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THE ELECTRONIC CLEARING SYSTEM AND SETTLEMENT OF DEBTS

Case study: Afriland First Bank Cameroon

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<p>The main aim of this thesis was to find out what the electronic clearing system was all about and how it facilitates the settlements of debt. This thesis was based on an internship which motivated the writer to investigate more about the electronic clearing system and how it functions as compared to the formal means of clearing (manual clearing system). The research was based on personal observations and research with the use of questionnaires which were sampled to a randomly selected staff and customers of the case institution.</p> <p>From the responses received from the questionnaires and also from the personal observations and the writing of others about the electronic clearing system, it is assumed that the electronic clearing system has played a great role in settling debts or financial differences between banks on behalf of their customers. Conclusively, the electronic clearing system is one of the greatest inventions in modern day technology as it has superseded the outdated manual clearing system, thereby leading to the growth of the entire economy.</p>		
Key words Electronic clearing, Manual clearing, Settlements of debts, Technology		

LIST OF ABBREVIATIONS

AFB: Afriland First Bank

ACH: Automated Clearing House

BEAC: Banque de Etats de l'Afrique Central

CEMAC: Communité Economique et Monétaire de l'Afrique central

CFA: African Financial Community

COBAC: Commission Bancaire de l'Afrique Central

CCEI: Caisse Commune d'Épargne et d'Investissement

ECOWAS: Economic Community of West African State

ECS: Electronic Clearing System

FHFB: Federal Housing Finance Board

NEFT: National Electronic Funds Transfer

SYGMA: System des Gros Montant Automatisé

SYSTAC: System de Telecompensation en Afrique centrale

SWIFT: Society for Worldwide Inter-bank Financial Telecommunication

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ABSTRACT

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1 INTRODUCTION

The main aim of this thesis is to know how the electronic clearing system functions in settling debts as compared to the formal means of clearing (manual clearing). Electronic clearing system (ESC) also known as electronic fund transfer or better still wire transfer is a feature of electronic banking where by the transfer of funds from one account to another rather than by cash is done with the use of electronic devices like computers and scanners. This is done both at national and international levels, and its objective on the banking sector as whole is devising a means by which customers would be stress free from traditional payment methods.

Also with the business philosophy of maximizing profit and minimizing cost, the business environment nowadays has become very complex, dynamic and competitive as a result of an improvement in technology. This has led to increase of awareness therefore Afriland First Bank and the entire banking sector as a whole has to adapt to such changes or improvement in other to serve its clientele in a more efficient manner. Before the coming of electronic payment system, settlements of inter-bank debts were done manually in the clearing house at the central bank. Here, chief clearers from different banks met at the central banks and their cheques holdings compared to establish balances and forms of payment were mostly by cash but things took a different turn with the modernization of the banking sector. There was a need to computerize the payment system in other to reduce the risk involved in that form of clearing and to satisfy customers.

A bank is referred to as a financial institution that is out to receive money from customers (customer's deposit) for safe keeping and given them back as loans to other customers and in return make profit from the interest paid by the customers. The main objective of this institution is that of profit maximization. The banking sector over the past decades has developed tremendously in almost all its aspects and one of these modernizations is the introduction of the electronic clearing system to replace the manual clearing system.

Pre-colonial Cameroon did not experience the operation of the banking profession as it is the case today. What they had as financial interest groups were "Njangi" or "Tontine". It was only until the flourishing of trade at the coastal parts of Cameroon and the subsequent German colonization that the country witnessed the creation of some banks such as;

- The German bank of Deutsch

- West Africanish Handelsgesellschaft

It was only after the defeat of Germany in the Second World War by the British and French and subsequent independent of Cameroon in 1960 and 1961 respectively, that Cameroon saw the rise of its own banks. Some of these banks were;

- Amity bank
- Chase bank 1991
- Meridian bank 1988
- SGBC 1963

Since then some of these banks have collapsed, merged with other banks and some new banks have being created like Afriland First Bank in 2002.

Accompanying this growth in the banking sector is technology which has brought about an improvement in the banking sector. A case in point here is electronic clearing system which has helped significantly in settling inter-bank debts between banks at national and international levels. (Doyle,1972). But the question here is what role has electronic clearing system played in settling inter- bank debts among banks in Cameroon as per the case of Afriland First Bank. This role will be determined from the various forms of clearing or inter-banks settlement carried out at Afriland First Bank. These will be further analyzed in the preceding chapters using the response from the questionnaires and significance of the study.

The role played by the electronic clearing system settling of inter-bank debts is very much vital to our society as a whole and to the organizations in particular. E-banking is very important to the economy in that, administrative work is reduced, expenditures on papers, slips, forms bank stationeries too have gone down which help raising profit margins using the charges generated from e-banking services. Another importance is that the service provides quality service to both private and public sectors due to the use of a device like.

This study is limited to Afriland First Bank at the Bamenda commercial avenue branch. The researcher is limited to the role played by electronic banking especially electronic clearing in settling inter-bank debts in Cameroon. This study is carried out through interviews, the administration of questionnaires to some staffs and members of Afriland First Bank. They were selected through a random sampling method or technique.

2 PRESENTATION OF AFRILAND FIRST BANK

The bank was founded in 1987 by Dr Paul K Fokam under the name Caisse Commune d'Épargne et d'Investissement (CCEI) a micro finance institution. This financial establishment started with a capital of 300 million France CFA and it was founded in Yaoundé. It was as a result of the rapid growth in the banking sector of Cameroon that the bank by the 1st of January 2002 changed the name from Caisse Commune d'Épargne et d'Investissement (CCEI) to Afriland First Bank (AFB) with branches all over the CEMAC region and some countries in the world. They also have affiliate in some countries like France, England just to name a few.

The head office of AFB is at 1063 place de l'indépendance Yaoundé. Today the bank is having a capital of 15.8 billion France and about 700 permanent employees with the General manager Mr Alphonse Nafack at the head of control. This bank has evolved over time with product other than deposit, savings and lending but services such as internet banking, flash cash, money first, e-money, As millennium, flash millennium, Malaika and ASkiba, school fee loans, ATM and just to name a few. AFB Bamenda is a branch of AFB Cameroon that was created in 1992 under the name CCEI. It was also around the 1st of January 2002 that the name changed to Afriland First Bank Bamenda. It is found at the main commercial center of Bamenda (Commercial Avenue) that is opposite BICEC and adjacent orange Cameroon and SCB bank the branch office has about 21 staffs with the branch manager at the head of control. (Afriland First Bank Annual report 2010-2015)

TABLE 1. Working hours of Afriland First Bank

Mondays to Fridays	7:30am-11:45am	And 2:30pm-5:45pm
Saturdays	9:00am-11:45am	And 4:00pm-5:30pm
Public holidays	9:00am-11:45am	And 4:00pm-5:30pm

TABLE 1 shows the working hours of Afriland first bank Bamenda Bran on both working days and public holidays. Afriland first bank being one of the largest banks in Cameroon with a capital of about 15.8 billion France with branches all over the national territory and abroad, also use the electronic clearing system to settle debts. The system that is being used by Afriland First Bank to carry out

settlements of debt is the same being used by all the banks in the CEMAC economic zone which is SYSTAC and SYGMA clearing system.

SYSTAC (system de te'le'compensation en afrique central) with this system of clearing, cheques are scanned and sent to the central bank for clearing. And after 48 hours the fate of the cheque is received. Whether a positive or negative fate the information is first being send to the head quarter and then further to the branches due. A point to note here is that with this system of clearing the amount is less than a 100 million FCFA. And there is what is known as an away phase and return phase. (Afriland First Bank Manual 2010-2015)

SYGMA (system de gros mutant automatise) this system of clearing deals with the exchange of values greater than 100 million FCFA and this is done at the central bank. Then the central bank does the clearing and compensation, and this is the fastest means of clearing but very expensive. (Afriland First Bank Manual 2010-2015)

2.1 Products and Services of Afriland First Bank

Current account (Individual and company current account) this account can be operated by an individual or a company and this account yields no interest to the holder of the account. Also, withdrawals in this account are done through the use of cards, counter cheques, individual cheques and flash cash.

Documents required to open an individual current account are;

Photocopy of NIC or valid passport

2 passport size color photograph

A detailed location map or photocopy of current water or electricity bill

Filled account opening request form

In case of a resident permit or NIC receipt, it needs to be certified by an official

Document required to open a company current account are;

A notarized copy of articles of association

A court legalized copy of the certificate of incorporation issued not later than three month

A photocopy of valid tax payers card legalize by the taxation department

A photocopy of valid business license legalized by the taxation department

A location of the business premises legalized by the taxation department

A financial statement for the past two years if the business is already operating

A certificate of non- bankruptcy

Copy of the minute of constituent meeting (for a business whose creation is on the way)

A legalized copy of valid NIC or valid passport

Two passport color photograph

A detailed location map of the signatory

With the current account, that is individual current account the initial deposits is negotiable and the customer is entitled to an attestation of account and a cheque booklet and no charges are deducted from the customer's account. Meanwhile with company current account, the minimum deposits is 100000FCFA and they pay 5000 FCFA as charges and are also entitled to attestation and cheque booklet. (Afriland First Bank annual report 2010-2015)

Savings account;

This is an account that customers open in order to be able to yield interest. This is mostly operated by business persons who want to save their money. The documents used to open the current account are the same used to open the savings account. In this account you earn interest and you also pay charges after 6 months (1 semester) and the minimum amount to be deposited in this account is 100000FCFA and the minimum balance to be left in this account is 50000FCFA. In this account you are entitled to a passbook and only withdrawals and deposits are carried out in this account.

Islamic saving account:

This is an account owned by Muslims, and this account yields no interest and no charges are levied on this account. The minimum for the initial deposits is 100000FCFA and the minimum balance is 25000FCFA and the customer is entitled to a passbook.

Afriland first bank also carry out some money transfer services as well as international transfers, they also act as intermediaries and also carry out other services on behalf of the customers. It is as a result of this that Afriland first bank has being able to capture a greater proportion of the total number of customers in Cameroon and neighboring countries. This continues increase in the number of Afriland

first bank's customer base has led to the rapid growth of the bank, with the creation of new branches and subsidiary agencies all over the country and abroad. (Afriland First Bank annual report 2010-2015)

2.2 Data Collection Methods

This section of the work tackles the method and procedure involved in the collection of data to reflect the objectives that have been done to establish a better understanding of what electronic clearing is all about and the role it has on the settling of inter-bank debts among banks. The methodology used in carrying out the research is the explanatory and descriptive research method. The explanatory research method give detail information about what other people said on the "Role of Electronic Clearing System in Settling Inter-Bank indebtedness and payments" in the banking industry, while the descriptive research method was used by the observations by the intern, personal interviews with personnel, internet research on the corporation. However, data required for a proper understanding was obtained using both primary and secondary source of data collection

2.2.1 Primary Source of Data Collection

The primary source of data collection involves data obtain directly from the field which include;

Observation

Interviews

Firstly, by observation it was witnessed at first hand all the processes involve in the electronic clearing system. That is from how a customer deposits a cheque to the actual clearing of the cheque. Secondly, by interviews the researcher had a series of discussions and asked questions to almost all the entire staff of AFB and some staffs other banks. This was through questions and answers with practical examples at times.

2.2.2 Secondary Source of Data Collection

Secondary source of data collection involves mainly data gotten from other writers up published and unpublished as well as the internet. Research studies from corporation's archives, Internet research from website of the organization, reading other publication from different authors on the topic concern and research projects of other researchers

2.3 Sample and Sampling Technique

When conducting a research, it is almost impossible to study the entire population that you are targeting. This is because it will be time consuming and costly and as a result, the researcher uses sample as a way to gather data needed. Sample is a subset of the population being studied; it represents the largest population and is used to draw references about the population, while sampling technique simply refers to the method used by the researcher to select representative samples from the entire population. For the researcher to design this sample, he calls for three decisions that is; who will be surveyed? (The sample), how many people will be surveyed? (Sample size) and how should the sample be chosen? (Sampling design).

With the above decision, the researcher pays attention to the following when developing a sampling design. He defines the population, sampling unit, source list and size of sample, the parameters of interest, budgeting constraint and sampling procedures and finally the type of sampling technique to be used in selecting the items for the sample.

Base on the objectives and hypothesis of the study, Afriland First Bank staffs and customers were chosen. With this, the probability sampling was used. This is a sampling in which every item of the population has an equal chance of inclusion in the sample. Hence, two main procedures were used; firstly, is the strategic sample in which a bank was identified in Bamenda to reflect the other banks. After this the random sample procedure was employed to identify management and customers to provide information that will reflect the entire population. The sampled population responded to items on the questionnaires as well as interviews.

2.4 Reasons for Data Collection Method Used

Some of the reasons for the data collection method used are as follows;

(A) Reason for primary data collection method used;

The respondent may give more honest answers to questions, the information collected is reliable, sustainable and adequate for the purpose, and it is a very easy way to get relevant information quickly, and finally it is cheap, it saves time, it is flexible and enables the researcher to collect large amount of Information.

(B) Reasons for secondary data collection method used;

The researcher used this method because observation is patient, and the researcher did not have that much time to observe for a very long time due to limited factors, the researcher used it because the primary data collection method had problems on interviewing some customers.

3 THE ELECTRONIC CLEARING SYSTEM

This is the electronic mode of funds transfer from one bank account to another. It can be used by institutions for making payments such as distribution of dividends. The electronic clearing system (ESC) also known as electronic fund transfer or better still wire transfer is a feature of electronic banking where by the transfer of funds from one account to another rather than by cash is done with the use of electronic devices like computers and scanners. This is done both at national and international levels and its objective on the banking sector as whole is devising a mean by which customers would be stress free from traditional payment methods (Stewart, 2001).

Also with the business philosophy of maximizing profit and minimizing cost, the business environment nowadays has become very complex, dynamic and competitive because of an improvement in technology. This has led to increased awareness therefore the entire banking sector has to adapt to such changes or improvement in order to serve its clientele in a more efficient manner. Clearing on its part is the process of reconciling purchases and sales of diverse options, futures or securities, as well as the direct transfer of funds from one financial institution to another. The process validates the availability of the appropriate funds, records the transfer, and in the case of securities, ensures the delivery to the buyer. (Adolphus, 2004.)

3.1 How the Electronic Clearing System Operates

In the past decades, it was very difficult for people and banks to carryout financial transactions and settling of their debts because all was done manually due to the facts that the banking sector was not yet computerized. Given that banks had many cheques drawn on them, and payments orders made by customers during their daily transaction. Doing the settlements manually entailed an excessive cost, too much paper work and bureaucracy as well as time wastage. But with the computerization of the banking system, there was a need to computerize the inter-bank clearing system in order to reduce operational cost and this was done mostly through teleclearing.

Generally, it is the mechanism of exchange of values (cheque) between banks with the objective of settling reciprocal debt bond from transactions by their customers. Electronic clearing is a situation in which cheques are being cleared with the use of electronic devices such as computers and scanners and the use of internet between banks.

3.2 The Electronic Clearing System Procedure

There are many forms of electronic clearing systems which differ from country to country or from one trade zone to another. Some electronic clearing systems used in an economic zone like CEMAC in West Africa are SYSTAC and SYGMA. (Payment systems)

SYSTAC (system de te'le'compensation en afrique central) with this system of clearing, cheques are scanned and sent to the central bank for clearing. And after 48 hours the fate of the cheque is received. Whether a positive or negative fate, the information is first being sent to the head quarter and then further to the branches due. A point to note here is that with this system of clearing the amount is less than a 100 million FCFA. and there is what is known as an away phase and return phase. (Afriland First Bank Manual 2010-2015)

SYGMA (system de gros mutant automitise) this system of clearing deals with the exchange of values greater than 100 million FCFA and this is done at the central bank. Then the central bank does the clearing and compensation, and this is the fastest means of clearing but very expensive. (Afriland First Bank Manual 2010-2015)

According to the Afriland First Bank manual 2010-2015 the electronic clearing system has the following procedure.

Step 1: When a customer of a bank presents a cheque from another bank drawn to his benefit, he deposits the cheque alongside a filled cheque remittance form including account name, number and signature.

Step 2: The operation officer the next day scans the cheque and sends the scanned cheque and relevant information to the central bank. The central then forwards the scanned cheque to the bank that is due. The bank then pays the money to the central bank and the central bank then forwards the money to the head quarter of the bank, who then distributes the money into the account of the customers at the various bank branches. This whole process takes a period of two days.

Step 3: The customer's account will be credited with the amount on the cheque if the cheque was valid. In a situation, when a cheque is not valid, the central bank will inform the bank and the bank to will inform its customer.

In the United States for example, the clearing of cheques and other forms of interbank debt is done through the automated Clearing House (ACH) at the federal reserve bank of America. The automated clearing house handles and settles interbank financial differences on behalf of a set of regional banks and correspondent banks. In the United States, each bank participating in automated clearing system has a financial transaction server. This financial transaction server of these regional banks performs settlement and transaction forwarding services on behalf of the correspondent banks serviced by that regional bank. The financial transaction server for each correspondent bank transmits and receives electronic financial transactions to and from the financial transaction server for its regional bank. The financial transaction server for a regional bank includes a first interface for receiving electronic financial transactions from clients, a second interface for transferring electronic financial transactions to and from the electronic financial transaction servers of other regional banks, and a third interface to transferring electronic financial transactions to the regional bank associated with the electronic financial transaction server. (<https://www.fiscal.treasury.gov/pmt/ach> , accessed 13th October 2017)

Each electronic financial transaction has associated therewith a payor, a payor's financial institution, a payee and a payee's financial institution. Those financially related transactions server for a regional bank. Additionally incorporates transaction rationale to determining, for each money related transaction accepted starting with a client, if the accepted monetary transaction fulfills predefined integument criteria, also settlement rationale for preparing every gained monetary transaction by overhauling in any event one record offset connected with in any event a standout amongst those payor alternately payee's budgetary institution, What is more sending those accepted fiscal transaction should in any event have a standout amongst the payor alternately payee's monetary organization by means of the second or third interface

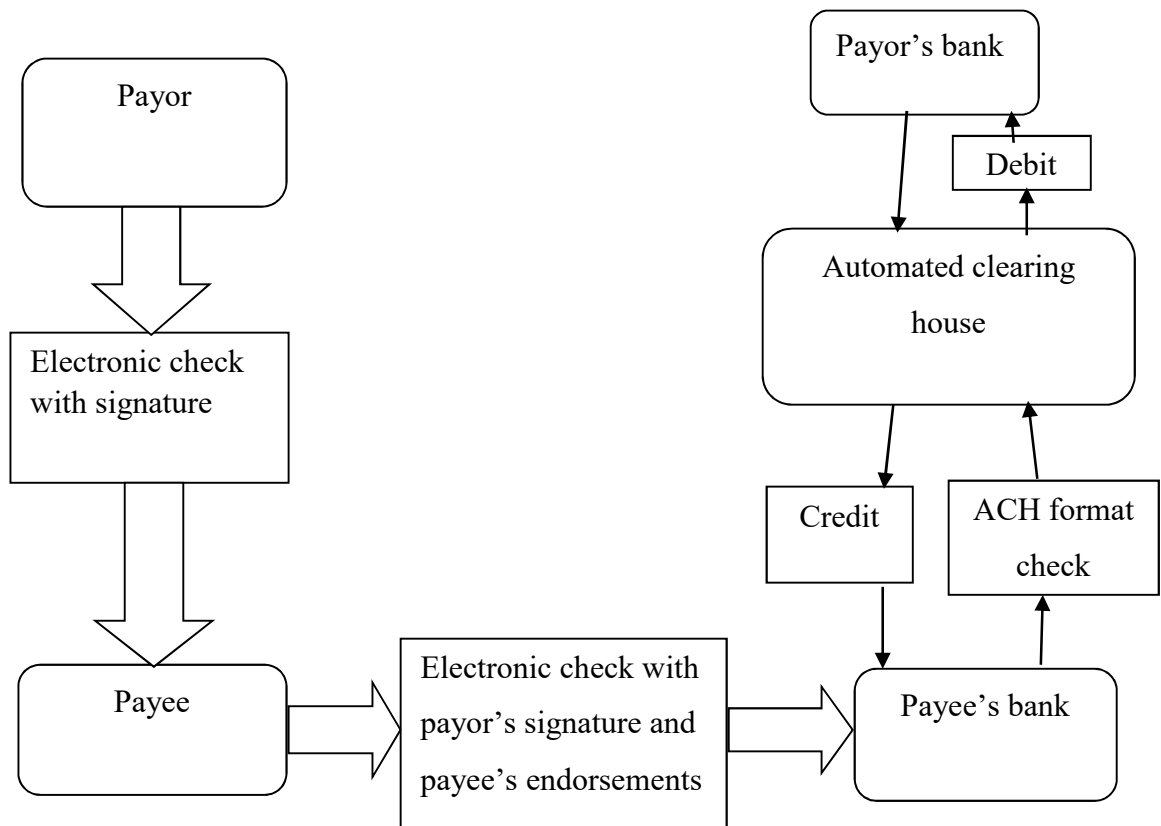


FIGURE 1

U.S Patent December 8, 2008 (<https://www.fiscal.treasury.gov>pmt>ach> , accessed 13th October 2017)

As seen in FIGURE 1 above, a bank in United States starts a direct deposit or direct payment transaction using the automated clearing house network. The bank can be a private or government bank, and ACH transactions can be both debit and credit. The bank where the cheque is deposited, or the originating depository financial institution (ODFI), takes the cheque and batches it together with other cheques of other customers and transactions to be sent out at regular times throughout the day to the federal reserve bank or automated clearing house.

An automated clearing house operator, either the Federal Reserve or a clearing house, receives the batch of cheque transactions from the banks, with the originator's transaction included. The automated clearing house operator sorts the batch and makes transactions available to the bank or financial insti-

tution of the intended recipient, or to the receiving depository financial institution (RDFI). The recipient's bank account receives the transaction, thus reconciling both accounts and ending the process.

The banking industry in the United States has long acknowledged that the national Federal Reserve Bank cheque clearing system and settlement system has numerous drawbacks. One of these problems is caused by the length of time it takes to clear one transaction. Normally in the national system, funds are not settled for 2-3 days that is, from the day the cheque is received by the institution. To assure the integrity and availability of funds, most institutions place holds on the availability of the funds until after the cheques have being cleared. This causes inconveniences to both banks and the customers or cheques holders who might need their money to carry out other transactions. What is needed is an electronic clearing system that enables a quicker means of settling transactions between institutions that regularly conduct business, but which also allows other check settlements and fund transfers to be performed between institutions that may be remotely located from each other and that conduct business less frequently. (<https://www.fiscal.treasury.gov>pmt>ach> , accessed 13th October 2017)

3.3 Theories on the electronic clearing system

Firstly, according to Ngoh (2010) in his book titled Banking and Finance for professionals he defines the clearing system as a means by which banks exchange differences drawn on each other through a clearing house. He goes ahead to say, the electronic clearing system is a modern way of clearing inter-bank indebtedness and which does not involve the manual movements of cheques from bank branches to head offices. He says that with the increasing use of computers in banking, a special clearing system has been developed to make possible the transfer of funds from one bank account in a bank to another bank account in another bank by putting details of transfer in magnetic tapes that can be read by the computer and that banks have formed a special section of the clearing house called Banks Automated Clearing Service Limited (BACs) with a central computer in other to facilitate such operations.

Secondly, in his book entitled Payment strategy and system (2001), Stewart examined the benefit of electronic payments in India and concludes that efficiency in payment system brings about many benefits for a country's economy and its people. Many studies have indicated that a saving of 1per/cent of gross domestic product (GDP) is possible by improving payments system efficiency and moving physical payment to electronic payments. In India, this represents a huge opportunity. Many improvements have taken place in India in terms of payments systems. In retail payment area however, physical payments are still predominant although retail electronic payment option such as NEFT Electronic

Clearing System (ESC) is growing. India needs to focus on reducing the volume of physical cheques and increasing electronic payments to achieve greater payments system efficiency. This paper is an attempt to study use statistics of 2003-04 to 2008-09, analyze the trend and suggest a few approaches to improve the efficiency of India payments systems by reducing the use of cheques and increasing the use of electronic payments systems. Innovations, convenience, strong legal and incentives are significant factors in improving efficiency.

Furthermore, according to the FHFBS offices of Supervision Examination Manual April (2007) offer analyzing payment system in the United States of America, they consist of numerous financial intermediaries, financial service firms and non-banking businesses that create, distribute and process electronic transactions to purchase, sell or finance securities transaction, disburse or repay loans, settle real estate transactions and make large value, time critical payment such as payment for settlement of interbank purchases and sales of federal funds. The Automated Clearing House (ACH) which is a nationwide mechanism that processes electronically originated batches of high volume, low value, credit and debit transfers rather than sending each payment separately. ACH transactions are accumulated and sorted by destination for transmission during a predetermined time period. This provides significant economies of scale used to convert cheque payments to ACH debit transfer which provides faster processing and reduces payment processing cost.

According to Hyundai Information Technology (2003), we will find the analysis of electronic payment systems in Korea which like other retail payment systems in Korea is owned and operated by the Korean Financial Telecommunications and Clearings Institute (KFTCI), owned by member banks. According to the analysis, there are currently two classes of members in the cheque clearing system that is direct and indirect. Direct participants clear directly with one another and settle net obligations across their account at the Bank of Korea (BOK). General and associate members of KFTCI are entitled to direct participation in the system. Since general and associate memberships are open to banks only, non-banks and banks other than general and associate members are required to obtain the prior permission of KFTCI's general meeting in order to participate directly in the cheque clearing system. Indirect participants appoint direct participants as agents to clear and settle their cheques on their behalf. As of the end of December 2001, the Seoul clearing house had 24 direct participants such as domestic banks and 1,504 indirect participants such as foreign bank branches and mutual credit facilities. The type of transactions cleared in this system includes cheques, promissory note, bill of exchange, dividends receipts through 51 clearing houses in Korea. (Sheueling, 1998)

The cheque clearing process in the Seoul area is as follows: cheques deposited by customers are automatically sorted by reader-sorter machines at the institutions data centers. Most cheques have an MICR (Magnetic Ink Character Recognition) like encoding the detailed information such as the cheque amount and the payee's bank. Cheques are delivered to Seoul clearing house for overnight clearing 1:00 on day T+1. Cheques of institutions without their own reader and sorters are sent to the clearing house by 19:00 on day T to be sorted by the clearing house on institution's behalves. After exchange of cheques and final verification among participants, the clearing house calculate the net obligation of each institution on a multilateral basis and sends it to the bank of Korea by 13:30 on day T+1 for final settlement. Meanwhile by 14:30 and day T+1, the payers' bank should notify the payee's bank of any cheques which are expected to remain unsettled because of insufficient funds on payer's account. From 14:50 on day T+1 the payee's banks allow the payee to withdraw funds on cheques except those expected to remain unsettled. Unsettled cheques are put again in the regular clearing cycle and return to the payee's bank in the Seoul's clearing house, cashier's cheques and some paper-based bills are cleared by online transmission of digital information only, without physical delivery, as cheque truncated has been implemented since May 2000 to reduce operation cost.

3.4 Electronic Clearing System versus Manual Clearing System

The electronic clearing system is a modern system of clearing interbank deference or debts that arise as a result of the issuing of cheques by customers of one bank to that of other banks. This electronic clearing system or automated clearing system is brought about by the advancement in technology and modernization, and it has tremendously helped in facilitating transactions in the banking sector in particular and the entire economy of a country as a whole. This is being done with the use of electronic devices such as scanners, computers and servers and it takes a short time for the complete transaction to take place depending on the clearing system or amount.

Meanwhile the manual clearing system is an outdated form of clearing, were in the staff of banks had to meet at the clearing house and settle their financial differences. This was due to the lack of technology and this really slowed the way in which transactions were being carried out, as it will take a long time for a customer's cheque to be verified and cleared. This form of clearing was done with the use of papers, pens and each banks representative who met at the clearing house. And with this form of clearing there is bound to be errors arising from calculation of figures or fraudulent cheques and delays.

Also with the electronic clearing system, businesses turn to move faster and the entire economy turns to grow at an alarming rate due to fast movements of money from one person or business to another. But as compared with the manual mode of clearing, the movement of money had to take a long time thereby hindering or slowing down businesses. Because cheques had to be cleared and verified by both parties involved and this took a long time, thus hindering businesses as compared to modern day economy.

The electronic clearing system better still known as automated clearing system is more secure and safe as compared to the outdated form of clearing. This is because with the electronic mode of clearing, there is no movement of cheques and remittance papers from one place to another as everything is being done with the use of machines and internet. Meanwhile, the manual system of clearing was unsafe as representatives of banks had to carry cheques and remittance forms for long distances which could be stolen or damaged along the way. Nakajima,(2011)

3.5 Benefits of the Electronic Clearing System

According to Adolphus, (2004) some of the benefits of the electronic clearing system are;

Improving banks efficiency: The electronic clearing system helps to improve on Afriland First Bank's efficiency as proceeds of customers' cheques will be collected fast and cheaply.

Additional revenue: The electronic clearing system provides an additional source of revenue for banks as they collect charges from customers who carry out clearing services.

Flexibility: The bank customers can easily use cheques to carry out their transactions because they know that those cheques will be cleared within a period of two days, thus making it flexible as compared to the manual system of clearing.

Reduce risk: Another important benefit of the electronic clearing system is that it reduces the risk. That is, cheques are scanned and sent to BEAC in the electronic banking systems thus reducing risk as compared to the manual clearing system that cheques are transported to BEAC with the risk of getting lost along the way.

Fast: with the use of computers, scanners and the internet, the electronic clearing system is fast and thus enabling those involved in carrying out their transactions on time.

3.6 Some Challenges with Electronic Clearing

Poor handling of cheques: Mostly at times customers rough handle (twist or fold) of cheques issued to them from other banks which become difficult to scan and as a result needs to be cleared manually which is costly and time consuming on the part of the bank.

Delay on the part of BEAC: At times, BEAC takes a long time to collect proceed of a cheque from the drawer's bank and to pay to the beneficiary's bank.

Poor internet connection: Frequently AFB has internet connection problems which as a result delays the clearing process.

Bounce cheques: At times customers of AFB deposit cheques issued to them by customers of other banks with no or without enough money in their account. This will consequently bounce and at times the customer of AFB get furious but with the bank instead of the issuer of the cheque. (Asare, 2017)

4 PRESENTATION AND ANALYSIS OF DATA

This chapter presents an analysis of data on the role played by the electronic clearing system in settling inter-bank debt in Cameroon. It also elaborates on identification of respondents (primary data) and the interpretation of result. And in identifying this respondent the researcher used the demographic question in the questionnaire such as what is your age, sex and level of education

The respondents were relatively staffs and customers of Afriland First Bank who were eligible, present, and available for the study at the time of the research's internship. They were administered questionnaires. These questionnaires were administered at the AFB Bamenda branch office located at commercial avenue Bamenda. 70 questionnaires were sent out and all were answered with a response rate of 100per/cent.

TABLE 2: Distribution of questionnaires according to sample size

Sample size	Number of sample
Customers	50
AFB Staff	20
Total	70

TABLE 2 shows the number of randomly selected customers and workers of Afriland First bank who are to answer the questionnaire. There are about 5000 customers at AFB thus giving a ratio of $50/5000= 1:100$. Also, there are about 20 workers at AFB Bamenda branch giving a ratio of $20/20= 1:1$.

The data collection tools were questionnaires administration through which schedules were carried out, where the researcher asked questions and they were answered. This was especially with the customers who brought cheques of other banks to AFB to be cleared either through SYSTAC or SYGMA. The data was collected, grouped and analyzed with the use of tables. Data of 20 staff and 50 customers is analyzed and presented in two sections. Section one deals with the staff and section two deals with the customers of AFB.

4.1 Analysis of Questionnaire Based on Banks Staff

TABLE 3: Identification of respondent by gender

Gender	Frequency	Percentage (%)
Male	7	35
Female	13	65
Total	20	100

As seen from the table above, out of 20 staffs who answered the questionnaire, 7 were males making a percentage of 35 %, and 13 were females giving a percentage of 65 % making a grant total of 100 %.

TABLE 4: Identification of respondents by age group

Age Range	Frequency	Percentage (%)
20-35	14	70
36-45	5	25
46-60+	1	5
Total	20	100

The table above illustrates how 14 respondents were between the ages of 20-35, having a percentage of 70 %, while 5 respondents were between 36-45 giving a percentage of 25 %, and only 1 respondent was between the age of 46-60+ giving a percentage of 5 % , implying a grand total of 20 respondent with a 100 %.

TABLE 5: Identification of respondents by level of education

Level of education	Frequency	Percentage (%)
FSLC	0	0
O/L	0	0
A/L	6	30
University	10	50
Others	4	20
Total	20	100

From TABLE 5, out of 20 persons that answered the questionnaires, 6 respondents are of the Advance level of education, giving a percentage of 30. 10 have university level giving a percentage of 50 and lastly, 4 respondents are from other levels of education like PhD giving 20 % and a grand total of 20 respondents and 100 %.

4.1.1 Staffs Point of View on Electronic clearing

TABLE 6: Has the electronic clearing system (ECS) played any role in inter-bank settlements?

Respondent	Frequency	Percentage (%)
Yes	20	100
No	0	0
Total	20	100

Out of 20 respondents that answered the above question, there was nobody who denied the fact that the electronic clearing system played a role in inter-bank settlements giving a total of 100 %.

TABLE 7: Will inter-bank settlements be affected if Electronic clearing system is stopped?

Respondent	Frequency	Percentage (%)
Yes	16	70
No	4	30
Total	20	100

From TABLE 7 above, 14 respondents said inter-bank settlements will be affected if the electronic clearing system is stopped, giving a percentage of 70. While 6 respondents are of the opinion that, the inter-bank settlements will not be affected if the electronic clearing system is stooped giving a 30 % and a grand total of 100 %.

TOTAL 8: Is the electronic clearing system important to your institution?

Respondent	Frequency	Percentage (%)
Useful	16	80
Not useful	4	20
Total	20	100

From the above table, electronic clearing system is useful according to 16 staff respondents giving a percentage of 80. While 4 respondents say electronic clearing system is not useful giving a percentage of 20, making a grand total of 20 respondents and a 100 %.

4.1.2 Staffs Remarks about Electronic Clearing

TABLE 9: Is the electronic clearing system the one and most important form of clearing?

Respondent	Frequency	Percentage (%)
Yes	0	0
No	20	100
Total	20	100

As seen on table 9, the electronic clearing system is not the most important form of clearing according to all the 20 respondents, giving a percentage of 100.

TABLE 10: Is funds always available for the settling of inter-bank debts?

Respondent	Frequency	Percentage (%)
Yes	20	100
No	0	0
Total	20	100

From the TABLE 10, there are always funds available to settle inter-bank debts. This is proven by the 100 % total giving by the 20 respondents who all answered YES to the question.

4.2 Analysis of Questionnaire According to Customer's Point of View about Electronic Clearing

As mentioned earlier, section two deals with questions and responses to the customers of AFB who deposit their cheques at the bank for clearing. The researcher administered questionnaires to 50 customers. The analysis can be seen as present below.

TABLE 11: Identification of respondents by gender

Respondents	Frequency	Percentage (%)
Male	20	40
Female	30	60
Total	50	100

From the TABLE 11 above, there were 20 male respondents who answered the questionnaires with a percentage of 40, and 30 female with respondents with a percentage of 60 and a grand total of 50 respondents and 100 per cent.

TABLE 12: Identification of respondents by age group

Age	Frequency	Percentage (%)
20-30	10	20
31-40	20	40
41-50	15	30
51-60	5	10
61+	0	0
Total	50	100

From the TABLE 12, 10 respondents fall between the age range of 20-30 and they made a percentage of 20. There were 20 respondents between the ages of 31-40, making a percentage of 40. Between the age ranges of 41-50, they were 15 respondents who had a 30 %. And 10 per cent goes to 5 respondents who fall between the ages of 51-60. In total, there were 50 respondents with 100 %.

TABLE 13: Identification of respondents by level of education

Respondents	Frequency	Percentage (%)
FSLC	5	10
O/L	12	24
A/L	8	16
University	20	40
Others	5	10
Total	50	100

TABLE 13 shows that 5 respondents are of the first school living certificate level of education gaining a percentage of 10. 12 are ordinary level holders with a percentage of 24, 8 are advanced level holders with 16 per cent. With the university level, 20 respondents are of that qualification gaining a percentage of 40. 5 are of other qualifications like PHD thus having a percentage of 10, thus a grand total of 50 respondents and 100 %.

TABLE 14: Is the electronic clearing system of any importance to you?

Respondents	Frequency	Percentage (%)
Yes	45	90
No	5	10
Total	50	100

Electronic clearing system is of great importance according to the 45 respondents giving a percentage of 90, while 5 respondents said it not important to them giving a 10 per cent, thus giving a grand total of 50 respondents and 100 per cent.

TABLE 15: Do you deposit cheques for clearing with other banks?

Respondents	Frequency	Percentage
Yes	15	30
No	35	70
Total	50	100

From TABLE 15 is shown that 15 respondents do deposit cheques with other banks for clearing making a percentage of 30, while 35 respondents do not deposit their cheques at other banks for clearing making a percentage of 70, thus a grand total of 50 respondents and 100 %.

TABLE 16: What type of electronic clearing system do you carry out?

Respondents	Frequency	Percentage (%)
SYSTAC	45	90
SYGMA	5	10
Total	50	100

As seen from TABLE 16, most of the respondents that is 45 used SYSTAC with a percentage of 90, While 5 respondents used the SYGMA system with a percentage of 10 giving a total of 50 respondents and 100 %.

TABLE 17: Are the charges on the clearing of cheques satisfactory to you?

Responded	Frequency	Percentage (%)
Satisfactory	28	56
Unsatisfactory	22	44
Total	50	100

The charges on the clearing of cheques are satisfactory according to 28 respondents from TABLE 17, thus a percentage of 56. But according to 22 respondents, they said the charges are unsatisfactory thus a percentage of 44 and a total of 50 respondents and 100 %.

TABLE 18: Has the electronic clearing system made any impact on you as a customer of the bank?

Respondents	Frequency	Percentage (%)
Yes	40	80
No	10	20
Total	50	100

Electronic clearing has made an impact according to 40 respondents from TABLE 18 with a percentage of 80, and 10 respondents have not been impacted by the electronic clearing system leaving them with 20 per cent. Thus a grant total of 50 respondents and 100 %.

4.3 Conclusion of Results

Based on what has been observed from the questionnaires and discussions with some staffs and customers of Afriland First Bank, the following results were obtained in relation to the two sections. From section one of the analysis which was based on the staff of Afriland First Bank, it shows that most of the workers of AFB age are in between 20 to 46 and there is no one with ordinary level certificate. They are certificate holders from advanced levels to first degree and above which implies that AFB's workers are well educated leading to effective work and performance, thus a mastery of the electronic clearing system in settling inter-bank debts. Thus, as the saying goes "The majority wins the

vote” and from the analysis of this section, the electronic clearing system plays an important role in settling of inter-bank indebtedness. Through the electronic clearing system, Banks have realized an increase in the number of customers and also an increase in revenue from the charges collected.

Section two on the other hand that was based on the customers, shows that without the customers, there will be no need for the electronic clearing system (ECS). This means that when a customer deposits a cheque drawn from another bank for clearing, the need for ECS arises. Also, without the staff, there will be no ECS services meaning that both the customers and the staffs are of great importance for the electronic clearing system to work smoothly.

But finally, the researcher’s problem was; if the electronic clearing system had played any role in the settlement of inter-bank debts which was yes. This is because, as seen on TABLE 6 above, out of 20 bank staffs that answered the above question concerning the electronic clearing system and bank settlements, there was nobody who denied the fact that the electronic clearing system played a role in inter-bank settlements giving a total of 100 %.

And from the customer’s point of view, a majority of them in each case made it clear that either they were satisfied with the electronic clearing system or they were satisfy with the charges it comes with. This all further go a long way to make it clear that the electronic clearing system has played a great role in settling interbank debt.

5 CONCLUSION AND RECOMMENDATIONS

This chapter of the thesis seeks to bring out the summary of findings, conclusion, recommendations and suggestions for further studies based on the topic “assessing the role played by the electronic clearing system in settling inter-bank debts in Cameroon”. At this point, the researcher tries to portray a picture of what the entire project was all about. The facts and assertion in this chapter will be systematically presented under their respective headings as will be seen below.

The main aim of this study was to assess the role played the electronic clearing system in settling inter-bank debts in Cameroon. And as seen from the research work carried out, the following are the summary of findings. The finding shows that the electronic clearing systems to a greater extend has contributed a great role in the settlements of inter-bank indebtedness as seen from the above questionnaire results. Also the research showed the various types of electronic clearing systems used in Cameroon to settle inter- bank monetary differences. In addition the research shows how the electronic clearing procedure takes place. Furthermore the research shows the various benefit of the electronic clearing system to both the organizations and customers. Again the research shows that the electronic clearing system has challenges which slow the effectiveness in settling debts among banks.

To crown it all, others have written allots about the electronic clearing system as you can see from the few samples above and it shows that the electronic clearing system has a strong role to play in the modern-day banking sector. So, one can conclude to the work of writers like Ngoh(2010) says that the electronic clearing system is a modern way of clearing inter-bank indebtedness and which does not involve manual movements of cheques from banks branches to head office. He says that, “with increasing use of computer in banking, a special clearing system has been developed to make possible the transfer of funds from one bank to another by putting details of cheques, in magnetic tapes that can be read by computers” to facilitates clearing. More so, Henry Stewart in his book entitled “payment strategy systems” examined the benefits of electronic payment in India and concludes that efficiency in payment system brings about many benefits for a country’s economy and its people.

Thus, the electronic clearing system or automated clearing system is one of the most important tool in the modern day banking sector as banks can settle their debts with each other without hindrances as well as customers can get their money on time and carry out their transaction which eventually leads to the growth of the entire economy and subsequent development. But to some extent, the manual clear-

ing system is still being used by some countries or when there is a problem with the electronic clearing system.

Afriland First Bank in order to efficiently carry out electronic clearing services should observe the following recommendations;

The management of the bank should advise their customers to handle cheques with absolute care and diligence in order to prevent it from getting twisted or bad.

Also the bank should notify or write to BEAC about the date limit for the settling of cheques. That is the time frame a cheque has to be with BEAC has to be exact and not more as the case at times.

Another recommendation is that the bank should try and install a better internet connection system to facilitate the clearing.

On the part of the banks customers, the management should sanction their customers who deliberately issue cheques to people severally that bounce. Cause these damages the image of the bank to the general public.

The management of the bank should also try as much as possible to get good equipment to carry out this clearing process such as scanners and also a good working condition to the operation officer in charge of the clearing.

As the saying goes, learning never ends, it is with great humility that I suggest that further studies should be made on the following;

Studies should be made on the laws governing the electronic clearing system so as to avoid illicit transaction that might lead to disorder.

Comparing the electronic clearing system of the CEMAC region with that of other economic region like ECOWAS and EU.

Research should be made on the types of cheques that are cleared using the electronic clearing system.

Also the impact of the electronic clearing system on economy of a country as a whole.

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QUESTIONNAIRE**Dear sir/Madam**

I am a final year student at Centria University of Applied Science in Kokkola, Finland by name Bambot Clinton Ndangoh. I am carrying out a research on the topic, "The electronic clearing system and settlement of debts". This will be used as analysis in my thesis, please kindly answer the following questions by either ticking "Yes" or "No" or by giving a short answer where necessary.

Thanks for your understanding**Date:** _____**Sign:** _____**STAFF**

- 1) Gender Male Female
- 2) Age ; 20-30 31-40 41-50 51-60
60+
- 3) Level of education? FSLC O/L A/L
UNIVERSITY OTHERS
- 4) For how long have you worked at AFB? (State) _____
- 5) Has the electronic clearing system (ECS) played any role in inter-bank settlements?
Yes No
- 6) Will inter-bank settlements be affected if Electronic clearing system is stopped?
Yes No
- 7) Is the electronic clearing system important to your institution? Yes No
- 8) Are funds always available for the settling of inter-bank debts? Yes No
- 9) Is the electronic clearing system the one and most important form of clearing?
Yes No

CUSTOMERS

- 1) Gender Male Female
- 2) Age ; 20-30 31-40 41-50 51-60
60+
- 3) Level of education? FSLC O/L
A/L UNIVERSITY OTHERS
- 4) For how long have you being a customer of AFB? (state) _____
- 5) Do you deposit cheques for clearing with the banks? Yes NO

6) How often do you deposit your cheque for clearing? Daily Weekly

Monthly

7) Is the electronic clearing system of any importance to you? Yes No

8) What type of electronic clearing system do you carry out? SYSTAC

SYGMA