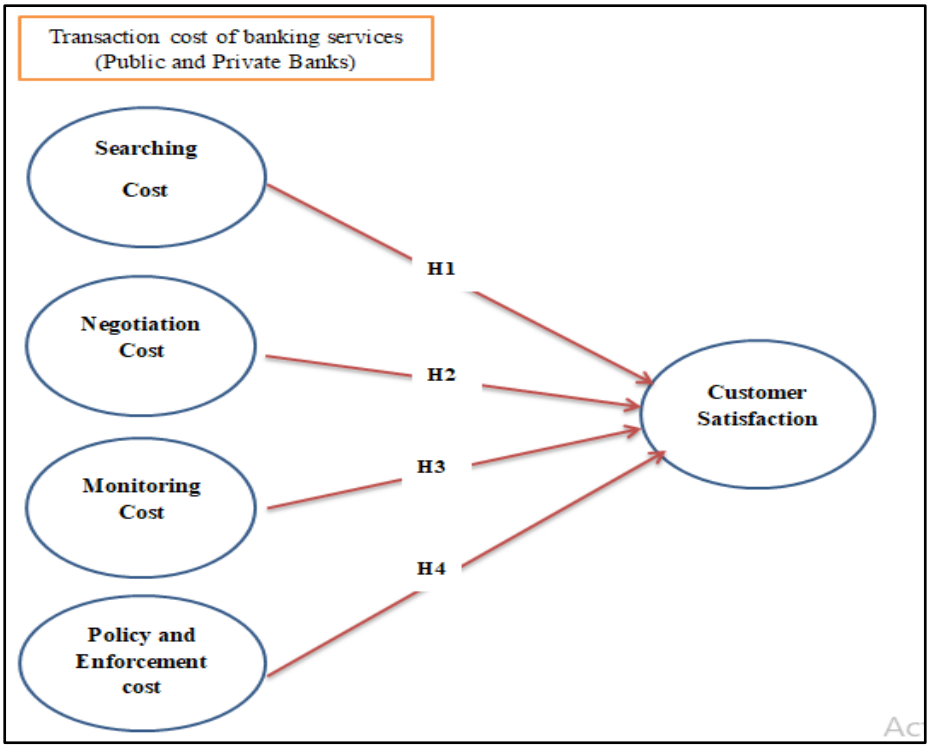
This study is primarily intended to study customer satisfaction towards bank services perspective to TC. Many customers abandon traditional banking methods due to the high costs and try to reduce those costs through more convenient subscription services (Mobarek, 2007). Customer satisfaction is one of the most important factors in enhancing the performance of a bank as well as any business (Keisidou, Sarigiannidis, Maditinos & Thalassinos, 2013). Therefore, a bank has the potential to enhance its reputation as well as its profitability by reaching out to the customer on cost-reducing services that increase customer satisfaction. The customer should consider opportunity cost in addition to financial costs, and they mainly consider how TCs arising from bank services affect customer satisfaction. The conceptual framework provides a site map for this research. In there, two variables can be identified such as the independent variable and the dependent variable. Figure 1 shows that the adoption of customer satisfaction considers a dependent variable in the current study and TC of the bank services considered as independent variables.

Customer satisfaction is reflected from five items such as personnel of the bank, products, image of bank, service, access (Mihelis, et al., 2001; Felix, 2015). While TC is reflected from four dimensions searching cost, negotiation cost, monitoring cost, policy, and enforcement cost (Rahayu, 2015; Fox, 2007; Anand, 2008) for the bank services. The conceptual framework in figure 1 illustrates the variables that affect the TC of bank services to customer satisfaction.

**Searching cost of bank services and customer satisfaction**: Haffernan (2005) emphasized that clients always spend money to find quality services and that there is a strong connection. Wruuck, Speyer & Hoffmann (2013) emphasized that there is a financial incentive to take out a real estate loan and that extensive information should be gathered before making a purchase and that additional effort may be required.

Rural areas charge very high interest rates due to a lack of information, where customers are reluctant to apply for loans (Ahmed, 1999). Bebczuk (2003) studied a lending business and the borrower and the lender established a loan contract and the searching cost are positively affected by the lack of proper information. Goldman (1978) presented in information theory; it has been suggested that the cost of information affected the lender until the marginal cost equals the economic benefit of obtaining additional information. Therefore, the study hypothesizes that;

*H1: Searching cost of bank services has a negative impact on customer satisfaction.*




Source: Developed by Researcher, 2020

**Figure 1: Conceptual Framework**

**Negotiation cost of bank services and customer satisfaction**: Unsatisfied customers who have been left are difficult to serve and more cost spend for switching them to the banks again (Coyles & Gokey, 2005). Retail banking today applies the price factor where the consumer is also strongly tempted to pay the cost where it is directly affected. The consumer is less knowledgeable about the purchase of a particular product or service and it positively affects the contract cost (Wruuck, et al., 2013). Krawcheck (2012) emphasizes that there expectation between customer and supplier creating the dissatisfy feeling beyond them. But a customer finds it hard to turn to competition because of the learning costs, psychological, transactional, and contractual effects (Farrell & Klemperer, 2007). The lending and borrowing of banks consist of two difficulties and consequently, it has been suggested that bank lending and borrowing are based on contractual transaction-level data and that it mainly generates costs (Carey, Prowse, Rea & Udell, 1993). The lack of collateral and the high cost of concluding agreements on loans to low-income earners depicted higher dissatisfaction (Rhyne, 1998). Thus, the study predicts that:

*H2: Negotiation cost of bank services has a negative impact on customer satisfaction.*

**Monitoring cost of bank services and customer satisfaction**: Burnham, Frels & Mahajan (2003) emphasized customers who use a self-service banking environment have a direct impact on start-up cost, maintenance costs, and bill payment cost. It has been suggested that maintaining a cost-effective interaction with customers has a vital effect on their default satisfaction (Davidow, 2003). Nitsch & Santos (2001) studied the Grameen bank customers and emphasized that hidden charges were levied on the customers. According to the study, there is additional paperwork cost, transportation, and accommodation, reception cost occurs by customers. Empirical findings of Bonfim, Dai & Franco (2018) have suggested that it does not support increasing permanent bargaining power or reducing the oversight cost of banks. Hubbard, Kuttner & Palia (2002) emphasized that many firms face significant costs in switching lenders and thus provide support for the bank lending channel of monetary transmission. Therefore, the study hypothesizes that;

*H3: Monitoring the cost of bank services has a negative impact on customer satisfaction.*

**Policy and enforcement cost of bank services and customer satisfaction**: Delis, Staikouras & Tsoumas (2019) conducted research and established the hypothesis that assumes the announcement of formal compliance measures promotes the supervision and discipline of depositors' withdrawals. According to Diamond's (2004) study, legal systems with expensive or inefficient contract enforcement are difficult. It is suggested that if the lenders do not enforce, there will be an incentive for the borrowers to misbehave. If the agreed remedies do not benefit the lenders then they will not enforce their agreement Mitchell (1993). La Porta & Lopez-de-Silanes (1998) examined that contract enforcement may be costly or inefficient due to high costs and said that it has a strong influence on the legal system in credit transactions. Thus, the study predicts that:

*H4: Policy and enforcement cost of bank services has a negative impact on customer satisfaction.*

## 4. METHODOLOGY

The deductive approach has been employed and the method was quantitative in order to study the research problem. Primary data were used in the analysis to evaluate the hypotheses. The target population in this study is the bank customer in the Colombo district. Due to the Covid-19 pandemic situation, the sample required for the study was limited to the bank customers in

Maharagama Divisional Secretariat Division (DSD) which was selected randomly from Colombo District. Seven Grama Niladhari Divisions were selected from the Maharagama DSD using the lottery method. According to Kock and Hadaya (2018) and Ranatunga, Priyanath, and Meegama (2020), 'Inverse Square Root Method' has been used to determine the sample size and hence, 152 banks customers who actively engage with banking activities with both public and private banks were selected from such Grama Niladari Divisions to the survey as the sample based on a convenience sampling method. Data collected by using a survey method having face-to-face and telephony interviews with the selected bank customers using a structured questionnaire. In developing the 7-point Likert scales structured questionnaire, the study used two steps procedure. Initially, a pool of items of each dimension was generated which includes reviewed empirical literature published in the cited journals and carefully selected items for the structured questionnaire since objects were more important for calculating the basic dimensions of the constructs. Furthermore, prior to the main questionnaire test, a pilot survey was conducted.

According to this study, Confirmatory Factor Analysis (CFA) is used for determining the hypothetical relationships by using the Partial Least Square Structural Equation Modeling (PLS-SEM) which is a statistical analysis used to analyze the relationship between independent and dependent variables as well as can evaluate more than one construct at the same time. In a structural equation model, there are two sub-models; the inner model specifies the relationships between independent and dependent latent variables, while the outer model specifies the relationships between the latent variables and their indicators observed. Demographic data and dimension-wise customer satisfaction and TC of bank services were analyzed by using SPSS software.

The data collected from the study is equally divided into two sections applicable to public and private banks. Customer satisfaction is the dependent variable and the independent variable is the TC of bank services. The dimensions of the independent variable suggested by the literature such as searching cost, negotiation cost, monitoring cost, policy, and enforcement cost were employed (Priyanath, 2017; Rahayu, 2015). Five latent variables created for personnel of the bank, products, Image of the bank, service, and access (Mihelis, et al., 2001; Felix, 2015) as that determine customer satisfaction.

In the first-order analysis, the latent variable was created for the dependent variable and calculated the reliability and validity of the construction. Second-order analysis calculated the validity and reliability using the independent variables and latent variables constructed by the first-order analysis. The second-order analysis measures the reliability and validity of the variables, respectively, with convergence validity and discriminant validity. Collinearity

issues assessed the efficiency of the structural model, and evaluation involves examining the significance of the hypothesized relationships, coefficient of determination (R2), f Squared (f2), Predictive Relevance (Q2). Finally, the model checked for the moderate influence of savings and credit programs on the relationship between TC and customer satisfaction.

## 5. RESULTS AND DISCUSSIONS

Based on the PLS-SEM measurement model, two steps were taken to ensure the validity and reliability of the measurement model. Validity and reliability scores between questionnaire items and lower constructs were determined in the first step (first-order analysis). In this review, two reliability tests and two validation tests were carried out. In first-order analysis indicator reliability and internal consistency, reliability were examined between indicators and questionnaire items relating to the reliability of the constructs, while the convergence validity is conducted. The standardized factor loadings above the minimum threshold criterion 0.7 are confirming the reliability of the first-order reflective build indicator.

In addition, further indicates that at the significance level of 0.05, all factor loadings were statistically significant. The study initially assessed the validity and the reliability of five constructs (personnel of the bank, products, the image of the bank, service, and access) at the first-order level, it is also represented that the outer loading of all those indicators is more than 0.7 values. The statistical value of all constructions is higher than 2.58, indicating that constructions in a 99 percent significant level.

**Table 1: Analysis of the Indicator Reliability**

| Questionnaire Item | Public Banks | | Private Banks | |
|---|---|---|---|---|
| | Outer Loadings | T-statistic | Outer Loadings | T-statistic |
| **Customer Satisfaction** | | | | |
| **Personnel of the bank** | | | | |
| 1. There is a well-informed and experienced staff in the bank | 0.886 | 22.939 | _ | _ |
| 2. Responds efficiently to customer issues | 0.874 | 18.949 | 0.906 | 30.125 |
| 3. There is good communication and cooperation with customers. | 0.926 | 66.318 | 0.950 | 70.140 |
| 4. Employees are friendly with customers | 0.854 | 19.930 | 0.892 | 29.367 |

| | | | | |
|---|---|---|---|---|
| **Products** | | | | |
| 1. The bank offers a wide range of services | 0.869 | 35.018 | 0.786 | 14.013 |
| 2. Minimum repayment problems | 0.770 | 9.372 | 0.755 | 6.573 |
| 3. The cost of the services provided by the bank is minimal | 0.757 | 10.232 | 0.698 | 8.207 |
| 4.The bank provides customer-specific services (Leasing, Factoring, Banking assurance) | 0.833 | 16.913 | 0.890 | 29.903 |
| **Image of the bank** | | | | |
| 1.The bank provides a reliable service | 0.913 | 26.395 | 0.936 | 56.936 |
| 2.The bank services are technically superior | 0.858 | 18.683 | 0.878 | 11.396 |
| 3. The bank has the ability to meet the needs of prospective customers. | 0.920 | 29.447 | 0.885 | 12.338 |
| **Service** | | | | |
| 1.The bank offers interesting services | 0.823 | 21.500 | 0.880 | 32.554 |
| 2.The time it takes to wait in line and on the phone is minimal | 0.761 | 9.878 | 0.856 | 19.574 |
| 3.Provides services information in a way that customers can understand | 0.857 | 23.230 | 0.845 | 11.505 |
| 4. The complexity of service processes is very low. | 0.869 | 27.355 | 0.874 | 31.618 |
| **Access** | | | | |
| 1. Can be satisfied with the expansion of the bank | 0.863 | 29.055 | 0.969 | 169.500 |
| 2. Bank branches can be satisfied with the location | 0.860 | 15.385 | 0.789 | 11.017 |
| 3.Minimize inconveniences in using the services (Strikes, damaged ATM) | 0.772 | 12.474 | 0.969 | 169.500 |

Source: Survey Data, 2020

Table 2 shows that the Cronbach's alpha of all constructs was greater than the required value of 0.7 and it indicated composite reliability of each construct and it was greater than the recommended value of 0.7. As well as the Average Variance of Exacted (AVE) was higher than the required value of 0.5 for each construct. These two measures confirm the convergent validity of these models.

**Table 2: Composite Reliability and Convergent Validity**

| | Public Bank | | | Private Banks | | |
|---|---|---|---|---|---|---|
| | **AVE** | **Composite Reliability** | **Cronbach's Alpha** | **AVE** | **Composite Reliability** | **Cronbach's Alpha** |
| Access | 0.694 | 0.872 | 0.779 | 0.834 | 0.938 | 0.897 |
| Customer Satisfaction | 0.462 | 0.939 | 0.929 | 0.393 | 0.918 | 0.904 |
| Image of the bank | 0.805 | 0.926 | 0.878 | 0.810 | 0.928 | 0.883 |
| Personnel of the bank | 0.784 | 0.936 | 0.908 | 0.840 | 0.940 | 0.904 |
| Products | 0.654 | 0.883 | 0.823 | 0.709 | 0.879 | 0.795 |
| Service | 0.686 | 0.897 | 0.849 | 0.747 | 0.922 | 0.887 |

Source: Survey Data, 2020

According to Fornell & Larcker (1981), the square root of AVE in each latent variable can be used to establish discriminant validity where, if the diagonal values are larger than other correlation values among the latent variables. Accordingly, Table 3 shows the validity of the model is confirmed by both private and public banks in this analysis.

**Table 3: Discriminant Validity of First Order Constructs (Fornell-Larcker Criterion)**

| **Public Banks** | **Access** | **Image of the bank** | **Personnel of the bank** | **Products** | **Service** |
|---|---|---|---|---|---|
| Access | **0.833** | | | | |
| Image of the bank | 0.595 | **0.898** | | | |
| Personnel of the bank | 0.545 | 0.519 | **0.885** | | |
| Products | 0.553 | 0.567 | 0.603 | **0.808** | |
| Service | 0.526 | 0.501 | 0.577 | 0.532 | **0.828** |
| **Private Banks** | | | | | |
| Access | **0.914** | | | | |
| Image of the bank | 0.566 | **0.9** | | | |
| Personnel of the bank | 0.348 | 0.466 | **0.917** | | |
| Products | 0.344 | 0.345 | 0.441 | **0.842** | |
| Service | 0.505 | 0.472 | 0.336 | 0.387 | **0.864** |

Source: Survey Data 2020

In second-order analysis indicator reliability and internal consistency reliability were examined between indicators and latent variables corresponding to the reliability of the constructions and, for the validity of the constructions, Convergence validity and Discriminant validity were considered. Standardized factor loadings were greater than 0.7 for all the constructs provided in Table 4 and loading factors were significant at a 0.05 significance level, indicating the reliability of the predictor.

**Table 4: Analysis of the Indicator Reliability (Second Order Constructs)**

| Questionnaire Item | Public Banks | | Private Banks | |
|---|---|---|---|---|
| | Outer Loadings | T-statistic | Outer Loadings | T-statistic |
| **Analysis of Second order construct** | | | | |
| Access<- CS | 0.796 | 17.039 | 0.810 | 22.721 |
| Image of the bank <- CS | 0.793 | 10.333 | 0.827 | 16.909 |
| Personnel of the bank <- CS | 0.815 | 17.326 | 0.625 | 4.917 |
| Products <- CS | 0.829 | 15.467 | 0.649 | 4.653 |
| Service <- CS | 0.767 | 11.823 | 0.743 | 10.96 |
| **Searching cost** | | | | |
| 1. A significant amount of money is spent for search information about deposit or loan demand, supply, interest rates and other benefits. | 0.814 | 17.547 | _ | _ |
| 2. There is a significantly higher cost for information communication about deposits or loans. | 0.858 | 18.238 | _ | _ |
| 3. Disclosure of information about loans, deposits and other services involves significant traveling costs. | 0.844 | 21.005 | _ | _ |
| 4. Bank takes a considerable amount of time to get information about loans and deposits. | 0.740 | 10.584 | 1.000 | |

| | | | | |
|---|---|---|---|---|
| **Negotiation cost** | | | | |
| 1. A considerable time to handle legal matters and negotiate with the bank to decide on deposits or loan services. | 0.937 | 3.736 | _ | _ |
| 2. A considerably higher amount of traveling cost to handle legal matters and negotiate with bank to determine information about deposits or loan services. | 0.788 | 2.547 | _ | _ |
| 3. A considerably higher amount of cost for communication to handle legal matters and negotiate with bank to determine information about deposits or loan services. | _ | _ | 1.000 | |
| **Monitoring cost** | | | | |
| 1. Have to spend a considerable amount of money to monitor activities that are carried out in accordance with the agreements entered into with the bank | 0.832 | 12.141 | 0.736 | 2.206 |
| 2. Have to spend a considerable time to monitor activities that are carried out in accordance with the agreements entered into with the bank | 0.846 | 14.594 | 0.968 | 3.430 |
| 3. Have to spend a considerable amount of travelling cost to monitor activities that are carried out in accordance with the agreements entered into with the bank | 0.853 | 10.049 | 0.762 | 2.285 |

| | | | | |
|---|---|---|---|---|
| 4. Have to spend a considerable amount of communication cost to monitor activities that are carried out in accordance with the agreements entered into with the bank | 0.796 | 5.471 | _ | _ |
| **Policy and enforcement cost** | | | | |
| 1. Have to spend Significantly higher expenditure for resolve transaction disputes, service charges and taxes levied by the bank for loans and deposits. | 0.823 | 10.198 | 0.927 | 38.972 |
| 2. Have to spend considerably higher time to resolve transaction disputes, service charges and taxes levied by the bank. | 0.888 | 35.976 | 0.935 | 56.821 |
| 3. Have to spend Significantly higher travelling cost for resolve transaction disputes, service charges and taxes levied by the bank. | _ | _ | 0.801 | 14.833 |
| 4. Have to spend considerably higher communication cost for resolve transaction disputes, service charges and taxes levied by the bank. | _ | _ | _ | _ |

Source: Survey Data, 2020

According to second-order analysis, Table 5 shows that the Cronbach alpha was higher than the required value of 0.7 and that the composite reliability for all the constructs was higher than the recommended value of 0.7 and hence the convergent validity of constructs was verified by the findings. Tables 5 show that the AVE was higher than the necessary value of 0.5 for each construct, indicating convergent validity.

**Table 5: Composite Reliability and Convergent Validity (Second Order Constructs)**

| | **Internal Consistency** | | | | **Convergent validity** | |
|---|---|---|---|---|---|---|
| | **Public Banks** | | **Private Banks** | | **Public banks** | **Private Banks** |
| | **CR** | **CA** | **CR** | **CA** | **AVE** | **AVE** |
| Access (LAC) | 0.872 | 0.779 | 0.938 | 0.897 | 0.694 | 0.834 |
| Image of the bank (LIM) | 0.926 | 0.879 | 0.927 | 0.883 | 0.805 | 0.810 |
| Personal of the bank (LPE) | 0.936 | 0.909 | 0.940 | 0.904 | 0.784 | 0.840 |
| Products (LPR) | 0.883 | 0.824 | 0.865 | 0.790 | 0.654 | 0.617 |
| Service (LSE) | 0.897 | 0.849 | 0.922 | 0.887 | 0.686 | 0.747 |
| Monitoring cost (TMO) | 0.899 | 0.853 | 0.866 | 0.818 | 0.692 | 0.687 |
| Negotiation cost (TNE) | 0.856 | 0.688 | 1 | 1 | 0.750 | 1 |
| Policy and enforcement cost (TPO) | 0.846 | 0.639 | 0.918 | 0.865 | 0.733 | 0.791 |
| Searching cost (TSE) | 0.888 | 0.832 | 1 | 1 | 0.664 | 1 |

Source: Survey Data, 2020

The results further indicate that the square root of AVE was greater than all the correlations of the constructs as demonstrated in Tables 6. According to results confirmed that the discriminant validity of all the second-order was adequate to interpret the relationships among constructs.

**Table 6: Discriminant Validity of Second Order Constructs (Fornell-Larcker Criterion)**

| **Public banks** | **Customer Satisfaction** | **TMO** | **TNE** | **TPO** | **TSE** |
|---|---|---|---|---|---|
| Customer Satisfaction | **0.800** | | | | |
| TMO | -0.361 | **0.831** | | | |
| TNE | -0.164 | 0.176 | **0.866** | | |
| TPO | -0.814 | 0.197 | 0.117 | **0.856** | |
| TSE | -0.660 | 0.243 | 0.120 | 0.463 | **0.815** |
| **Private banks** | | | | | |
| Customer Satisfaction | **0.730** | | | | |
| TMO | -0.107 | **0.821** | | | |
| TNE | -0.734 | 0.085 | **1** | | |
| TPO | -0.855 | 0.045 | 0.653 | **0.889** | |
| TSE | -0.600 | 0.213 | 0.388 | 0.398 | **0.717** |

Source: Survey Data, 2020

According to Hair et al. (2012), the next step is to estimate the hypothesized causal relationship between exogenous (independent) and an endogenous (dependent) latent variable after the reliable and validated measurement model has been developed. The evaluation of the structural model was mainly based on the five-stage steps. As the first step, assess the structural model for collinearity issues. VIF values for public banks show minimal collinearity, ranging from 1.042 to 1.316 and private banks show ranging from 1.035 to 1.83. The tolerance levels range from 0.76 to 0.95 in public banks and 0.54 to 0.96 in private banks. According to analysis, VIF values are lower than 5 and their Tolerance values are higher than 0.2. Thus, there is no collinearity problem. This demonstrates an absence of multicollinearity in the structural model between the independent constructs and the dependent constructs. The second step in evaluating the structural model is to examine the significance of the hypothetical relationships and to perform the first PLS algorithm to estimate the path coefficients. $R^2$ value has a significant correlation of 0.788 with public banks and 0.846 with private banks. Typically, it is significant if the value of $R^2$ is greater than 0.69, and the model matches with the observations. Therefore, according to the above results, we can conclude that public banks have 78.8 percent, and private banks have 84.6 percent variation of customer satisfaction is being clearly explained by the independent variables. The fourth step of structural model assessment was, assess of F

squared ($F^2$) – effect size. Searching cost of the public bank represents a large effect size for customer satisfaction and private banks also represent a large effect size. The value of $F^2$ of negotiation cost is provided by in public bank medium-size effect and that effect size is the same for the private banks also. $F^2$ value of monitoring cost is a large size effect for public bank and for private banks. $F^2$ value for policy and enforcement cost is represented by in public bank large size effect but according to private banks, it represents by small effect size. The model must be able to provide a prediction of the dependent variable by the measuring items. For public banks, the predictive relevance ($Q^2$) of customer satisfaction is 0.487, while the predictive relevance of customer satisfaction is 0.382 for private banks. Both values demonstrate substantially greater explanatory power. Finally, the model tested for the moderate effect of savings and credit services on the relationship between TC and customer satisfaction. According to public banks, there is a significant effect of bank services on the relationship between customer satisfaction and searching cost, negotiation cost, and enforcement cost of services. Type of bank services significantly affected the relationship between negotiation cost, monitoring cost and enforcement costs, and customer satisfaction under private banks.

**Table 7: Path Coefficients and Significance**

| **Public Banks** | | | | |
|---|---|---|---|---|
| Hypothesis | **H1** | **H2** | **H3** | **H4** |
| | TSE -> Customer Satisfaction | TNE -> Customer Satisfaction | TMO -> Customer Satisfaction | TPO -> Customer Satisfaction |
| Path coefficient (β) | -0.329 | -0.024 | -0.153 | -0.629 |
| T- value | 4.244*** | 0.396 | 2.127** | 7.596*** |
| Results | **Supported** | **Not Supported** | **Supported** | **Supported** |
| **Private Banks** | | | | |
| Path coefficient (β) | -0.268 | -0.252 | -0.009 | -0.583 |
| T- value | 4.293*** | 2.734** | 0.192 | 6.048*** |
| Results | **Supported** | **Supported** | **Not Supported** | **Supported** |

**p>0.05, ***p>0.01

Source: Survey Data, 2020

H1 hypothesis established as the searching cost of bank services has a negative impact on customer satisfaction. According to Table 7 path coefficient (β value) of searching cost is -0.329 which includes t- statistics higher than 1.96 at 0.05 significance level (t-statistic = 4.299) and it can be concluded as there is a significant negative relationship between searching cost and customer satisfaction regarding public banks. Considering private banks path coefficient (β value) of searching cost of the bank is -0.268 and the t-statistics of private banks is 4.293 which indicates the negative impact of customer satisfaction. That means when searching cost increase by 1 percent, customer satisfaction decreases by 32 percent in a public bank and 26 percent in private banks. Based on public banks' ineffective response to customer issues, lack of proper communication cooperation, lack of technical updates, and unavailability of understandable information can have reduced the customer satisfaction and it affected to increase the searching cost of bank services significantly. The cost of searching arises due to factors such as rising banking costs, branch locations, only commercial cities, and opportunistic behavior. Berger & DeYoung (1997) also emphasized that searching and collecting relevant information about agent-based on loans have a negative effect on the volume of loan funds. Bardhan & Udry (1999) emphasized that fragmented or missing information is negatively affected by borrowers. Stiglitz & Weis (1981) stated that the lack of sufficient information regarding activities of agents in the credit market and lenders have negatively affected borrowers. The result of this research has proved these findings.

H2 hypothesis represents the negative relationship between negotiation cost and customer satisfaction. Path coefficient of negotiation cost is -0.024 but the t-statistic is lower than 1.96 at a 0.05 significance level. Thus, there is no significant relationship between negotiation cost and customer satisfaction based on public banks. In private banks path coefficient (β value) of the negotiation cost of the bank is -0.252 and the t-statistic of private banks is 2.734 which emphasizes the negative impact of customer satisfaction. That means when negotiation costs increase by 1 percent, customer satisfaction decreases by 25 percent in private banks. Although the cost of negotiations in the public sector has a negative impact on customer satisfaction it was not significant due to some factors. The public sector banks are mainly subject to the regulatory framework of the Central Bank of Sri Lanka to act in accordance with government regulations. Therefore, the public sector is free from opportunistic behavior and acts responsibly and transparently. In this context, the negotiation costs of public banks have a negative impact on customer satisfaction but not a significant impact. Farrel & Klemperer (2007) explained that unsatisfied customers and contractual effects have a significant relationship. Rhyne (1998) emphasized in his studies there is a negative

relationship between the cost of concluding agreements and loans of low-income earners.

H3 hypothesis predicted that the monitoring cost has a negative impact on customer satisfaction. As depicted in table 7 the path coefficient of monitoring cost is -0.153 and t - statistics is 2.127 which represents the negative relationship between monitoring cost and customer satisfaction of public banks. However, private banks' path coefficient value of monitoring cost is -0.009, and t - statistics is 0.192. Therefore, it has no significant negative relationship with customer satisfaction. According to the above results when the monitoring cost is increased by 1 percent, customer satisfaction decreases by 15.3 percent in public banks. According to the results, private banks, which are constantly facing competition, always expect to improve and serve their customers through processes. Private Banks reduce the complexity of services as compared to public bank services to customers through technological tools. In private banks, the flexibility, resource capacity, a greater focus on competitiveness, and absence of complex service processes, the cost of monitoring is reduced than public banks. In addition, banking institutions face the problem of customer satisfaction in the light of their operation in a variety of situations like impolite counter service, inadequate staff to serve customers, busy telephone lines, and minimal banking times (Saeed, 1996; Perera & Priyanath, 2018). As per previous research findings, Nalukenge (2003) emphasized that monitoring the cost of small loans, affected both lenders and borrowers, as well as transportation and monitoring costs naturally increase the distance, which can affect negatively customer expectation. Coyles & Gokey (2005) examined unsatisfied consumers are increased by moving cost and time. Kaura, Prasad & Sharma (2015) and Anjalika & Priyanath (2018) emphasized because of generating hidden charges from banks highly affected customer satisfaction negatively under the monitoring cost.

Hypothesis H4 established a negative relationship between policy and enforcement cost and customer satisfaction. Path coefficient value of policy and enforcement cost is -0.629 which influences negatively on customer satisfaction with a higher significance level (t- statistic=7.596) and it emphasizes a significant relationship between policy and enforcement cost and customer satisfaction on the public banks. According to private banks, the path coefficient value is about -0.583, and the t – statistic is 6.048. This represents a significant negative relationship between policy and enforcement cost and customer satisfaction. Based on results, the enforcement cost increases by 1 percent, customer satisfaction decreases by 62 percent regarding the public banks, and by 58 percent regarding private banks. Polski & Kearney (2001) emphasized several factors such as securities losses, income taxes, and loan and lease losses are highly affected for banking. The organizational framework, including the banking sector, is framed in a human

manner. It, therefore, delivers a variety of restrictions to the customer, both formal (rules, laws, and constitutions) and informal (norms of behavior, conventions, and self-imposed codes of conduct) (Daniela, Mihail-Ioan, Anatol & Sebastian, 2010). La Porta & Lopez-de-Silanes (1998) stated that there is a strong negative influence on the legal system in credit transactions.

## 6. CONCLUSION

According to the study, argues that customer encounters problems in obtaining bank services are analyzed by perspective to TC. Hence it was concerned about the TCs generated by deposit and credit services as the most sought-after services by its customers. Based on this argument, the results revealed that the searching cost of public banks represents a significant negative relationship with customer satisfaction. The study reveals about bank services in both public and private banks generate a significant communication cost, travel cost, and time cost for providing services. The results of this study showed that negotiation costs have a negative impact on customer satisfaction in public banks and that is not statistically significant. Negotiation costs have a significant negative impact on customer satisfaction in private banking compared to public banking. Monitoring costs generated by bank services have a significant negative impact on customer satisfaction in public banks. Nevertheless, monitoring costs did not have a significant impact on customer satisfaction in private banks. It was revealed that the monitoring costs of public banks are higher than those of private banks, which reduces customer satisfaction. Moreover, finally, the cost of policy and enforcement of bank services has a significant negative impact on customers of both public and private bank services. It is noted that public and private banks generally incur significant costs for transaction disputes and service charges.

The banking sector needs customer retention through good satisfaction and future customer attraction to sustain its presence in the industry. Therefore, it is important for banks to develop a sound corporate plan which helps in developing a more satisfying service environment, and therefore, it is advisable to use successful techniques and innovations that are resilient in the face of the economy without adverse regulations. As this study revealed, banks should give priority to developing reforms that minimize customer TCs associated with credit and deposit services. Hence, a good network connection should be established within the bank premises and the employee from the lowest level to the highest level should be ensured to contribute to it. In order to reduce the investment deficit that arises in the economy, better deposit growth and easy access to credit should be developed. Also, a mechanism needs to be put in place to minimize the costs incurred by equipping the customer with comprehensive information. Entrepreneurs and small businesses fall victim to financial intermediation due to a lack of information

and opportunistic behavior. Therefore, policymakers should be encouraged to enter into enterprise development through appropriate institutional strategies, through various loan schemes and financial assistance schemes. In addition, an information dissemination mechanism should be set up across the country through the banking network to generate the new knowledge required by entrepreneurs. It is important to build a well-informed and cooperative staff within the premises to minimize the damage that negotiation costs can cause to business satisfaction. It is also important that the Central Bank of Sri Lanka relax adequately prudent regulations and controls on financial sector reforms. It is important to implement a proper regulatory framework to prevent fraud in the financial sector. As a government, the consumer will have confidence in banking and will not be reluctant to invest in such measures. Implementing an appropriate regulatory framework within the system is less likely to create opportunistic behaviors. Even bankrupt financial services can be restructured by moving towards a privatization policy followed by almost every developing country. In this way, the banking sector will be possible to reduce the TC of the customers and improve investment performance and create a strong financial capability as a country.

Operationalization of the independent variable TC has been done on only four factors. However, there can be other considerations that affect the TC in the banking service of different socio-economic and cultural environments. Researchers can further enhance the used indicators according to the nationwide requirements. The study used a small sample (152) and future researchers can use larger samples to minimize the generalization issues. This research was conducted in an Asian country and researchers are encouraged to conduct this kind of experiment in different regions in different education, social, and cultural environments.

## REFERENCES

Ahmed, A. S., Takeda, C., & Thomas, S. (1999). Bank loan loss provisions: a reexamination of capital management, earnings management and signaling effects. Journal of accounting and economics, 28(1), 1-25.

Ahmed, Z. U. (1989). Effective Costs of Rural Loans in Bangladesh. World Development, 17(3), 357-363.

Almossawi, M. (2001). Bank selection criteria employed by college students in Bahrain: an empirical analysis. Int. Bank. Mark, 19(3), 115-125.

Al-Shbiel, S. O., & Al-Olimat, N. H. (2016). Impact of information technology on competitive advantage in Jordanian commercial banks. Accounting information system effectiveness as a mediating variable.

International Journal of Academic Research in Accounting, Finance and Management Sciences, 6(3), 202–211.

Anand, R. P. (2008). New states and international law. Pinnacle Technology. Vikas Publishing House, Delhi.

Anderson, E. W., Fornell, C., & Mazvancheryl, S. K. (2004). Customer satisfaction and shareholder value. Journal of marketing, 68(4), 172-185.

Anjalika, W. P. W. & Priyanath, H. M. S. (2018). Effect of service quality on customer satisfaction: an empirical study of customers who have bank accounts in both public and private banks in Sri Lanka. International Journal of Marketing and Technology, 8(1), 11 – 36.

Artz, K. W. (1999). Buyer-Supplier Performance: The Role of Asset Specificity, Reciprocal Investments and Relational Exchange. British Journal of Management, 10(2), 113-126.

Bardhan, P., & Udry, C. (1999). Development microeconomics. OUP Oxford.

Bebczuk, R. N. (2003). Asymmetric information in financial markets. Cambridge Books, Cambridge University Press.

Bena, I. (2010). Evaluating customer satisfaction in banking services. Management & Marketing, 5(2), 143-150.

Berger, A. N., & DeYoung, R. (1997). Problem loans and cost efficiency in commercial banks. Journal of Banking & Finance, 21(6), 849-870.

Bharadwaj, S. G., & Mitra, D. (2016). Customer satisfaction and long-term stock returns. Journal of Marketing, 80, 116–121.

Bonfim, D., Dai, Q., & Franco, F. (2018). The number of bank relationships and borrowing costs: The role of information asymmetries. Journal of Empirical Finance, 46, 191-209.

Burnham, T. A., Frels, J. K., & Mahajan, V. (2003). Consumer switching costs: a typology, antecedents, and consequences. Journal of the Academy of marketing Science, 31(2), 109-126.

Carey, M., Prowse, S., Rea, J., & Udell, G. (1994). The economics of the private placement market. Fed. Res. Bull., 80, 5.

Central Bank of Sri Lanka, (2018). Annual Report. Colombo. Central Bank of Sri Lanka.

Chochol'áková, A., Gabcová, L., Belás, J., & Sipko, J. (2015). Bank customers' satisfaction, customers' loyalty and additional purchases of banking products and services. A case study from the czech republic. Economics & Sociology, 8(3), 82.

Coase, R. H. (1960). The Problem of Social Cost. Journal of Law and Economics, 3, 1-44.

Coase, R. H. (1988). The Nature of the Firm: Origin, Meaning and Influence. Journal of Law and Economics, 4(1), 3-59.

Coase, R. H. (1992). The Institutional Structure of Production. The American Economic Review, 82(4), 713-719.

Coyles, S., & Gokey, T. C. (2005). Customer retention is not enough. Journal of Consumer Marketing, 69(4), 193-200.

Daniela, Z., Mihail-Ioan, C., Anatol, C., & Sebastian, M. D. (2010). New international financial regulation: Necessity or required by crisis. Annals of the University of Oradea, Economic Science Series, 19(1), 456-461.

Davidow, M. (2003). Organizational responses to customer complaints: What works and what doesn't. Journal of Service Research, 5(3), 225-250.

Delis, M. D., Staikouras, P. K., & Tsoumas, C. (2019). Supervisory enforcement actions and bank deposits. Journal of Banking & Finance, 106, 110-123.

Diamond, L., & Morlino, L. (2004). The quality of democracy: An overview. Journal of democracy, 15(4), 20-31.

Dyer, J. H., & Chu, W. J. (2003). The role of trustworthiness in reducing transaction costs and improving business performance: empirical evidence from the United States, Japan, and Korea. Organization Science, 14(1), 57-68.

Eggert, A., Ulaga, W. (2002). Customer perceived value: a substitute for satisfaction in business markets?, Journal of Business & Industrial Marketing, 17(2/3), 107-118.

Ejigu, S. N. (2017). E-Banking Service Quality and its Impact on Customer Satisfaction in State Owned Banks in East Gojjam Zone; Ethiopia. Global Journal of Management and Business Research, 16(8-B).

Farrell, J., & Klemperer, P. (2007). Coordination and lock-in: Competition with switching costs and network effects. Handbook of industrial organization, 3, 1967-2072.

Felix, K. (2015). Factors for customer satisfaction and customer dissatisfaction in commercial banks. Mediterranean Journal of Social Sciences, 6(4), 584.

Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. Journal of Marketing Research, 18(1), 39–50. JSTOR. https://doi.org/10.2307/3151312.

Fox, G. (2007). The real Coase theorems. Cato J., 27(3), 373-396.

Fraering, M., & Minor, M. S. (2006). Sense of community: An exploratory study of US consumers of financial services. International Journal of Bank Marketing, 24(5), 284-306.

Frank, S. D., & Henderson, D. R. (1992). Transaction costs as determinants of vertical coordination in the US food industries. American Journal of Agricultural Economics, 74(4), 941-950.

Gerrard, P., & Cunningham, J. B. (1997). Islamic banking: a study in Singapore. Int. J. Bank. Mark., 15(6), 204-216

Goldman, S. M. (1978). Portfolio choice and flexibility: The precautionary motive. Journal of Monetary Economics, 4(2), 263-279.

Grönroos, C. (2000). Creating a relationship dialogue: communication, interaction and value. The marketing review, 1(1), 5-14.

Habibi, S., Azari, A. D., Toloue, G., Ejlali, N., & Nejadjavad, M. (2013). Customer satisfaction and its impact on improvement of banking services. Interdisciplinary Journal of Contemporary Research in Business, 4(10), 998-1003.

Heffernan, S. (2005). Modern banking. John Wiley & Sons. New York, United States.

Hennart, J. F. (1993). Explaining the Swollen Middle: Why Most Transactions are a Mix of "Market" and "Hierarchy. Organization Science, 4(4), 529-547.

Heskett, J. L., Sasser, W. E. & Hart, C. W. L. (1990) Service Breakthroughs: Changing the Rules of the Game. The Free Press, New York.

Heide, J. B. & Stump, R. L. (1995). Performance Implications of Buyer-Supplier Relationships in Industrial Markets: A Transaction Cost Explanation. Journal of Business Research, 32(1), 57-66.

Hokanson, S. (1995). The Deeper You Analyze, The More You Satisfy Customers. Marketing News, p. 16.

Hom, W. (2000). An Overview of Customer Satisfaction Models. Annual Meeting of the Research and Planning Group for California Community Colleges, p.13

Hoyer, W. D. & MacInnis, D. J. (2001). Consumer Behaviors (2nd ed.). Boston, Houghton Mifflin Company. Boston. Houghton Mifflin.

Howard, J. A., & Sheth, J. N. (1969). The theory of buyer behavior. New York: Wiley.

Huimin, L., David, A., & Zhuofu W. (2013). Factors that affect transaction costs in construction projects. J. Constr. Eng. Manage, 139, 60-68. DOI: 10.1061/(ASCE)CO.1943-7862.0000573.

Hubbard, R. G., Kuttner, K. N., & Palia, D. N. (2002). Are there bank effects in borrowers' costs of funds? Evidence from a matched sample of borrowers and banks. The Journal of Business, 75(4), 559-581.

Kaleem, A., & Ahmad, S. (2009). Determinants of SMEs' perceptions of electronic banking in Pakistan. International Journal of Electronic Finance, 3(2), 133-148.

Kaura, V., Prasad, C. S. D., & Sharma, S. (2015). Service quality, service convenience, price and fairness, customer loyalty, and the mediating role of customer satisfaction. International Journal of Bank Marketing, 3(4), 404-422.

Kenneth, C. L., & Jane, P. L. (2013). Management Information Systems: Managing the Digital Firm (12th ed.). Prentice Hall.

Keisidou, E., Sarigiannidis, L., Maditinos, D. I., & Thalassinos, E. I. (2013). Customer satisfaction, loyalty and financial performance. International Journal of Bank Marketing, 31(4), 259-288

Koch, T. W., & MacDonald, S. (2006), Management of banking. The Journal of Risk Finance, 13(1), 29-38.

Kock, N., & Hadaya, P. (2018). Minimum sample size estimation in PLS-SEM: The inverse square root and gamma-exponential methods. Information Systems Journal, 28(1), 227–261.

Kombo, F. (2015). Customer satisfaction in the Kenyan banking industry. Journal of International Studies, 8(2), 174-186.

Kotler, P. (2003). A framework for marketing management. Pearson Education India.

Krawcheck, S. (2012). Four Ways to fix banks. Harvard Business Review, 1 June 2012. Harvard Business Review. Marketing Management in Turkey

Kumar, V. (2016). Introduction: Is customer satisfaction (Ir)relevant as a metric?. Journal of Marketing, 80(5), 108–109.

Kundu, S., & Datta, S. K. (2015). Impact of trust on the relationship of e-service quality and customer satisfaction. EuroMed Journal of Business, 10(1), 21-46.

La Porta, R., & Lopez-de-Silanes, F. (1998). Capital markets and legal institutions. Beyond the Washington consensus: Institutions matter, 73-92.

Ladman, & Jerry, R. (1984). Loan-transactions costs, credit rationing, and market structure: the case of Bolivia undermining rural development with cheap credit. Dale W Adams et al. (eds.), Westview Press, Boulder.

Lopez, J., Kozloski Hart, L., & Rampersad, A. (2007). Ethnicity and customer satisfaction in the financial services sector. Managing Service Quality: An International Journal, 17(3), 259-274.

Melese, F. & Franck, R. (2005). A Transaction Cost Economics View of DOD Outsourcing. Translated by California: Naval Postgraduate School.

Meramveliotakis, G., & Milonakis, D. (2010). Surveying the transaction cost foundations of new institutional economics: A critical inquiry. Journal of Economic issues, 44(4), 1045-1072.

Mihelis, G., Grigoroudis, E., Siskos, Y., Politis, Y., & Malandrakis, Y. (2001). Customer satisfaction measurement in the private bank sector. European Journal of Operational Research, 130(2), 347-360.

Mitchell, J. S. (1993). Introduction to machinery analysis and monitoring. Tulsa, Okla: PennWell. Paper Prepared for the International.

Mobarek, A. (2007). E-banking practices and customer satisfaction-a case study in botswana. In 20th Australasian Finance & Banking Conference.

Montazemi, A. R., & Qahri-Saremi, H. (2015). Factors affecting adoption of online banking: A meta-analytic structural equation modeling study. Information & Management, 52(2), 210-226.

Munusamy, J., Chelliah, S., & Mun, H.W. (2010). Service Quality Delivery and Its Impact on Customer Satisfaction in the Banking Sector in Malaysia. International Journal of Innovation, Management and Technology, 1(4), 398-404.

Nalukenge, I. K. (2003). Impact of lending relationships on transaction costs incurred by financial intermediaries: Case study in Central Ohio (Doctoral dissertation, The Ohio State University.

Nitsch, M., & Santos, C. A. (2001). Da repressão financeira ao microcrédito. Brazilian Journal of Political Economy, 21(4).

North, D. C. (1990). Institutions, Institutional Change and Economic Performance. Cambridge University Press, Cambridge, UK.

Perera, A.P.P. & Priyanath, H.M.S. (2018). Impact of internet banking service quality on customer satisfaction: An empirical investigation of customers in Sri Lanka. International Journal of Management, IT & Engineering, 8(2), 198 – 220.

Polski, M. M., & Kearney, A. T. (2001). Measuring transaction costs and institutional change in the US commercial banking industry. Institute for Development Strategies Discussion Papers. ISSN, 1-3.

Priyanath H. M. S. (2017). Effect of network structure on transaction cost of small enterprises in Sri Lanka: An empirical study. Journal of Small Business and Entrepreneurship Development, 5(1), 1-10. DOI: 10.15640/jsbed.v5n1a3.

Quinn, J. B., Baruch, J. J., & Paquette, P. C. (1987). Technology in services. Scientific American, 257(6), 50-59.

Rahayu, R., & Day, J. (2015). Determinant factors of e-commerce adoption by SMEs in developing country: evidence from Indonesia. Procedia-Social and Behavioral Sciences, 195, 142-150.

Ranatunga, R. V. S. P. K., Priyanath, H. M. S. and Megama, R. G. N. (2020a), Methods and rule-of-thumbs in the determination of minimum sample size when appling structural equation modelling: A review, Journal of Social Science Research, 15(2020), 102–109. https://doi.org/10.24297/jssr.v15i.8670.

Rao, R. V. (2007). Decision making in the manufacturing environment: using graph theory and fuzzy multiple attribute decision making methods: Springer Science & Business Media: 2012

Rhyne, E. (1998). The yin and yang of microfinance: Reaching the poor and sustainability. Micro Banking Bulletin, 2(1), 6-8.

Rose, P. S., & Hudgins, S. C. (2008). Bank management & Financial Service, Mc Graw-Hill/Irwin. New York.

Saeed, A. (1996). Islamic banking and interest: A study of the prohibition of Riba and its contemporary interpretation (Vol. 2). Brill.

Stiglitz, J. E., & Weiss, A. (1992). Asymmetric information in credit markets and its implications for macro-economics. Oxford Economic Papers, 44(4), 694-724.

Tharanikaran, V., Sritharan, S., & Thusyanthy, V. (2017). Service quality and customer satisfaction in the electronic banking. International Journal of Business and Management, 12(4), 67-83.

Wanninayake, W. M., & Dissanayake, D. M. R. (2007). A comparative study of service quality and customer service in public sector and private sector commercial banks. In Conference proceedings of 4th International Conference on Business Management (ICBM), 268-274.

Williamson, O. E. (1979). Transaction-cost economics: the governance of contractual relations. The journal of Law and Economics, 22(2), 233-261.

Williamson, O. E. (1985). Assessing contract. Journal of Law, Economics, & Organization, 1(1), 177-208.

Wruuck, P., Speyer, B., AG, D. B., & Hoffmann, R. (2013). Pricing in retail banking. Scope for boosting customer satisfaction. Frankfurt am Main: Deutsche Bank AG, 1-20.

Yasuda, H. (2005). Formation of strategic alliances in high-technology industries: comparative study of the resource-based theory and the transaction-cost theory. Technovation, 25(7), 763-770.

Zairi, M. (2000). Managing customer satisfaction: a best practice perspective. The TQM magazine, 12(5),