CENTRAL BANK OF NIGERIA

CLEARING SYSTEM COMPUTERIZATION
(A CASE STUDY OF C.B.N. MINNA BRANCH)

BY

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DEDICATION

This project is dedicated to Allah the most Merciful God, my wife, child, and o my parents & brothers.

ACKNOWLEDGEMENT

I am grateful to God for given me the courage & strength to see me through to have started this course and finish the course without sweat. I am indebted to my supervisor in person of Dr S.A REJU and the members of staff in the department. And I am indebted to my understanding loving wife Dr Mrs. Idowu Folorunsho for standing by me, despite the fact that most of the time that I am in Minna in the course of studying. May God almighty continue to guide and assist her in all endeavor. My son "Junior" is not left out, he should study hard because life is not easy and follow his father foot-step in studying too.

I am also greatly indebted to the Branch Controller C.B.N Minna Branch, Banjo O.R Esq whose assistance morally cannot be quantified, and his Senior Manager Banking Office in person of Mr Y.S Sambo for taking his time to explain alot of operation at the Clearing House to me. Mrs B.N. Nwosa AfriBank Plc, Minna for all her effort too, I do appreciate.

My friends in person of Femi Showumi, Samson Alamu, Joshua Alawode, Tunde Baale, Bature Garba, Uncle Kayode Adetayo at Tincan- Island and my bosom friend inneed, Engineer Ayoola Ishola that I am very grateful for both his moral and financial support may God continue to guide him and his family, amen. Lastly, all my family are not left out of the acknowledgement.

CERITIFICATION

to certify that this project has been examined and found to have met the ments for the award of the Post Graduate Diploma in Computer Science of the University of Technology, Minna.

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ERNAL EXAMINER	DATE

ABRSTRACT

As a result of the numbers of days cheque(s) uses in Clearing House in all the ous C.B.N. Clearing House nation-wide. And likewise since Banking Operation onwide as gone internet and networked I gave it a thought that the Clearing System uld be computerized.

This will reduce the numbers of man/hour(s) that Clearing Officers of the various mmercial Bank(s) uses in the Clearing House everyday in the week. If this software is ed and found to be effective, clearing will be reduced to hours for intra, local eque(s) while inter-cheque(s) will use just a day instead of days and weeks which it kes to clear those cheque(s) in question.

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CHAPTER ONE

NTRODUCTION: TO NIGERIA BANKERS' CLEARING HOUSE RULES

.2(A) PREAMBLE

- (i) By section 41 of the Central Bank of Nigeria Decree No 24 of 1991, the Central ank of Nigeria (C.B.N) as charged with the duty of facilitating the clearing of cheques and redit instruments for commercial banks and for this purpose to organize in conjunction with other anks, clearing houses in premises provided by it, in such places as it may consider necessary.
- (ii) Pursuant to the said section 41 of the C.B.N. Decree No 24 of 1991 and in onsultation with the Commercial Banks delay established in Nigeria, the C.B.N. has decided to ssue the following rule for the guidance of all Nigeria Bankers Clearing Houses (NBCH)
- B) The Objectives of the NBCH are:
- C) (i) To make arrangement for the speedy and efficient collection of cheques, bills and other documents payable or deliverable at or through offices of member banks of the NBCH by a system or systems of clearing.
- D) (ii) To draw up and prescribe from time the time forms for the use of the member banks of the NBCH in connection with clearing.
- (E) (iii) To do all such other lawful things as are incidental or conductive to the attainment of all or any of the foregoing objectives

1.4 CLEARING HOUSE RULES

The clearing House Rules shall be binding on all member banks of the NBCH located in each state Capital where there is a Branch of the CBN with effect from 2nd January, 1995. These Rules superseded any previous NBCH Rules.

CONDITIONS FOR MEMBERSHIP

embership of the NBCH shall restricted to licensed commercial banks and the CBN. The pointment of such eligible banks shall be based on merit.

- (i) Any bank wishing to become a member of the NBCH shall apply in writing to the rector of Banking Operations Department on the prescribed form which is provided by the CBN embership of the NBCH shall imply membership of the appropriate Bankers clearing House mmittee (herein after called the Committee).
- (ii) Every member bank shall have the mandatory responsibility to maintain in credit its rent account with the central bank of Nigeria be required to deposit with the C.B.N. adequate lateral such as NTB, NTC etc. The valve of such collateral shall be determined from time to see by the C.B.N.
- (iii) A newly approved member of a committee shall appear before it for formal mission and shall be required to address it on the scope of its banking business before its mission.
- (iv) Any licensed bank that is not eligible to become a member of an NBCH may enter o agency arrangement (s) with any member(s) of any NBCH for the purpose of accepting cheque two on it and collecting cheques drawn on other banks.

MANAGEMENT OF CLEARING HOUSE

- (a) NBCH wherever located shall be administered by a committee comprising the presentation of commercial banks and the CBN.
- (b) The CBN shall appoint thee chairman of the committee the clearing House perintendent & the Assistant Clearing House Superintendent.
- (c) Each member bank shall appoint representative to thew committee whose status t be below the rank of AGM or equivalent to Lagos and Manger or equivalent in the branches d Abuja. The name and status of such a representative shall not be admitted to committee setting.
 - (d) Clearing sessions shall be provided over by the clearing superintendent and the

assistants. The decision(s) of the clearing superintendent shall be binding on all clearing.

- (e) Representative at any session. Any party dissatisfied with the decision(s) of the superintendent may appeal to the Senior Manager, Banking Office in the States or the Assistant Director Clearing Office at the CBN Head Office at the end of the day's session.
- (f) A member bank shall be suspended from participation in any clearing session if:-
- (g) After a written warning, it still contravenes the NBCH rules:-
- (h) Despite a written notice, it fails the provide a qualified/suitable or competent representative at the clearing sessions;
- (I) It fails to maintain adequate collateral on daily basis; and
- (j) It is so suspended by the Management of CBN for if it is so decides that it is the interest of the system.

ELIGIBLE INSTRUMENTS

igible financial instruments for clearing purposes shall include cheques, drafts, dividends/interest irrants, debit/credit notes,bankers payments, direct debits and any other instrument(s) that may be proved by the CBN.

3 DEMARCATION OF CLEARING AREAS.

BCH shall regard the whole of Nigeria as a clearing area comprising:

- (a) Local Clearing Area: which shall cover transactions between banks located in a ace where a clearing house has been established by the CBN. The area covered shall be defined to the committee in each state.
- (b) Intra-State Clearing Area- which shall cover all clearing transactions between anks located within a State where such banks are not in close proximity with the NBCH in the tate as to be covered under local Clearing Area. Where it is desirable and convenient, a bank tuated in a State may be admitted to the Clearing House of adjoining State to facilitate speedy

clearing of cheques.

(c) Inter-State Clearing Area- which shall cover all clearing transaction between banks located in different States anywhere in Nigeria.

1.9 DURATION OF HOLDING OF INSTRUMENTS

Clearing instruments presented at the counter of any member bank shall be deemed paid after the date of presentation at the counter of any member bank as follows:-

- (a) Local Clearing shall be four (4) clearing sessions, that is, five (5) working days.
- (b) Intra- State Clearing shall be eight (8) clearing sessions, that is, nine (9) working days.
- (c) Inter-State Clearing shall be fourteen (14) Clearing sessions, that is, fifteen (15) working days.

1.10 NEXT DAY CREDIT/DEBIT OF MEMBERS' (NET CLEARING POSITIONS)

Under these revised rules, the next-day clearing settlement system shall be adopted. Consequently, banks clearing net positions shall be debited/credited to their clearing. Banks may therefore return any unpaid clearing instrument to the house on the next day following the date of presentation. The valve of such cheques shall be credited to the banks, clearing accounts with the CBN on the same day.

1.1 RETURN OF UNPAID INSTRUMENTS

(a) Time Limit

All financial instruments presented on member banks in any clearing area shall, if unpaid, be returned through the clearing area house by the fourth eighth, and fourteenth clearing sessions for local, intra and inter-state clearing instruments, respectively.

(b) Any unpaid instruments shall be returned together with a clearing house debit note which will be passed through current day's clearing. For avoidance of any through current day's clearing. For avoidance of any doubt, the time limit for the return through clearing of any financial instrument drawn on branches in any clearing area are:-

- (i) Local -State Clearing- eight (8th) clearing session or (5th) working day;
- (ii) Intra-State Clearing- eight (8th) clearing session or nineth (9th) working day
- (iii) Inter-State clearing (up-country) fourteenth (14th) clearing session or fifteenth (15th) working day.
- (iv) Any financial instrument not returned the last clearing day stated above, shall be deemed paid and the collecting bank may give valve to its customer the next day.

1.13 REASONS FOR RETURNING INSTRUMENTS

- (i) All cheques and other instrument returned unpaid shall bear a written reason for the cause of non-payment. Reason for return shall be as listed in Appendix II. The reasons shall be written on the cheque itself, must not be at variance with actual fact; and be written in words without abbreviations and not indicated by initials.
- (ii) Where an unpaid clearing instrument is the subject of any inquiry, the paying bank shall pass a debit note with a copy of the unpaid instrument through the clearing house to the collecting bank and shall indicate why the instrument is not paid. The original of unpaid instrument may be returned to the collecting bank under confidential cover.
- (iii) Where cases of errors in the listing of cheques occur or a wrong delivery is discovered, an adjustment will be made at the next clearing session by use of debit noted. Wrongly delivered clearing house the next day following that on which the wrong delivery was made.

1.14 HOURS OF CLEARING

Clearing session shall commence each working day at 9.30 or at such other time as the local circumstances and peculiarities may permit.

1.15 LATENESS TO CLEARING HOUSE

Any member bank which arrives at the clearing House later than 15 minutes after the time scheduled for the clearing to commence shall not be allowed to take part in the day's clearing to commence shall not be allowed to take part in the day's clearing.

1.16 LOCATION OF CLEARING HOUSE

NBCH shall be located in the premise provided by the CBN and in such. Places as in the CBN may duly advise in writing.

1.17 OPERATIONAL COST OF CLEARING HOUSE

The CBN shall administer each NBCH and shall at it's discretion bear it's running costs.

1.18 MEETINGS OF CLEARING HOUSE COMMITTEE

The committee shall meet at a place to be provided by the CBN on the last Wednesday of March, June, September and December of every year or any other, day approved by the CBN to discus matters relating to NBCH.

- (a) Attendance at meeting of the committee shall be mandatory and shall be a prerequisite for continued membership of NBCH.
- (b) A member-bank may be penalized by suspension from participation in clearing activities for such period as shall be determined by the CBN for non-attendance at committee's meetings without a satisfactory reason, communicated in writing within five (5) working days before any

- Co Deliberations of the committee shall be recorded by the clearing House Superintendent and presided over by the Chairman. The recorded minutes shall be circulated to all members for adoption at the next meeting. A certified copy of the minutes of a meeting at which an amendment to these Rules is proposed shall be forwarded to the Director of Banking Operations for necessary action
- (d) Meetings of the committee shall require aquorum of 33 1/3% of the registered member banks. The Chairman shall count as part of the quorum. The quorum for clearing sessions shall be determined by the CBN as the need arises.
- (e) Each member of the committee shall have one vote. The decision of the committee shall be uphold by a simple majority vote count and where there is a tie, the chairman shall cast a verdict vote to break the tie and uphold a decision.

1.19 RESPONSIBILITIES OF MEMBERS

- (a) To the Clearing House
- (i) At the end of every clearing session and upon the return of its representative from the clearing House, a member bank must write a letter, signed in accordance with its mandate with the Central Bank, stating the next figure for or against it as shown on the Presentation Form and signed by the clearing Superintendent for a the day; such a letter must reach the Senior Manager, Clearing Office, CBN, Lagos or Abuja before the second Clearing session following that to be sent through the Clearing House Representative. Should there be any discrepancy, the Senior Manager, Clearing Officer, CBN, must alert the bank during the next clearing session. Any member bank in respect of whom such a letter is not received within the specified period will be deemed to have accepted as correct the figure shown on the Presentation Form for each clearing session.
- (ii) Every member bank shall be represented in the clearing House by a representative who shall deliver and receive the documents to be cleared. Each representative, in the addition to his identify card which shall be issued to him by his bank, should always have in his possession, whenever he is attending the clearing House on behalf of his bank, the clearing House entry card of member

bank which shall be issued to his bank by CBN. Such representative shall:

- (iii) * refrain from any activity that may bring discredit it to his/her bank or disrupt the clearing.
- (iv) * conduct himself/herself with dignity in the House and respect and obey the Clearing Superintendent.
- (iii) Member banks shall take full responsibility for the action of their own representative. Members must send their representative to the Clearing House during pass through the clearing or not.

(b) To other Financial Institutions

- (i) Clearing banks shall maintain properly signed and sealed agency agreement with any of their non-clearing financial institution customers that collect instruments, (e.g. Merchant bank, Primary Mortgage Institution, Community Bank, Peoples' Bank, Stock Brokers and Finance Houses).
- (ii) The agreement shall contain adequate provisions that shall convey full liability to the institution for any instruments they collect for clearing.

- 1.22 TO BANK CUSTOMERS.

- (i) Bank customers shall be entitled to receive valve for their uncleared effects/
 instruments for collection on due date without hindrance except where their instruments are
 dishonoured and returned unpaid to them within the stipulated clearing duration or are the subject
 of an inquiry/fraud
- (ii) Clearing banks may have recourse to their customer(s) through legal means as provided for by the laws of the Federation for any loss of funds attributable to the operation of their customer's accounts.

- (iii) The CBN may order the closure of a place a caution on the account(s) of any of bank's customers implicated, beyond doubt, in any abuse of the clearing system/fraud. It may also impose a charge/cost of transactions to compensate for any fund lost through such customer(s) accounts.
 - (iv) Clearing banks shall ensure that liability clauses are incorporated in all their account opening documentations and brought to their customers' notice while the said documents must be properly signed by the customers.
 - (v) A presenting/ collecting bank may be fully liable to the extent of any act of omission or commission including contributory negligence, that cause(s) any loss of fund through presentation of defective clearing instruments, if it fails to sends a letter of caution to the paying bank.
 - (vi) A collecting bank that pays the proceeds of a defective/forged instrument before maturity shall be fully liable for the loss of funds thereof.
 - (vii) A presenting/collecting bank shall de deemed negligent if:
 - (a) A customer's account is not opened and all documents required by regulations for opening of account are not obtained, cross -checked and vertified according to established procedures.
 - (b) Fails to update it's customer-information to ensure that it's customers and their referees are genuine, with locatable addresses.
 - (c) A note of caution is not sent to a paying bank when instrument of unusually large amount(s) is (are0 lodged by a customer.
 - (d) Instrument of large amount are lodged into a dormant or new customer.
 - (e) On the face of the instrument, irregularities such as era sures, post/state daft, mutilations, are evident.

(viii) A paying bank shall be absolved from liability if in the ordinary course of business it
 pays presented instrument in good faith and in accordance with established banking
 procedures

with proper and valid confirmation of it's customer (where applicable).

- (ix) A paying bank negligently pays a defective/forged instrument shall be fully, up to the limit of available funds with the collecting bank, liable for any loss of fund arising from the payment of such, instrument if not discovered within the stipulated clearing duration
- (iv) Both paying and collecting banks shall be jointly liable for any loss of fund due to defective instruments if they are both negligent in the clearing of the instruments.

1.23 DISCLAIMER

- (a) The CBN in the conduct and settlement of clearing instrument, shall not incur any liability or additional responsibility other than that falling equally upon all member banks.
- (b) Members of NBCH shall not be liable for any errors and/ or omissions relating to clearing settlement of any clearing session if the error or omission is not identified and reported in writing within reasonable time. Late reports of errors and/ or omissions by member banks shall be bilaterally resolved between the affected members.

1.24 ABUSES OF CLEARING PROCESS

(a) Offences

Any of the under listed acts such that the offending bank stands to derive undue advantage shall constitute abuse of the clearing system if it is proven that it knowingly committed the offence:

- Drawing or accepting instruments on unfunded accounts by a banks.
- (ii) Persistent presentation of fake/forged instrument on other banks
- (iii) Wilful wrong presentation of instrument of high valve on other banks.

- , (iv) Any other act that may be determine4d by CBN from time tot time as constituting an abuse of the clearing systems.
 - (b) Sanctions

Appropriate sanctions shall be imposed by the CBN on any bank that commits any of the abovelisted offences.

1.26 INDUSTRIAL ACTION IN MEMBER BANKS.

In the event of an industrial action in any member bank the following procedure shall be adopted:-

- (a) The affected bank shall write tot the CBN immediately the industrial crisis commence, and the crisis is such as to prevent the officials of the bank from attending any clearing session. The letter to the CBN shall be addressed to the Senior Manager in the Branch/Centres and copied to all other banks, Bank that fails to write as indicated above shall be liable to appropriate penalty as may be determined by the CBN.
- (b) The Senior Manger or Banking Manager shall make a formal announcement of the industrial action at the next clearing session.
- (c) Member banks shall reserve the right to reject financial instrument drawn on a bank that stays away from the clearing session for more than three (3) consecutive working days due to industrial action until the bank resolves its industrial crisis and returns to the clearing house.
- (d) Any bank returning to the clearing house after an industrial crisis shall give a day's notice in writing to the Senior Manager or Banking Manager return to the clearing House and may return to the house the next day.

1.27 INDUSTRIAL ACTION IN CBN

In the event of an industrial action affecting central Bank of Nigeria which prevent the clearing house from sitting, clearing activity may be conducted in a temporary, place which shall be

arranged by the First Bank of Nigeria PLC in conjunction with any other bank(s). In the case of instruments which had gone through the clearing before the industrial action started in the CBN, one additional day of grace shall be counted for the valve dates of the instruments above the normal clearing duration. Where a temporary place could not be arranged while the CBN industrial crisis last, banks may present their instruments direct to the Head Offices of the banks on which the instruments are drawn and they shall observe the normal clearing duration as applicable.

1.28 NATIONAL EMERGENCY

In event of a National Emergency that prevents the clearing houses from meeting, all working days during the emergency period shall not be counted as working days for purpose of determing clearing duration. The CBN shall write to all member banks to inform them of the National Emergency.

1.29 AMENDMENTS

The rules of the clearing House may be amended by the CBN as it may consider necessary.

Member banks wishing to propose amendments to the Rules, shall forward such proposals to the Director of Banking Operations Department. The amendments shall be widely circulated among member banks and sufficient notice given to all member-banks before the effective date of the amendment(s).

1.30 ADJUDICATION ON DISPUTES

Any dispute between member banks on clearing activities shall be referred to the CBN for adjudication. The decision of the CBN shall be binding on the affected banks.

1.31 **DEFINITIONS**

- (a) References to Senior Manager Clearing, Assistant Director Clearing, and Clearing Superintendent shall be references to appropriate equivalents in the States where a clearing house has been established by the Central Bank of Nigeria.
- (b) Clearing session means the period between the commencement and closing of clearing business on each working day.
- (c) (5) five, (9) nine, (15) fifteen working days start to count from the date of lodgement of the instrument with the collecting banks.
- (d) Working day commences at 8.00a.m and closes at 3.00 p.m on Mondays and 1.30p.m on Tuesday through Fridays.
- (e) 4 (four), 8 (eight) and 14 (fourteen) clearing sessions start to count from the day the instrument is presented through the Clearing House.

CHAPTER TWO

BANKERS' CLEARING SYSTEM; A CASE STUDY

2.0 THE ROLE OF CENTRAL BANK IN NIGERIA; S ECONOMY

(a) Definition of Concepts

The key words in our topic for discussion are "role", "bank" and "Central Bank". Any Current dictionary would attempt to define "role as duties, party played, functions, etc. Role and functions can be regarded as synonymous. They are words that can be interchanged for each other. For the purpose of this project "role" should be constructed to mean special activities of a person (either corporate or individual) in the attainment of given ends. In other words, special activities are not done in isolation of objectives. The Role are derived from the objective of a person or institution.

In examing the concept "Bank" is no concensus in the literature as to the "right" definition. The various definitions of "bank" can be classified into four namely, dictionary concept, text book definition, legal interpretations and statutory definition. The reason for the divergence in the definition of a "bank" is because these financial institutions operate in different economic environment with different legal and social framework. For the purpose of our this research, let us agree that a bank is a company duly lincensed by the appropriated authority to perform specified banking functions.

If defining a bank is difficult, a defining a Central Bank is much more complex. Any attempt at a universal definition of a Central Bank is bound to run into problem of acceptability because different statutory functions are assigned to Central Banks in different countries.

Central Banking today is closely entwined with the mechanics of economic management. It is a vehicle of a state in the realization of its macroeconomic objectives. For the purpose of this project, a Central Bank should be seen as a government backed institution (either privately or

publicly owed) vested with monopoly power in carrying out statutory functions of central banking. The general role of Central Banks include monetary responsibilities, sound financial structure development of Capital Market and to ensure monetary stability and employment generation.

(b) Evolution of Central Banks including CBN

The earliest Central Bank which is Riksbank of Sweden was established 302 years before the establishment of Central Bank of Nigeria. CBN was established by the Act of parliament on 15th September, 1958. Riksbank was established in 1656, while Bank of England which blazed the trail in modern central Banking started in 1694. Central Banks that existed before 1900 are Riksbank of Sweden (1656), Bank of England (1694), Bank of France (1800), Bank of Netherlands (1814), National Bank of Austria (1817), National of Denmark (1818), Bank of Russia (1860), Deutsche Bank of Germany (1875), Bank of Japan (1882), and Bank of Italy (1893), Between 1920 and 1972, more 100 Central Banks were established; globally.

The antecedent of Central Bank of Nigeria was the West African Currency Board which was established in 1912. It was basically a not issueing and exchanged centre. It was located in Britain but performed its functions through the commercial banks in Nigeria. The clamour by the Nationalist and the recommendation of the World bank in 1953 led to the setting up of J.B.Loynes Commission in Nigeria 1956 which recommended the setting up of a Central Bank in Nigeria in 1957. Loynes report received the seal of the Parliament of 15th September, 1958 and Central Bank commenced operations on 1st July, 1959.

(c) National Economic Objectives & CBN Principal Objects Interface.

Nigeria has consistently been involved in national economic development since the 1930's.

Development which is the core of national economic objectives, was described by Giovani Fornari of Italy, as the attainment step by step and within the limits of human possibilities a life worth living. Economic development is a subset of total development. The Nigeria's Ten Year Development of 1964 had as its objective " the improvement and to provide those physical facilities

which may be regarded as the minimum necessary for the improvement of the country'.

There were other development plans (five in number) in post independent Nigeria the last of
which was the 1988-1992 rolling plan. The general objectives of those plans were:-

- (i) GROWTH OBJECTIVES which include:
- * increase in per capital income
- * increase in the supply of high level manpower
- * increased in productivity in the economy
- * positive population policy to improve the quality of the population

(ii) EQUITY OBJECTIVES which include

- * a more even distribution of income
- * balanced development
- * a more even development between states

(iii) STABILIZATION OBJECTIVES which include

- * diversification of the economy
- * greater self reliance
- * attitudinal stabilization through promotion of new national orientation conductive to greater discipline, better attitude to work etc.
- * reduction in the level of inflation.

(iv) MANAGEMENT OBJECTIVES which include

- * achievement of efficient utilization and effective co-ordination of economic activities towards the attainment of desired economic goals.
- The CBN Act (Decree 24 of 1991) section 2 (a-d) emuciated the principal objects of Central Bank of Nigeria as:

- (i) issuance of legal tender currency in Nigeria
- (ii) maintenance of external reserves to safeguard the international valve of the local currency,
- (iii) promote monetary stability and a sound financial system,
- (iv) act as banker and financial adviser to the Federal Government, and
- (v) may act as banker to other banks in Nigeria and outside Nigeria.

The principal objects listed above would appear to be a subset of the macro-economic goals of the State. For instance, the promotions of monetary stability is in consonance with the stabilization objectives of the state. Monetary stability refers to consistency in internal valve of the Naira which helps in reducing risks element associated with investment and consequently, increase in the output level of the economy necessarily imply increasing factor input thereby generating employment opportunities. We can thus conclude that there is complete interface between the national economic objectives and the principal objects of the CBN.

(v) CURRENCY ISSUING AND ITS MANAGEMENT

A Central Bank differs from the other banks by the fact that they are saddled with the responsibility of issuing legal tender currency except in a few places where such responsibility is delegated. In pursuance of this role, the Bank arranges for the printing of the currency and the minting of coins; it is responsible for the issue or re-issue or exchange of currency notes approved for that purpose and ensures the logistic of distribution of the notes in Nigeria. Central Bank exercised this rights in 1960, 1965, 1968, 1973, 1977, 1984 and 1991.

For a gathering of this nature we may want to know what influence a Central Bank in the quantity of currency it issues out. In theory, a central Bank may adopt simple deposit system or the fiduciary system. It can also appear CBN adopts the different approach. The quantum of currency issued by the Bank is a function of the level of transactions in the economy and the fund required by Government, especially that in the past 25 years, there were deficit budgets on 20 occasions.

(e) RESEARCH ROLE



Effective economic management hinges crucially on a deep knowledge of the economy under focus to permit a decision on the desired macro-economic objectives. An economy consists of the real sector and the financial sector. Both sectors relate to different but interwoven decision environment. The real sector relates to environment within which economic decisions regarding production, consumption and transfer of physical goods and services are made the financial sector is concerned with economic decisions which involve the acquistion and disposal of financial assets. CBN plays significant role in influencing economic activity through variation in money supply, in the availability of credit or interest rate.

Specifically, the research role of the Bank is directed at:-

- (i) Initiating improvement and suggestions for changes in policies and programs of Government
- (ii) Contributing significantly to the formulation and conduct of monetary policy through basic and applied research which provide insights into the functioning of the economy;
- (iii) Promote efficient and responsive financial structures capable of fostering economic growth and development, identifying the dynamics on the international economic, financial and monetary scene and initiating policy oriented studies that will assist in designing rational and well articulated policies which enables Nigeria to achieve its international economic objectives, and
- (iv) Improving the direction, efficiency and effectiveness of Bank operations and service through a systematic review of the method of operations and allocation of the resources.

(f) BANKING ROLE

The Bank is the banker to the Federal Government, States and the Local Government, and to funds, Institutions or Corporations established by any of the three tiers of Government in NIGERIA. It is also the banker to International Institutions.

In the pursuit of its banking roles, the Bank:-

* Receives payment on behalf of the various level of Governments and keep their accounts gratuitously,

- * Provide clearing facilities throughout the country in accordance with section 41 of the Act and this speeds payment system, enable banks users to have confidence in the banking system and expedites transactions in the economy, and
- * CBN provides short term finances to the Federal Government to enable it meet its short term budgetary commitment

(g) SUPERVISORY ROLE

Banks are like other business meant to serve the interest of the shareholders. The interest of the shareholders may not necessarily be consistent with the National Economic goals hence the need for regulation and supervision. The supervisory function of CBN focuses on adequacy of bank capital, sound and safe banking policies and practices and better management practice. The rationale for the control is to protect depositors. Most bank depositors are not be sophisticated persons, and if given all the records of their banker, they may not be able to judge the soundness of the bank. The depositors need to be protected from the excessive speculative banking practices and fraud.

Another reason for supervising the banking system, especially by the , is to elicit efficiency on the part of the banks. Money facilities improved transaction in the economy but this is subject to the level of banking habit and this ism subject to the level of banking habit and the confidence in the financial system. CBN supervises the banking system in order to lower the risks of holding demand deposits (current account balances) which necessitate the use of cheques and consequently superior payment system.

Since efficiency in the banking system does not predicate only on the solvency of the banking institutions but also on the quality, quantity and structure of manpower; CBN evaluates the manpower profile of the banks by ensuring that the right type of staff are in the right position and in the right quantity.

CBN employs three basic types of controls in achieving its supervisory objectives. These are protective controls, preventive controls and emergency controls.:

These controls are expressed in:

- * Market entry, branching and branching and exit
- * Capital adequacy
- * Liquidity supervision
- * Permissible business

Factors which tend to influence the supervisory role of Central Bank in Nigeria include:

- (a) The relevance of the current institutional structure bearing in mind antecedents in policies, legal and political past;
- (b) the ability of the staff of Central bank to recognize its core functions as it relates to its own environment and possible conflicts likely to arise between differing objectives of monetary control and financial regulations
- (c) an appreciation of the need for consistency in monetary policy over time which reduces uncertainty and provides a stable financial environment
- (d) the ability of the bank to relate the consistency of the financial system with the competitive environment and also the institutional structure and
- (e) supervision of the possible conflicts between monetary control and federal fiscal program and design appropriate institutional structure which minimizes the conflicts.

(f) FOREIGN SECTOR ROLE

There is a relationship between foreign and domestic sectors of an economy that depends on export for survival. If the foreign sector performs badly, it affects the domestic program. Central Bank of Nigeria plays a very significant role in the management of the external sector of Nigeria's economy. The overall goals of the CBN in the foreign sector are:-

(i) Improving the balance of payment position

- (ii) Maximization of foreign exchange receipts from all available resource and optimally utilize existing foreign exchange reserves to achieve the country's macro-economic goals,
- (iii) Enhancement of confidence in the external payment system by honouring international obligations subject to satisfactory documentation.

(j) PUBLIC DEBT MANAGEMENT

Public debt management is the careful design of debt policy which contributes to attainment of macro-economic goals and the actual implementation of the policy. External Debt management is a conscious and carefully planned schedule of the acquisition deployment and retirement of loans acquired either for development purposes or to support the balance of payment. It incorporates estimates of foreign earnings, sources of finance, the project returns from investment and the repayment schedule.

By virtue of section 27(r) of CBN Act of 1991, CBN may undertake the issue and management of loans publicly issued in Nigeria by Federal or State Governments or by the Federal or State or Public bodies. Thus from above, CBN is the registrar of the Federal Government of Nigeria in the issuance of the gilt edged securities

(k) ROLE OF CBN IN THE FOREIGN EXCHANGE MARKET

One basic function of CBN is to ensure long term price stability among other functions. A low and stable interest and exchange rate create a stable financial and price environment which provides very effective way for a central bank to promote economic growth and development. The role of CBN in the foreign exchange market in Nigeria includes:-

- (a) Research and policy formation role
- (b) Funding and fund allocation
- (c) Promotion/Development of the Market
- (d) Inspectorate Role

On annual basis, CBN issues to authorized dealers, policy thrust of the Government with regard to the F.E.M. The official market prior to the merger was funded partly from foreign exchange earnings from crude oil and revenue from Federal Government Foreign Investment. The Commercial market was funded from sources such as foreign exchange imported by tourists, foreign nationals resident in Nigeria, agency commissions, professionals fees, other invisible earnings, funds held in approved external accounts by oil producing companies, foreign provided by Central Bank and other sources approved by the Minister of Finance.

By virtue of section 27(I) of Decree 24 of 1991, CBN is a development agent of the federal Government. Thus it is expected to promote the development of money and capital market in Nigeria or of stimulating financial or economic development. In this respect, CBN established the Foregin Market through the exchange control Act of 1962. Recently it embarked on training of authorized dealers in new techniques of managing their Forex Resources.

Trade and Exchange Department is expected to interpret and administer regulations contained in the Exchange Control Act, 1962, Supervision of authorized dealers among others. The Banking Supervision Department inspects the records of the authorized dealers to ensure compliance with the statues and standing exchange control guidelines and monitors accurate timely accounting.

CONSULTING ROLE

The art of consulting is an age long tradition in African Societies. Divine wish often consulted before a war, in making a choice between several alternative and in choosing a ruler. Usually, the oracles are consulted. Consulting a simply providing help on the content, process or structure of a task or series of tasks. Greiner and Metzger consider consulting as an advisory service contracted for and provided to organizations of a nation by specially trained and qualified persons who assist, in an objective and independent manner, to identify problems, analyze such problems and help, when required, in the implementation of solutions.

The role of the bank as a Consultant to the Government is a resource role as it provide technical expertise by way of supplying relevant information on the economy, diagnosing the economy, and

and preferring solutions to observe problems. The Bank influences the economy as consultant through demonstration of its technical expertise, exhibiting professional integrity in its tasks and developing a common vision with Government.

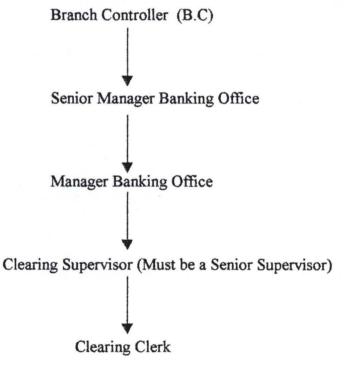
DEVELOPMENT ROLE

Central Bank of Nigeria is very much involved in economic development of Nigeria. Growth and development of the economy is an added function of Central Bank in the developing economies. Central banks in the developing counties including Nigeria, are considered as potent institutions for improving the poor living conditions in the developing countries.

CBN is involved specially in :-

- * Promotion and development of financial market
- * Promotion of specialized financial institutions
- * Promotion the development of the rural sectors of the economy
- * Acting as a major forces in the promotion of small and medium scale enterprises in Nigeria.

2.2 MINNA BRANCH OPERATIONAL ORGANOGRAM CHART



Functions of the Clearing Supervisor & Clearing Clerk

- (i) Senior Supervisor or Clearing Supervisor- co-ordinates the activities of the clearing house on a daily basis at the designated venue.
- (ii) Clearing Clerk- presents all other eligible banking instruments for the commercial banks.

At CBN Minna Branch a pigeon hole box is made for the respective Commercial Banks its Clearing Officers from these respective Commercial Bank comes to pick on a daily basis their Banks cheques between the hours of 9a.m-11a.m where credits and debits are accrued. Hence this depends on whether it is an Inter-State, Intra-State, Local Clearing cheques; the number of days ranges from 14-15 clearing session, for Inter-State, while clearing session for Intra-State uses 4-clearing session.

Furthermore, the Cheques are divided into two sub-grouping:-

- (a) Micr- Cheques-Magnetic Ink Character Recognization
- (b) Non- Micr- Cheques
- (c) Local Cheques
- (d) Upcountry Cheques

The numbers of days the various aforementioned above cheques in clearing session depends on the type of cheques specified above; hence from the various Commercial Banks the clearing departments must have separated the various branches and that of other Commercial banks will be presented before 4p.m. to CBN for the preceding day's session. Those cheques presented before 4p.m. the next day is what is presented at the clearing house the the next day, these are the cheques that kept inside the pigeon hole of the respective Commercial Banks for that day's clearing session. Hence counting session starts from this day e.g. a local cheques presented to CBN from a Commercial Bank on Monday by 4p.m. starts its counting on Tuesday clearing session so once it is cleared the customer is free to claim his money from his Commercial bank on the 4th clearing session day which will be on Friday.

Any cheque or instrument returned unpaid shall bear a written reason for non-payment. Which shall be written on the cheque itself, it is normally written in words and not abbreviations.

At the end of everyday clearing session each commercial banks in debited and credited and this is forwarded to CBN Headquarter in Abuja where the actual debited and credited is effected into their account.

Furthermore; there could be inter-clearing between two or more clearing houses e.g CBN Minna and CBN Akure, CBN Lagos & CBN Ilorin, CBN Benin and CBN Kaduna. Only new created States that doesn't have a clearing house, their neighbouring, States CBN conducts the clearing for them. Then there is always reconciliatory accounts/statement for these clearing Branches.

CHAPTER III

OPERATING SYSTEM

3.0 PRESENT SYSTEM OF OPERATION

Presently, manual hand written forms is used to collateral the cheques from the clearing department of the commercial Bank, likewise the submitting of the various commercial banks cheques to CBN a day previous to the clearing session; in done manually too.

At the CBN level, once these cheques are submitted to the Banking office, this is taken to the Manager banking Operation who certify and pass it on the Senior manager, Banking Operation; some forms are attached with his signature needs to be on those Central Bank forms for onward delivery to the Senior Supervisor who is in-charge of the Clearing Session as explained on the Organogram in Chapter II.

At the clearing session there is a bill-board with pigeon hole boxes for various commercial banks written on them. Various officers from the commercial banks now with the help of the clearing clerk from CBN now presents various instruments to these officers from the various commercial banks.

Hence, debits and credits will now be agreed upon by the various commercial banks clearing officers it will then be records.

At the end of the Clearing Session between (9a.m-11a.m) everyday the various commercial banks are debited and credited before the accured account statement is sent to CBN Headquarters in Abuja.

3.1 PROBLEMS OF PRESENT SYSTEM

There are lots of errors that are accurred to manual means of operating e.g. the clearing system in question; since it is done manually Human error is inevitable. These include listing of cheques occur; or a wrong delivery is discovered- an adjustment will to make at the next clearing session by the use of debit notes. Wrongly delivered clearing house the next day following that on which the wrong delivery was made.

- (i) Wrong presentation- a cheque that is meant as Intra Cheques presented as Intercheques
- (ii) During Netting- from the Gross, you net the figure which could be credit/debitduring the process you might mistakenly pick a wrong figure, the same figure will be transferred by the clearing supervisor. As the Banks tries to balance the clearing supervisor tries to balance his extra figure on his clearing sheet
- (iii) Items-you make sure the items given/presented to you as the same figure you transferred into presentation form if not the clearing house settlement form will not be balanced.
- (iv) Atimes if the presenting bank as not balance cheques right from the office it is a big problem because it causes delay during clearing session since the extra figure balance might not be gotten at the clearing house
 - (v) When cheques are unscheduled but it is not presented.

3.2 NEED TO IMPROVE ON THE PRESENT SYSTEM

Since Human error are inevitable hence there is the need to minimize these errors; thereby the need to use computer systems and operation in the clearing house.

Firstly, the speed of operation, accuracy, efficiency is not comparable to human-efforts. If the software is developed accurately; the numbers of man-hours spent by clearing officers from various commercial banks on a daily basis will be reduced to (1/5) of what time spent right now.

Secondly almost all errors listed at the page will be reduced or eliminate and this will lead to more efficient banking system in the Federation.

Thirdly, since all eligible instruments have to pass through a clearing house system by the use of computer system hence the numbers of days spent between interstate; intrastate and local clearing

system. With the use of Computer system once an instrument is not eligible it will be detected and sent back to the commercial bank for onward delivery to the customers instead of waiting for days, week before confirmation is done manually.

3.3 SYSTEM DESIGN & ANALYSIS

System study Approach suggested that a procedure for solving problems with computers should begin with a Broad Systems Specification which must have the following characteristics or attributes in terms of flexibility, Purpose, Economical, Reliability and Improvement. This will enhance:

- (a) The need to increase speed so as to meet target/objective
- (b) The desire to minimize error and
- (c) The readily available of information on the clearing system.

Analysis of Proposed New System

- (a) Method of data information generation
- (b) Method of data processing
- (c) Method of file organization & Storage
- (d) File movement/Information dissemination
- (e) Security & Safety of File

Method of data information is similar to the one used by the old system since it is the same type of forms that will be used throughout. Data processing from the dbase IV file is automatic it allows data to be produced, organized separately from other source(s) or inputted. Data Integration, Redundancy, Independent.

File Organization and storage- dbase file is created for different commercial banks, the name of the file is what is required all the time to load it to the Computer memory anytime a specific information dissemination can be adopted in two ways:

First if a new File is new the information to be display could be done by issuing query command that will actually lead to the specific information requirement or in alternative you could issue query as at when necessary and print the require information.

System Test and Training should be comprehensive and the change over itself planned in detailed

For proper effective and efficiency of the organization and for security reasons, the old system may be held in abeyance including equipment. In event of a major failure of the new system, the organization would revert to the old system.

System Conversion.

Training of personnel with basic knowledge of computer.

The above planning methods allows settling down and solve any bugs which be uncovered by live running. However; it is also hoped that as each element of system goes live the old system would be dropped as soon as practicable.

Installation

3

Befitting environment will be made available to accommodate the Hardware, Software & Human know-how. Before usage dbase IV package has to be installed on the PC. This depends on Hard-disc-drive.

How to Run the Program

At the Dos (Disk operating System) prompt, change directory (CD) to dbase directory.

Type dbase and press the enter key, wait for some few second, dbase IV plus will be loaded and present you with the dot prompt.

Net working Operating System

A network operating system (NOS) is not one program but rather a series of programs with multitasking or multi-user architectures.

That is, they take request for services from many application programs at the same time and satisfy them with the network resources i.e arbitrating request for the same service from different users.

Invisible to users and modular structurally, some of these programs reside in the

Computer acting as service of various types and other run in PCs acting as client station. While the networking software in services provides and controls multiple simultaneously access to shared resources in the client stations inter-captain redirects the requests for service to the appropriate server for action. This kind of numbers with server/client architecture is usually based on UNIX or any of its derivatives. Examples of these are NOVELL NETWARE, BANYAN VINES & LAN MANAGER (MICROSOFT).

The second type is the DOS-based Network Operating System. This DOS Operating System usually have the peer-to-peer resources sharing features among others.

Network

All the various Commercial Banks must a computer which have to be on network so that once a cheque is presented through the network-to the various Commercial Banks.

Through this information received via the net will be used to start the clearing process at the Commercial Bank(s).

Hence all Commercial Bank(s) must have a standby PC at the Clearing Departments

The next day at the Clearing House in (CBN) the cheque(s) will be inputted by the Clerk of the clearing House and then put inside the pigeon hole for collection. Hence debit/credit can be made to the various Commercial Bank(s).

Both intra & inter local cheque(s) there numbers of days spent on clearing will be reduced drastically.

SYSTEM-CHANGE-OVER

Change-over is the movement from the Old to the New System. In this study the parallel change over system will be adopted since this method is the complete replacement of old system to new system in gradual move. This method is extra expensive since in parallel system of running where old and new system is kept alive, due to the fact that once a cheque(s) has been cleared the problem of that cheque(s) has been solved. Direct change over system makes operation moves faster but in case of crisis direct changeover crashes immediately.

Cost & Benefit Analysis

Operating Cost

Progra	m main	tenance for 1 year	- #2:	50,000.00
	a)	For 1 year installation of Air condition (2) slit unit-	-#2:	50,000.00
	b)	Utilities e.g lightening	=#	20,000.00
	c)	Supplies of Computer papers & other consumables	=#	20,000.00
	d)	Labour cost	#	20,000.00
	e)	Miscellaneous expenses	=	# 50,000.00
		Total Operating cost	=#	590,000.00

Development Cost

Computer Hardware:

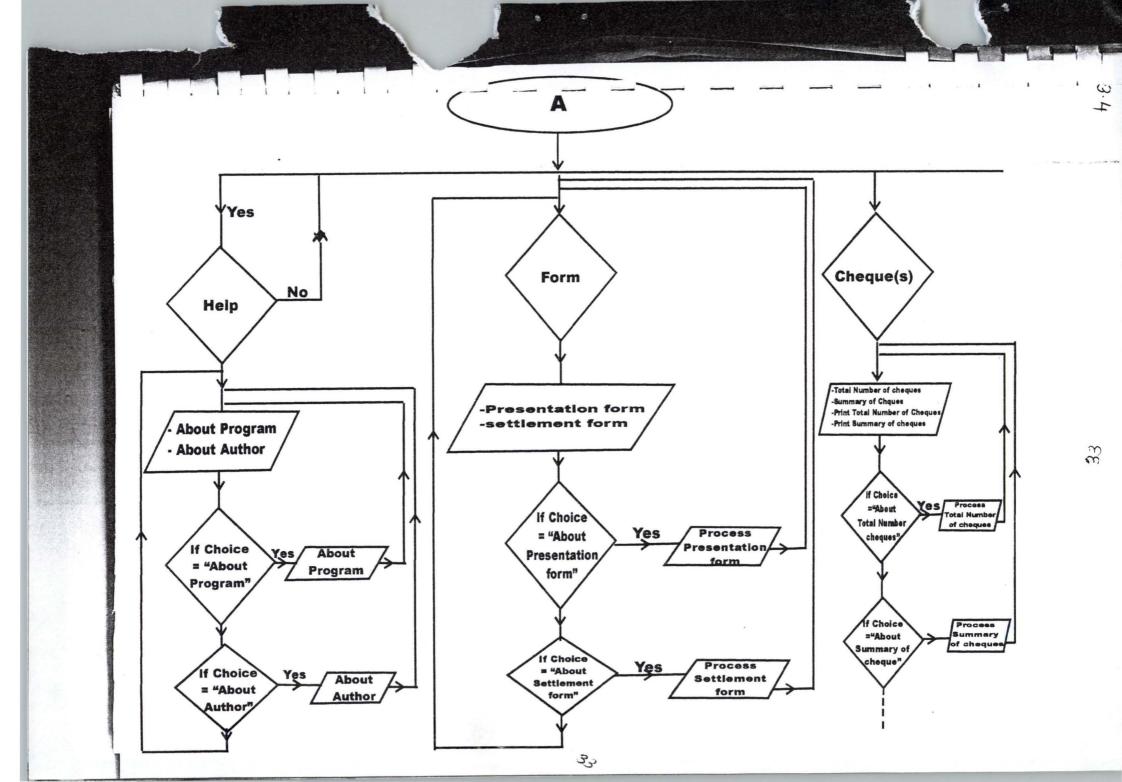
`	10 Compaq Computer @ rate of 105,00	0.00 each	= #10.5M
	5 UPS backup @ the rate of 50,000.00 e	each	=#250,000.00
	2HP Deskjet 610/895C printer @ the ra	te of 33,000.00	=# 66,000.00
	Installation Cost		=#100,000.00
1)	Personnel Trainning 1 person		=# 20,000.00
	Total Developmenta	l Cost	=#10.930M

DBASE FILE STRUCTURE SAMAD. DOF

/27	T' 1137	Field type	Width	Dec	Index
Num	Field Name			Dec	mach
1	Banks	Character	28	-	-
2	Date	Date	8	-	-
3	Items	Numeric	3	0	-
4	N	Numeric	10	0	-
5	K	Numeric	2	0	-
6	Total_Deb	Numeric	9	2	-
7	Total_Cre	Numeric	9	2	= /
8	Net_Bal	Numeric	9	2	, -
9	Net_Cre	Numeric	9	2	-
10	Net_Deb	Numeric	9	2	
11	Bank	Character	28	-	-
12	S_No	Numeric	2	* 🐷	-
13	Tot_No_Che	Character	10	-	-

REGISTER .DBF

Name	Character	20	-	-
Off Add	Character	25	-	-
Profess n	Character	25	-	-
Tele one	Character	15	-	_
Rank	Character	15	-	-



RECOMMENDATION & CONCLUSION

From the system changeover; once the Commercial Banks and the C.B.N sees that the software developed worked. Then it is advisable to change from the Old system to New System via the use of computer by parallel change over; if tested and staff training have been carried out. From the various methods of change over namely direct, parallel, pilot and staged. The parallel changeover was choose because once a cheque(s) has been cleared it in then kept inside the achiever.

For parallel changeover both the current cheque(s) will be processed along with the old system so as to serve as check(s) & balance(s) with new system. Although parallel running is extra cost, difficult and tedious work for the Clerk of the Clearing House.

Proper handover of the system; should be done once the system has found to be effective for an agreed period time. Maintenance of the program should be done by the computer Department of C.B.N.

The handover will be finalized once a clear understanding is achieved by all the users in C.B.N & the Clearing Officers in the Commercial Bank.

clear set talk off set status off set console off set deleted on set scoreboard off set echo on set safety on set date to Brit store space (5) to pass @ 10,30 to 15,55 panel color B set color to R @12,30 say "Enter password" get Pass read if upper (pass) = "SAMAD" @17,20 say "YOU ARE WELCOME TO C.B.N MINNA BRANCH CLEARING HOUSE" clear do start else clear @17,24 say "You cannot get access to the software thanks" do exit endif return

```
*Procedure Start
set talk off
set status off
set clock on
@1,1 to 24,74 Panel Color R
Set Color to GB+
@4,20 say "C.B.N. MINNA CLEARING SYSTEM HOUSE OPERATIONS"
Set Color to G*/W
@8,32 say "SOFTWARE DEVELOPED BY"
Set Color to R
@10,32 say "FOLORUNSHO, OLATUNDE ADEYINKA"
Set color to GR
@12,32 say "PGD/98/99/754"
Set color to B
@15, 32 say "SUPERVISED BY: DR. S.A.REJU"
Set color to GR+/B
ans= space(1)
@19,20 say "Press C to continue or Q to quit" get ans
Read
if upper (ans)="C" .or. ans="c"
clear
*do main 1
endif
if upper (ans) = "Q" .or.ans="q"
do exit
endif
return
```

Text
HELP-TEXT-ABOUT THE SOFTWARE BEEN DEVELOPED ! !! !!!
Central Bank of Nigeria (C.B.N) Minna Branch, Clearing System
was computerized to enhance efficiency, speedy, accountability
and finally to meet up with the present day Banking operation which is
aided by the use of Information technology through the use of Computer
with emphasize on the Software System.
With the use of this software the numbers of man/hours used daily by
Commercial Banks Clearing Officer will be reduced by almost 1/10th
man/hour. Hence, also all the intra, inter and local cheque(s) days
of clearing will be drasily reduced to hours insteads of days and
weeks.
ENDTEXT
WAIT
CLEAR
RETURN

TEXT

TEXT-HELP ABOUT THE DEVELOPER OF THE SOFTWARE ! !! !!! An Agricultural-Economics Graduate from University of Agriculture, Abeokuta and a Post Graduate Dipolma holder in Computer Science from Federal University of Technology, Minn, Twenty Nine of Age married with a kid called junior.
ENDTEXT

WAIT " End of Help file. Press any key to continue" clear Return

Set talk off set score off set status off set century on *set date of Brit set clock on use samad.dbf @1,1 to 24,74 Panel color R Set color to GB+ @2,10 say "CENTRAL BANK OF NIGERIA" @3, 10 say "SUMMARY OF CHEQUE(S) PRESENTED" Set color to G*/W @4,10 say "ON @4,14 get On SET COLOR TO GB @7,10 SAY "TO___ @7,14 get To *Set color GR+/GR @9,10 say "No. of Cheque(s)=" @9,32get No of cheq Set color to G @9,50 say "Amount=" @9,54 get amount Set color to B @18,10 say "Compiled by" @18,22 get name @18,40 say "Checked by" @18,52 get name Wait *closes databases clear return

```
Procedure main4
 clear
@5,2 to 17,65 panel color GR+
 Sat color to Gb
   s =space (1)
,14 say "Do you want to register now or later Y/N" get res;
 lid res $ "YnNy" error "Press Y or N"
 Read
 if res="Y" .or. res="y"
 clear
 do register
 else
 if res="N" .or. res="n"
 clear
 *do main 5
 endif
 endif
 Return
```

Procedure Main5
Set talk off
Set status off
Set scoreb off
Set century on
Set date to Brit
Set clock on
clear

@3,1 to 23,78 Panel color B
@4,63 say date()
Define Menu C.B.N
Define Pad File of C.B.N Prompt "File" @ 6,6
Define Pad Form of C.B.N Prompt "Form" @ 6,12
Define Pad Cheque(s) of C.B.N Prompt "Cheque(s)" @ 6,30
Define Pad Help of C.B.N Prompt "Help" @ 6,50
**

Define Popup File pop from 7,6

Define Bar 1 of Filepop Prompt "Register" Message " Supply the neccessary information about oneself"

Define Bar 2 of Filepop Prompt "Close" Message " Close all the open files"

Define Bar 3 of Filepop Prompt "Exit" Message "Quitting C.B.N Minna Clearing System Operations"

On Selection Popup Filepop Do Proceed1

Define Popup Formpop from 7,12

Define Bar 1 of Formpop Prompt "Presentation Form" Message "To use Presentation Form of C.B.N Minna Branch, Clearing House Form".

Define Bar 2 of Formpop Prompt " Settlement Form" Message " To use Settlement Form of C.B.N. Minna Branch, Clearing House Form"

Define Bar 3 of Formpop Prompt "Print Presentation Form" Message " To Presentation Form of C.B.N. Minna Branch, Clearing House Form"

Define Bar 4 of Formpop Prompt " Print Settlement Form" Message " To P Settlement Form of C.B.N. Minna Branch, Clearing House Form"

Define Popup Cheque(s)pop from 7,30

Define Popup Cheque(s)pop Prompt "Cheque(s)" Message " To sum the Tota of Cheque(s) used in C.B.N Minna Branch Clearing House"

Define Popup Cheque(s)pop Prompt "Cheque(s) Message " To Print Summary presented at C.B.N. Minna Branch Clearing House"

Define Popup Helppop from 7,50

Define Bar 1 of Helppop Prompt " About Program" Message " To display m about the Program Software"

Define Bar 2 of Helppop Prompt "About the Author" Message " To display about the Author of the Software"

* *

```
case bar()=1
  do Register
case bar()=2
   do close
case bar()=3
   do exit
idcase
eturn
```

Procedure Proceed1
Do case
case bar()=1
 do presentation form
case bar()=2
 do settlement form
case bar()=3
print presentation form
case bar()=4
print settlement form
Endcase
Return

Procedure Proceed2
do case
case bar()=1
do sum
case bar()=2
do summary
endcase
Return

Procedure Proceed3
do case
case bar()=1
 do aboutA
case bar()=2
 do aboutb
endcase
Return

Procedure Exit Clear Close all @ 4,1 to 15,77 Double Color B Set color to GB*/R* @7,35 say " I am quitting,.... thanks for sharing your ideas" Set color to B*/W Ans=space (1) @11,11 say "Are you sure you want to quit, Y/N?" get Ans Read if Ans= "Y" close all Ouit else clear Return to Master endif

```
*Invoice for Minna Bankers' Clearing House
 'Total numbers of Cheques Cleared
 Set talk off
Set Status off
Set Date to Brit
Set Century on
Jse samad.dbf
ns No=0
row=6
do while .t.
R = 12
Append blank
mS No=mS No + 1
R=R+1
@1,1 to 23,64
@2,5 say "Total Numbers of Cheque(s) Cleared"
@3,1 to 3,64
@4,10 say "BANK"
@4,40 say "CLEARED "
@4,50 say "PRESENTED"
@5,1 TO 5,64
@row, 4 get Bank
@5,38 to 18,38
@row,39 get Cleared
@6,49 TO 19,49
@row, 2 get mS_No picture '99'
@row,51 get Presented
@19,3 TO 19,64
row=row+2
*Read
@19,1 say "TOT No CHE"
@19,20 get TO No CHE
Read
More=space(1)
@21,3 say "More record Y/N" get More picture '!'
if More = "Y"
 oop
 ise
 exit
endif
enddo
Return
```

```
o create an invoice, Settlement Form for CBN Minna Branch
  Learing House
  t talk off
  t Status off
  t Date to Brit
  t Century on
use samad.dbf
mS No=0
row=10
do while .t.
R = 12
append blank
mS No=mS No+1
R=R+1
@0,0 to 23,75
*Set Color to B*/W
@1,20 say "Settlement Form"
*Set color to G*/R
@2,20 say "CBN MINNA CLEARING HOUSE"
@3,2 say "Dr"
@3,55 say "Cr"
@4,2 to 4,74
@5,10 say "PAID"
@5,60 say " RECEIVED"
@6,2 TO 6,11
@6,11 TO 6,74
@6,2 say "S No"
@5,6 to 17,6
@7,12 SAY "N"
@7,20 say "K"
@7,32 say "BANKS"
@7,62 say "N"
@7,68 say "K"
@17,2 to 17,74
@row, 2 get mS_No picture '99'
@row, 8 get N
@6,17 to 16,17
@row, 20 get K
@5,23 to 16,23
@row, 25 get BANKS
@5,53 to 16,53
@row,56 get N
@7,67 to 16,67
@row,68 get K
row=row+2
*@11,1 to 11,78
@18,3 say "CENTRAL BANK OF NIGERIA"
@18,3 say "Debit or Credit relative"
@18,55 say "Entries Passed"
@19,55 say "----"
@20,55 say "Banking Manager, CBN"
@21,3 say "Total Numbers of Cheques Cleared"
@21,35 get Tot_No_Che
Read
More=space(1)
@21,55 say "More Record Y/N" get More picture '!'
Read
if more="Y"
loop
else
exit
endif
```

eturn

The above is labelled as Appendix I

REASONS FOR RETURNING ELIGIBLE INSTRUMENTS

- (1) Insufficient fund in the Account
- (2) Irregular signature
- (3) Post-Dated Cheques
- (4) Stale Cheques-i.e. cheques expires after six month form the day/date it was issued.
- (5) Difference between figure and Amount in words on the issued cheque
- (6) Unnamed payee

Do you want to register now or later ${\rm Y/N}$

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