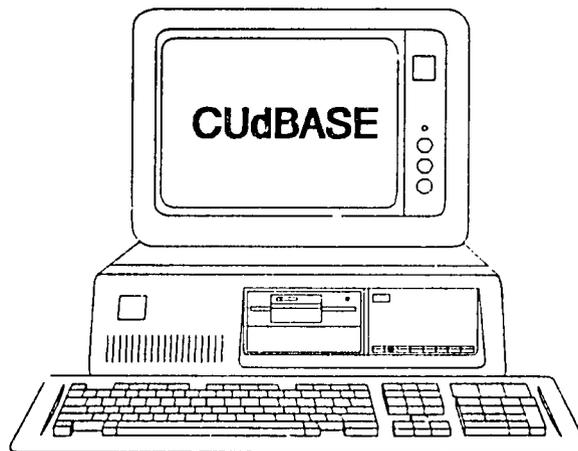


Cameroon Cooperative Credit Union League, Ltd.

User's Guide

Credit Union Monitoring and Data Base Management System



Produced by WOCCU and CamCCUL with USAID/Cameroon Funding

**Bamenda,
March/April, 1994**

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CUDBASE User's Guide

Credit Union Monitoring & Data Base Management System

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GLOSSARY

123	Lotus Development Corporation's 1-2-3 for Windows Release 4.0
AA	Credit Union Annual Accounts Form
A.I.D.	United States Agency for International Development
App	A computer program, or "Application"
ASSN	Common Bond Field Code for "Association"
BMP	Suffix for "bitmap" graphics files generated by Windows 3.1 Paint and other programmes
CamCCUL	Cameroon Cooperative Credit Union League, Ltd.
CDC	Cameroon Development Corporation, employer of many credit union members
CFAF	Communauté Financière Africaine Franc, Cameroon's currency
Chart	A graph produced by Lotus 1-2-3 Release 4.0
Chron	Chronological (used in conjunction with reports and charts to indicate that the report or chart shows the evolution of something over time)
Clipboard	Windows 3.1's "holding bin" designed to aid in the transfer of data from one Windows App to another
CU	Credit Union
CUdBASE	CamCCUL's state-of-the-art credit union monitoring and data base management system
DATABASE	Lotus Range Name for CUdBASE's Data Base Table, containing credit unions' quarterly financial and statistical data
dBASE	One of Microsoft Corporation's leading data base management computer programmes
dbf	Computer file extension for dBASE data base files
DBMS	Data Base Management System (e.g., dBASE and FoxPro)
DG	Discussion Group (unregistered credit union)
DOS	In this document, Version 6.2 of Microsoft Corporation's leading personal computer operating system
DOSSHELL	Four-window dos utilities, file management, and menuing shell present in MS-DOS Versions 5.0 and later
EST	Document Source Field Code meaning some of the record's data were estimated
FoxPro	One of Microsoft Corporation's leading data base management computer programmes
FoxBase	One of Microsoft Corporation's leading data base management computer programmes
Freelance	Lotus Development Corporation's Freelance for Windows 2.0 professional graphics software
FW	A CamCCUL Fieldworker
FWS	A CamCCUL Fieldworker Supervisor
ID	Identification fields in CUdBASE

INSP	A CamCCUL Inspector (Document Source Field Code)
League	Same as CamCCUL
Lotus	In this User's Guide, refers to the Lotus Development Corporation's Lotus 1-2-3 for Windows Release 4.0
Macro	Lotus 1-2-3's programming language in which CUdBASE was developed
MFSR	A credit union monthly financial and statistical report
MIS	Management Information System, or CamCCUL's MIS Officer
ModScreen	Special CUdBASE screen designed to help modify existing DATABASE records
M.O.S.	Minimum Operating Standards; here, an overall credit union rating system built into CUdBASE
PKZIP	Leading ShareWare personal computer file compression software
ProgMan	Windows 3.1's Program Manager
USAID	The United States Agency for International Development's Mission to Cameroon
Window	An application currently loaded and operating on the Windows 3.1 platform
Windows	MicroSoft Corporation's Windows 3.1 software platform
WOCCU	World Council of Credit Unions

I. Introduction

Purpose

CuDBASE is a data base application to monitor Cameroonian Credit Unions' growth and financial performance. The data base and *CuDBASE*, its manager, have been created to better monitor the evolution and performance of the Cameroonian credit union movement. This data base manager has been conceived in such a way that the growth and performance of a single credit union can be studied, as well as that of any group of credit unions (e.g., all workers' credit unions, all community credit unions, urban or rural credit unions, those of a particular geographic region, etc.), or the movement taken as a whole. *CuDBASE* is an integral part of CamCCUL's Management Information System (MIS), and is currently used primarily by CamCCUL's MIS Manager who, with the assistance of a Credit Union Systems Specialist/Program Officer from WOCCU, developed *CuDBASE*. The MOS¹ performance ratios and indicators used in the various reports produced by *CuDBASE* were developed by Mr. A. B. Ndofor, former CamCCUL Manager. In addition to a variety of printed financial and statistical reports, *CuDBASE* also produces a series of 55 different charts² which illustrate, in graphical form, the growth and various aspects of performance of those credit unions being studied. *CuDBASE* also calculates a performance, or health, index for the credit union(s) being studied. A number of different types of reports, as well as all the various charts, can be examined on the computer screen, and can all be printed, if the user so desires. For the moment, for budgetary reasons, *CuDBASE* is only used at CamCCUL's Headquarters office in Bamenda, but it is CamCCUL's intention to eventually place an updated copy of *CuDBASE* in each CamCCUL regional office's computer, so that regional staff can more readily access the massive data base and extraordinary analytical tools that *CuDBASE* represents.

The possible uses of *CuDBASE*'s various state-of-the-art analytical reports and charts are many, but among the most potentially useful are the following:

- Prompt detection of nascent problems in individual credit unions or in particular sectors of the movement (e.g., rural Credit unions, urban Credit unions, worker Credit unions, CDC Credit unions), or general problems of the movement as a whole.
- Assistance in determining training needs, priorities and programmes most responsive real to performance problems identified by *CuDBASE*.

¹ Minimum Operating Standards.

² Despite Lotus Corporation's long history with graphs (witness PrintGraph, you spreadsheet pioneers), Lotus Development Corporation apparently believes that Release 4.0's graphs are now so elegant that they can only be properly termed "charts."

- As a promotional tool, i.e., posting *CUDBASE*-generated reports and charts in credit unions and in CamCCUL headquarters and regional offices, so that visiting members and the general public can graphically see the credit unions' and movement's progress.
- A complete performance analysis of credit unions applying for League loans would greatly help in assessing the applying society's creditworthiness.
- Assistance in the constantly modifiable credit union inspection programme, i.e., targeting for near-term inspection those credit unions where *CUDBASE* has identified nascent problems, as well as identifying those aspects of performance on which the inspections should focus on.

Hardware and Software Requirements

As currently conceived, *CUDBASE* is entirely self-contained in one spreadsheet file entitled **CUDBASE.WK4**. When originally conceived to work on the Lotus for DOS Release 3.1 platform, it had two parts, **CUDBASE.WK3** and **CUDBASE.FM3**. The latter file contained the WYSIWYG formatting information. Both spreadsheet and formatting information are now contained in a single file when using Lotus 123 for Windows Release 4.0. At the time this manual was written, the size of **CUDBASE.WK4** was about 3.5 MB. Accordingly, backups have to be done with PKZIP. Because of the size of **CUDBASE.WK3**, *CUDBASE* must run on a fast "486" machine with 16 Megabytes of RAM Memory. *CUDBASE* was developed on a Hewlett-Packard 486/20 desk top with 12 MB in RAM, and data queries took about one hour to complete (compared to 5 hours or more under the previous DOS version of *CUDBASE*). CamCCUL will shortly receive a faster (486/33) machine with 16 MB of RAM memory, which should cut down the time by about half, if not more. If *CUDBASE* is to be installed in CamCCUL's regional offices, similar machines will be required there, too, although this might be abated somewhat if CamCCUL's MIS Officer removes all unnecessary (outdated) records from the data base before sending them to regional offices.

In terms of software, the operation of *CUDBASE* requires MicroSoft Windows 3.1 as its platform and the spreadsheet programme Lotus 1-2-3 for Windows Release 4.0 (English language version). *CUDBASE* will NOT work with Lotus 1-2-3 for Windows Release 1, nor with any other previous version. Accordingly, potential users other than CamCCUL's MIS Officer who are unfamiliar with either Windows or Lotus 1-2-3 Release 4.0 must become acquainted with both, and be functional in the basics of each programme to be able to effectively use the powerful tool that is *CUDBASE*. But have no fear; *CUDBASE* is very-user friendly. Great care has been taken to make sure that it can be used by those without a great knowledge of either Windows or Lotus 1-2-3 for Windows Release 4.0.

Nonetheless, those just beginning to learn to use *CUdBASE* must take the time to familiarize themselves with both Windows and Lotus for Windows. At a minimum, the potential user must know how to launch Windows and Lotus for Windows, how to save Lotus files to disk, and how to properly exit Lotus for Windows and Windows itself. Those who have NEVER worked with Windows applications before are strongly encouraged to take Windows' Tutorial, particularly to master the use of the mouse (or other pointing devices such as a pen or a trackball, all of which are hereafter referred to as the "mouse") used by your computer. The user must, in learning Windows, make a special effort to learn to choose screen selections by "clicking" and "double-clicking," as well as become used to using dialog boxes and pull-down menus. The reader, even if a previous power user of Lotus 1-2-3 for DOS, is strongly encouraged to take Lotus for Windows' Tutorial, also, since the user interface is completely different from previous releases. As in any application developed on the Windows platform, *CUdBASE* operates most easily with a mouse. While the authors of *CUdBASE* have taken great pains to assure that a user *without* a mouse can still use *CUdBASE*, manipulating the application is considerably easier *with* a mouse than with just the keyboard alone.

A complete description of the different aspects of Windows and Lotus 1-2-3 for Windows Release 4.0 is beyond the scope of this manual, and hence is not reproduced here. The reader/user, to repeat once more, must necessarily have already mastered the basic Windows and Lotus for Windows commands before continuing to train him/herself using this manual.

Definition of a Data Base

In computer terminology, a data base is basically a collection of data organized in a systematic and structured, i.e., tabular, form. Even if you are not a computer expert, you have certainly, albeit perhaps unknowingly, worked with data bases before. A simple example is a list of customers containing their names, addresses, telephone numbers, etc. Such a data base can exist entirely on paper (e.g., your address book or rolodex) or, alternatively, it can be kept electronically in a computer-based table. What do we mean, then, by a computer data base? The difference between a computer data base and a paper one is basically that the computer data base developer has standardized the *structure* of the data base. That is, he/she determines the data base's *fields*. The fields are the bits of information we keep on, say, our customers, in the case of an address "book." For example, a customer data base might contain the following eleven "fields" (think of them as column headings in a table):

- Title (e.g., Mr., Mrs., Miss, Ms, Doctor, etc.)
- First Name
- Surname
- Street and Street Number
- City

- State/Province
- Country
- Postal Code
- Preferred Greeting (e.g., Dear Joe,)
- Telephone number
- Facsimile number

In computerese, the whole of these 11 pieces of information about a single person is called a *record*. The whole set of records on *all* one's customers would be termed a customer "data base." Computer programmes facilitating the manipulation of data bases are generally called Data Base Management Systems (DBMS).

The major advantage of computer-based data bases over paper-based ones is that the data can be much more easily manipulated with a computer, particularly as the number of records gets into the thousands. To illustrate using our hypothetical customer data base, you could easily ask a computer for a list of all the customers living in a particular city or state, merge their names and addresses into a publicity letter on a new product, print the letters, and prepare address labels for all of them, and all of this with very little work on the computer user's part. Equally, you could wish to examine or tabulate information on all the customers with the same telephone prefix or postal code, or all those resident in a particular country. And, if your DBMS is of the "relational" type, you can, for example, use your customer data base in tandem with another data base originating from your accounting department, listing, say, quarterly sales by customer. A relational DBMS would permit you to prepare a list of all customers in a particular province, say, who have purchased at least 1 million CFAF from us during the past three months. Preparing this kind of "cross-tabulated" list is extremely difficult, if not impossible, to prepare error-free in the absence of a computer DBMS, but a personal computer can make quick work of it.

CUDBASE Structure

For the current time being, *CUDBASE* has not been conceived as a relational data base. Over time, though, it may evolve in that direction if the need arises, for example, should CamCCUL wish to perform analyses on the credit unions under each fieldworker's supervision, perhaps to facilitate the calculation of performance bonuses. Merging a list of credit unions and their supervisors with the current *CUDBASE* statistical and financial data base, using Lotus 1-2-3 for Windows' powerful relational data base management commands, would facilitate such an analysis. Such a merger is quite feasible, requiring only a few minutes to set up. Using Lotus' "Translate" utility, the CUDBASE data base can also be converted into indexed .DBF files usable by dBASE, FoxPro, FoxBase, etc.

CUDBASE, like other data bases created in all other releases of Lotus 1-2-3, basically consists of a multicolumnar table (with 166 columns in this case), each column representing a "field" in the data base. The first row of this "Data Base Table" (capitalized because Release 4.0 requires the user to formally give them names) shows the field names, and succeeding lines are the individual "records", or annual and quarterly financial and statistical reports sent in by credit unions and input into the data base. The formal name of the Data Base Table, oddly enough, is DATABASE. Each line represents one credit union at a particular moment in time. In the case of *CUDBASE*, then, a "record" is a collection of certain identifying data and statistical and financial information about a credit union extracted at a particular point in time from quarterly returns, and shown in Lotus 1-2-3 as a single row in the Data Base Table. As shown in detail in Attachment B (*CUDBASE* Structure), the 166 columns (fields) in the data base (numbered from 0 to 165 according to Lotus 1-2-3's requirements) can be regrouped as follows:

Table 1
List of CUDBASE Data Base Field Categories

<u>Field Number</u>	<u>Field Category</u>
0	Effective date of the record (these are always input as end-of-quarter dates, even if the return's actual effective date differed by a few days)
1 to 14	Identification fields (name, location, type, logical fields to show whether the Credit union is insured or in the productive credit programme, etc.)
15 to 19	Gender fields (men, women, groups, sex unknown, total)
20 to 46	Expense account fields
47 to 57	Income (revenue) account fields
58 to 60	Net income & dividend rate fields
61 to 109	Asset account fields
110 to 132	Liability & Capital account fields
133 to 144	Delinquent loan schedule summary
145 to 158	Loan purpose data
159 to 165	Ledger difference data

Accordingly, following the end of each calendar quarter, the salient data from *each credit union's* quarterly return must be input into *CUDBASE*. When input, and added ("appended", in computer jargon) to the Data Base Table as a new row, becomes a new "record" in the Data Base Table. There must, obviously, be one and only one record for each credit union for each quarter-end. Each record must contain data in each field, unless the field's value is zero, in which case the field will be empty (blank). Field No. 0 must contain a date in Lotus 1-2-3's @DATE(Y;M;D) format; fields 1 to 14 must contain text (i.e., alphanumeric) data, "labels" in Lotus' terminology; and fields 15 through 165 must contain numeric data ("values" in Lotus' terminology). To conserve

memory, though, *CUDBASE* was conceived in such a fashion that when a newly-input "record" is "appended" to the data base, all fields containing zeros are "erased", i.e., the zeros are eliminated, leaving the spreadsheet cells completely empty). This was necessary, because thousands of extra zeros could add many unwanted kilobytes to the *CUDBASE.WK4* file size.

The principal operations a *CUDBASE* user can undertake are:

- Input of new records
- Queries of the data base to extract one or more records satisfying certain user-defined criteria, and placing these records in a "Query Table"³
- Displaying certain reports, documents or charts on the screen, or printing them.

Each component of *CUDBASE* will be discussed at length in succeeding chapters of this manual.

CUDBASE Outputs

Although the various *CUDBASE* outputs (reports and charts) are discussed in detail in the following chapters, to enable the reader to have an idea of the end use, or "outputs" of the application, a succinct discussion of those outputs is probably appropriate here.

As for analytical reports, *CUDBASE* produces two types of "chronological" reports and two types of "spatial" reports. By "chronological," we mean that the output is a table showing the evolution of a number of data base fields over a period of time, in this case at five successive user-defined dates. One chronological report, the so-called "At-a-Glance" report, is a two-page summary report, while the other, a more detailed and much lengthier report, provides complete listings for all fields of all data available on a particular credit union or group of credit unions, along with an extensive analysis of that data. "Spatial" reports show the distribution of all types of data by region. The standard spatial report is one that shows the status of a group of credit unions in tabular form with each Chapter area having one column where the data (fields) of all credit unions of the defined group of credit unions located in that particular Chapter area are summarized. Both a two-page summary ("At-a-Glance") spatial report and an extensive, detailed spatial report are available upon demand. Obviously, if you are asking *CUDBASE* to analyze the

3

Those users familiar with previous Releases of Lotus 1-2-3 for DOS should note that the Lotus Corporation has in Lotus 1-2-3 Release 4.0 eliminated the former three-table data base conception, whereby input, criteria and output "ranges" had to be defined along with arcane criteria formulae. In their place, Lotus has substituted a "Data Base Table, corresponding to the former "input range" and a "Query Table", replacing the old "output range". Criteria are now set manually (or by macro) prior to each "query", using a dBASE-like procedure.

growth and performance of a single credit union, the "spatial" reports are meaningless. The analytical sections of these four reports contain a considerable number of performance measures and ratios, as well as an "M.O.S." index of overall credit union financial health, which varies from zero to 100, the higher the score the better the performance.

One would employ one of the chronological reports if he/she wanted to assess the performance over time of a particular credit union or group (however defined) of credit unions. The chron reports show either selected or all fields at each of five successive (user-specified) dates, along with varying quantities of financial analysis and graphics. One would, on the other hand, be more interested in looking at a "spatial" report if one wanted to compare the performance of a multi-region group of credit unions in each region with the performance of the group as a whole. Both spatial reports provide analyses at the fifth and latest date specified by the user. "Groups" can be defined in any way, limited only by the creativity of the user. Some possibly useful groups whose performance might be useful to examine periodically would include all urban credit unions, all rural credit unions, all worker credit unions, all community credit unions, CDC credit unions, all credit unions of particular Chapters, all "productive credit" and all "risk management" credit unions.

This, then, is the reason *CUdBASE* was created, to provide varying levels of tabulation and analyses for a credit union or group of credit unions at a particular point of time or over time. Let us now turn our attention to learning how to obtain this marvellous information from *CUdBASE*.

II. Starting CUdBASE

Launching of DOS, Windows and Lotus 123 for Windows

This manual cannot, as previously indicated, reproduce all instructions relative to using the operating system (MS-DOS), MS Windows 3.1, and Lotus for Windows Release 4.0. The user him/herself must make the effort to master at least the basics of all these different programmes, all of which are essential to the proper functioning of *CUdBASE*.

Different PCs (personal computers) are configured differently, but in any case, MS-DOS must be launched first, normally during start-up when the user turns on the computer. Certain habitual users of Windows who tend to use *exclusively* Windows applications will probably launch Windows automatically every time they turn on their computer by placing the command C:\Windows\Win on the last line of their AutoExec.BAT file. Other users, particularly those who primarily use DOS-based applications and only occasionally use Windows applications, will have to launch windows by leaving their current application and returning to the DOS prompt, C:\>, and manually passing the same command as others place in their AutoExec.BAT file. Other users may place this same command in the DOSSHELL menu window, or in some other "point-and-shoot" utility.

At any rate, once MS-DOS and Windows are either launched automatically or otherwise, the Windows Program Manager (the so-called "ProgMan") is displayed on the screen. Assuming it has been previously installed, a section on the ProgMan screen grouping a number of Lotus product icons should be visible. If not, it can be made visible by choosing (clicking) on the Windows menu item, and a further click on "Lotus Apps". Once the "Lotus Apps" group is visible, look for the icon labelled "Lotus 1-2-3", and "double-click" on it. Alternatively, in the absence of a mouse, use Alt-W to choose the Windows menu item and, using the cursor movement keys, move the cursor to the "Lotus Apps" choice, and hit Enter. In either case, the initial Lotus 1-2-3 for Windows screen appears after a few seconds. Refer to the Lotus 1-2-3 User's Guide for a description of the control panel and spreadsheet grid.

Launching CUdBASE

Finally, once MS-DOS, Windows 3.1, and Lotus 1-2-3 V. 4.0 have all been loaded into memory, it is now possible to launch *CUdBASE*. The exact procedures to follow will vary according to where the user has stored the CUdBASE.WK4 file and what default directory has been previously specified for Lotus work files. If the user has placed it, as its current macros require, in a C:\CUdBASE directory, choose File Open either with the mouse or with the sequence Alt-F,O, and either type or choose CUdBASE.WK4 (along with its path, if different from the default path), and click on OK or hit the Enter key. **CUdBASE.WK4** loads in about a minute. When fully loaded into memory, *CUdBASE*

appears on the screen as shown in Figure 1 immediately below. Before proceeding to a discussion of the various commands now available to us, let us study this first *CuDBASE* screen a little more closely.

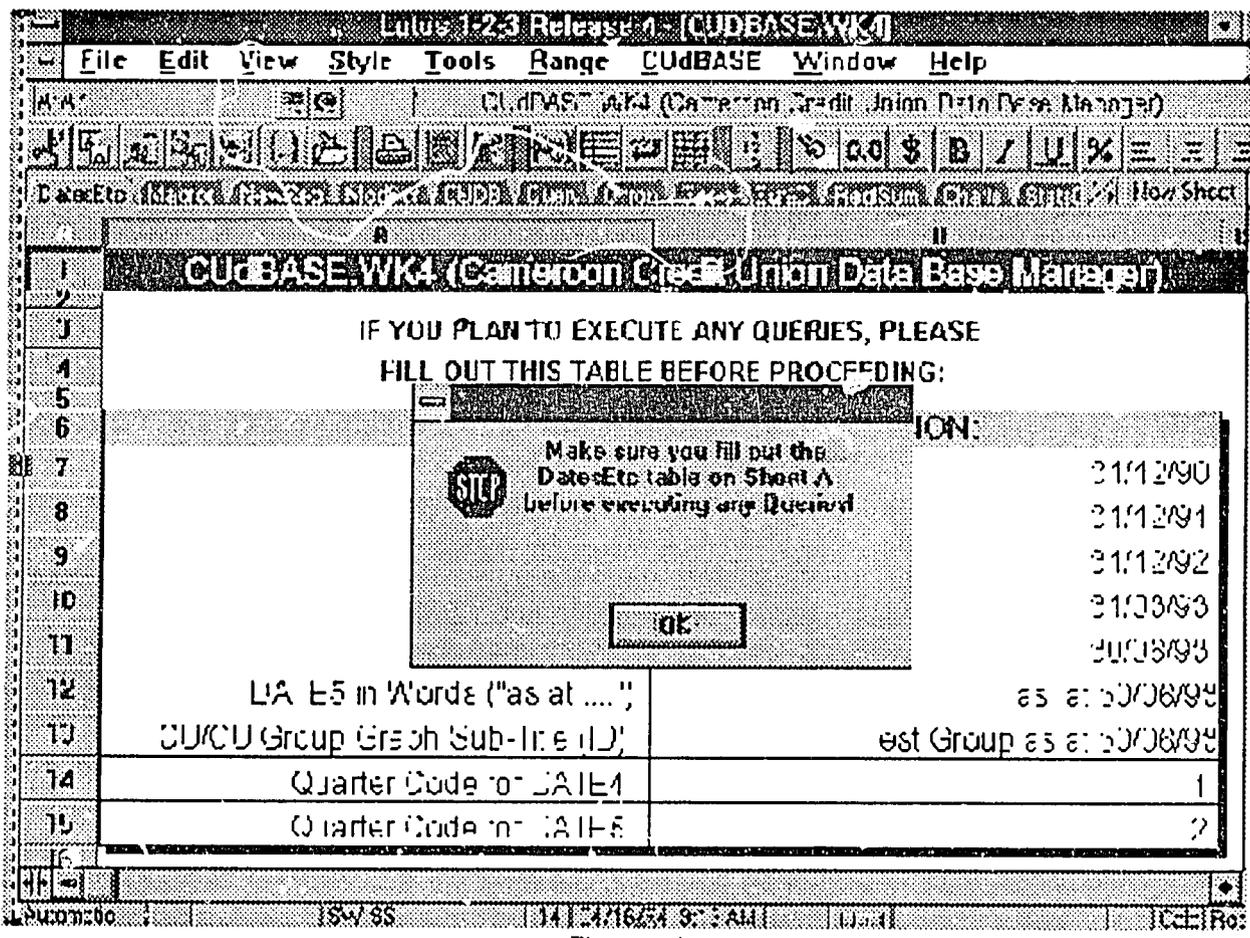


Figure 1

Users already familiar with Lotus for Windows already know that Lotus 1-2-3 for Windows is three-dimensional, i.e., it has multiple worksheets, numbered sheet A, sheet B, etc., through sheet Z, sheet BA, sheet BB, etc., through sheet IV, making 256 sheets available in all. *CuDBASE* only uses 17 sheets, however. One can toggle one's way one sheet at a time to other sheets with the manual commands Ctrl-PgUp (towards the last sheet) and Ctrl-PgDn (towards the first sheet), as was possible in Lotus 1-2-3 Release 3.x, or one can simply click on the "tab" for the sheet you want to make "current". Clicking with the mouse is obviously much quicker, especially if you want to go to a far-away sheet.

Those with some acquaintance with the Lotus 1-2-3 for Windows Main Menu (File, Edit, Worksheet, etc.) will notice the remarkable addition of a new element to the Main Menu, ***CUDBASE***. One of the many marvels of Lotus for Windows is the ability to insert your own custom pull-down menu of up to 24 items into Lotus' own Main Menu. The authors of ***CUDBASE*** have consolidated access to all the various commands available to the ***CUDBASE*** template in this single custom pull-down menu.

The reader may also note on the initial screen that the 1-2-3 template contains 17 worksheets (Sheets A through Q), and that, in general, the authors have placed only one document on each worksheet. Experienced, veteran spreadsheeters will appreciate this precaution--by placing only one document on a worksheet, the insertion or deletion of a line or column will not damage any other documents on that particular sheet, as was a real problem with previous two-dimensional spreadsheets whereon users had to place a number of documents and try not to damage one while editing another.

Note, too, the line of Lotus SmartIcons, shortcuts to giving commands through the command (menu) line. There are literally dozens of SmartIcons available, and the icon line can be tailored to the user's needs. The icons shown on ***CUDBASE***'s initial screen are those recommended for ***CUDBASE*** users, but are not absolutely essential to running ***CUDBASE***. Refer to the manual for the meaning of each SmartIcon whose intended use is not obvious.

Only sheet A and sheets C through L are visible and easily accessible by the user. Some sheets, particularly the macros that run the custom pull-down menu and sub-menus, have been "hidden" to reduce the likelihood of users damaging them, and hence rendering parts of ***CUDBASE*** non-operational. If he/she promises to be careful, the reader can look up how to hide sheets or make them visible again in the Lotus 1-2-3 Release 4 User's Guide. After satisfying your curiosity, however, please re-hide the sheets the authors had the foresight to hide from sight.

Before continuing to learn more about the utilization of ***CUDBASE***, the authors recommend that readers inspect each of the different worksheets to familiarize themselves with the contents of each one. Using a mouse, simply click on each successive sheet's tab, and use the cursor movement (arrow) keys to move around the worksheet, then click on the next sheet and inspect it, and so on, until the last sheet. To return to Sheet A, click on its tab, give the Go To command (no, not *there!*) F5-A:, Enter, or click on Edit, Go to, type A: and push Enter. Alternatively (and generally more time-consuming), push Ctrl-PgUp to return one sheet at a time towards Sheet A. The command sequence Ctrl-Home will also return the cursor to Sheet A.

Another important thing to explain from the beginning: In learning ***CUDBASE***, you will no doubt make some mistakes, and perhaps even *damage* the CUDBASE.WK4 file. For this reason, it is necessary to make backups of the file. If you have backups, and have somehow damaged the CUDBASE.WK4 file loaded into memory, just give the command

File Close to remove the current version from memory, and then load the uncorrupted version into memory with the File Open command, and continue learning. Before loading your last backup, however, be sure to make a backup of your backup!

With certain types of errors, you may notice that the CuDBASE element has disappeared from the Main Menu, being replaced by Lotus 1-2-3's Standard Menu. If that is the only noticeable fault, you can recall the modified main menu containing the CuDBASE element by giving the command Ctrl-M. Then, once CuDBASE reappears in the Main Menu, you can immediately access the CuDBASE pull-down menu again by clicking on the CuDBASE menu item with a mouse or, from the keyboard, pushing Alt-C.

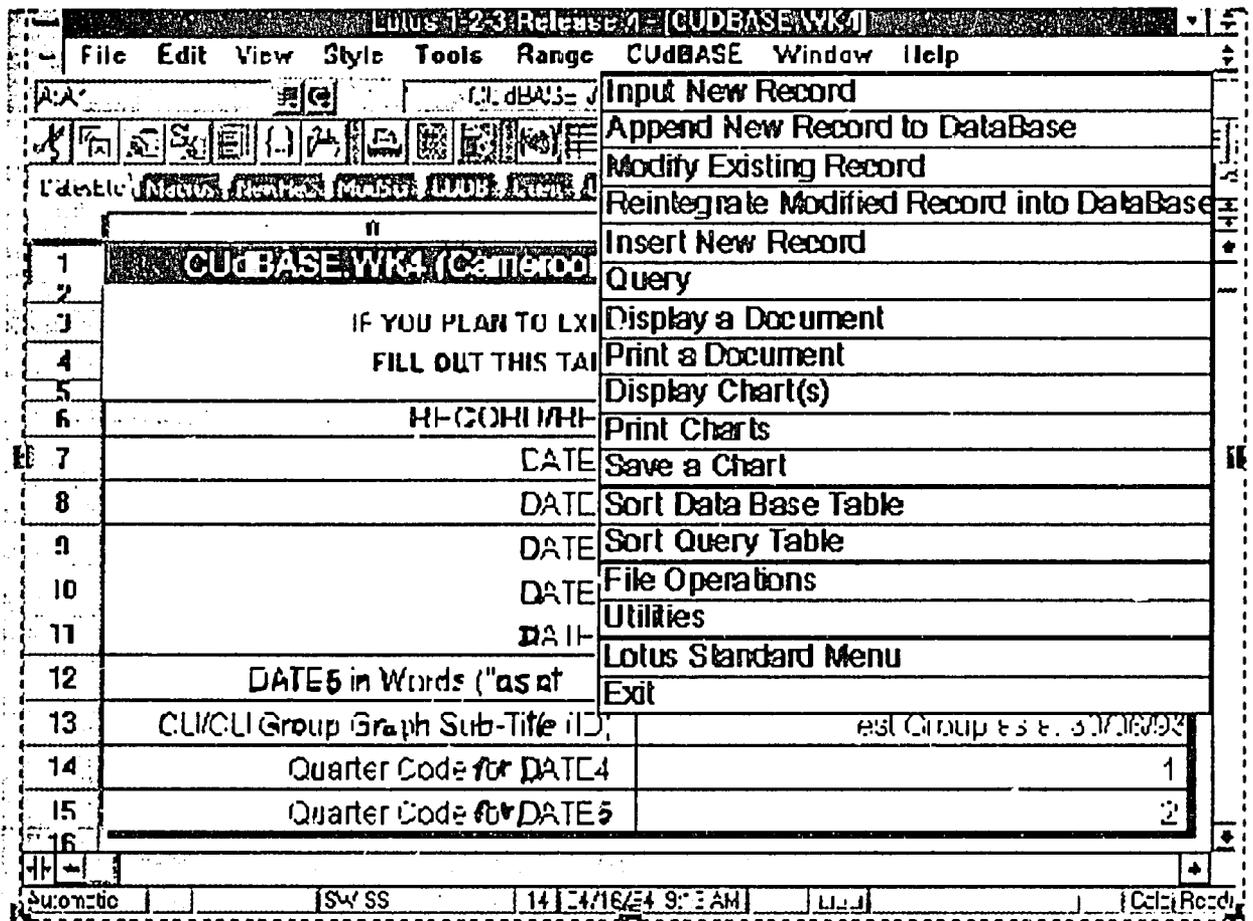


Figure 2

When you do finally choose CuDBASE from the Main Menu line, the special pull-down CuDBASE menu will appear with 17 choices available to you. These command choices, shown in Figure 2 above, contain *all* the commands and controls available to the CuDBASE user. By clicking one of the choices with a mouse, or by moving the cursor

to the desired command and hitting the "Enter" key, you can execute the chosen command. Before executing any of the commands, however, use the down cursor control key to move slowly down the list of commands. Notice that for each one, a separate brief description of the command is shown in the control panel. The *CUDBASE* pull-down menu contains the elements indicated in Table 2. Each command can be given by a click on the menu element or, from the keyboard, by pushing Alt and the underlined letter simultaneously.

Table 2
Description of CUDBASE Custom Pull-Down Menu Choices

<u>Choice</u>	<u>Menu Item Choices</u>
<u>I</u>nput <u>N</u>ew Record	Input a new record (i.e., a new MFSR or AA)
<u>A</u>ppend New Record	Append the newly-input record to the data base
<u>M</u>odify Existing Record	Modify a previously-input record
<u>R</u>e-integrate Old Record	Reintegrate the modified record into the data base
<u>I</u>nsert Modified Record	Append modified record as new record in DATABASE as a new record, leaving the pre-existing record intact
<u>Q</u>uery	Set record choice criteria and perform query
<u>D</u>isplay a Document	Display a user-specified report on the screen
<u>P</u>rint a Document	Print a user-specified report
<u>D</u>isplay Charts	Display user-specified chart(s) on the screen
<u>P</u>rint Charts	Print a user-specified chart or charts
<u>S</u>ave a Chart	Save a Chart to the Windows Clipboard
<u>S</u>ort Data Base Table	Sort the Data Base Table
<u>S</u>ort Query Table	Sort the Query Table
<u>F</u>ile Operations	Save CUDBASE.WK3 or DATABASE to disk
<u>U</u>tilities	Various eventual but currently undefined utilities
<u>L</u>otus Standard Menu	Return to Lotus Standard Menu
<u>E</u>xit	Return Lotus 1-2-3 to READY mode

All these different *CUDBASE* operations are discussed in detail in the following chapters. The authors strongly recommend that learners not execute any of the above commands (except **Quit**) until they have read the section concerning that choice in succeeding sections of this manual.

III. Record Input and Management

As already indicated in the introduction, the very heart of **CUdBASE** is a Data Base Table containing statistical and financial information on Cameroonian credit unions. This table with 166 columns, each one representing a "field" in the data base, has been given the range name DATABASE. Unlike the number of columns, the number of rows in DATABASE is practically limitless (in reality, there are 8,192 lines available on each sheet, but it is extremely unlikely that CamCCUL will push this limit in the foreseeable future). Each subsequent row of DATABASE below the field names on the first is an individual data base "record." The reader will recall that a "record" is nothing but the salient data from credit unions' quarterly financial and statistical reports (or annual accounts, in the case of the fourth quarter). Each quarter, the MIS Officer must input the new data from each credit union, i.e., create a new record for each credit union at each date. The DATABASE table, found on Sheet E (alternatively named CUDB on its tab, should you wish to go to it by clicking on its tab), appears on the screen as follows:

The screenshot shows an Excel spreadsheet with the following data:

	A	B	C	D	E
1	Data Base Table				
2					
3					
4	31/12/90	ABUH	CU	NW	BOYO KO
5	31/12/91	ABUH	CU	NW	BOYO KO
6	31/12/92	ABUH	CU	NW	BOYO KO
7	31/03/93	ABUH	CU	NW	BOYO KO
8	30/06/93	ABUH	CU	NW	BOYO KO
9	30/09/93	ABUH	CU	NW	BOYO KO
10	31/12/90	NJINIKOM	CU	NW	BOYO KO
11	31/12/91	NJINIKOM	CU	NW	BOYO KO
12	31/03/92	NJINIKOM	CU	NW	BOYO KO
13	30/06/92	NJINIKOM	CU	NW	BOYO KO
14	30/09/92	NJINIKOM	CU	NW	BOYO KO
15	31/12/92	NJINIKOM	CU	NW	BOYO KO
16	31/03/93	NJINIKOM	CU	NW	BOYO KO
17	30/06/93	NJINIKOM	CU	NW	BOYO KO

The spreadsheet interface includes a menu bar (File, Edit, View, Style, Tools, Range, CUdBASE, Window, Help), a toolbar with various icons, and a status bar at the bottom showing 'Automatic', 'SWISS', '12', '18/03/94 8:26', and 'Calc Ready'.

Figure 3

Please go to DATABASE yourself by clicking on its tab, with a {GoTo}D:,Enter command, or by using the Ctrl-PgUp or Ctrl-PgDn movement keys. Move around the worksheet a little. Notice that what shows on the screen at any particular moment is but an infinitesimal part of the entire Data Base Table. In the illustration shown above, only 5½ of the 166 columns/fields are shown, and only 17 of the thousands of rows/records are shown.

Input of New Records

If the objective were only to fill out new lines in this table each quarter, it would have been possible to fill out the table directly using Lotus' View Freeze Titles command to make sure the field names are always displayed. However, experience shows us that doing data input this way (in browse mode for those familiar with DBMS's) is not very practical. First of all, the Data Base Table does not visually *look like* the source documents (MFSRs and Annual Accounts), thus making input awkward. Secondly, there is no control on data input errors, nor for that matter on data errors in the source documents, and experience shows us that as many as 15% of incoming MFSRs contain copying, figure inversion or other types of errors. Lotus 1-2-3 provides an alternative, namely the creation of an "input screen," or "mask," in which all data can be entered and validated before appending the new record to the data base. This input screen physically resembles the source documents, thus facilitating eye movement and coordination up and down the source documents and thus lets the reader basically "copy" data contained in the source document onto the screen in the same order as in the original. This convenience alone is worth the trouble of setting up a formal input screen.

The input screen allows the user to simultaneously (1) verify the internal logic of the MFSR or Annual Accounts (e.g., do the individual assets add up to the total assets indicated, or do the various delinquency categories and current loans add up to the amount shown in the balance sheet as "total loans outstanding?") and (2) identify and correct (to the extent possible) errors committed during data input. At this point, the reader should make the input screen the "current" screen by clicking on its tab (called "NewRec") or using the Ctrl-PgUp and Ctrl-PgUp cursor movement keys. Alternatively, using the Lotus "go to" command sequence would also work: F5 INPUT_SCREEN Enter. This is an example of the many backup procedures available should the user prefer not to use one or the other available procedures. Once the reader has the input screen (i.e., sheet C) displayed in front of him/her, he/she should take the time familiarize him/herself with the layout of this "electronic" MFSR. Using the cursor arrows and/or PgUp and PgDn, travel around the document a little, but for the moment do not enter any data. The input screen is identical to the one shown in Attachment C of this manual. Notice that the cells representing data fields requiring data input all have lines around the four cell borders. It is therefore quite difficult to make a mistake as to where to put data during input. If a user tries to place data somewhere other than where allowed, *CUDBASE* will refuse to cooperate and will beep to show its discontent.

Let us together now, using the input screen, input a new record into *CUDBASE*. Find an MFSR which has not yet been input, and follow these easy steps:

- Click once on the *CUDBASE* element of Lotus' Main Menu, and when the custom pull-down *CUDBASE* menu appears, click on "Input New Record." Alternatively, for those readers without a mouse, type Alt-C followed by N. In either case, a blank input screen is displayed, ready for new data.
- If the effective (end-of-quarter) date of the new record differs from the default date proposed to you, move your cursor to the DATE field, and compose the correct date in Lotus @DATE(Y;M;D) format, or edit the existing date with the F2 (Edit) function key. When you give the command *CUDBASE* "Input New Record" with either the mouse or the keyboard, *CUDBASE* erases all previous data on the input screen, except for the DATE field, totals, and the control panel at the foot of the document. This has been done on purpose because normally several same-date MFSRs are input during the same session, and thus leaving the previous date intact saves the user a dozen or so keystrokes.
- Immediately below the DATE field, one finds the input screen section whose purpose is to identify the particular credit union we're inputting data on. These identification fields consist of:
 - the credit union's name
 - the society's status: registered credit union (CU) or unregistered discussion group (DG)
 - the Province and Division where the Credit union's Headquarters are located (see Attachment M for codes)
 - the Chapter area in which the Credit union's Headquarters is located (See Attachment M for codes)
 - the source document type: annual accounts (AA), MFSR, or estimates (EST)
 - the source document's author: fieldworker (FW), fieldworker supervisor (FWS), inspector (INSP), or the credit union's bookkeeper (BKPR)
 - the credit union's operating milieu (rural, urban or mixed)
 - a logical code (Y/N) to show whether the credit union benefits from payroll deduction
 - the common bond type: place of EMPLOYment, COMMunity, or Association (ASSN)
 - the members' employer, in case of a workers' credit union
 - a logical code (Y/N) to indicate whether the credit union participates in the productive credit programme
 - a logical code (Y/N) to indicate whether the credit union participates in the risk management scheme
 - a logical code (Y/N) to indicate whether the credit union is *active* in the risk management scheme.

The MFSRs' upper right hand corner contain all this ID information, as does the annual accounts form.

- Once the credit union has been thoroughly identified, move the cursor down to the next section, the membership fields. Notice that CamCCUL has specified four sexes: men, women, group or corporate members, and "sex unknown." The latter field is used when the detail on the first three gender fields is for whatever reason not reported. Move the cursor to the Males field and enter the number of male members. Do the same for the other three "sexes." If the number of males, females and groups has not been filled out, type the total number of members in the Unknown Sex field. Do NOT type the total membership on the Total Number of Members line. Instead, use the macro entitled \R with the Ctrl-R (mnemonic for Recalculate) keys. This macro recalculates all the formulae in the input screen. Verify that the total membership produced by formula corresponds to the total membership reported on the source document. If not, the person preparing the MFSR made an error, and the user needs to place the unknown number of members in the Unknown Sex field. Note all such errors in a register, so that these errors can be reported to the parties concerned for rectification. This register will also be helpful during the appraisals of fieldworkers' and fieldworker supervisors' performance.
- Move your cursor down to the next data input screen section, the income and expense statement. Fill out the various income and expense account fields. If the credit union has income or expense account titles other than those shown, place the totals of such odd items in the "Other Income" and "Other Expenses" fields. Do NOT type in the credit union's net income or operating loss. This will be calculated automatically as soon as you press Ctrl-R again. If the debit side and credit side totals do not, after recalculation, produce the total shown on the MFSR or annual accounts forms, show the difference as either "Unnamed Income" or "Unnamed Expenses" or in both places, if necessary. Once the Income and Expense Statement is in equilibrium, fill out the remaining two data fields of this section concerning dividends on shares. Put the total *amount* of dividends on shares in the "Dividends" field, and the *number of CFAF* paid per share-month in the "Int. on Savgs Rate" field (for the uninitiated, convert the number of francs into an annual percentage rate by multiplying by 1.2).
- Next, move the cursor down to the next section, where the credit union's Balance Sheet is input. Type in the various asset, liability and capital field amounts shown on the source document, but do NOT type in either the "Total Assets" or "Total Liab. & Capital" fields. Rather, once again employ Ctrl-R to calculate the totals. If, after recalculation of the input screen, assets don't equal liabilities and capital, verify that you have correctly typed each figure as reported by the credit union. If the final totals after reverification are not the same as shown on the source document, place the difference in the "Unnamed Assets" or "Unnamed Liabilities"

fields, similarly to how we equalized the income and expense accounts. To assist you in equalizing the two column totals, the difference between the two is shown just below the total assets figure. If the error cannot be found, "plug" this figure into one or the other of the "Unnamed" accounts to balance the two.

- Moving on down the data input screen, we find the Loan Delinquency Schedule. Find this schedule in the source document, then fill in all of this section's fields, except for the totals, and once again recalculate the total formulae. If the Loan Delinquency Section of the source document has not been filled out by its preparer, place the total number of loans (if known) on the "Amt. of Delinquency Unknown" line, along with the total amount of loans outstanding (use the balance sheet figure if it is not shown here). Do not write anything on the "Total Loans Outstanding" line. Instead, calculate the totals once again by running the Ctrl-R macro. Verify that the totals are the same as shown on the source document. If not, verify that you have input all figures correctly and, if so, place any difference in the "Amt. of Delinquency Unknown" fields. As indicated in more detail below, you can find the *amount* of the difference by referring to the control panel at the foot of the input screen.
- The next section to fill out is the "New Loans Granted" section containing the number and amount of loans granted by purpose. Generally, detail on loan purposes is only input once a year from the annual account forms. However, **CUDBASE** requires the total number and amount of loans granted during the year for some of its calculations, so when the purpose data is absent, please place the total number and amount of loans granted *this year* to date on the "Other Purposes" line. Once all the loan purpose data has been input, once again push Ctrl-R to verify that the totals are as shown on the source document. If not, adjust the "Other Purposes" line up or down so that the same totals are obtained. Don't forget to note the error in your input errors register for subsequent communication to the source documents' preparers.
- The final group of fields to be input is the list of ledger differences. Place the absolute value (without + or - signs) of each on the appropriate lines. If you wish, you can once again push Ctrl-R to obtain the total (absolute) value of ledger differences. However, this is really unnecessary, because in the next section below you are going to recalculate one more time to verify that there are no remaining differences in the control panel.
- After having input all the various data fields from the source document into all the different sections of the input screen, please press Ctrl-R one last time to recalculate all input screen formulae, and move the cursor down to the Control Panel at the foot of the input screen. If there are still errors in the input screen, identify and correct them before proceeding to append the new record to the data base. The absolute values of the differences are shown, as well as the differences

divided, respectively, by two and nine. To quickly and effectively identify and correct errors, follow the following instructions:

Look and see if the amount of the difference appears somewhere on the source document. If so, you have probably simply omitted the figure during input. If you have, place the figure in its proper field and recalculate again with Ctrl-R.

If you do not see the exact amount of the error on the source document, consult the Difference/2 column. If you have input a debit as a credit or vice versa, you can identify the offending figure there, and find it in the source document. If this is the case, erase the amount in the place where it was wrongly placed, and retype it in its correct field. [IMPORTANT!: NEVER EVER use Lotus' Move functions to move a figure from a wrong place to the right place! The act of doing so will damage *CUdBASE*'s internal logic. Rather, take the time to erase the bad figure and retype it in the right place.] Recalculate once again with Ctrl-R.

If you still haven't identified the origin of all the errors, consult the Difference/9 column. This type of error occurs either when figures are inverted or when you have typed too many or too few zeros (or the source document preparer copied too many or too few zeros). In either case, the difference between the correct figure and the incorrect figure is always exactly divisible by 9. If no decimal fraction is present following the Difference/9 figure, you have probably made an inversion or zeros error. Therefore, re-verify the figures ending in zeros, and if you don't find the error there, proceed with verifying the order in which each figure was composed in the offending section(s).

Finally, if after all these procedures you still cannot identify the error or errors, proceed to a re-verification of the typed-in figures in the offending section. You will finish either by (1) finding a figure that you have wrongly composed or (2) concluding that the preparer of the source document made a mistake. If it is not possible to know the exact nature of the error (e.g., when the preparer of the source document omits an asset item), the difference must be placed on the "Unknown" line of the section producing the error.

- When you will have completed all the new record's data input and corrected any errors showing up in the Control Panel, such that the latter contains all zeros, recall the custom pull-down *CUdBASE* menu with a click on the *CUdBASE* menu item, and click on Append from the custom pull-down menu. Alternatively, using the keyboard, give the command Alt-C followed by A. The Append command adds the newly-input record as a new row at the bottom of the Data Base Table. At this

point, the input of the new record is complete, and you can start the input of still another new record by giving the CUdBASE Input New Record command, or end the data input session after saving the updated file (see Chapter VII for instructions on saving the *CUDBASE.WK4* file.). In either case, clear the input screen with clicks on CIJdbase and Input New Record. This will save you a kilobyte or so when saving to disk.

- If, instead of inputting an MFSR, you wish to input an annual accounts form, the procedures are identical. However, it is important to point out that you must input the *annual* balance sheet, and *not* the post-closing balance sheet, and that the income and expense statement is inclusive of interest on savings and deposits. Don't forget that the figure for Net Annual Surplus in the Balance Sheet has to be *identical* to the Surplus shown in the Income and Expense Statement. In any case, the Control Panel will not *let* you forget, and will refuse (after beeping) to append the new record to the data base until the Control Panel contains *only* zeros.

Here's one final bit of advice on inputting new records, which is also applicable to the modification of existing records (see following section). That is, the authors consider it important that the users of *CUDBASE* are aware of the technique used to append new or modified records to the data base. This knowledge will make the user less likely to take forbidden shortcuts and thereby damage the internal logic of *CUDBASE*. The technique employed is the use of so-called "Staging Areas" located on Sheet P of *CUDBASE*. To protect the staging areas, the sheet containing them have been "hidden." This is intended to keep the user from attempting to make any modifications to the staging area formulae, which are integral to *CUDBASE*'s proper functioning. Figure 3 below shows (before the sheet was hidden) the upper left-hand corner of the sheet containing the staging areas. The new record and existing record modification staging areas both contain all the same columns (i.e., field names) that head up the Data Base Table itself. In the new record staging area, below each field name, there is a short formula simply recalling the value of that field currently sitting in the New Record Input Screen. One such formula is shown in the Lotus 1-2-3 Control Panel illustrated in Figure 4. For example, the formula recalling the value of the DATE field in the Input Screen is +NewRec:E3 (this is the same as C:E3, since Sheet C. also has the TAB name NewRec). As an exercise, jump to the input screen on Sheet C and verify that the DATE field is, in fact, located at cell C:E3. When you give the Input New Record Append command, Lotus recalculates the line immediately below the staging area's field names, and copies the values (not the formulae), except for zero entries, to the next available row of the Data Base Table.

Because of the absolute necessity of maintaining the integrity of the P:A4, P:B4, etc., formulae, the authors would like to once again caution the user to NEVER EVER use Lotus' Worksheet Move command to move a figure you have typed in the wrong place in the input or record modification screens. ALWAYS erase the figure and retype it in its correct location. Using Move will *damage* *CUDBASE*, and should *never* be used during the course of a *CUDBASE* session. If you damage these staging area formulae,

the data appended to the Data Base Table will not be correct, and resulting analyses based on these records will also be erroneous. Enough said.

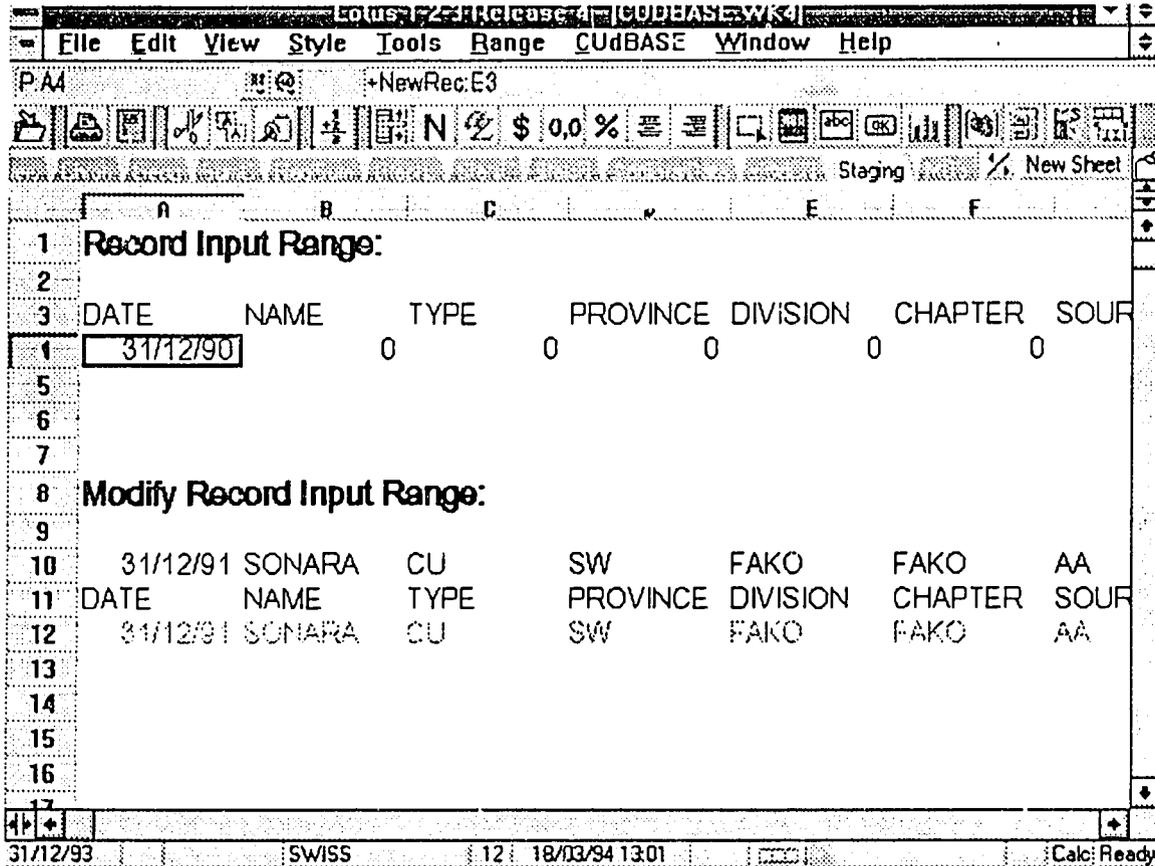


Figure 4

Modification of Existing Records

Sometimes it is necessary to modify a record already input into *CUDBASE*. This can happen for a variety of reasons, including the following non-exhaustive list:

When an amended MFSR or Annual Accounts form arrives replacing one containing errors previously returned to its preparer for corrections following its initial input with amounts shown in "Unknown" fields.

At the end of the year when pre-audit MFSRs are input prior to the payment of dividends and the preparation of annual accounts. This may be necessary in order to compile provisional movement statistics. When the annual accounts forms arrive, however, the record must be modified to take into account the dividends,

share savings, reserve accounts and any other accounts adjusted during the annual accounts preparation process.

When the MFSR of a certain (dormant) credit union has not changed significantly since the preparation of the last quarterly MFSR submission.

In all these cases, the modification is performed in a manner very similar to the inputting of a new record. That is, one uses a Record Modification Screen (also called ModScreen) very similar to the New Record Input Screen. The Record Modification Screen is linked to a separate data staging area just below the New Record Staging area.

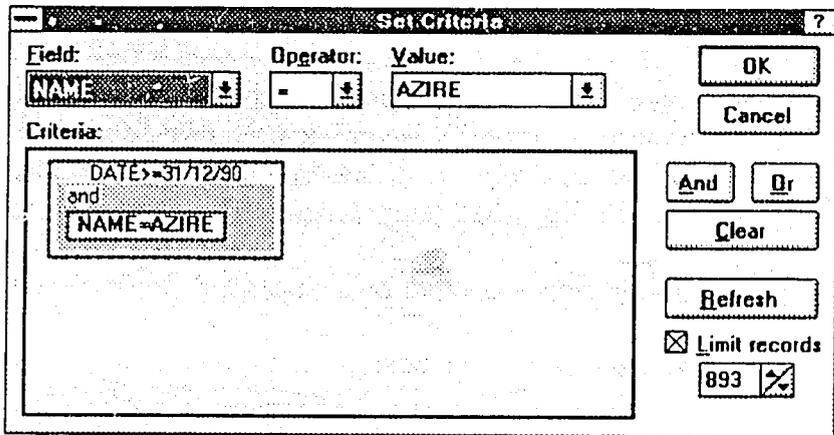


Figure 5

To modify a record, once again recall the custom pull-down CUdBASE menu, and choose Modify a Record, or use the keyboard equivalent, Alt-C followed by M. A dialog box (see Figure 4) will appear requesting that you fill in the record selection criteria. Unless two credit unions have the same name in the NAME field, a criteria specifying the DATE and NAME (using the logical AND, as opposed to the OR, operators) should suffice to locate the record and copy it to the Record Modification Staging Area.

When you will have specified the selection criteria for modifying a record in the dialog box, and have clicked on the OK button or used the tab key repeatedly until the cursor is sitting on the OK button and then pressed the Enter key, the Record Modification Screen will then be displayed. Notice that the various data fields are already occupied by the data composing the record you want to modify, if it exists.

Proceed to change any figure appearing in the Record Modification Screen by typing over the previous data being brought in by formula. Typing data right over the formulae will not hurt the logic of the ModScreen, but as before, NEVER EVER use the Worksheet Move command to move a figure from one site to another. After making all the changes you want, recalculate the Record Modification Screen with the macro command Ctrl-S (note that the recalculation macro for the ModScreen is different from that of the New Record Input screen's own recalculation macro, Ctrl-R). Descend to the ModScreen's Control Panel at the foot of the document and check for differences. If any exist, follow

the instructions for correcting errors explained in the previous section on inputting new records. When any errors have been corrected, and only zeros remain in the control panel, you can return the modified record to the data base by clicking on the commands ***CUDBASE*** Re-integrate Existing Record (Alt-C followed by R from the keyboard). ***CUDBASE*** proceeds to reintegrate the record, as modified, into the Data Base Table.

Above, we cited three situations where it might be necessary to modify records. The two first cases can be taken care of as shown in the previous paragraph. The third case, however, that of a dormant credit union whose MFSR has changed little, if at all, since the last quarterly MFSR submission, must be handled in a slightly different manner. That is, instead of giving the ***CUDBASE*** Reintegrate Record command, you instead give the command ***CUDBASE*** Insert Record. This command leaves the existing record as it was, and appends a *new* record at the foot of the Data Base Table. This cannibalization of existing records is another time-saving measure built into ***CUDBASE*** by its authors to help speed up the input of the records of moribund credit unions whose MFSRs change little from one quarter to another.

One more time, the authors would like to remind the user to NEVER EVER use the command ***CUDBASE*** Move to move record data from one field of the New Record Input Screen or ModScreen to another field. Always erase the wrongly-placed figure and retype it in its correct place. Moving data will corrupt ***CUDBASE***'s logic and render subsequent analyses erroneous.

Maintenance of the Data Base

The two means of modifying an existing data record, ***CUDBASE*** Reintegrate and ***CUDBASE*** Insert, have one shortcoming that ***CUDBASE***'s authors could not overcome. That is, ***CUDBASE*** does not erase all the empty/zero cells, as does ***CUDBASE*** Append New Record. Therefore, from time to time, the authors recommend that the user enter the Data Base Table and search for superfluous zero-value cells and manually erase them. These excess zeros occupy considerable amounts of RAM and disk memory, and erasing them can significantly improve ***CUDBASE***'s speed and overall performance. But make sure you don't erase non-empty cells. Just in case, before a zero-erasing session, make sure you have saved the file before commencing the erasing operations. Then, should you accidentally erase some data, it can be recalled from disk with the ***CUDBASE*** File Combine command. Make sure that you return any accidentally-erased data, since the absence of that data will cause errors or erroneous conclusions to be drawn from any eventual query-based analyses based on these data.

A discussion of other aspects of the proper maintenance of ***CUDBASE*** is presented in Chapter VII. The reader should read that section before his/her first zero-erasing session. Doing so could save him/her considerable work.

IV. Querying the Data Base

The preceding chapter discussed how to get credit unions' data input *into* the data base, how to modify existing data records, and gave certain advice on the proper maintenance of *CUDBASE*. Perhaps by now the reader of this manual has asked himself what all this data input, modification and maintenance is really for. This chapter begins to answer that question. The answer is that we can do many things with this data: produce analytical reports with differing degrees of detail, view and/or print a vast number of charts (graphs) on the growth and performance of a credit union or group of credit unions, and even more.

To properly discuss what *CUDBASE* can produce and illustrate how the statistical and financial data base can be useful, we must choose an object on which to focus our attention. That is, before asking *CUDBASE* to perform any analysis, the user has to decide *what* exactly he/she wants to study. That specification can generally take the form of "a credit union", "a group of credit unions", or "all credit unions." The next step is to communicate the object of our desires to *CUDBASE*. Fortunately, as was evident in specifying the criteria for selecting a record to modify, the task is not difficult, and is now much easier than ever before in previous releases of Lotus 1-2-3.

Revisiting Lotus 123's Concept of Data Bases

To understand all this, it will perhaps be easier if we briefly review once more how Lotus 1-2-3 Release 4 treats data base operations. Before proceeding further in reading this manual, the reader should take the time to read and re-read the sections concerning data base management in the Lotus 1-2-3 Release 4 User's Guide (pp. 265 through 292), if he/she is not already thoroughly familiar with Release 4's data base commands. This is true even if you are a seasoned user of the data base commands of previous releases of Lotus 1-2-3, since Lotus has entirely revamped its approach. Once the reader is up to speed in Lotus 1-2-3 Release 4.0's data base commands, let us reiterate Lotus' need to define two specific ranges:

- The range containing the data base itself, called the "Data Base Table". This, as previously explained, is a two-dimensional table having the same number of columns as the data base has fields. The first row of this table contains the data base field names, and subsequent rows contain the individual records, which represent credit union financial and statistical data at quarterly intervals.
- The range containing the data extracted from the Data Base Table during a data query. This table, called the "Query Table" in Lotus' jargon, in theory can include as many fields (and hence columns) as desired, even calculated fields. It has the same layout as the Data Base Table, in that the first line contains the field names and subsequent rows contain the records extracted from the Data Base Table. In our particular case, however, the Query Table contains all the same field names and

columns as the Data Base Table itself. When the user effects a data query, Lotus 1-2-3 asks him/her to specify the record selection criteria, proceeds to find all records matching these criteria, and copies them to the Query Table.

These two tables are located, respectively on Sheets E and F. Before continuing to read the manual, jump to these sheets and move the cursor around a little to familiarize yourself with the layout of each one.

The dialog box resulting from launching a query is already familiar to you. The one used by CUdBASE Query in the custom pull-down menu is basically the same as the one you used when you specified the criteria for selecting a record to modify in the previous chapter.

However, just to be

sure, it is reproduced again here as Figure 6. Before trying to specify criteria, make sure you understand the basics from the User's Guide, especially how to specify logical AND and OR type criteria. The illustrated dialog box shows criteria that would cause the Query to extract all records for Azire Credit Union for all dates greater than or equal to 31/12/90.

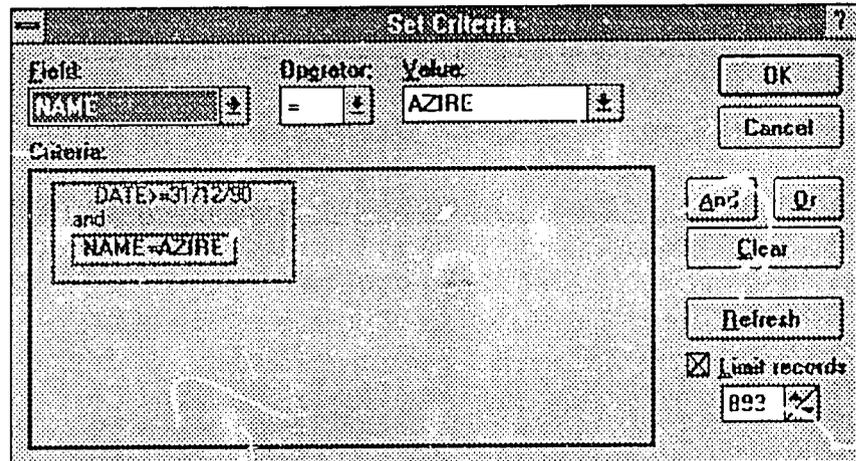


Figure 6

As long as there is only one credit union in the Data Base Table with the name AZIRE (always use capital letters when specifying criteria), specifying the criteria Date AND Time is necessary and sufficient to select the desired records. Were there two credit unions with the same name, it would be necessary to add an additional criteria, perhaps the Division in which it is located, or any other criterion which would distinguish it from others. As another example, suppose that we wanted an analysis of all the credit unions in the North West Province. Our criteria would then change to DATE \geq 31/12/90 AND PROVINCE = NW. There would be no NAME field criterion in this case. If you want to study the entire Cameroonian credit union movement (i.e., all credit unions as a whole), set only the criteria DATE \geq 31/12/90. Those users familiar with dBASE or similar products should find the process of setting criteria almost second-nature.

In any rate, once you will have specified the record selection criteria appropriate to the credit union or group of credit unions you want to study, click on the OK button in the Criteria dialog box (or, using the keyboard, TAB to the OK button and push the Enter key), and *CuDBASE* will effect the extract and update tables and charts based on the Query Table. This may take up to an hour on a 486/20 computer, less if you have a faster machine.

The Time Factor

Before proceeding, a discussion of how *CuDBASE* and the user interface with respect to the time factor is necessary. In effect, *CuDBASE* requires that the user specify the five dates which will appear as column headings on the chron reports, in the various chron charts, and elsewhere in the template. These five dates, which appear on Sheet A (Tab name DatesEtc), have the range names DATE1, DATE2, DATE3, DATE4, and DATE5. In order for *CuDBASE* to work properly, these dates must be filled out in conformity with a certain conceptual framework. Not just *any* five consecutive dates will do; they have to follow certain rules. That is, *CuDBASE* requires that DATE1, DATE2 and DATE3 be consecutive end-of-year dates, e.g., 31/12/90, 31/12/91 and 31/12/92. DATE4 and DATE5 must be the last days of the last two quarters for which data is available in *CuDBASE*. This scheme assures both a long-term perspective as well as performance data from the recent past. The following table indicates valid DATE1 to DATE5 combinations over a two-year period:

TABLE 3
Partial Listing of Valid DATE1 to DATE5 Combinations

DATE1	DATE2	DATE3	DATE4	DATE5
31/12/90	31/12/91	31/12/92	31/03/93	31/06/93
31/12/90	31/12/91	31/12/92	31/06/93	30/09/93
31/12/90	31/12/91	31/12/92	30/09/93	31/12/93
31/12/90	31/12/91	31/12/92	31/12/93	31/03/94
31/12/91	31/12/92	31/12/93	31/03/94	30/06/94

DATE1	DATE2	DATE3	DATE4	DATE5
31/12/91	31/12/92	31/12/93	30/06/94	30/09/94
31/12/91	31/12/92	31/12/93	30/09/94	31/12/94
31/12/91	31/12/92	31/12/93	31/12/94	31/03/95
31/12/92	31/12/93	31/12/94	31/03/95	30/06/95

The pattern should be fairly evident: DATE1, DATE2 and DATE3 remain the same for four quarters, and increase by one year each at the end of the second quarter of each year. As previously explained, DATE4 and DATE5 are always the last two quarters for which data is available for queries.

The spatial reports and charts showing the comparative performance of different Chapter areas are based on data contained in Query Table records having DATE5 as their date field value.

When you will have determined the appropriate dates for your next *CUDBASE* Query, you still have to communicate these dates to *CUDBASE*. This can be done easily by jumping to Sheet A with a click on the DatesEtc tab in the Lotus Control Panel. Remember this screen? It's the same one you saw illustrated in Figure 1, and is the default screen displayed when you load *CUDBASE* into memory. The data you filled out in your last session will still be there until you specifically change them. As concerns DATE1 through DATE5, type in new Lotus @DATE(Y;M;D) formulae representing your chosen dates, or edit the old dates with the F2 (Edit) function key. Then write out DATE5 in words, as indicated, in the field set aside for it, and complete the section with the sub-title you would like to appear in all the charts following execution of a Query. For example, an appropriate chart sub-title for the Query on Azire Credit Union might be, simply, "AZIRE CREDIT UNION." Lastly, fill out the Quarter Codes for DATE4 and DATE5. March 31's code is 1, June 30's is 2, September 30's is 3, and December 31 is 4. No other code is acceptable. When the entire table is satisfactorily filled out (verify this carefully, since it takes up to an hour to execute a Query, and you don't want to have to do it twice), the user can proceed with executing a Query. If he/she has not previously filled out this data completely, the dates and titles used in the last previous query will appear in any new reports and charts produced with the Query command.

The reasons for these admittedly arcane rules on setting dates are rather technical, but let it suffice to say that the rules are absolutely necessary for *CUDBASE* to properly calculate

the various growth rates and other performance indicators relative to DATE4 and DATE5 in the chronological reports and charts. Failure to follow these rules on setting dates and quarter codes will certainly result in incorrect results from the formulae contained in the DATE4 and DATE5 columns of all chron reports, as well as data portrayed in many chron charts.

Performing Queries

Now we get down to the nitty-gritty, what we've all been waiting for, right? When you have properly filled in the "DatesEtc" table, you can give the *CuDBASE* Query command. The (by now) familiar Query Criteria Specification dialog box appears, and you specify the Data Base Table name (if other than DATABASE), the desired criteria (in the manner described above), and the Query Table name (if other than QUERY1). When that's done, click on OK (or with the keyboard, TAB to the OK button and push the Enter key), and *CuDBASE* performs the query and places the matching records in the Query Table, recalculates the reports and charts based on the Query Table, and moves the cursor to the Query Table. An illustration of how this screen might look after performing the AZIRE query is shown in Figure 7 below. When the query is completed, note that, as expected, all AZIRE records at or later than 31/12/90 have been copied to the Query Table.

DATE	NAME	TYPE	PROVINCE	DIVIS
31/12/90	AZIRE	CU	NW	MEZA
31/12/91	AZIRE	CU	NW	MEZA
31/12/92	AZIRE	CU	NW	MEZA
31/03/93	AZIRE	CU	NW	MEZA
30/06/93	AZIRE	CU	NW	MEZA
30/09/93	AZIRE	CU	NW	MEZA

Figure 7

Summary of Querying Procedures

To summarize this key chapter, let's recap the various steps the user must go through in order to query a Data Base Table:

1. Specify DATE1 through DATE5 in Lotus 1-2-3's @DATE(Y;M;D) format, DATE5 in text format, the chart sub-title you want to appear in the various charts, and the DATE1 and DATE2 quarter codes (specify either 1, 2, 3, or 4 for each of the two quarters), in the table on worksheet A.
2. Begin the Data Base Table query by giving the command CUdBASE Query from the custom pull-down menu.
3. Specify criteria for selecting the records of the credit union(s) you wish to study. When all criteria are specified, click on the OK button of the dialog box, or TAB to the OK button and hit the Enter key.
4. Take a break or catch up on your correspondence or other work. A *CUDBASE* query may take up to an hour, depending on the computer one uses.
5. When the **READY** mode signal returns to the bottom right hand corner of the screen, the query is complete, and you can now view the various reports and charts based on the records you've just copied to the Query Table. A discussion of accessing the various outputs (reports and charts) will be the subject of the next chapter.

Thank you for your patience.

V. CUDBASE's Outputs

Reports Produced

As already indicated, the principal reports produced by *CUDBASE* are four financial and statistical reports:

- The At-a-Glance Chronological Report, or summary chron report, which packs a maximum of financial and statistical information, analyses and charts into two pages. This report shows the evolution and performance over time (from DATE1 to DATE5) of a single credit union, a group of credit unions, or all Cameroonian credit unions, depending on the criteria you specified during the query. For most purposes, this short report is sufficient to give a clear enough picture of how a credit union or group of credit unions has been performing over time.
- The Detailed Chronological Report. This report contains all information included in the At-a-Glance Chronological Report, but in much greater detail. It also covers the same period (DATE1 through DATE5). This report is viewed or printed whenever the user wants an exhaustive analysis of the performance over time of a credit union or group of credit unions, probably no more than once a year, except possibly in the case of "problem" credit unions the League is watching closely.
- The At-a-Glance Spatial Report, or summary regional breakdown report, shows on two 11" x 14" sheets of paper how a group of credit unions is performing in CamCCUL's various Chapter areas. This report is meaningless for a single credit union, because the report will show stacks of zeros in all columns except the one representing the Chapter area where the single credit union is located, and most charts will show a single bar representing the Chapter area of the credit union in question. When an analysis of the relative performance of a widespread group of credit unions (e.g., all worker credit unions, all CDC credit unions, or all Cameroonian credit unions) is desired, usually this summary report will suffice to give a fairly clear picture of the differences in performance between the regions.
- The Detailed Spatial Report. This report includes all data included in the At-a-Glance Spatial Report, but includes much greater detail and a much more exhaustive performance analysis. When a thorough analysis of the performance of a widespread group of credit unions, or even the entire movement, is desired, typically at the end of each year for the movement taken as a whole, this is the preferred report.

It is beyond the scope of this manual to explain in detail how the authors have used Lotus' features to generate these reports. Suffice it to say that a great number of @DSUM and @DCOUNT function formulae are used, based on the @D... formulae criteria specified in hidden Sheet O. If the user is curious to understand the process, he/she should review

the syntax and usage of @D... function keys in the Lotus for Windows on-line help (click on Help or push Alt-H).

To view these four reports on the screen, all the reader has to do is click on the desired report's tab in Lotus' Control Panel. Alternatively, the user can give the command CuDBASE Display a Document, whereupon the dialog box illustrated in Figure 8 at the right appears. Click on the desired report, and then on the OK button; or, alternatively, move the cursor up or down to the desired choice, and then TAB to the OK button, and push Enter. The desired report can also be chosen with Alt + the underlined letter in the chosen report inscription. This is a further demonstration of the variety of means at the user's disposal to navigate between the various reports and documents that make up *CUdBASE*.

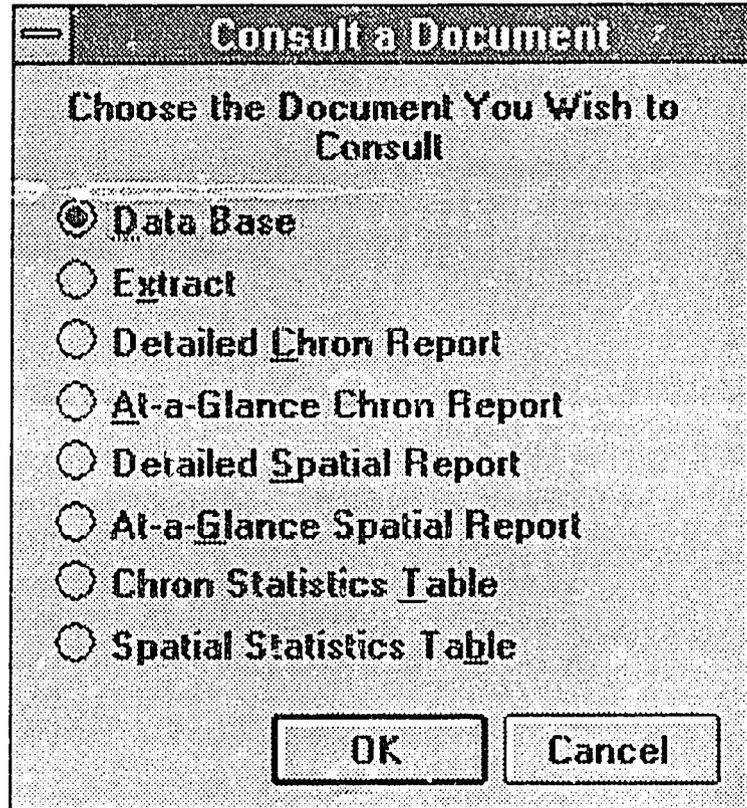


Figure 8

Before continuing the reading of this manual, the authors highly recommend that readers actually take the time to use the CuDBASE Display a Document dialog box a few times, to familiarize themselves with its use, and satisfy themselves that the cursor will, in fact, jump to the desired report. Please take the time to familiarize yourself with both the format and contents of each report. If, during this process, you get lost, remember that you can always get "home" to Sheet A by giving the keyboard command Ctrl-Home.

All four reports end with a listing of several ratios and other performance indicators calculated based on the records which your query has copied to the Query Table. These indicators are based in part on the M.O.S. indicators mentioned earlier, but also include more extensive analyses in addition to the dozen M.O.S. indicators. The formulae and meaning of each of these indicators is shown in Attachment I ("eye") to this report. This

manual does not place much textual emphasis on these ratios and indicators, but they are obviously the heart of *CUdBASE*, since they tell us how our credit union or group of credit unions as a whole is performing vis-a-vis certain standards. The flexible standards themselves, on which the M.O.S. index score is based, can be examined by "unhiding" Sheet Q, or (preferably) by examining Attachment K. The "lookup table" on that sheet can be changed at any time to reflect changing economic circumstances. In conclusion, the authors highly recommend that the reader study the discussion of these various indicators in Attachments I and K at length, and even internalize them, so that he/she doesn't have to constantly refer to this manual to understand one of the reports.

Report Periodicity

In Attachment E, a certain initial periodicity is proposed for the preparation of each type of report. This is an approximation of similar schedules used in other country movements' MISs, and may well be modified over time to better meet CamCCUL's felt needs. It is only with experience that CamCCUL's staff and leaders will be able to specify a "final" periodicity for each report.

Charts

Fifty-five (55) different charts have been defined in *CUdBASE* to graphically show the growth and performance over time and between Chapter areas. A list of the various charts available to be viewed on the screen, saved to the Windows Clipboard, or printed, is shown in Attachment G. *CUdBASE* users can view charts individually on the screen in any order, or choose one of the two series of charts. One series is for a

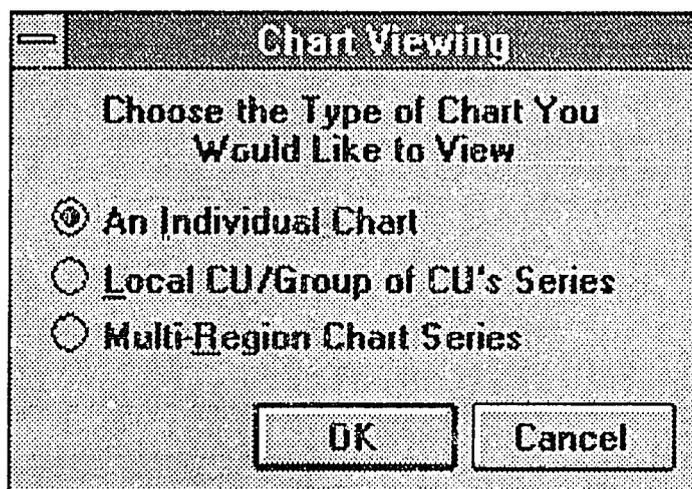


Figure 9

single credit union or a group of credit unions in a particular Chapter area, while the other is appropriate to a widespread group of credit unions located in several different Chapter areas. To choose to display an individual chart or a series of charts, give the command *CUdBASE* Display Chart(s), or with the keyboard, Alt-C followed by the letter I. The resulting dialog box is illustrated in Figure 9. Choose the chart or chart series you wish to examine and follow the instructions given to you. Specimens of individual charts and chart series are shown in Attachment H.

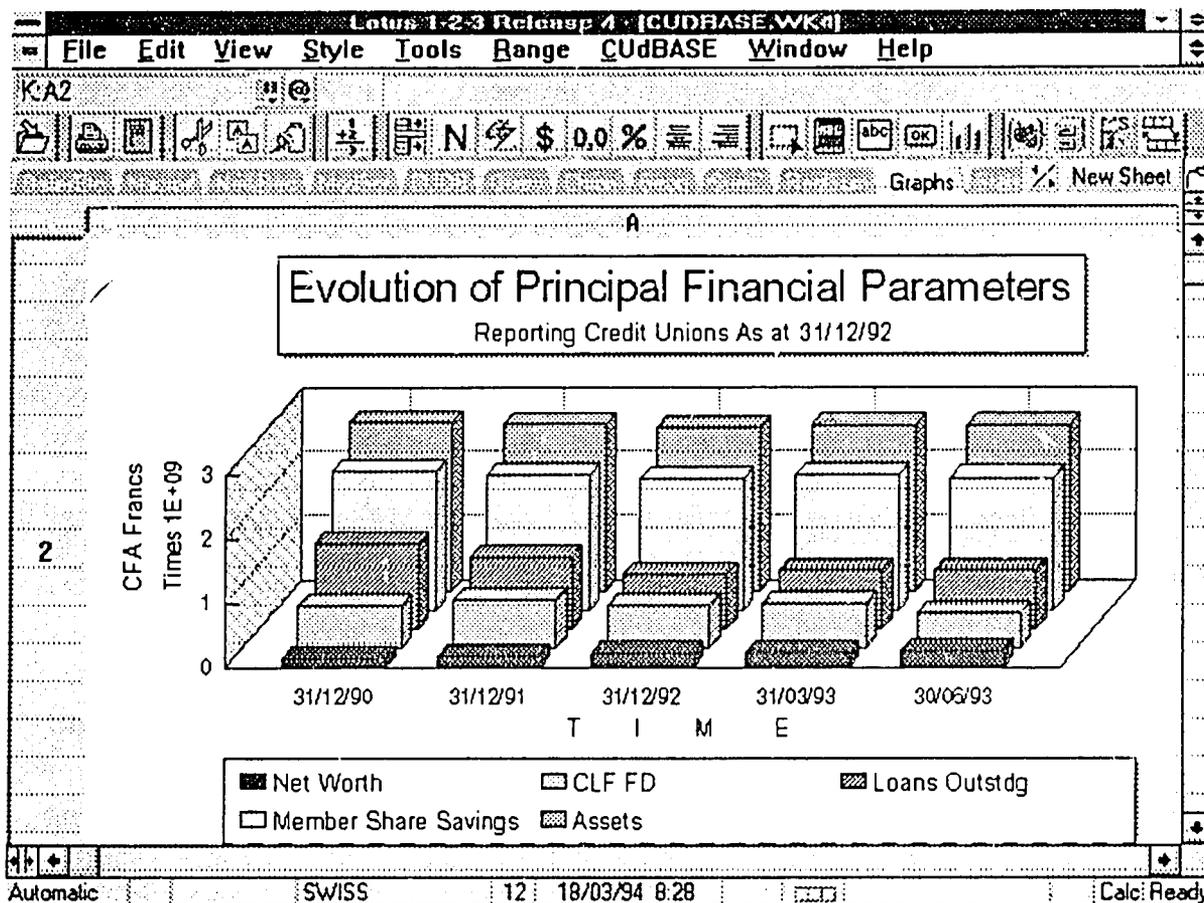


Figure 10

When you choose Individual Chart from the Display Charts dialog box, a list of all available charts is shown to you, and you only have to click on the one you want to see, and it will be displayed in the "Charts" Lotus worksheet, as shown in Figure 10 above. Study each chart to master what each shows, and also to be able to easily select its abbreviated chart name in the chart list.

If you wish to review one of the two chart series, click on your choice, and click again on the OK button, or follow the usual procedures to make a choice from the keyboard. The series of charts that you requested will be displayed on the screen. To view the next chart in the series, use the PgDn key. To return to a previous chart, use the PgUp key.

The appropriate periodicity for viewing the many available charts is difficult to foresee with any precision. It's only with experience that the need (and demand) for each one will become evident. Some people *prefer* charts to tables of numbers and ratios. To slightly

paraphrase an old saying, a chart is worth a thousand words. Other people, like *CUDBASE*'s authors, prefer to work with the numbers themselves, but the creators let the user make the choice of how he/she wants to see the data resulting from queries. The printing of the various available charts (see next chapter) and placing them on credit union, chapter, and League office walls could be an effective promotional tool. Time will tell what works and what people want. It is also quite likely that the use of charts may become an important means of communicating credit union results to their managers and leaders, as well as to the League's own staff and leaders.

Supplementary Data on Charts

Most charts are based on the data shown in the four standard financial and statistical reports. However, the drawing of some charts required that the data be transformed in one way or another to make them suitable for graphing. Hence, *CUDBASE*'s authors created a special section on the hidden Sheet N where these data transformations have been placed. While it is unlikely that the user will ever want to examine this supplemental "report", he can do so by unhiding Sheet N. If the user should eventually want to print this "supplemental report", he/she should define its range and print instructions as he/she would for any Lotus 1-2-3 print job, and print the desired range. Printing of this range has *not* been the object of a *CUDBASE* print macro.

VI. Printing of Reports and Charts

The four financial and statistical reports, as well as all 55 graphic charts, can all be printed. The macros which perform the print jobs are completely independent of the type of printer the user employs, except that the printer needs to be able to print 11" x 14" tractor paper if the spatial reports are to be printed. Before printing a document, make sure to verify in the Windows ProgMan Main Group's Control Panel to see which printer has been named the current printer, and change it to the printer you want to print on. Verify also (with Lotus' File Select Printer) that you have chosen the correct default printer in Lotus, too. To print individual charts, it is also necessary that your printer be able to be able to print in landscape mode while in Windows. Since the two chart series are printed in portrait mode, both chart series can be printed on nearly any printer with a defined Windows driver.

To print a particular report, all the user has to do is give the command CUdBASE Print a Document, choose with a click on the appropriate radio button or TAB to it, and then either click on the OK button or TAB to it and hit ENTER. CUdBASE proceeds to perform the print job you have requested. If you want to print another report, follow the above instructions again, but choose the other document you wish to print. The dialog box resulting from giving the command CUdBASE Print Document is shown at the right (Figure 11).

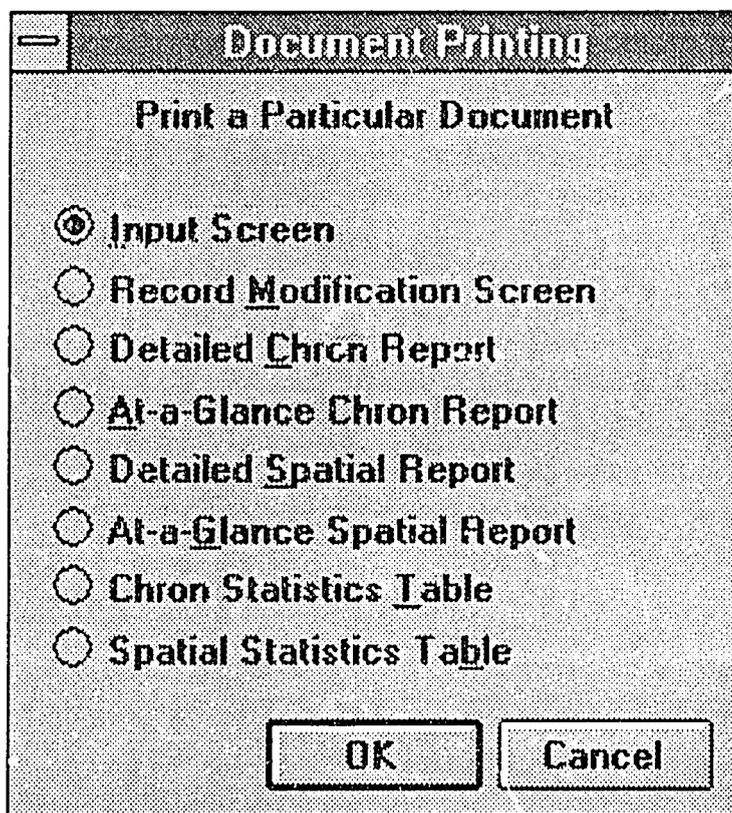


Figure 11

Examples of all these reports can be found in Attachment F. The specimens shown there have been printed with an Epson LQ1170 dot matrix printer, and for this reason the documents you eventually produce on your own printer may differ slightly in appearance.

Remember also that you must load 11"x14" paper into your printer before giving the command to print either of the two "spatial" (regional) reports.

Printing of the various charts is performed similarly. The user gives the command *CUdBASE* Print Charts, which produces the dialog box shown to the right in Figure 12, chooses the chart or chart series he/she wants to print, and clicks on the OK button. If you chose one of the two chart series, *CUdBASE* proceeds with the printing of the charts in that series. If, however, you have chosen to print a single chart, you need to make your chosen chart the "current" chart before invoking "Print Chart(s).

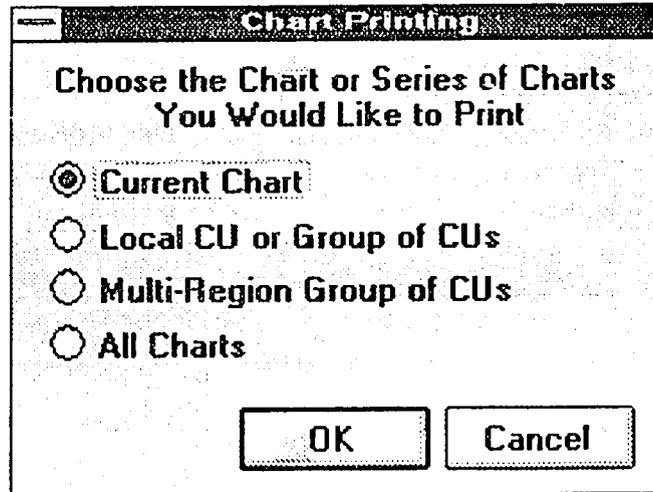


Figure 12

VII. Saving and Maintenance of CUdBASE Files

Saving CUdBASE.WK4

Saving the *CUdBASE.WK4* file frequently during work sessions, and at the end of a work session, are absolutely essential tasks that the user must make second nature. During long data input or other types of sessions, the user should save *CUdBASE* to disk frequently. This will help the user avoid the necessity of redoing work a second time after a computer or power failure (or someone accidentally turns off the electrical power to the computer room, for example) turns the computer off in the middle of a session, and all work since the last save is lost. Users at CamCCUL must make regular backups of the *CUdBASE.WK4* file, and maintain copies

away from the office in secure places, just in case the host computer or office disk copies are stolen, sabotaged or, for example, destroyed in a fire. The different options available when *CUdBASE* File Operations produces the dialog box shown in Figure 13 are explained in more detail below:

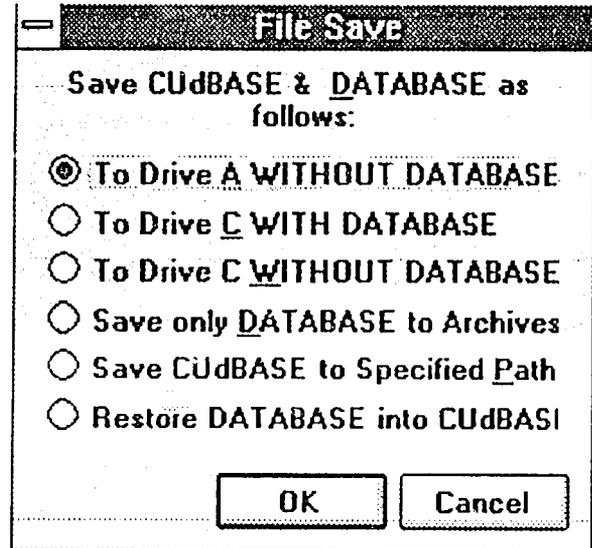


Figure 13

- Save *CUdBASE* to a floppy disk in Drive Q *without* the data base.
- Save *CUdBASE.WK4* in its usual places on the hard disk (C:\CUDBASE\CUDBASE.WK4 and C:\CUDBASE\CUDBASE.WK4). If these two paths look the same to you, don't worry. The MIS Officer knows the difference.
- Save *CUdBASE* to C:\CUDBASE *without* the data base.
- Save just the DATABASE field to the C:\CUDBASE\ directory as DATABASE.WK4.
- Save/backup *CUdBASE.WK4* to a user-defined path and name.
- Reincorporate the DATABASE.WK4 file into the version of CUdBASE.WK4 already loaded into memory.

Saving Charts

Exporting any of the 54 charts created by *CUdBASE* is permitted through use of Windows 3.1's Clipboard window. By giving the command *CUdBASE* Save a Chart, the dialog box shown to the right in Figure 14 appears on the screen. With the Up and Down cursor movement keys, cover the name of the chart you want to copy to the Windows Clipboard, and hit the Enter key or click on OK. The copy is done, but it is not obvious to the user. Only by using the Alt-Tab toggling key sequence can one open the Windows Clipboard window from ProgMan. Once the chart is safely sitting in the Windows Clipboard, its further disposition is up to the user. To see the chart in Clipboard, you may have to change the file format with

Options BITMAP. With most Windows applications, such as WordPerfect for Windows or Freelance Graphics for Windows, it can be copied from Clipboard right into a document with the command Edit Paste. Once in WordPerfect, you'll have to size it appropriately according to your taste. The chart can also be saved to disk within Clipboard as a .CLP file or by copying it into ProgMan's Paint window and saving it there as a .BMP file with the File Save command. It can then be recalled into Clipboard or Paint at a later time and copied from there into most other Windows applications files or even back into Lotus 1-2-3 for Windows.

Sorting/Maintenance

CUdBASE, or more precisely, the Data Base Table containing the field DATABASE where all credit union data records are stored, can be easily sorted in an essentially unlimited number of ways. From time to time, the user's superiors may pose questions like, "What are the ten largest credit unions in terms of membership?" or "Which credit union has the largest number of group members?" These types of questions can be easily answered by using *CUdBASE*'s sorting capabilities. As shown in the dialog box resulting

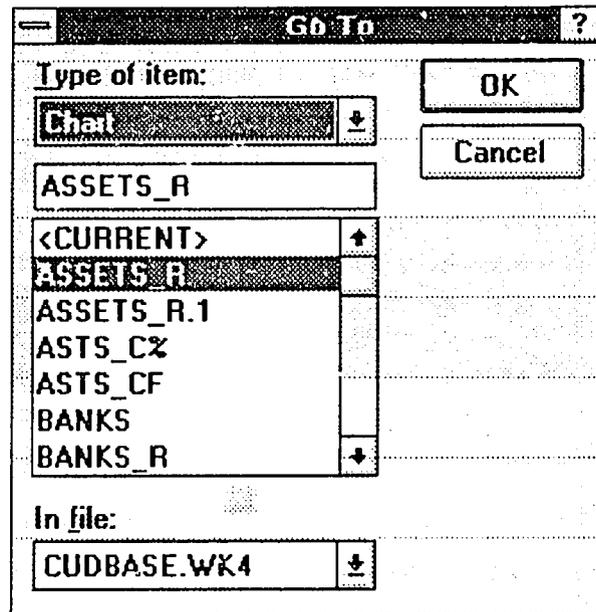


Figure 14

from the CUdBASE Sort Data Base command depicted in Figure 15, three different types of sorts of the Data Base Table are foreseen. These three are:

- "By CU in Chron Order". This command effects a sort of the Data Base Table, sorting all records in alphabetical order of CU names. That is, each credit union is listed in alphabetical order, and in each credit union's "section", the records are listed in ascending chronological order, with the oldest records at the top and the latest record at the bot-

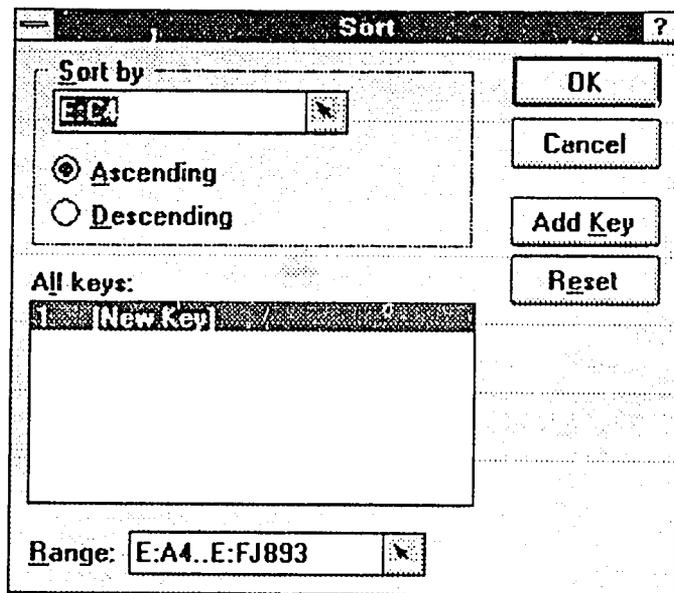


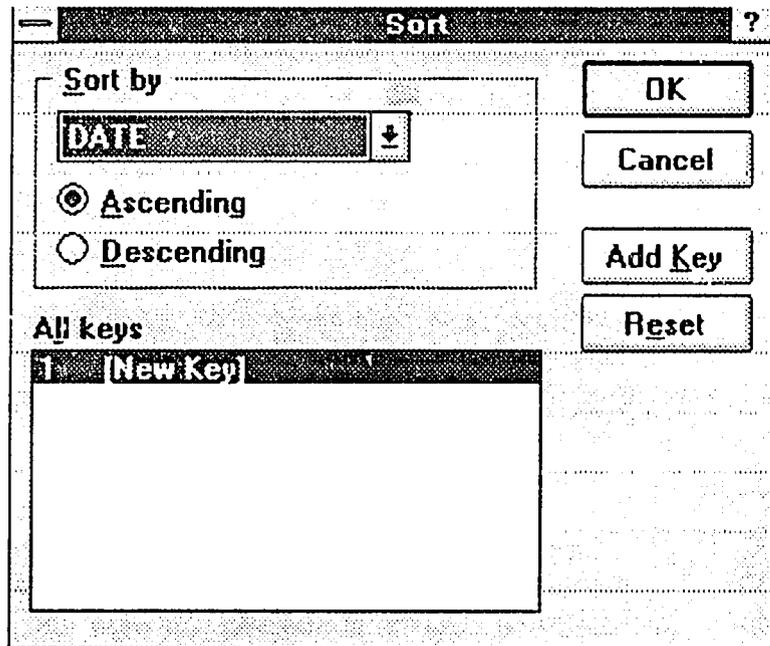
Figure 15

tom. This type of sort is very useful in the periodic "maintenance" of *CUdBASE*. The user should perform this sort after each quarter's input of all new records, prior to any queries. By placing the records in this new order, it will be easy to spot and correct spelling inconsistency errors in the ID fields, such as perhaps using LI in some records and LIT in others as the Province code for Cameroon's Littoral Province. For *CUdBASE* to work properly, there must be *total* consistency in the ID section fields. In computers, even if only a single character is different, the record field is considered to be a completely different response. Lotus cannot understand that a credit union in LI and another in LIT are in the same province, so you, the user, must assure this consistency. Using this type of sort will also help you spot double records for particular credit unions, if they exist, so that the doubles can be purged.

- "By Date and CU". Here the Data Base Table is sorted in ascending order of record's DATE fields. The records with the oldest dates will be at the top of the table, and the newest records will be at the bottom. For each date, credit unions will be listed in ascending alphabetical order, with the "a"s on top and the "z"s at the bottom. Use this sort to make sure that the latest quarter's records you've just put in have consistent ID field codes.

- "User-Defined Sort Keys". This sort choice allows the user himself to specify the sort keys (up to 255 of them) for sorting the Data Base Table. When the user chooses this option, the Data Base Table itself appears immediately on the screen, and the additional dialog box shown in Figure 15 appears on top of it, with DATABASE already defined as the range to be sorted. For explanations on how to specify sort keys in Lotus for Windows, consult the data base section of the Lotus 1-2-3 Release 4.0 User's Guide. This is a very powerful function of *CUdBASE*, one every user should master.

In addition to being able to sort the Data Base Table, the Query Table, too, can be sorted. When the command *CUdBASE* Sort Query Table is chosen, the same standard sort dialog box (Figure 16) appears, as was shown in Figure 15, except that the Query Table's range has been substituted for that of the Data Base Table. Once again, the choice of sort keys is left up to the user.



Utilities

Figure 16

The command *CUdBASE* Utilities has been foreseen to regroup any number of utilities that may eventually be developed for the template. Currently, there are none, but a menu and dialog box offering various utilities could easily be added. The nature of the needed utilities will make itself known as users actually USE *CUdBASE*. For example, to break the monotony of inputting new records, every two hours or so one could launch a utility macro that would allow you to play a game of solitaire before returning to *CUdBASE*. Choosing this command currently has no effect, the template returning the user immediately to READY mode.

Lotus Standard Menu

The last choice on the CUdBASE custom pull-down menu is the choice of returning to the Standard Lotus Main Menu. This command is necessary because sometimes the user may open other .WK4 files at the same time as CUdBASE.WK4, and not want the customized Main Menu to appear there. When the user chooses CUdBASE Lotus Standard Menu, the CUdBASE element of the Main Menu disappears. Once you have removed CUdBASE from the Lotus Main Menu, though, to get it back without re-opening the CUdBASE.WK4 file, the user would have to give the \M macro command using the Ctrl-M key strokes.⁴

⁴ Backslash (\) macros such as \M are launched in Lotus for Windows with the command Ctrl-M, instead of Alt-M, as would have been the case in Lotus 1-2-3 for DOS.

ATTACHMENTS

Attachment A

CUdBASE Menu Tree

<u>Choice</u>	<u>Menu Item Description</u>
<u>I</u>nput <u>N</u>ew Record	Input a new record (i.e., a new MFSR or AA)
<u>A</u>ppend New Record	Append the newly-input record to the data base
<u>M</u>odify Existing Record	Modify a previously-input record
<u>R</u>e-integrate Old Record	Reintegrate the modified record into the data base
<u>I</u>nsert Modified Record	Append modified record as new record in DATABASE as a new record, leaving the pre-existing record intact
<u>Q</u>uery	Set record choice criteria and perform query
<u>D</u>isplay a Document	Display a user-specified report on the screen
<u>P</u>rint a Document	Print a user-specified report
<u>D</u>isplay Charts	Display user-specified chart(s) on the screen
<u>P</u>rint Charts	Print a user-specified chart or charts
<u>S</u>ave a Chart	Save a Chart to the Windows Clipboard
<u>S</u>ort Data Base Table	Sort the Data Base Table
<u>S</u>ort Query Table	Sort the Query Table
<u>F</u>ile Operations	Save CUdBASE.WK3 or DATABASE to disk
<u>U</u>tilities	Various eventual but currently undefined utilities
<u>L</u>otus Standard Menu	Return to Lotus Standard Menu
<u>E</u>xit	Return Lotus 1-2-3 to READY mode

Attachment B

CUdBASE Record Structure

**CUDBASE.WK3 Field Names, Numbers
and Structure**

No.	Field Name	Type
0	DATE	DATE
1	NAME	TEXT
2	TYPE	TEXT
3	PROVINCE	TEXT
4	DIVISION	TEXT
5	CHAPTER	TEXT
6	SOURCE	TEXT
7	AUTHOR	TEXT
8	MILIEU	TEXT
9	PR_DED	LOGICAL
10	BOND_TYPE	TEXT
11	EMPLOYER	TEXT
12	PC	LOGICAL
13	RM_MBR	LOGICAL
14	RM_ACT	LOGICAL
15	MEN	NUMERICAL
16	WOMEN	NUMERICAL
17	GROUPS	NUMERICAL
18	SEX_UNKN	NUMERICAL
19	MEMBERS	NUMERICAL
20	STATIONERY	NUMERICAL
21	TRANSPORT	NUMERICAL
22	INSURANCE	NUMERICAL
23	SEM_TRNG	NUMERICAL
24	ELEC_WATER	NUMERICAL
25	RENTS	NUMERICAL
26	TELECOMS	NUMERICAL
27	ACCTG_FEES	NUMERICAL
28	MAINT&REP	NUMERICAL
29	PROMOTION	NUMERICAL
30	LEGAL_EXP	NUMERICAL
31	BOD_EXP	NUMERICAL
32	LG&CH_DUES	NUMERICAL
33	AGM_EXP	NUMERICAL
34	SHORTAGE_E	NUMERICAL
35	LOSSES	NUMERICAL
36	OTHER_EXP	NUMERICAL
37	SALARIES	NUMERICAL
38	SI&TAXES	NUMERICAL
39	BANK_CHRGS	NUMERICAL
40	INT_SAVNGS	NUMERICAL
41	LG_INT_EXP	NUMERICAL
42	OTHER_INTX	NUMERICAL
43	DEPREC_N	NUMERICAL
44	BD_DBT_EXP	NUMERICAL

**CUDBASE.WK3 Field Names, Numbers
and Structure**

No.	Field Name	Type
45	UNKN_EXP	NUMERICAL
46	EXPENSES	NUMERICAL
47	ENTR_FEES	NUMERICAL
48	FINES	NUMERICAL
49	LOAN_FEES	NUMERICAL
50	GRANTS&DON	NUMERICAL
51	RM_INCOME	NUMERICAL
52	OTHER_INC	NUMERICAL
53	LOAN_INT	NUMERICAL
54	LG_INT_RCD	NUMERICAL
55	BK_INT_RCD	NUMERICAL
56	UNKN_INC	NUMERICAL
57	INCOME	NUMERICAL
58	SURPL_P&L	NUMERICAL
59	DIVIDEND	NUMERICAL
60	INT_RATE	NUMERICAL
61	CASH	NUMERICAL
62	COOP_MISSN	NUMERICAL
63	CUR_CAMBK	NUMERICAL
64	CUR_BCC	NUMERICAL
65	CUR_BICIC	NUMERICAL
66	CUR_BMBC	NUMERICAL
67	CUR_SGBC	NUMERICAL
68	CUR_SCBCL	NUMERICAL
69	CUR_NEW1	NUMERICAL
70	CUR_NEW2	NUMERICAL
71	CUR_OTHER	NUMERICAL
72	POSTALCHQS	NUMERICAL
73	LG_RD	NUMERICAL
74	SVGS_CAMBK	NUMERICAL
75	SVGS_BCC	NUMERICAL
76	SVGS_BICIC	NUMERICAL
77	SVGS_BMBC	NUMERICAL
78	SVGS_SGBC	NUMERICAL
79	SVGS_SCBCL	NUMERICAL
80	SVGS_NEW1	NUMERICAL
81	SVGS_NEW2	NUMERICAL
82	SVGS_OTHER	NUMERICAL
83	SVGS_PO	NUMERICAL
84	INSUR_DEP	NUMERICAL
85	ACCTS_REC	NUMERICAL
86	SHORT_BS	NUMERICAL
87	LED_DIF_AS	NUMERICAL
88	ADVANCES	NUMERICAL
89	INT_RECVBL	NUMERICAL
90	PR_DED_REC	NUMERICAL
91	DBTFUL_LNS	NUMERICAL
92	OTHER_ASS	NUMERICAL
93	LOANS_OUT	NUMERICAL
94	DAT_BICIC	NUMERICAL
95	DAT_BMBC	NUMERICAL
96	DAT_SGBC	NUMERICAL
97	DAT_SCBCL	NUMERICAL
98	DAT_NEW1	NUMERICAL
99	DAT_NEW2	NUMERICAL

**CUDBASE.WK3 Field Names, Numbers
and Structure**

No.	Field Name	Type
100	DAT_OTHER	NUMERICAL
101	LG_FD	NUMERICAL
102	LG_SFD	NUMERICAL
103	LG_SPTD	NUMERICAL
104	LG_SHARES	NUMERICAL
105	FURN&EQ	NUMERICAL
106	BUILDING	NUMERICAL
107	LAND	NUMERICAL
108	UNKN_ASSET	NUMERICAL
109	ASSETS	NUMERICAL
110	SAVINGS	NUMERICAL
111	DEPOSITS	NUMERICAL
112	DIVID_PBL	NUMERICAL
113	INT_PBL_S	NUMERICAL
114	OTH_IN_PBL	NUMERICAL
115	LD_LIAB_BS	NUMERICAL
116	CASH_OVR_BS	NUMERICAL
117	SUND_PRVNS	NUMERICAL
118	LG_LNS_ST	NUMERICAL
119	LG_LNS_LT	NUMERICAL
120	OTHER_LOAN	NUMERICAL
121	OTHER_LIAB	NUMERICAL
122	UNKN_LIAB	NUMERICAL
123	SHARES	NUMERICAL
124	COMP_RES	NUMERICAL
125	EDUC_FUND	NUMERICAL
126	GEN_RES	NUMERICAL
127	BLDG_RES	NUMERICAL
128	OTHER_RES	NUMERICAL
129	GRANTS	NUMERICAL
130	SURPLUS_BS	NUMERICAL
131	PROV_BD_DT	NUMERICAL
132	LIAB&CAP	NUMERICAL
133	N_DEL_UNKN	NUMERICAL
134	NO_CURRENT	NUMERICAL
135	NO_DEL2_6	NUMERICAL
136	NO_DEL6_12	NUMERICAL
137	N_DEL_OV12	NUMERICAL
138	N_LNS_TOT	NUMERICAL
139	AMT_UNKN	NUMERICAL
140	AMT_CURR	NUMERICAL
141	AMT2TO6	NUMERICAL
142	AMT6TO12	NUMERICAL
143	AMT_OVR12	NUMERICAL
144	TOTAL_AMT	NUMERICAL
145	NO_FARM	NUMERICAL
146	NO_TRADE	NUMERICAL
147	NO_EDUC	NUMERICAL
148	NO_HEALTH	NUMERICAL
149	NO_BLDG	NUMERICAL

**CUDBASE.WK3 Field Names, Numbers
and Structure**

No.	Field Name	Type
150	NO_OTHER	NUMERICAL
151	NO_GRANTED	NUMERICAL
152	AMT_FARM	NUMERICAL
153	AMT_TRADE	NUMERICAL
154	AMT_EDUC	NUMERICAL
155	AMT_HEALTH	NUMERICAL
156	AMT_BLDG	NUMERICAL
157	AMT_OTHER	NUMERICAL
158	AMT_GRANTED	NUMERICAL
159	LD_SHARES	NUMERICAL
160	LD_SAVINGS	NUMERICAL
161	LD_LOANS	NUMERICAL
162	LD_DEP	NUMERICAL
163	LD_CASH	NUMERICAL
164	LD_BANK	NUMERICAL
165	LD_LEAGUE	NUMERICAL

Attachment C

Input Screen for New Records

RECORD INPUT SCREEN

Record Date: 30/06/93

CREDIT UNION IDENTIFICATION:	
Credit Union Name	
Status of Society (CU/DG)	
Province (HQ Location)	
Division (HQ Location)	
Chapter Area of HQ Office	
Source Document (AA, MFS, EST)	
Source Doct. Author (FW, FWS, INSP)	
Milieu (R=Rural; U=Urban)	
Benefits from Payroll Deduction? (Y/N)	
Bond Type (EMPL, COMM, ASSN)	
Members' Employer for Worker CUs	
PC Programme Participant? (Y/N)	
Risk Mgmt Prgm Participant? (Y/N)	
Active In Risk Mgmt Prgm? (Y/N)	

MEMBERSHIP DESCRIPTION:	
Number Male Members	
Number Female Members	
Number of Group Members	
No. Members of Unknown Sex	
Total Number of Members	0

STATEMENT OF INCOME & EXPENSES

EXPENSES:		INCOME:	
Stationery & Postage		Entrance Fees	
Travel & Transport		Fines	
Insurance Premiums		Loan Fees	
Educ/Trng (Seminars)		Donations/Grants	
Electr./Water		Risk Mgmt Income	
Rental Expenses		Other Income	
Telecommunications		Interest on Loans	
Accounting Fees		League Interest	
Maintenance & Repairs		Bank Interest	
Promotional Expenses		Unnamed Income	
Legal Expenses			
Board Expenses			
League & Chapter Dues			
AGM Expenses			
Cash Shortage			
Losses			
Other Expenses			
Salaries			
Sec. Ins. & Taxes			
Bank Charges			
Interest on Savings			
Int. on League Loans			
Other Interest Expense			
Depreciation Exp.			
Bad Debts			
Unnamed Expenses			
Surplus	0	Deficit	
TOTAL	0	TOTAL	
	0	Difference	

Addl. Data on Remuneration of Share Savings:	Dividend Amount Int. on Savgs Rate	0,00F
--	------------------------------------	-------

Loan Delinquency Schedule:

Degree of Delinquency	Number	Amount
Amt. of Delinquency Unknown		
Current Loans		
Loans Delinquent 2 to 6 Mos.		
Loans Delinquent 6 to 12 Mos.		
Loans Delinquent over 12 Mos.		
Total Loans Outstanding	0	0

New Loans Granted:

Purpose	No. of Loans Granted	Amt. of Loans Granted
Farming		
Trading		
Education		
Health		
Building		
Other Purposes		
Total No. Granted	0	0

Ledger Differences:

Shares	
Savings	
Loans Outstdg.	
Deposits	
Cash	
Bank Deposits	
League Deposits	
TOTAL	0

Data Input Control Panel:

Test Parameter(s):	Difference	Difference/2	Difference/9
Total Membership	0	0	0
Expenses	0	0	0
Income	0	0	0
Assets	0	0	0
Assets - Liab.	0	0	0
Liabilities	0	0	0
Loans to Mbrs (sum)	0	0	0
Surplus (BS/P&L)	0	0	0
No. Loans Granted	0	0	0
Amt. Loans Granted	0	0	0

Attachment D

Input Screen for Modifying Existing Records

RECORD MODIFICATION SCREEN

Record Date

31/12/90

CREDIT UNION IDENTIFICATION:

Credit Union Name	AZIRE
Status of Society (CU/DG)	CU
Province (HQ Location)	NW
Division (HQ Location)	MEZAM
Chapter Area of HQ Office	BAMENDA
Source Document (AA,MFS,EST)	AA
Source Doct. Author (FW,FWS,INSP)	FW
Milieu (R=Rural; U=Urban)	U
Benefits from Payroll Deduction? (Y/N)	N
Bond Type (EMPL, COMM, ASSN)	COMM
Members' Employer for Worker CUs	IRA
PC Programme Participant? (Y/N)	Y
Risk Mgmt Prgm Participant? (Y/N)	Y
Active in Risk Mgmt Prgm? (Y/N)	Y

MEMBERSHIP DESCRIPTION:

Number Male Members	6.577
Number Female Members	157
Number of Group Members	3
No. Members of Unknown Sex	0
Total Number of Members	6.737

STATEMENT OF INCOME & EXPENSES

EXPENSES:		INCOME:	
Stationery & Postage	719.035	Entrance Fees	1.290.000
Travel & Transport	455.425	Fines	403.975
Insurance Premiums	13.568.663	Loan Fees	0
Educ/Trng (Seminars)	6.000	Donations/Grants	858
Electr./Water	136.890	Risk Mgmt Income	893.317
Rental Expenses	1.080.000	Other Income	938.100
Telecommunications	149.100	Interest on Loans	119.686.165
Accounting Fees	0	League Interest	56.300.150
Maintenance & Repairs	174.825	Bank Interest	9.550.297
Promotional Expenses	0	Unnamed Income	0
Legal Expenses	2.309.860		
Board Expenses	2.916.310		
League & Chapter Dues	4.175.900		
AGM Expenses	1.200.000		
Cash Shortage	0		
Losses	0		
Other Expenses	597.870		
Salaries	17.496.216		
Soc. Ins. & Taxes	2.254.437		
Bank Charges	1.420.743		
Interest on Savings	131.000.000		
Int. on League Loans	0		
Other Interest Expense	0		
Depreciation Exp.	3.398.315		
Bad Debts	3.500.000		
Unnamed Expenses			
Surplus	2.503.273	Deficit	0
TOTAL	189.062.862	TOTAL	189.062.862
	0	Difference	
Addl. Data on Remuneration of		Dividend Amount	0
Share Savings:		Int. on Savgs Rate	5,00F

BALANCE SHEET

ASSETS:

Cash	9,561.020
CPMS/Mission Safe	0
Curr. Acct. CamBk	23,958.999
Curr. Acct. BCC	0
Curr. Acct. BICIC	10,207.262
Curr. Acct. BMBC	0
Curr. Acct. SGBC	0
Curr. Acct. SCB/CL	0
Cur. Acct. New Bank 1	0
Cur. Acct. New Bank 2	0
Curr. Acct.-Other Bks	0
Postal Chequing Acct.	0
League Regular Dep.	10,000.000
Savings Acct. CamBank	0
Savings Acct. BCC	0
Savings Acct. BICIC	174,707.757
Savings Acct. BMBC	0
Savings Acct. SGBC	0
Savings Acct. SCB/CL	0
Svgs Acct. New Bank 1	0
Svgs Acct. New Bank 2	0
Svgs Accts-Other Bks	0
Post Office Savings	0
Insurance Deposit	442.660
Accounts Receivable	3,644.915
Cash Shortages	0
Ledger Differences	177.738
Advances	180.000
Interest Receivable	38,102.207
Payroll Dedctns Recvl	0
Doubtful Accounts	0
Other Assets	149,152.85
Loans Outstanding	1,335,186.430
Term Depts. BICIC	0
Term Depts. BMBC	0
Term Depts. SGBC	0
Term Depts. SCB/CL	0
Term Depts-New Bank 1	0
Term Depts-New Bank 2	0
Other Terms Deposits	0
League Fixed Deposit	679,667.324
Lg Spec Fixed Deposit	180,000.000
Lg Spec Term Deposit	120,000.000
League Shares	200.000
Furniture & Equipment	1,194.935
Building	1,489.325
Land	23,663.575
Unnamed Assets	0
Total Assets	2,627,299.432

LIABILITIES & CAPITAL:

Liabilities:	
Member Savings	2,167,208.587
Member Deposits	162,427.312
Dividends Payable	0
Int. Pble on Svgs	131,000.000
Other Int Payable	0
Ledger Differences	0
Cash Overages	742
Expse Provisions	4,477.199
ST League Loans	0
LT League Loans	0
Other Loans Pble	0
Other Liabilities	20,000
Unnamed Liabilities	122,962.43
Capital & Reserves:	
Member Shares	19,593.000
Compulsory Rsrve	12,028.394
Education Fund	3,820.506
General Reserve	3,902.746
Building Reserve	67,025.000
Other Reserves	7,600.000
Capital Grants	0
Y-T-D Surplus	2,503.273
Provn. Dbtfl Acts	33,396.430

**Total Liab. & Capital
Difference**

2,627,299.432

Loan Delinquency Schedule:

	Number	Amount
Amt. of Delinquency Unknown	0	0
Current Loans	2,158	894,478,700
Loans Delinquent 2 to 6 Mos.	19	11,544,000
Loans Delinquent 6 to 12 Mos.	30	24,098,000
Loans Delinquent over 12 Mos.	442	405,707,730
Total Loans Outstanding	2,649	1,335,828,430

New Loans Granted:

No. of Loans Granted	No. of Loans Granted	Amt. of Loans Granted
Farming	15	4,157,000
Trading	693	391,080,000
Education	712	333,058,000
Health	333	34,604,000
Building	485	270,355,000
Other Purposes	406	59,104,000
Total No. Granted	2,644	1,092,358,000

Ledger Differences:

Shares	33,000
Savings	957,815
Loans	1,000,372
Deposits	171,270
Cash	485,474
Bank Deposits	0
League Deposits	0
Total	2,647,931

Data Input Control Panel:

Test Parameter(s):	Difference	Difference/2	Difference/9
Total Membership	0	0	0
Expenses	0	0	0
Income	0	0	0
Assets	0	0	0
Liabilities	0	0	0
Assets - Liab.	0	0	0
Loans to Mbrs (sum)	0	0	0
Surplus (BS/P&L)	0	0	0
No. Loans Granted	0	0	0
Amt. Loans Granted	0	0	0

Attachment E

Output Report Periodicity

Attachment E

Output Report Periodicity

Type of Report	Reports Generated When Needed	Reports Generated Quarterly	Reports Generated Every 6 Mos.	Reports Generated Annually
At-a-Glance Chron Report				
For each Credit Union	X			
For each Chapter Area		X		
For each Province				X
All Rural & All Urban CUs				X
All Worker CUs				X
All CDC CUs		X		
The entire CU Movement		X		
Detailed Chron Report				
For each Credit Union				X
For each Chapter Area				X
For each Province				X
All Rural and all Urban CUs				X
All Worker CUs				X
All CDC CUs				X
The Entire CU Movement		X		
At-a-Glance Spatial Report				
All Rural and all Urban CUs				X
All Worker CUs				X
All CDC CUs		X		
The Entire CU Movement		X		
Detailed Spatial Report				
All Rural and all Urban CUs				X

Type of Report	Reports Generated When Needed	Reports Generated Quarterly	Reports Generated Every 6 Mos.	Reports Generated Annually
All Worker CUs				X
All CDC CUs				X
The Entire CU Movement		X		
Individual Charts	X			
Chron Chart Series				
For single credit unions	X			
For Chapter Areas		X		
For Provinces	X			
For All Rural & all Urban CUs			X	
For All Worker CUs			X	
For all CDC CUs		X		
For other groups of CUs	X			
For the entire Movement		X		
Spatial Chart Series				
For All Rural & all Urban CUs			X	
For All Worker CUs			X	
For all CDC CUs			X	
For the entire Movement		X		
Other Groups of CUs	X			

Attachment F

Sample Output Reports

Attachment F-1

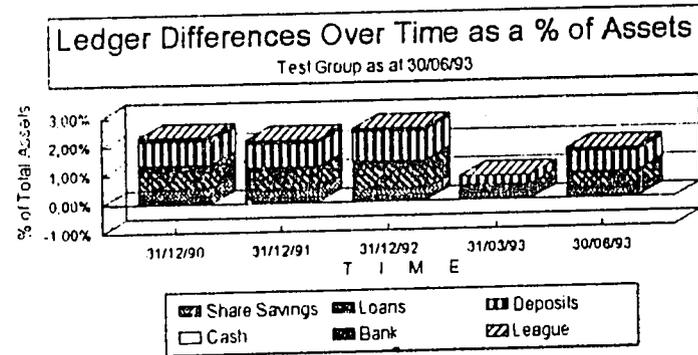
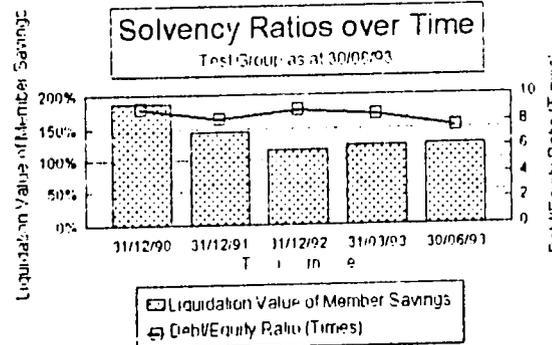
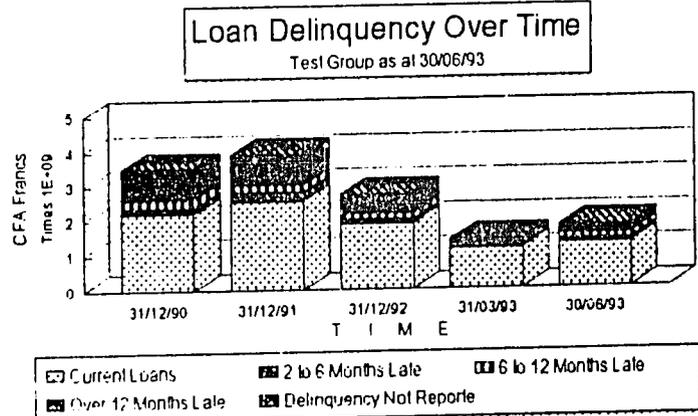
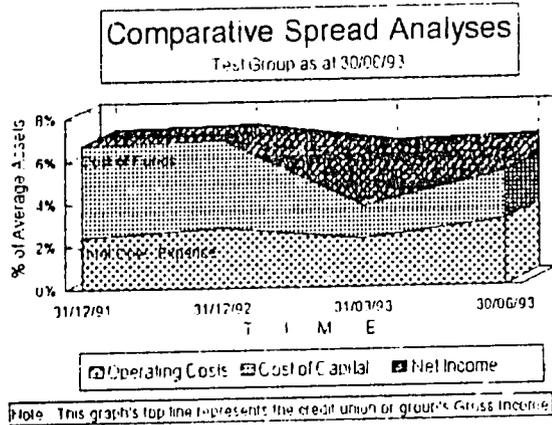
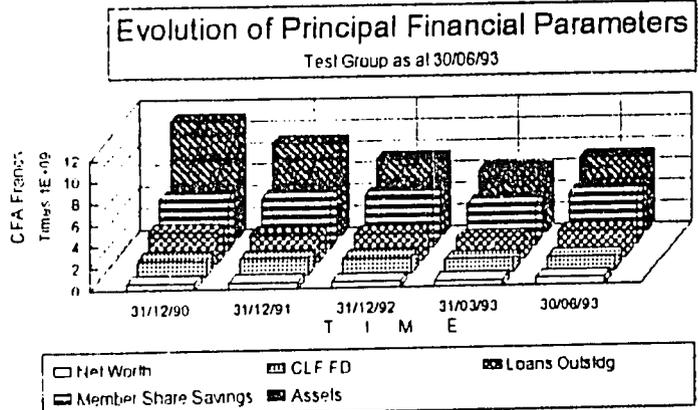
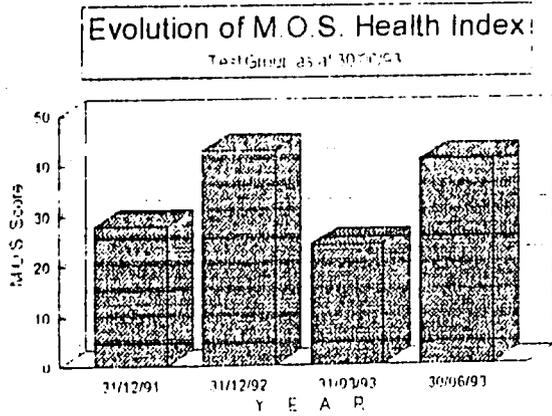
At-a-Glance Chron Report

AT-A-GLANCE SUMMARY REPORT FOR:

	Total Credits at 30/06/93				
STATISTICAL DATA:	31/12/90	31/12/91	31/12/92	31/03/93	30/06/93
Number of Credit Unions		41	46	29	50
Number of Members:					
Women	5975	6080	6672	6174	7,718
Total	38,153	35,482	41,542	32,154	45,308
Loans Granted					
Number	14,157	12,766	15,709	8,140	5,458
Amount	3,243,241,193	2,645,916,052	3,073,561,657	1,509,474,240	670,243,625
Abbreviated Balance Sheet:					
ASSETS:					
Cash	45,343,120	47,524,563	34,913,602	34,897,546	30,738,045
Bank	2,826,381,433	1,179,889,922	849,526,982	617,980,456	715,882,933
League Shares & Deposits	3,987,645,117	3,208,092,727	2,644,048,200	2,010,780,792	2,636,649,472
Insurance Deposit	9,894,002	4,218,700	5,041,905	75,088	3,592,724
Loans Outstanding	2,944,783,281	2,675,413,224	2,571,277,692	2,013,990,470	2,581,839,000
Payroll Deductions Receivable	362,720,652	757,779,075	481,762,828	787,489,666	523,861,171
Other Assets	301,384,228	365,942,189	116,834,373	70,908,308	133,324,417
Fixed Assets	504,073,555	491,433,728	274,755,859	256,219,723	289,157,659
Total Assets	10,766,225,446	8,670,394,128	6,878,261,435	5,792,336,049	6,894,845,421
LIABILITIES & CAPITAL:					
Member Savings	4,740,721,792	4,704,289,942	4,889,138,601	4,025,268,010	4,792,703,637
Member Deposits	227,281,520	254,343,335	294,982,992	247,828,018	284,287,754
Interest Payable	262,903,724	142,022,139	269,183,336	268,910,887	181,156,999
External Loans Payable	63,978,861	55,614,418	30,588,965	46,776,185	37,756,688
Other Liabilities	180,541,331	185,020,424	26,889,615	14,469,037	23,497,640
Member Shares	61,589,802	63,283,717	68,652,559	53,515,362	68,919,531
Reserves	532,522,203	509,539,507	531,670,453	459,137,062	512,509,465
Y-T-D Surplus	14,898,054	13,857,049	13,013,894	25,246,723	110,568,107
Total Liab. & Capital	6,074,235,287	5,987,930,531	6,104,120,417	5,141,150,294	6,011,400,121
Abbreviated Income & Expense Statement:					
INCOME:					
Interest on Loans	279,466,200	260,704,703	261,424,008	35,340,634	125,594,396
Other Interest Income	140,955,262	192,760,129	183,265,500	57,045,700	83,551,533
Sundry Income	18,240,291	17,297,476	14,906,261	5,799,399	9,505,570
Total Income	438,661,753	470,762,308	459,595,769	98,185,733	218,651,499
EXPENSES:					
Insurance Premium	51,441,044	40,354,178	46,910,125	9,781,763	25,800,604
Personnel Costs	85,895,196	73,245,183	66,733,153	17,360,196	33,692,368
BoD/Meetings Expenses	30,942,237	30,868,166	31,200,949	17,808,380	20,948,355
Education, Training & Promotion	1,886,795	3,017,920	3,406,024	1,734,730	1,795,140
Interest Expense	385,349,978	262,792,032	251,154,375	124,480,159	68,178,721
Bad Debts & Provisions	29,310,000	31,522,839	43,612,561	9,281,131	5,108,385
Depreciation	6,885,285	6,405,478	6,523,936	6,253,718	2,199,287
Losses	19,775	264,800	69,550	0	344,573
Other Expenses	36,385,132	48,346,451	21,122,669	10,108,543	17,119,372
Total Expenses	627,715,442	496,835,047	470,763,342	196,766,620	174,926,772
NET SURPLUS	(189,053,689)	(26,072,739)	(11,167,573)	(98,580,887)	43,724,727
MINIMUM OPERATING STANDARDS:					
Gr. Return on Working Assets	NA	5,16%	6,15%	6,42%	6,54%
Gross Return on Loans	NA	9,49%	9,97%	6,17%	9,73%
Dividend Rate (Frn/Share-Month)		4,50F	4,15F	2,23F	1,22F
Net Income/Share-Savings	-3,94%	-0,42%	-0,23%	-9,67%	1,79%
Expenses/Income Ratio	55,25%	49,10%	47,70%	73,64%	48,82%
Loan Patronage Ratio	37,11%	35,98%	37,81%	25,32%	12,04%
Loans/Share-Savings Ratio	61,32%	58,12%	62,07%	40,38%	62,70%
Loan Delinquency	37,50%	34,47%	32,04%	18,02%	26,51%
Reserves/Loans Ratio	18,08%	21,29%	20,86%	22,80%	20,01%
Ann. Gr. Rate - Membership	NA	-7,00%	17,03%	-90,40%	18,03%
Ann. Gr. Rate - Share Savings	NA	-0,72%	3,56%	-69,59%	-3,07%
Ann. Gr. Rate - Loans Outstanding	NA	-9,15%	-3,88%	-84,69%	-0,73%
Cash Shortage/Total Assets	0,59%	0,64%	0,56%	0,42%	0,43%
Liquidity Ratio	32,28%	32,72%	30,80%	31,07%	28,79%
RATING: (Maximum Score = 100 Points)		28	43	24	41

AT-A-GLANCE SUMMARY GRAPHS FOR:

Test Group as at 30/06/93



Attachment F-2

Detailed Chron Report

Evolution of the Cameroon Credit Union Movement

Group: Test Group as at 30/06/93

<u>Parameter/Indicator</u>	<u>31/12/90</u>	<u>31/12/91</u>	<u>31/12/92</u>	<u>31/03/93</u>	<u>30/06/93</u>
A. NUMBER OF SOCIETIES					
All Societies					
Credit Unions	33	33	34	26	34
Discussion Groups	9	8	12	3	16
Total Number	42	41	46	29	50
Milieu					
Rural	28	28	36	25	42
Urban	14	13	10	5	8
Total Number	42	41	46	30	50
With Payroll Deduction	16	15	18	10	14
By Common Bond Type					
Employee	17	16	18	10	16
Community	25	25	28	20	33
Association	0	0	0	0	0
No. In P.C. Programme	15	15	14	12	12
Risk Management					
No. Societies Participating	31	31	31	27	31
No. Societies Active	30	30	31	27	31
B. MEMBERSHIP					
By Sex:					
Males	15.890	17.132	17.259	13.761	18.756
Females	5.975	6.080	6.672	6.174	7.718
Groupes	634	361	472	584	575
Sex Unknown	15.654	11.902	17.132	11.635	18.252
Total Membership	38.153	35.482	41.542	32.154	45.308
By Milieu:					
Rural	9.984	10.632	13.610	9.811	17.611
Urban	12.427	12.521	11.402	10.800	12.018
Total	22.411	23.153	25.012	20.611	29.629
By Common Bond Type					
Employee	8.472	8.566	8.865	4.877	7.191
Community	13.939	14.587	16.147	15.734	22.336
Association	0	0	0	0	0
Total	22.411	23.153	25.012	20.611	29.527
No. Mbrs in Risk Mgmt CUs	20.283	20.893	22.236	19.977	21.860
No. Mbrs in PC Credit Unions	14.234	14.243	15.507	15.222	15.751
C. INCOME & EXPENSE STATEMENT:					
Income:					
Entrance Fees	2.409.000	2.084.600	2.695.850	717.100	1.890.250
Fines	6.529.092	6.711.393	6.186.662	3.443.901	3.268.016
Loan Fees	0	0	0	0	0
Donations/Grants	849.014	975.407	1.939.972	55.578	271.798
Risk Mgmt Income	4.937.361	4.429.072	1.126.881	854.493	1.674.058
Other Income	3.479.759	2.992.232	2.770.502	665.442	2.401.448
Interest on Loans	279.466.200	266.704.703	261.424.008	35.340.634	125.594.396
League Interest	116.632.502	145.992.791	158.863.093	39.793.965	49.442.839
Bank Interest	24.322.760	46.767.338	24.382.407	17.251.735	34.108.694
Unnamed Income	36.065	11.772	186.394	61.885	0
Total Income	4.38.661.753	476.672.308	459.595.769	93.185.733	218.651.499

Evolution of the Cameroon Credit Union Movement

Group: Test Group as at 30/06/93

<u>Parameter/Indicator</u>	<u>31/12/90</u>	<u>31/12/91</u>	<u>31/12/92</u>	<u>31/03/93</u>	<u>30/06/93</u>
Expenses:					
Stationery & Postage	2.766.475	2.539.993	3.154.174	1.053.810	2.124.232
Travel & Transport	3.200.580	2.751.248	3.105.723	728.265	2.071.065
Insurance Premiums	51.441.044	40.354.178	46.910.125	9.761.763	25.600.604
Educ/Trng (Seminars)	1.035.380	1.116.145	2.237.464	833.260	1.102.635
Electr/Water	1.932.107	2.319.077	1.415.864	552.218	1.152.508
Rental Expenses	5.356.900	8.110.882	2.083.600	316.400	1.416.100
Telecommunications	790.660	365.055	321.595	51.595	37.970
Accounting Fees	0	0	0	0	0
Maintenance & Repairs	1.630.140	1.784.425	897.160	1.502.855	1.083.610
Promotional Expenses	851.415	1.901.775	1.168.560	901.470	692.505
Legal Expenses	11.768.055	16.189.082	5.441.716	2.739.335	3.590.565
Board Expenses	12.438.345	12.390.178	12.805.070	2.444.980	7.631.270
League & Chapter Dues	10.284.457	10.003.988	10.186.548	9.262.400	10.190.060
AGM Expenses	8.219.435	8.472.000	8.209.331	6.101.000	3.127.025
Cash Shortage	0	0	20.000	0	0
Losses	19.775	284.800	79.550	0	344.575
Other Expenses	3.526.040	11.139.050	2.208.020	1.660.369	3.119.840
Salaries	71.283.738	61.855.701	57.762.324	12.628.084	29.547.617
Soc. Ins. & Taxes	14.411.458	11.389.482	8.970.829	4.732.112	4.084.751
Bank Charges	3.005.330	2.088.469	1.712.909	1.204.270	1.212.969
Interest on Savings	373.350.178	258.249.727	241.516.225	120.567.469	65.638.066
Int. on League Loans	2.984.300	4.541.005	636.850	3.877.190	2.540.655
Other Interest Expense	9.015.500	1.300	9.001.300	15.500	0
Depreciation Exp.	6.685.289	6.405.478	6.523.936	6.253.718	2.199.262
Bad Debts	29.310.000	31.522.839	43.612.561	9.281.131	5.108.385
Unnamed Expenses	<u>2.408.845</u>	<u>1.059.170</u>	<u>781.908</u>	<u>297.426</u>	<u>1.310.503</u>
Total Expenses	<u>627.715.442</u>	<u>496.835.047</u>	<u>470.763.342</u>	<u>196.766.620</u>	<u>174.926.772</u>
Net Surplus	<u>(189.053.689)</u>	<u>(20.162.739)</u>	<u>(11.167.573)</u>	<u>(98.580.887)</u>	<u>43.724.727</u>
Dividends (Am.)	15	8.917	150.000	8.912	150.000
Int. Rate on Svgs (F/Sb-Mo.)	3,60	3,71	3,61	0,00	0,00

D. BALANCE SHEET:

Assets:					
Cash	40.517.366	40.025.838	26.920.897	31.374.372	24.267.706
CPMS/Mission Safe	4.825.754	7.498.725	7.992.705	3.523.174	6.470.339
Curr. Acct. Cambank	79.552.092	26.998.520	1.287.937	1.956.773	2.788.513
Curr. Acct. SCBC	0	0	0	0	0
Curr. Acct. BICIC	118.949.160	111.942.657	55.982.341	10.515.677	30.375.728
Curr. Acct. BMBC	21.574.816	29.102.729	21.648.495	9.615.076	3.200.959
Curr. Acct. SGBC	25.965.041	42.435.235	26.401.460	2.736.210	27.811.619
Curr. Acct. SCB/CL	13.482.278	43.221.222	27.621.044	195.818	2.286.901
Cur. Acct. Amity Bank	1.192.285	1.192.285	0	0	0
Cur. Acct. CAC	11.476.120	0	0	(52.612)	10.166.056
Curr. Acct. -Other Bks	34.055.463	32.550.050	32.619.087	468.896	12.627.878
Postal Chequing Acct.	1.079.325	0	1.079.325	0	0
League Regular Deposit	32.003.823	10.575.052	1.242.408	1.028.300	1.067.406
Savings Acct. Cambank	57.971.588	54.874.561	8.727.737	0	8.941.012
Savings Acct. SCBC	15.415.434	40.728.976	19.144.997	6.274.027	8.713.009
Savings Acct. BICIC	407.445.201	310.701.994	99.978.889	49.772.807	57.677.885
Savings Acct. BMBC	40.448.004	81.470.579	47.663.425	44.800.816	49.362.018
Savings Acct. SGBC	54.445.258	34.029.591	10.471.569	17.841.059	10.589.574
Savings Acct. SCB/CL	178.309.355	222.950.560	42.028.002	62.656.732	91.116.422
Svgs Acct. Amity Bank	8.000.000	42.625	80.625	0	4.042.625
Svgs Acct. CAC	73.202.663	0	0	24.870.994	29.545.994
Svgs Accts -Other Bks	372.827.295	56.222.778	339.031.893	20.824.596	13.351.323
Post Office Savings	2.357.194	4.471.712	12.402.229	1.000.585	3.085.417
Insurance Deposit	3.894.062	4.218.700	5.041.905	75.088	3.592.724

Evolution of the Cameroon Credit Union Movement

Group: Test Group as at 30/06/93

<u>Parameter/Indicator</u>	<u>31/12/90</u>	<u>31/12/91</u>	<u>31/12/92</u>	<u>31/03/93</u>	<u>30/06/93</u>
Accounts Receivable	61,420,459	24,263,049	40,074,654	21,569,753	51,619,399
Cash Shortages	63,222,933	55,777,092	39,353,423	24,581,555	29,912,097
Ledger Differences:					
Advances	1,153,570	1,998,840	1,373,740	2,580,150	842,240
Interest Receivable	88,497,064	15,366,722	6,196,136	5,812,958	7,397,717
Payroll Deducts Recv	362,720,652	757,779,075	481,762,828	787,489,666	523,861,171
Doubtful Accounts	1,149,990	7,122,678	1,120,614	1,999,290	2,701,261
Other Assets	48,138,457	213,438,357	10,739,770	4,582,720	22,690,188
Loans Outstanding	2,914,783,281	2,675,413,224	2,571,277,692	2,013,990,470	2,561,839,000
Term Depts. BICIC	25,203,002	40,126,991	88,453,855	14,503,002	0
Term Depts. BMBC	7,926,857	7,926,857	270,000	0	0
Term Depts. SGBC	11,000,000	11,000,000	0	0	0
Term Depts. SCB/CL	214,503,002	28,000,000	14,634,072	0	0
Term Depts-Amity Bank	0	0	0	0	0
Term Depts-CAC	850,000,000	0	0	350,000,000	350,000,000
Other Term Deposits	0	0	0	0	0
League Fixed Deposit	1,550,145,752	1,559,847,494	1,511,034,824	1,267,130,067	1,399,462,456
Lg Spec Fixed Deposit	467,403,542	444,630,181	532,770,968	271,622,425	626,119,610
Lg Spec Term Deposit	1,910,000,000	1,185,000,000	590,000,000	465,000,000	600,000,000
League Shares	8,092,000	8,040,000	9,000,000	6,000,000	10,000,000
Furniture & Equipment	12,601,777	11,970,120	14,341,292	9,596,801	13,801,093
Building	380,773,303	334,889,593	255,243,761	240,616,922	270,617,066
Land	110,698,475	84,574,015	5,170,800	6,000,000	4,739,500
Unnamed Assets	(3,849,340)	1,127,761	2,059,116	1,144,331	(3,001,689)
Total Assets	10,756,225,445	8,670,394,128	6,978,261,435	5,792,336,049	6,894,845,421
Liabilities & Capital:					
Liabilities:					
Member Savings	4,740,721,792	4,704,269,942	4,869,138,601	4,025,268,010	4,792,703,637
Member Deposits	227,281,520	254,343,335	294,982,992	247,828,018	284,287,754
Dividends Payable	17,863,600	1,089,205	22,360,329	37,588,630	11,185,891
Int. Pble on Svgs	244,823,594	121,239,169	235,132,344	211,859,881	162,342,944
Other Int Payable	216,530	19,693,765	11,690,665	19,462,376	7,628,164
Ledger Differences	0	9,657,905	762,412	101,102	444,045
Cash Coverages	1,697,646	457,094	2,660,594	2,388,315	1,257,870
Expse Provisions	22,425,951	16,431,968	8,752,322	7,834,997	4,705,570
ST League Loans	39,477,225	39,931,775	4,602,780	27,256,445	23,163,775
LT League Loans	0	0	0	7,000,000	7,000,000
Other Loans Pble	14,201,636	15,682,643	25,986,185	12,518,750	7,592,913
Other Liabilities	155,642,152	157,810,234	14,533,849	4,169,806	16,614,645
Unnamed Liabilities	775,582	663,223	180,438	(25,183)	475,810
Total Liabilities	5,465,127,228	5,341,270,258	5,490,783,511	4,603,251,147	5,319,403,018
Capital:					
Member Shares	61,589,802	63,263,717	68,652,559	53,515,362	68,919,531
Compulsory Reserve	51,095,644	51,378,204	56,143,476	47,176,643	62,140,780
Education Fund	20,119,840	16,623,741	16,967,478	14,819,639	17,993,899
General Reserve	33,552,042	30,843,898	41,911,244	29,631,925	36,853,165
Building Reserve	258,692,879	259,002,301	210,077,876	175,529,888	216,540,272
Other Reserves	22,583,936	26,458,329	12,859,203	19,833,241	30,007,084
Capital Grants	27,000,000	39,551,947	39,071,217	48,000,000	10,115,000
Y-T-D Surplus	14,996,054	13,857,049	13,013,894	25,246,723	110,568,107
Provn. Dbnfl Acts	119,477,862	145,681,087	154,639,959	124,145,726	138,859,265
Total Capital	609,108,059	646,560,273	613,336,906	537,899,147	691,997,103
Total Liab. & Capital	6,074,235,287	5,987,930,531	6,104,120,417	5,141,150,294	6,011,400,121

Evolution of the Cameroon Credit Union Movement

Group: Test Group as at 30/06/93

<u>Parameter/Indicator</u>	<u>31/12/90</u>	<u>31/12/81</u>	<u>31/12/92</u>	<u>31/03/93</u>	<u>30/06/93</u>
E. <u>LOAN DELINQUENCY</u>					
Amnt. of Delinquency Unknown	12.589.172	24.666.901	8.277.307	968.160	30.892.558
Current Loans	2.178.599.909	2.530.592.000	1.830.583.299	1.124.086.731	1.259.808.457
Loans Delinquent 2 to 6 Mos.	201.730.554	266.469.204	162.380.608	59.485.611	106.055.595
Loans Delinquent 6 to 12 Mos.	203.512.892	196.895.118	125.860.709	65.669.192	132.521.528
Loans Delinquent over 12 Mos.	901.758.653	867.573.514	574.701.800	121.968.311	215.851.648
Total Loans Outstanding					
Amount	3.498.191.480	3.886.196.767	2.701.803.723	1.372.178.005	1.745.129.786
Number	10.145	12.060	9.815	7.146	8.821
F. <u>LOAN VOLUME BY PURPOSE:</u>					
No. of Loans Granted:					
Farming	340	368	400	205	245
Trading	2.193	1.461	1.828	158	725
Education	4.267	3.885	4.315	2.534	1.784
Health	2.690	2.878	3.192	1.709	1.078
Building	1.980	1.910	2.067	1.311	663
Other Purposes	<u>2.687</u>	<u>2.264</u>	<u>3.907</u>	<u>2.223</u>	<u>961</u>
Total No. Granted	14.157	12.766	15.709	8.140	5.456
Amount of Loans Granted:					
Farming	39.444.965	44.649.502	40.412.220	48.890.215	18.096.000
Trading	931.441.600	502.455.830	604.520.635	50.170.675	109.759.615
Education	872.391.022	666.137.193	861.184.519	574.099.045	224.288.455
Health	245.142.811	300.192.883	346.887.652	214.247.540	77.937.715
Building	751.467.220	749.633.520	741.225.463	308.073.765	158.153.070
Other Purposes	<u>403.353.575</u>	<u>382.847.124</u>	<u>479.331.168</u>	<u>313.993.000</u>	<u>82.008.770</u>
Total Amount Granted	3.243.241.193	2.645.916.052	3.073.561.657	1.509.474.240	670.243.625
G. <u>LEDGER DIFFERENCES:</u>					
Shares	3.553.459	588.990	436.528	332.244	805.580
Savings	52.715.973	37.509.700	26.232.600	12.172.024	16.554.189
Loans	89.222.396	69.284.437	71.131.072	17.718.681	45.389.912
Deposits	27.427.478	34.183.546	12.606.343	1.474.050	10.724.648
Cash	2.839.869	3.618.216	4.963.080	(173.209)	1.210.177
Bank	14.198.978	10.974.222	3.199.070	14.988	7.790.165
League	<u>47.265</u>	<u>47.958</u>	<u>82.000</u>	<u>0</u>	<u>49.945</u>
Total Ledger Differences	189.805.418	156.207.069	118.650.693	31.538.778	82.524.616

Evolution of the Cameroon Credit Union Movement

Group: Test Group as at 30/06/93

	<u>31/12/90</u>	<u>31/12/91</u>	<u>31/12/92</u>	<u>31/03/93</u>	<u>30/06/93</u>
H. SPREAD ANALYSIS:					
<u>ASSETS/INCOME:</u>					
Loans to Members	NA	9.5%	10.0%	6.2%	9.73%
League Deposits	NA	4.1%	5.4%	6.8%	3.72%
Banks	NA	2.5%	2.4%	9.4%	8.79%
Other Assets	NA	1.2%	1.2%	2.2%	2.02%
Return on Assets	NA	4.9%	5.9%	6.2%	6.36%
<u>LIABILITIES/COST:</u>					
Member Shares	NA	0.0%	0.2%	0.1%	0.43%
Member Savings	NA	5.5%	5.0%	10.8%	2.96%
External Loans	NA	8.3%	22.4%	40.3%	14.79%
Other Liabilities	NA	0.0%	0.0%	0.0%	0.00%
Cost of Funds	NA	4.4%	4.2%	1.6%	2.24%
Gross Spread	NA	0.6%	1.7%	4.6%	4.12%
<u>Operating Expenses:</u>					
Stationery & Postage	NA	0.0%	0.0%	0.1%	0.06%
Transport	NA	0.0%	0.0%	0.0%	0.06%
Insurance	NA	0.4%	0.6%	0.6%	0.73%
Educ., Trng., Promotion	NA	0.0%	0.0%	0.1%	0.05%
Cost of Democracy	NA	0.3%	0.4%	1.1%	0.60%
Personnel Costs	NA	0.8%	0.9%	1.1%	0.96%
Depreciation	NA	0.1%	0.1%	0.4%	0.06%
Bad Debts/B.D. Provns.	NA	0.3%	0.6%	0.6%	1.37%
Other Expenses	NA	0.4%	0.2%	-1.8%	-0.84%
Total Oper. Expense	NA	2.4%	2.8%	2.3%	3.06%
Net Income	NA	-1.9%	-1.1%	2.3%	1.06%

I. MINIMUM OPERATING STANDARDS:

1. Gr. Return on Working Assets	NA	5.2%	6.2%	6.4%	6.54%
2. Gross Return on Loans	NA	9.5%	10.0%	6.2%	9.73%
3. Net income/Share-Savings	-3.94%	-0.42%	-0.23%	-9.67%	1.79%
4. Expenses/Income Ratio	55.25%	49.10%	47.78%	73.64%	48.82%
5. Loan Patronage Ratio	37.11%	35.98%	37.81%	25.32%	12.04%
6. Loans/Share-Savings Ratio	61.32%	56.12%	52.07%	49.38%	52.70%
7. Loan Delinquency	37.50%	34.47%	32.04%	18.02%	26.51%
8. Reserves/Loans Ratio	18.08%	21.29%	20.68%	22.80%	20.01%
9. Ann. Gr. Rate - Membership	NA	-7.00%	17.03%	-90.40%	18.03%
10. Ann. Gr. Rate - Share Savings	NA	-0.72%	3.56%	-69.59%	-3.07%
11. Ann. Gr. Rate - Total Income	NA	8.67%	-3.57%	-314.55%	-104.27%
12. Ann. Gr. Rate - Loans Outstdg	NA	-9.15%	-3.88%	-86.69%	-0.73%
13. Liquidity Ratio	32.28%	32.72%	30.60%	31.07%	28.79%

Evolution of the Cameroon Credit Union Movement

Group: Test Group as at 30/06/93

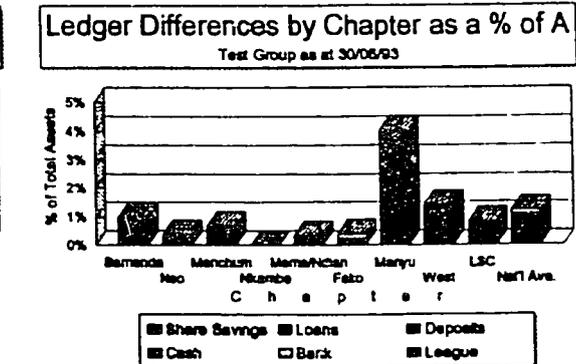
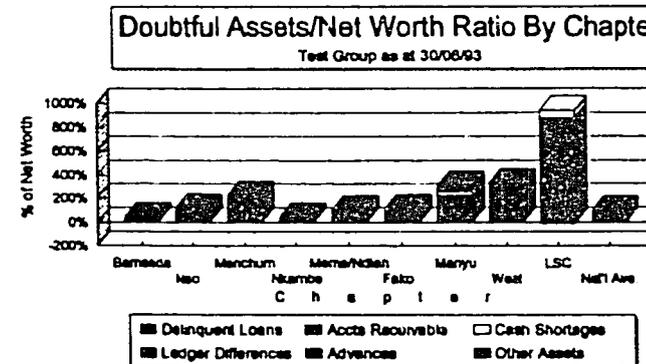
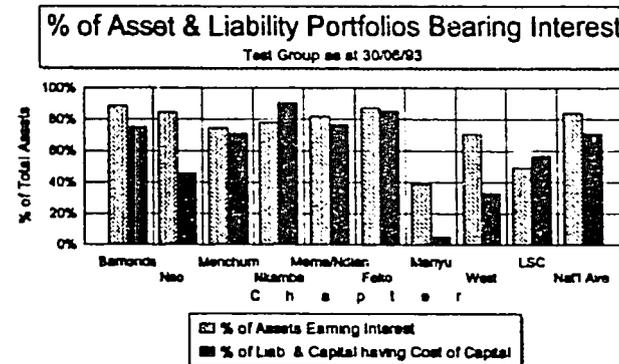
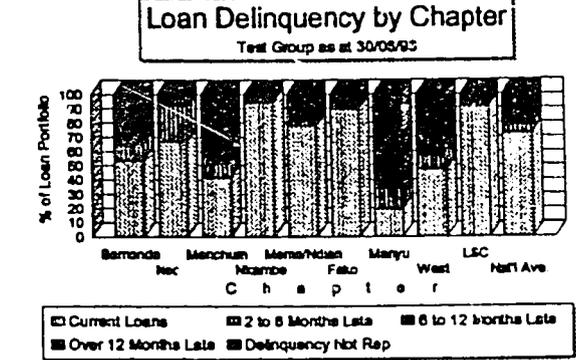
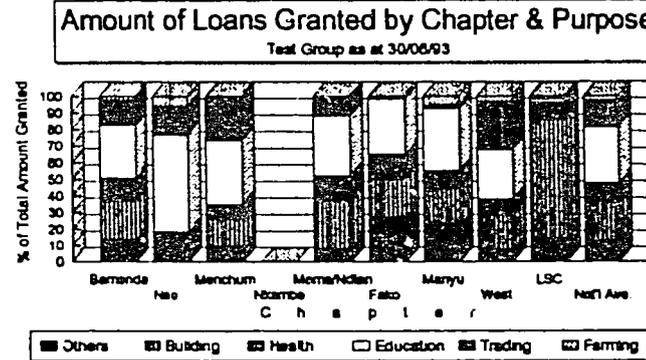
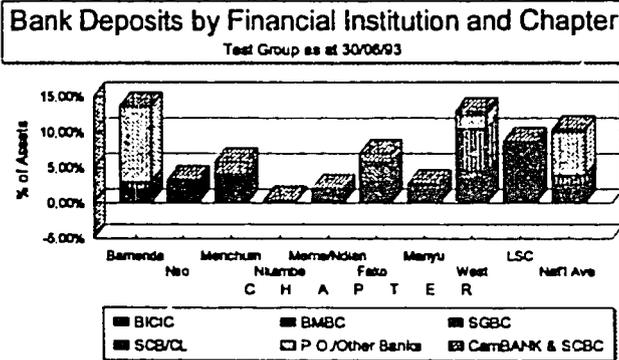
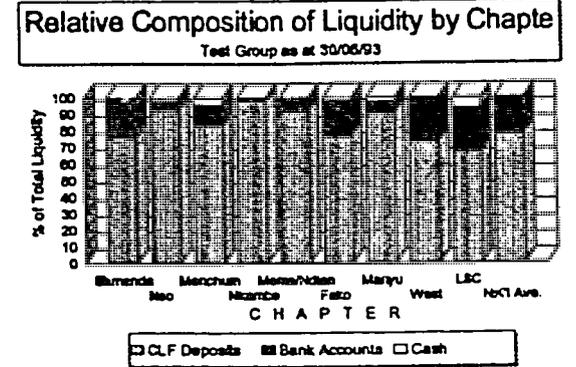
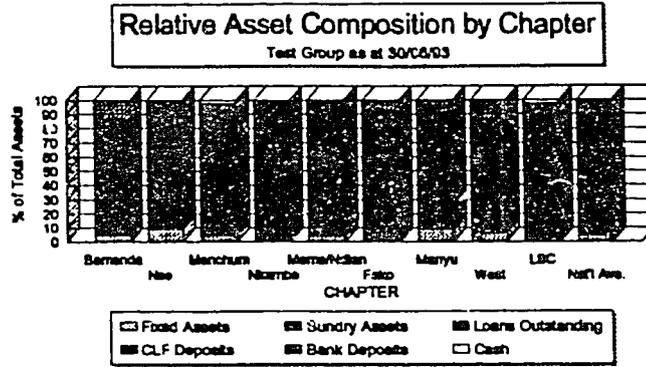
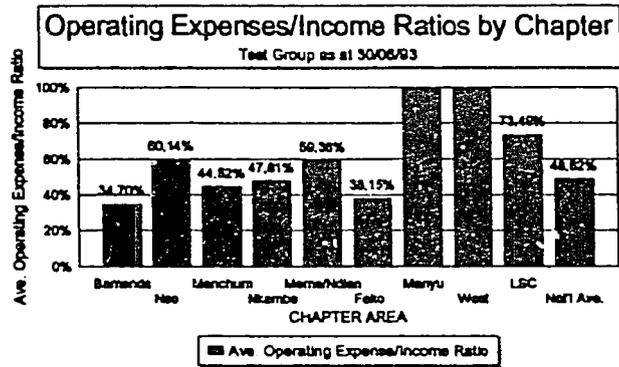
<u>Parameter/Indicator</u>	<u>31/12/90</u>	<u>31/12/91</u>	<u>31/12/92</u>	<u>31/03/93</u>	<u>30/06/93</u>
J. EXTENDED PERFORMANCE ANALYSIS:					
<u>PROTECTION:</u>					
Debt/Equity Ratio (Times)	9.0	8.3	9.0	8.6	7.7
Liquidation Value of Sh-Saves	187.1%	144.1%	115.7%	122.9%	123.1%
Delinq. Loans/Net Worth	220.0%	210.3%	143.7%	48.2%	78.2%
Delinq. Loans/Bad Debt Resrve	1104.5%	930.5%	563.4%	199.8%	349.5%
Risk Assets/Net Worth	325.7%	363.9%	209.6%	191.7%	135.5%
Reserves/Loans Ratio	18.08%	21.29%	20.68%	22.80%	20.01%
<u>EARNINGS:</u>					
Gross Yield on Loans	NA	9.49%	9.97%	6.17%	9.73%
Gross Yield on Assets	NA	4.91%	5.87%	6.15%	6.36%
Cost of Capital	NA	4.36%	4.15%	1.56%	2.24%
Gross Spread	NA	0.55%	1.72%	4.59%	4.12%
Operating Costs	NA	2.41%	2.81%	2.25%	3.06%
Net Spread	NA	-1.86%	-1.09%	2.34%	1.06%
<u>ASSET QUALITY:</u>					
Earning Assets/Total Assets	85.1%	77.0%	84.1%	79.6%	84.2%
Int.-Bearing Liab./Tottl Ass.	45.1%	55.6%	71.2%	71.2%	71.1%
% Loans Delinquent	37.5%	34.5%	32.0%	18.0%	26.5%
% Loans Delinq. >1 Yr.	25.9%	22.5%	21.3%	8.9%	12.6%
Ave. Repayment Period (Mos.)	NA	10.4	25.2	4.1	271.8
Loan Turnover Rate (Times/Yr)	NA	0.94	1.17	2.63	0.52
Patronage Ratio	26.6%	34.0%	23.6%	22.2%	19.5%
Ledger Differences/Assets	2.7%	3.0%	2.5%	1.1%	1.9%
<u>RATES OF GROWTH:</u>					
Membership	NA	-7.0%	17.1%	-90.4%	18.03%
Share Savings	NA	-0.7%	3.6%	-69.6%	-3.07%
Loans Outstanding	NA	-9.1%	-3.9%	-86.7%	-0.73%
Net Worth	NA	6.2%	-5.2%	-49.2%	25.51%
Assets	NA	-19.4%	-19.5%	-68.0%	-2.38%
Income	NA	8.7%	-3.6%	-314.5%	-104.27%
Expenses	NA	-20.9%	-5.2%	-232.8%	-124.99%
<u>LIQUIDITY:</u>					
Fixed Lg Dep./Share-Savings	32.3%	32.7%	30.6%	31.1%	28.8%
League Deposits/Total Assets	36.8%	36.9%	37.8%	34.6%	38.1%
(Cash+Bk+Lg)/Assets	61.0%	50.0%	50.0%	45.8%	48.7%
Cash/Assets	0.4%	0.5%	0.5%	0.6%	0.4%
<u>FINANCIAL STRUCTURE:</u>					
Fixed Assets/Bldg Reserve	155.2%	137.0%	132.6%	146.0%	136.0%
Loans/Share-Savings Ratio	61.3%	56.1%	52.1%	49.4%	52.7%
Loans/Loanable Funds Ratio	79.8%	70.9%	64.4%	60.5%	63.9%

Attachment F-3

At-a-Glance Spatial Report

REGIONAL SUMMARY AS ON 30/06/93 FOR Test Group as at 30/06/93

	Bemenda Chapter	Neo Chapter	Monchum Chapter	Nicambe Chapter	Mase/Ndaba Chapter	Falco Chapter	Manyu Chapter	West Chapter	L-C-S Chapter	National Totals
STATISTICAL DATA:										
Number of Credit Unions	15	2	2	2	9	9	2	13	2	50
Number of Members:										
Women	4,009	40	425	93	1,008	494	36	1,522	91	7,718
Total	19,278	214	2,278	1,420	7,199	2,890	1,058	9,757	1,218	45,308
Loans Granted										
Number	1,469	125	595	0	516	255	524	1,884	88	5,458
Amount	123,250,345	10,321,000	29,182,000	0	139,348,825	15,084,000	130,333,000	214,687,455	8,039,000	670,243,825
Abbreviated Balance Sheet:										
ASSETS:										
Cash	11,064,896	878,585	3,081,997	207,693	4,145,818	5,127,093	888,893	4,105,844	1,227,228	30,739,045
Bank	521,448,604	2,110,778	8,278,405	873,785	18,519,290	58,025,189	2,582,182	98,778,084	5,068,688	716,682,933
League Shares & Deposits	1,681,131,255	37,337,152	55,948,846	58,459,202	268,638,848	207,238,198	33,549,977	284,968,353	13,377,841	2,638,649,472
Insurance Deposit	684,849	101,140	53,870	311,114	191,884	1,621,296	(852)	393,858	55,485	3,582,724
Loans Outstanding	1,220,871,183	16,213,900	47,783,850	118,839,195	458,588,910	498,473,304	1,771,411	185,870,994	15,628,363	2,581,839,000
Payroll Deductions Receivable	170,062,251	0	18,298,502	48,409,858	83,023,024	55,008,538	44,430,790	101,233,968	5,368,242	523,881,171
Other Assets	29,855,638	2,838,470	2,784,064	738,268	25,811,574	4,643,292	3,124,733	47,092,235	18,428,145	133,324,417
Fixed Assets	184,388,482	5,735,492	5,811,820	1,803,591	35,508,529	1,854,742	8,481,320	44,838,738	944,965	289,157,859
Total Assets	3,819,797,138	65,215,605	142,069,154	225,440,708	890,387,775	831,789,602	94,788,634	787,279,872	58,096,937	8,894,845,421
LIABILITIES & CAPITAL:										
Member Savings	2,835,938,834	29,300,422	95,700,171	203,872,938	657,307,883	698,617,774	4,632,791	237,135,340	32,397,686	4,792,709,837
Member Deposits	253,963,574	2,589,702	2,989,680	1,344,850	8,825,091	2,058,810	276,023	10,773,524	1,488,500	284,287,754
Interest Payable	138,650,352	1,462,080	1,081,240	949,394	10,231,373	1,040,894	12,648,686	14,951,680	135,300	181,168,999
External Loans Payable	7,323,508	0	4,271,000	0	7,000,000	5,347,750	100,000	13,714,432	0	37,768,888
Other Liabilities	4,588,992	1,063,150	158,483	54,195	1,517,101	2,083,685	2,455,254	11,484,949	93,951	23,497,940
Member Shares	38,157,545	882,000	1,213,000	1,285,000	17,081,882	9,807,000	224,000	1,951,000	738,000	68,919,531
Reserves	271,873,599	7,370,038	12,584,181	14,671,308	104,479,322	38,747,900	1,116,939	60,213,395	1,453,805	512,509,485
Y-T-D Surplus	55,438,344	674,840	807,899	3,239,582	14,399,224	25,544,634	241,619	8,342,997	886,888	110,568,107
Total Liab. & Capital	3,603,938,550	43,122,232	118,783,734	225,217,243	820,835,978	781,046,627	21,694,312	359,567,317	37,194,130	6,011,400,121
Abbreviated Income & Expense Statement:										
INCOME:										
Interest on Loans	48,042,114	1,017,570	2,101,751	6,043,079	28,110,273	32,615,178	289,572	10,817,951	758,910	125,594,396
Other Interest Income	57,719,794	826,740	4,091,424	123,801	5,588,538	5,967,588	244,113	8,899,892	79,843	83,551,533
Sundry Income	3,154,357	205,455	582,878	106,695	1,522,282	1,640,444	189,345	1,719,948	384,160	9,505,570
Total Income	108,916,265	2,049,765	6,776,051	6,273,575	33,231,103	40,221,208	723,030	21,237,589	1,222,913	218,651,499
EXPENSES:										
Insurance Premium	7,574,230	331,045	454,430	1,204,720	5,014,766	4,617,228	117,398	5,818,133	468,854	25,600,804
Personnel Costs	14,579,240	126,740	831,013	839,053	6,184,137	4,180,449	478,809	6,350,897	54,000	33,632,368
BoD/Meetings Expenses	9,188,220	288,490	837,020	685,725	3,987,285	2,981,400	433,806	2,866,080	100,220	20,848,355
Education, Training & Promotion	492,100	52,000	154,000	18,000	351,720	192,830	144,440	330,050	60,000	1,795,140
Interest Expense	18,487,079	1,384,000	3,829,372	0	10,020,280	1,342,875	9,919,520	24,955,320	240,175	68,178,721
Bad Debts & Provisions	856,375	188,580	75,000	0	1,244,000	190,000	403,000	2,133,430	20,000	5,108,385
Depreciation	224,365	63,730	35,975	0	159,880	2,217	528,850	1,145,513	38,732	2,199,282
Losses	19,775	19,000	0	0	284,800	0	0	2,000	19,000	344,575
Other Expenses	4,185,488	185,050	829,158	251,875	2,489,757	3,179,296	883,322	4,897,330	138,088	17,119,362
Total Expenses	53,588,872	2,616,635	6,845,866	2,999,373	29,746,635	16,686,395	13,007,244	48,298,753	1,138,869	174,926,772
NET SURPLUS	53,329,393	(566,870)	(69,815)	3,274,202	3,484,468	23,534,813	(12,284,214)	(27,061,164)	84,044	43,724,727
MINIMUM OPERATING STANDARDS:										
Expenses/Income Ratio	34,70%	60,14%	44,52%	47,81%	59,36%	38,15%	427,06%	109,92%	73,49%	48,82%
Loan Patronage Ratio	10,74%	76,64%	17,49%	82,89%	29,52%	34,15%	4,91%	19,48%	18,97%	19,47%
Loans/Share-Savings Ratio	42,51%	54,11%	49,31%	57,88%	67,70%	70,58%	38,47%	77,74%	47,16%	52,70%
Loan Delinquency	43,68%	32,83%	56,36%	5,51%	21,84%	10,42%	52,84%	48,40%	8,49%	0,00%
Reserves/Loans Ratio	22,27%	45,45%	26,34%	12,37%	22,88%	7,77%	63,00%	32,40%	9,30%	20,01%
Cash Shortage/Total Assets	0,17%	0,39%	0,28%	0,00%	1,34%	0,10%	0,43%	1,07%	2,40%	0,00%
Liquidity Ratio	27,08%	30,23%	26,93%	25,15%	30,41%	27,54%	35,28%	50,92%	38,40%	0,00%
RATING: (Maximum Score = 100 Points)	27	30	18	47	27	35	1	(8)	17	41



Attachment F-1

Detailed Spatial Report

Regional Financial/Statistical Breakdown Distribution of the Cameroon Credit Union Movement by Chapter as of:
 Group(a): Test Group as at 30/08/93

30/08/93

Parameter/Indicator	Bamenda Chapter	Neo Chapter	Menchum Chapter	Nkambe Chapter	Meme/Ndian Chapter	Fako Chapter	Manyu Chapter	West Chapter	L-C-B Ave./Chapter	Ave./Total
A. NUMBER OF SOCIETIES										
All Societies										
Credit Unions	13	1	2	2	9	3	1	3	0	34
Discussion Groups	2	1	0	0	0	0	1	10	2	16
Total Number	15	2	2	2	9	3	2	13	2	50
Milieu										
Urban	2	0	0	0	2	1	0	2	1	8
Rural	13	2	2	2	7	2	2	11	1	42
Total Number	15	2	2	2	9	3	2	13	2	50
With Payroll Deduction	0	1	0	0	5	3	0	4	1	14
By Common Bond Type										
Employee	1	1	0	1	5	3	0	3	2	16
Community Association	14	1	2	1	4	0	2	9	0	33
Association	0	0	0	0	0	0	0	1	0	1
No. In P.C. Programme	9	0	1	0	2	0	0	0	0	12
Risk Management										
No. Societies Participating	13	1	2	2	9	3	0	1	0	31
No. Societies Active	13	1	2	2	9	3	0	1	0	31
B. MEMBERSHIP:										
By Sex:										
Males	8,772	151	763	970	3,323	1,211	153	3,035	378	18,756
Females	4,006	40	425	93	1,008	494	36	1,522	91	7,718
Groups	239	18	25	10	150	31	13	78	11	575
Sex Unknown	6,216	3	1,061	347	2,718	1,154	836	5,122	238	18,252
Total Membership	19,276	214	2,276	1,420	7,199	2,890	1,058	9,757	1,218	45,308
By Milieu:										
Rural	10,023	214	2,276	1,420	6,144	2,190	1,058	8,765	1,200	33,290
Urban	9,253	0	0	0	1,055	700	0	992	18	12,018
Total	19,276	214	2,276	1,420	7,199	2,890	1,058	9,757	1,218	45,308
By Common Bond Type										
Employee	280	81	0	938	2,489	1,522	0	1,143	738	7,191
Community Association	14,169	116	1,213	135	1,192	0	199	5,312	0	22,336
Association	4,827	17	1,063	347	3,518	1,368	832	3,302	480	15,781
Total	19,276	214	2,276	1,420	7,199	2,890	1,058	9,757	1,218	45,308
No. In Active Risk Mgmt. CUs	14,120	116	1,213	1,073	3,681	1,522	0	135	0	21,860
No. In PC Credit Unions	13,428	0	903	0	1,420	0	0	0	0	15,751
C. INCOME & EXPENSE STMT:										
Income:										
Entrance Fees	1,127,400	13,000	11,900	78,000	110,600	130,000	10,000	171,850	237,500	1,890,250
Fines	385,121	172,430	204,140	7,635	658,337	1,122,804	72,765	614,754	30,030	3,268,016
Loan Fees	0	0	0	0	0	0	0	0	0	0
Donations/Grants	180	0	19,500	0	127,768	66,000	16,800	41,550	0	271,798
Risk Mgmt Income	886,406	16,680	69,478	0	369,444	257,580	25,600	6,635	42,235	1,674,058
Other Income	755,250	3,345	277,858	21,060	256,143	64,060	64,180	885,157	74,395	2,401,448
Interest on Loans	46,042,114	1,017,570	2,101,751	6,043,079	26,110,273	32,613,176	289,572	10,617,951	758,910	125,594,396
League Interest	26,315,020	826,740	4,032,560	0	4,633,400	5,878,940	178,215	7,498,121	79,843	49,442,839
Bank Interest	31,404,774	0	58,864	123,801	965,138	88,648	65,898	1,401,571	0	34,108,694
Unearned Income	0	0	0	0	0	0	0	0	0	0
Total Income	106,916,265	2,049,765	6,776,051	6,273,575	33,231,103	40,221,208	723,030	21,237,589	1,222,913	218,651,499
Expenses:										
Stationery & Postage	902,570	18,575	75,535	97,775	294,620	292,907	22,010	361,120	59,120	2,124,232
Travel & Transport	512,950	17,950	61,000	65,200	723,150	283,600	55,900	302,715	48,600	2,071,065
Insurance Premiums	7,574,230	331,045	454,430	1,204,720	5,014,766	4,617,228	117,398	5,818,133	468,654	23,600,604
Edict/Trng (Seminars)	311,500	42,000	69,000	0	182,605	192,830	69,000	175,700	60,000	1,102,635
Electr/Water	458,718	16,550	23,725	3,215	401,714	0	23,990	219,481	3,115	1,152,508
Rental Expenses	690,000	0	111,000	0	288,000	24,000	137,100	166,000	0	1,416,100
Telecommunications	0	0	0	0	11,095	0	19,750	7,125	0	37,970
Accounting Fees	0	0	0	0	0	0	0	0	0	0
Maintenance & Repairs	179,085	0	0	2,550	236,450	21,950	117,475	526,100	0	1,083,610
Promotional Expenses	180,600	10,000	85,000	18,000	169,115	0	75,440	154,350	0	692,505
Legal Expenses	868,410	71,525	274,525	0	94,350	372,000	375,215	1,534,540	0	3,590,565
Board Expenses	2,784,785	65,350	240,500	274,015	1,713,180	1,456,375	14,250	1,043,915	38,900	7,631,270
League & Chapter Dues	5,826,910	63,140	191,520	411,710	1,606,115	1,380,025	14,655	644,665	51,320	10,190,060
AGM Expenses	556,525	160,000	205,000	0	668,000	145,000	405,000	977,500	10,000	3,127,025
Cash Shortage	0	0	0	0	0	0	0	0	0	0
Losses	19,775	19,000	0	0	284,800	0	0	2,000	19,000	344,575
Other Expenses	330,795	40,450	138,400	40,375	252,520	1,713,792	34,833	560,105	8,570	3,119,840
Salaries	13,133,051	95,000	565,440	753,032	5,372,775	3,910,214	104,000	5,560,105	54,000	29,547,617
Soc. Ins. & Taxes	1,446,189	31,740	265,603	86,021	821,362	270,235	372,609	790,792	0	4,084,751
Bank Charges	224,540	0	144,771	42,760	187,858	179,607	195,049	219,884	18,500	1,212,969
Interest on Savings	15,687,604	1,384,000	3,741,872	0	9,699,825	1,342,975	9,386,120	24,155,495	240,175	65,638,066
Int. on League Loans	799,475	0	87,500	0	320,455	0	533,400	799,825	0	2,540,655
Other Interest Expense	0	0	0	0	0	0	0	0	0	0
Depreciation Exp.	224,365	63,730	35,975	0	159,880	2,217	528,850	1,145,513	38,732	2,199,262
Bad Debts	856,375	186,580	75,000	0	1,244,000	190,000	403,000	2,133,430	20,000	5,108,385
Unearned Expenses	18,420	0	200	0	0	281,440	0	1,000,260	183	1,310,501
Total Expenses	53,386,872	2,616,635	6,845,996	2,999,373	29,746,625	16,686,393	13,007,244	48,298,753	1,138,809	174,926,772
Net Surplus	53,329,393	(566,870)	(629,945)	1,274,202	3,484,478	23,534,815	(12,284,214)	(27,061,164)	84,044	43,724,727

Regional Financial/Statistical Breakdown Distribution of the Cameroon Credit Union Movement by Chapter as of:
Group (e): Test Group as at 30/09/83

30/09/83

Parameter/Indicator	Bamenda Chapter	Neo Chapter	Menchum Chapter	Nkambe Chapter	Meme/Ndian Chapter	Fako Chapter	Maryu Chapter	West Chapter	L-C-S Ave./Chapter Chapter	Ave./Total
Dividends (Amst.)	0	150,000	0	0	0	0	0	0	0	300,000
Int. Rate on Svgs (P/Sb-Mo)	4.47	5.00	2.00	0.00	2.88	3.60	1.63	2.94	3.45	3.49
D. BALANCE SHEET:										
Assets:										
Cash	11,094,896	878,585	1,874,722	207,693	4,145,816	1,362,248	490,613	2,985,905	1,227,228	24,267,706
CPMS/Mission Safe	0	0	1,207,275	0	0	3,764,845	378,280	0	0	6,470,339
Curr. Acct. Cambank	240,000	0	0	0	914,771	1,294,381	0	339,361	0	2,788,513
Curr. Acct. SCDC	0	0	0	0	0	0	0	0	0	0
Curr. Acct. BICIC	4,584,383	0	3,099,250	32,076	6,021,122	5,553,564	297,105	5,873,613	4,914,615	30,375,728
Curr. Acct. BMBC	1,304,591	0	0	81,330	0	847,785	27,787	939,466	0	3,200,959
Curr. Acct. SCBC	349,691	0	0	0	3,469,999	17,274,960	0	6,716,699	0	27,811,619
Curr. Acct. SCB/CL	396,751	0	0	0	0	0	0	1,890,150	0	2,286,901
Curr. Acct. Amity Bank	0	0	0	0	0	0	0	0	0	0
Curr. Acct. - CAC	10,166,056	0	0	0	0	0	0	0	0	10,166,056
Curr. Acct.-Other Bks	6,989,831	0	0	0	155,807	0	151,076	5,331,164	0	12,627,878
Postal Chequing Acct	0	0	0	0	0	0	0	0	0	0
League Regular Deposit	19,410	0	0	0	105,461	1,500	21,700	919,335	0	1,067,406
Savings Acct. Cambank	2,687,545	0	2,481,922	0	0	707,805	277,396	2,786,344	0	8,941,012
Savings Acct. SCBC	0	0	0	0	0	8,713,009	0	0	0	8,713,009
Savings Acct. BICIC	32,237,108	2,110,776	2,237,782	233,005	1,011,214	3,817,047	1,566,963	14,410,897	53,093	57,677,885
Savings Acct. BMBC	22,182,245	0	45,000	509,515	6,571,313	15,278,313	(37,500)	4,813,132	0	49,362,018
Savings Acct. SCBC	8,088,178	0	0	0	0	1,061,647	0	1,439,749	0	10,589,574
Savings Acct. SCB/CL	42,825,505	0	213,348	0	101,341	3,251,488	77,780	44,646,566	0	91,116,422
Svgs Acct. - Amity Bank	4,042,625	0	0	0	0	0	0	0	0	4,042,625
Svgs Acct. CAC	29,545,994	0	0	0	0	0	0	0	0	29,545,994
Svgs Acct.-Other Bks	3,896,082	0	0	17,859	17,859	225,140	0	9,194,383	0	13,351,323
Post Office Savings	1,912,019	0	201,103	0	255,864	0	221,555	393,896	100,980	3,085,417
Insurance Deposit	894,849	101,140	83,870	311,114	131,984	1,621,296	(652)	393,638	55,465	3,592,724
Accounts Receivable	9,708,035	192,200	0	50,982	947,290	250,855	349,286	24,901,736	15,219,015	51,619,399
Cash Shortages	6,487,501	251,670	401,289	0	11,973,822	821,948	405,494	8,172,674	1,396,699	29,912,097
Ledger Differences	11,445,499	0	0	0	7,752,549	0	32,508	1,932,648	0	21,163,204
Advances	140,765	0	0	0	447,000	0	0	254,475	0	842,240
Interest Receivable	750,996	0	0	647,986	2,537,301	1,076,907	1,628,000	754,697	1,810	7,397,717
Payroll Devt/acc Recv'l	170,092,251	0	18,296,302	46,409,858	83,023,024	55,006,538	44,430,790	101,233,966	5,368,242	523,861,171
Doubtful Accounts	0	0	0	0	0	2,363,000	0	338,261	0	2,701,261
Other Assets	5,154,835	2,384,000	2,382,775	37,300	2,143,410	118,222	172,675	10,496,370	(199,399)	22,690,188
Loans Outstanding	12,200,711,183	16,213,990	47,783,650	118,639,195	456,588,910	498,473,304	1,771,411	185,870,994	15,626,363	2,561,837,000
Term Depos. BICIC	0	0	0	0	0	0	0	0	0	0
Term Depos. BMBC	0	0	0	0	0	0	0	0	0	0
Term Depos. SCBC	0	0	0	0	0	0	0	0	0	0
Term Depos. SCB/CL	0	0	0	0	0	0	0	0	0	0
Term Depos. Amity Bank	0	0	0	0	0	0	0	0	0	0
Term Depos. CAC	350,000,000	0	0	0	0	0	0	0	0	350,000,000
Other Term Deposits	0	0	0	0	0	0	0	0	0	0
League Fixed Deposit	777,670,299	9,056,691	26,101,120	51,541,193	205,069,950	194,515,040	1,713,277	121,732,045	12,062,841	1,399,462,456
Lg Spec Fixed Deposit	380,441,546	27,880,461	29,447,726	4,518,009	9,663,237	12,121,658	1,415,000	159,716,973	915,000	626,119,610
Lg Spec Term Deposit	520,000,000	0	0	0	50,000,000	0	30,000,000	0	0	600,000,000
League Shares	3,000,000	400,000	400,000	400,000	1,800,000	600,000	400,000	2,600,000	400,000	10,000,000
Furniture & Equipment	4,427,741	223,035	736,255	482,878	3,505,725	1,292,680	263,115	2,782,509	87,155	13,801,093
Building	177,970,721	5,512,457	5,075,565	1,320,713	31,593,304	362,062	8,198,205	39,726,229	837,810	270,617,066
Land	2,000,000	0	0	0	409,500	0	0	2,330,000	0	4,739,500
Unnamed Assets	(3,821,995)	10,600	0	0	10,202	12,360	535,770	241,374	10,000	(3,001,682)
Total Assets	3,819,792,136	63,215,605	142,069,154	225,440,706	890,367,775	831,789,602	94,788,634	767,279,872	58,066,937	6,894,845,421
Liabilities & Capital:										
Liabilities:										
Member Savings	2,835,938,634	29,300,422	95,700,171	203,672,936	657,307,883	696,617,774	4,632,791	237,135,340	32,297,686	4,792,703,637
Member Deposits	253,963,574	2,589,702	2,969,680	1,344,850	8,825,091	2,056,810	276,023	10,773,524	1,488,500	284,287,754
Dividends Payable	208,000	1,384,000	0	0	0	0	9,361,085	232,806	0	11,185,891
Int. Pble on Svgs	123,354,903	78,080	1,081,240	0	10,231,373	436,034	2,287,461	13,778,813	125,300	162,342,944
Other Int Payable	5,093,449	0	0	949,394	0	604,860	0	980,461	0	7,628,164
Ledger Differences	0	0	0	0	132,913	281,135	29,997	0	0	444,045
Cash Overages	164,158	40,000	40,000	25,600	765,000	40,000	18,299	165,413	0	1,257,870
Expense Provisions	688,787	160,000	90,885	29,195	411,820	329,344	2,047,349	917,430	30,760	4,705,570
ST League Loans	6,639,000	0	4,271,000	0	0	0	100,000	12,153,775	0	23,163,775
LT League Loans	0	0	0	0	7,000,000	0	0	0	0	7,000,000
Other Loans Pble	684,506	0	0	0	0	5,347,750	0	1,560,657	0	7,592,913
Other Liabilities	3,674,124	863,150	25,598	0	212,368	1,433,289	359,609	9,983,316	63,191	16,614,645
Unnamed Liabilities	61,823	0	0	0	(5,000)	22	0	418,789	0	425,810
Total Liabilities	3,240,471,058	34,415,354	104,178,574	206,021,375	684,881,448	707,147,093	20,112,754	288,059,825	34,115,437	5,319,403,018
Capital:										
Member Shares	36,157,549	662,000	1,213,000	1,285,000	17,081,982	9,607,000	224,000	1,951,000	738,000	68,919,531
Compulsory Reserve	21,627,993	309,494	4,222,539	2,900,596	14,327,118	9,900,400	171,983	8,472,749	207,908	62,140,780
Education Fund	7,692,750	87,661	656,636	926,666	5,287,892	1,375,833	59,320	1,869,593	37,548	17,993,899
General Reserve	11,969,534	112,687	528,744	1,364,763	14,928,642	4,225,269	705,339	2,696,228	411,959	36,853,165
Building Reserve	120,554,871	5,572,220	4,842,665	7,497,490	32,471,811	11,200,000	47,500	34,317,064	36,651	216,540,272
Other Reserves	71,771,623	767,506	31,811	483,866	2,246,722	700,000	51,345	3,607,470	346,739	30,007,084
Capital Grants	115,000	0	0	0	8,000,000	1,000,000	0	1,000,000	0	10,115,000
Y-T-D Surplus	55,436,344	674,840	807,999	3,239,362	14,393,224	25,544,634	241,619	9,342,997	886,888	110,568,107
Prova. Dct'd Acct	88,141,826	520,470	2,301,766	1,497,925	22,217,137	10,346,398	80,452	8,340,291	413,000	138,859,265
Total Capital	353,667,692	8,706,878	14,605,160	19,195,868	135,954,528	73,899,534	1,581,558	71,507,392	3,078,693	691,997,103
Total Liab. & Capital	3,603,938,550	43,122,232	118,783,734	225,217,243	820,835,976	781,046,627	21,694,312	359,567,317	37,194,130	6,011,400,121

Regional Financial/Statistical Breakdown Distribution of the Cameroon Credit Union Movement by Chapter as of:
Group(e): Test Group as at 30/06/93

30/06/93

Parameter/Indicator	Bamenda Chapter	Nso Chapter	Menchum Chapter	Nkambe Chapter	Mimo/Ndian Chapter	Fako Chapter	Manyu Chapter	West Chapter	L-C-8 Ave./Chapter	Ave./Total
E. LOAN DELINQUENCY										
Amt. of Delinquency Unknown Current Loans	6074.452	0	0	0	1,936.948	0	1,406.456	21,474.702	0	30,892.558
Loans Delinquent 2 to 6 Mos.	119,470.855	13,116.920	19,900.650	112,098.690	357,776.159	431,380.865	978,430	162,122.277	42,963.611	1,259,808.457
Loans Delinquent 6 to 12 Mos.	25,722.700	4,974.000	4,807.000	4,455.000	17,232.422	13,577.453	754,140	32,767.780	1,765.100	106,055.595
Loans Delinquent over 12 Mos.	28,283.020	328.000	3,219.000	622.200	27,369.624	5,025.481	1,606.515	64,830.199	1,237.489	132,521.528
Total Loans Outstanding	43,349.225	1,108.000	19,861.000	1,463.305	55,801.705	31,368.267	310,941	61,308.205	911.000	215,451.684
Amount	222,900.252	19,526.920	47,787.650	118,639.195	460,216.858	481,552.056	5,056.482	342,503.163	46,947.200	1,745,129.786
Number	2,070	164	398	893	2,125	987	52	1,901	231	8,821
F. LOAN VOLUME BY OBJECT:										
No. of Loans Granted:										
Farming	56	13	17	0	23	9	18	102	7	245
Trading	219	8	106	0	43	2	7	337	3	725
Education	450	57	204	0	196	97	187	588	5	1,784
Health	292	21	98	0	121	37	95	383	31	1,078
Building	184	19	68	0	84	41	55	188	24	665
Other Purposes	268	7	102	0	49	62	162	286	18	961
Total No. Granted	1,469	125	595	0	516	255	524	1,884	88	5,456
Amount of Loans Granted:										
Farming	2,472.500	607.000	452.000	0	1,091.000	147.000	6,620.000	6,630.500	76.000	18,096.000
Trading	18,752.000	1,820.000	7,303.000	0	15,476.000	120.000	2,948.000	63,267.615	73.000	109,759.615
Education	39,207.625	5,994.000	11,288.000	0	50,196.190	4,698.640	49,054.000	63,420.640	130.000	224,288.455
Health	17,548.140	1,121.000	2,480.000	0	21,365.475	2,292.000	13,402.000	18,876.100	853.000	77,937.715
Building	28,414.700	0	4,902.000	0	40,198.670	3,521.000	27,782.000	47,542.700	5,792.000	158,153.070
Other Purposes	16,855.380	729.000	2,757.000	0	11,019.490	4,006.000	10,522.000	14,949.900	1,115.000	82,098.770
Total Amount Granted	123,250.345	10,321.000	29,182.000	0	139,346.825	15,084.000	130,333.000	214,687.455	8,039.000	670,243.625
G. LEDGER DIFFERENCES										
Shares	47,327	1,000	333,742	0	13,000	3,000	30,000	336,511	41,000	805,580
Savings	2,821,778	98,650	169,270	0	548,731	1,111,966	1,393,839	10,383,487	26,468	16,554,189
Loans	32,258,357	32,500	105,827	0	235,848	70,400	2,148,235	10,290,745	248,000	45,389,912
Deposits	584,831	66,698	357,233	0	2,162,612	239,802	217,195	6,975,467	120,810	10,724,648
Cash	521,640	1,935	1	0	76,035	487,450	0	83,916	39,200	1,210,177
Bank	1,528,247	0	0	0	1,200	1,366,042	5,400	4,889,276	0	7,790,165
Leagues	0	49,945	0	0	0	0	0	0	0	49,945
Total Ledger Differences	37,762,180	250,728	966,073	0	3,037,426	3,278,660	3,794,669	32,959,402	475,478	82,524,616
H. CU PERFORMANCE:										
PROTECTION:										
Debt/Equity Ratio (Times)	8.9	4.0	7.1	10.7	5.0	9.6	12.7	4.0	11.1	7.7
Liquidation Value of Sb-Svgs	121.8%	192.9%	122.8%	108.1%	121.4%	113.2%	1910.0%	265.2%	120.1%	129.2%
Delinq. Loans/Net Worth	26.8%	73.6%	190.9%	34.1%	73.9%	67.9%	168.9%	222.2%	129.4%	65.7%
Bad Debt Reserve/Delinq. Loans	85.2%	8.1%	8.3%	22.9%	26.6%	20.6%	2.0%	4.6%	10.4%	28.6%
Risk Assets/Net Worth	31.9%	103.2%	234.2%	37.9%	78.7%	87.5%	322.4%	277.6%	617.3%	80.8%
EARNINGS (Profitability)										
A vrg Int. Rate Pd on Sb-Svgs	5.36%	6.00%	2.49%	0.00%	3.46%	4.32%	1.95%	3.53%	4.14%	4.19%
ASSET QUALITY:										
% Loans Delinquent	43.7%	32.8%	58.4%	5.5%	21.8%	10.4%	52.8%	46.4%	8.5%	26.0%
% Loans Delinq. >1 Yr.	19.4%	5.7%	41.6%	1.2%	12.1%	6.6%	6.1%	17.9%	2.1%	12.4%
Ledger Differences/Assets	0.99%	0.38%	0.68%	0.00%	0.34%	0.39%	4.00%	4.30%	0.82%	1.20%
Earning Assets/Total Assets	88.85%	84.74%	74.63%	77.83%	81.92%	87.61%	38.77%	70.79%	49.50%	84.08%
Int.-Bearing Liab./Tot. Ass.	75.38%	45.94%	71.22%	90.91%	76.53%	85.55%	5.23%	32.95%	57.04%	71.06%
Patronage Ratio	10.7%	76.6%	17.5%	62.9%	29.5%	34.2%	4.9%	19.5%	19.0%	19.5%
LIQUIDITY:										
Fixed Lg Dep./Share-Savings	27.08%	30.23%	26.93%	25.15%	30.41%	27.54%	35.28%	50.92%	36.0%	28.79%
League Deposits/Total Assets	43.93%	56.64%	39.10%	24.87%	29.74%	24.84%	34.97%	36.80%	22.34%	38.10%
(Cash+Bk+Lg)/Assets	57.87%	61.22%	47.10%	25.35%	32.29%	32.43%	38.61%	50.21%	33.18%	48.92%
Cash/Assets	0.29%	1.35%	2.17%	0.09%	0.47%	0.62%	0.92%	0.54%	2.11%	0.45%
FINANCIAL STRUCTURE:										
Building Reserve/Net Fixed Assets	65.4%	97.2%	83.3%	415.7%	91.4%	676.8%	0.6%	76.5%	3.9%	74.9%
Loans/Share-Savings Ratio	42.5%	54.1%	49.3%	57.9%	67.7%	70.6%	36.5%	77.7%	47.2%	52.7%
Loans/Loanable Funds Ratio	52.2%	64.7%	56.0%	69.5%	74.7%	82.2%	-50.1%	85.6%	58.8%	62.8%

Attachment G

List of Available Charts

List of Graph Names

No.	Name	Type	Orientation	Graph Type (Chron/Reg'l)	Series		Contents
					CU/Local Group	Wide Area Group	
GROWTH:							
1.	PRINSTAT	Line	Portrait	Chron	X	X	Evolution of Principal Financial Parameters
2.	GR_PATES	Bar	Portrait	Chron	X	X	Annual Growth Rates of Principal Parameters
3.	CUAVS&LC	Bar	Portrait	Chron	X	X	Average Share Savings & Loans Outstanding per CU
4.	CUAVS&LP	Bar	Portrait	Reg'l		X	Average Total Savings & Loans per Society
5.	NOCUDGSC	Stack-Bar	Portrait	Chron	X	X	Number of Credit Unions & Discussion Groups
6.	NOCUDGSP	Stack-Bar	Landscape	Reg'l		X	Number of Credit Unions & Discussion Groups by Chapter
7.	CUS_MILC	Stack-Bar	Portrait	Chron	X	X	Number of Urban & Rural Credit Unions (& DGs)
8.	CUS_MILP	Stack-Bar	Portrait	Reg'l		X	Number of Societies per Chapter by Milieu
MEMBERSHIP PROFILE:							
9.	M_SEX_C	XY	Landscape	Chron	X	X	Growth of Membership by Gender
10.	M_SEX_P	Stack-Bar	Landscape	Reg'l		X	Total Membership by Chapter and by Gender
11.	M_MIL_C	Bar	Portrait	Chron	X	X	Growth of Membership by Milieu
12.	M_MIL_P	Stack-Bar	Portrait	Reg'l		X	Total Membership by Chapter and by Milieu
13.	MAVGS_C	Bar	Portrait	Chron	X	X	Average Share Savings & Loans Outstanding per Member
14.	MAVG_P	Bar	Landscape	Reg'l		X	Average Account Size by Chapter
PROFITABILITY:							
15.	SPREAD_C	Line	Portrait	Chron	X	X	Comparative Spread Analyses
16.	M&L	Bar	Portrait	Chron	X	X	Growth of Income & Expenses
17.	E_I_C	Stack-Bar	Portrait	Chron	X	X	Operating Costs to Total Income Ratios
18.	E_I_P	Bar	Portrait	Reg'l		X	Operating Expenses/Income Ratios by Chapter
19.	I_SVGS_C	Bar	Portrait	Chron	X	X	Interest Rates Paid on Member Savings
20.	I_SVGS_P	Bar	Portrait	Reg'l		X	Average Rates of Interest Paid on Savings per Chapter
BALANCE SHEET COMPOSITION:							
21.	ASTS_C%	Stack-Bar	Landscape	Chron	X	X	Relative Asset Composition over Time
22.	ASTS_CF	Stack-Bar	Landscape	Chron	X	X	Asset Composition over Time
23.	ASSFTS_P	Stack-Bar	Landscape	Reg'l		X	Relative Asset Composition by Chapter
24.	LIAB_C	Stack-Bar	Landscape	Chron	X	X	Composition of Liabilities & Capital Over Time
25.	LIAB_%	Stack-Bar	Portrait	Chron	X	X	Relative Composition of Liabilities & Capital Over Time
LIQUIDITY:							
26.	LOCOMP_C	Stack-Bar	Portrait	Chron	X	X	Relative Composition of Liquidity Over Time
27.	LOCOMP_P	Stack-Bar	Landscape	Reg'l		X	Relative Composition of Liquidity by Chapter
28.	TOT_BH_C	Stack-Bar	Landscape	Chron	X	X	Bank Deposits Over Time by Financial Institution
29.	BANKS_P	Stack-Bar	Landscape	Reg'l		X	Bank Deposits by Financial Institution and Chapter
30.	BANKS	Stack-Bar	Landscape	Reg'l		X	Types of Bank Accounts Held
31.	CLF_DEPC	Stack-Bar	Portrait	Chron	X	X	League Deposits by Type Over Time
32.	CLF_DEPP	Stack-Bar	Landscape	Reg'l		X	League Deposits by Account Type and Chapter
33.	CLF_L&D	Bar	Landscape	Reg'l		X	CLF Deposits & Loans by Chapter
CREDIT MANAGEMENT:							
34.	NEWLOANS	Mixed	Landscape	Reg'l		X	Number & Amount of Loans Granted
35.	PURPS_C	Stack-Bar	Landscape	Chron	X	X	Amount of Loans Granted Over Time by Purpose
36.	PURPS_P	Stack-Bar	Landscape	Reg'l		X	Amount of Loans Granted by Chapter & Purpose
37.	DELQ_CF	Stack-Bar	Portrait	Chron	X	X	Loan Delinquency Over Time
38.	DELQ_C%	Stack-Bar	Landscape	Chron	X	X	Loan Delinquency Over Time
39.	DELINQ_P	Stack-Bar	Landscape	Reg'l		X	Loan Delinquency by Chapter
40.	LLFRAT_C	Bar	Portrait	Chron	X	X	Loans Outstanding to Available Funds Ratios
41.	LLFRAT_P	Bar	Portrait	Reg'l		X	Loans Outstanding to Available Funds Ratios
42.	PATRON_C	Bar	Portrait	Chron	X	X	Evolution of Loan Patronage Ratio
43.	PATRON_P	Bar	Portrait	Reg'l		X	Loan Patronage Ratio by Chapter
SOLVENCY/CAPITAL ADEQUACY:							
44.	EA&EL_C	Bar	Landscape	Chron	X	X	% of Asset & Liability Portfolios Bearing Interest
45.	EA&EL_P	Bar	Landscape	Reg'l		X	% of Asset & Liability Portfolios Bearing Interest
46.	DBTFL_C	Stack-Bar	Portrait	Chron	X	X	Doubtful Assets/Net Worth Ratio Over Time
47.	DBTFL_P	Stack-Bar	Portrait	Reg'l		X	Doubtful Assets/Net Worth Ratio By Chapter
48.	DEL_BDRC	Bar	Portrait	Chron	X	X	Evolution of Delinquent Loans/Bad Debts Reserve Ratio
49.	DEL_BDRR	Bar	Landscape	Reg'l		X	Bad Debts Reserve/Delinquent Loans Ratio by Chapter
50.	SOLV_C	Mixed	Portrait	Chron	X	X	Solvency Ratios over Time
51.	SOLV_P	Mixed	Landscape	Reg'l		X	Solvency Ratios
52.	LDS_C	Stack-Bar	Landscape	Chron	X	X	Ledger Differences Over Time as a % of Assets
53.	LDS_P	Stack-Bar	Landscape	Reg'l		X	Chapter-Wide Ledger Differences as a % of Assets
M.O.S. Health Index							
54.	INDEXC	Bar	Portrait	Chron	X	X	Evolution of M.O.S. Index
55.	INDEXP	Bar	Portrait	Reg'l		X	

Attachment H

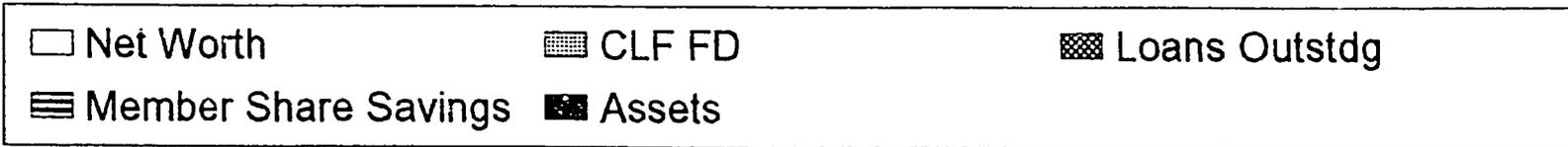
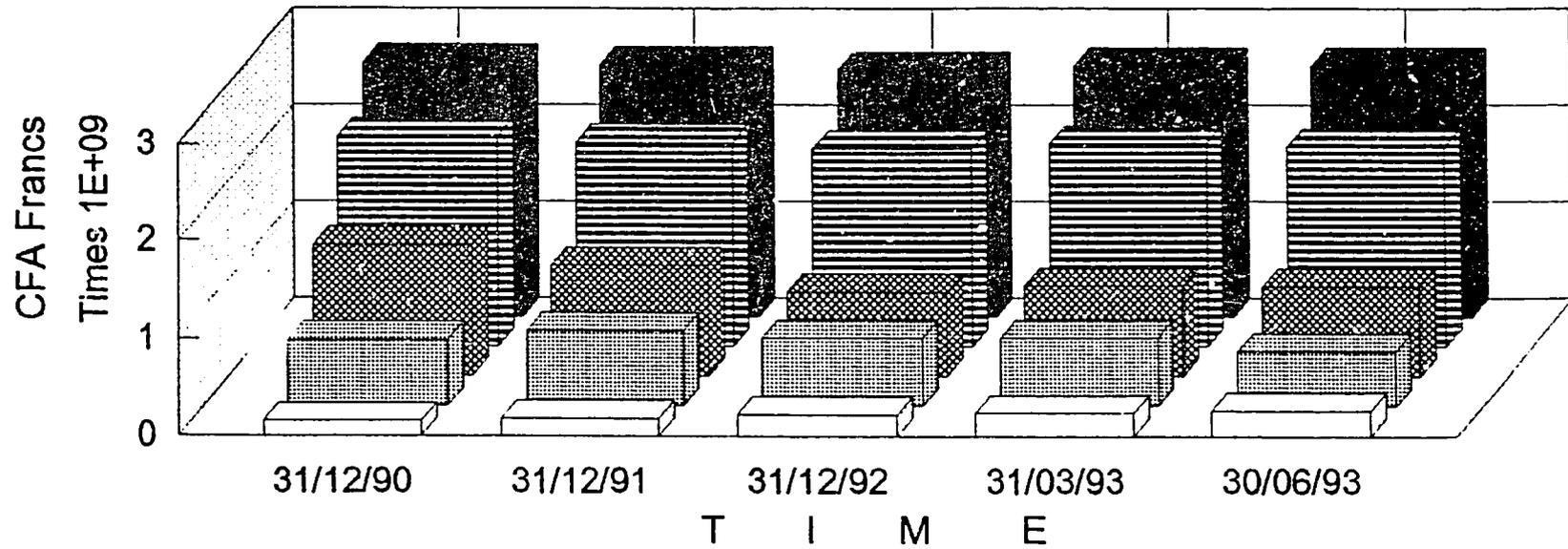
Sample Printed Charts

Attachment H-1

Individual Chart

Evolution of Principal Financial Parameters

Reporting Credit Unions As at 31/12/92



19/03/94

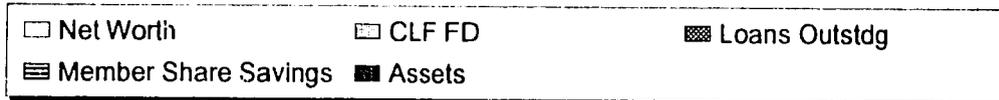
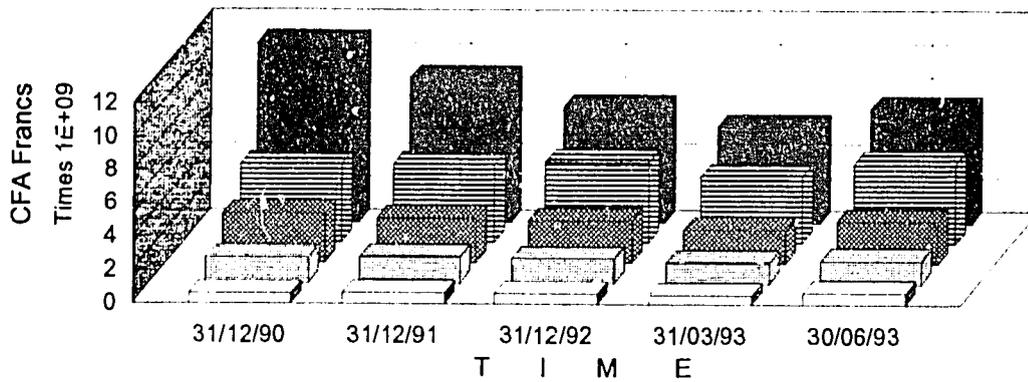
Attachment H-1

Series for Individual Credit Union or Local Group of CUs

Chronological Graph Series

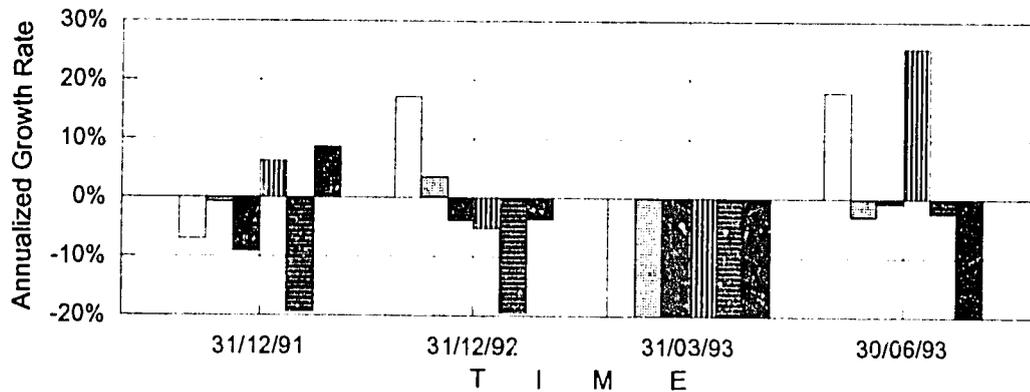
Evolution of Principal Financial Aggregates

Test Group as at 30/06/93



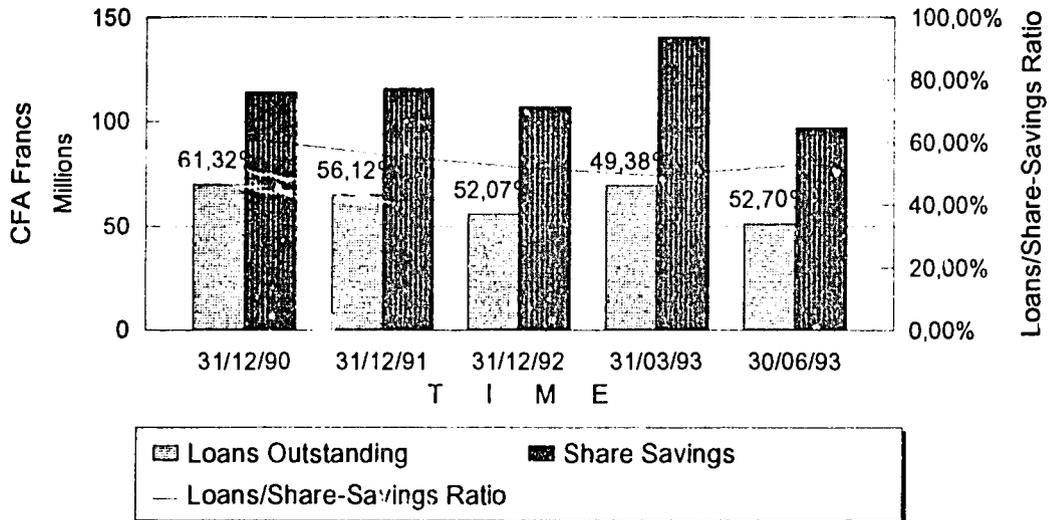
Annual Growth Rates of Principal Parameters

Test Group as at 30/06/93

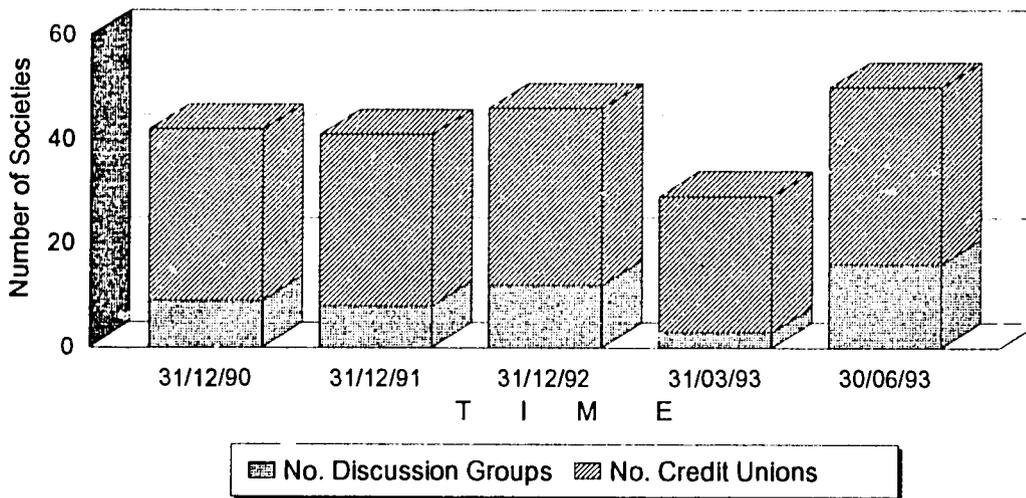


20/04/94

Ave. Share Savings & Loans Outstanding per CU
 Test Group as at 30/06/93



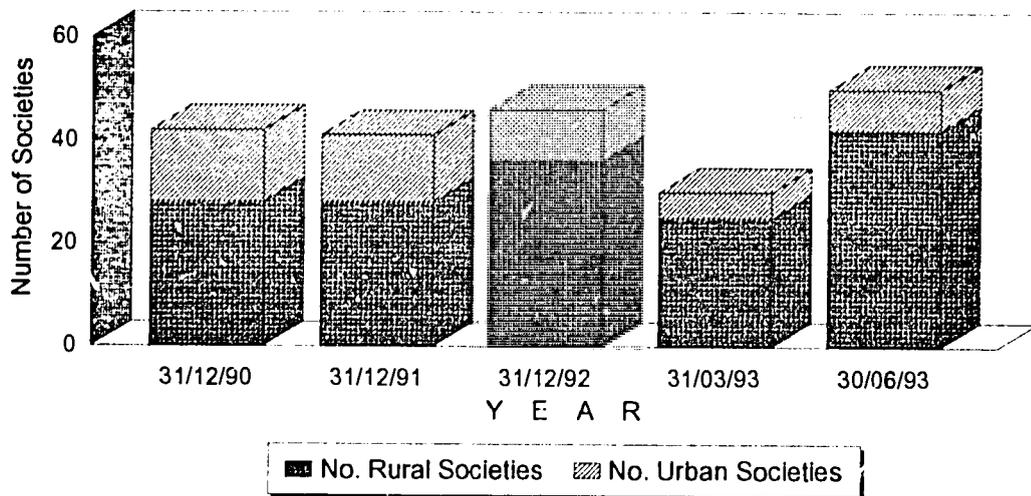
Number of Credit Unions & Discussion Groups
 Test Group as at 30/06/93



20/04/94

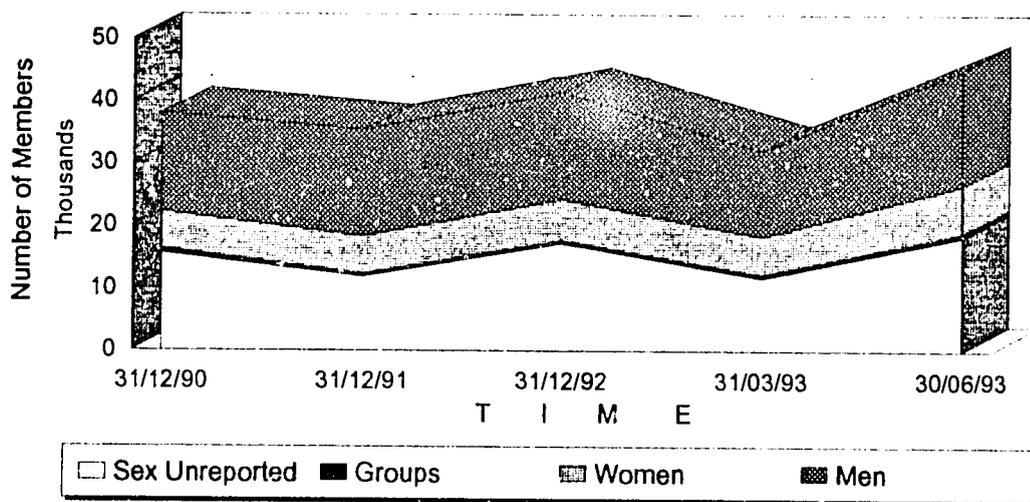
Growth of Number of Societies by Milieu

Test Group as at 30/06/93



Growth of Membership by Gender

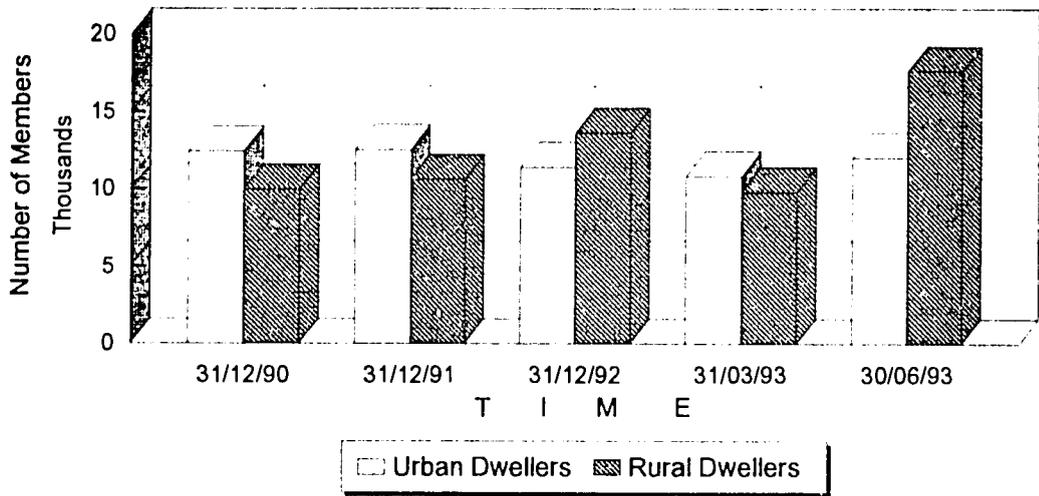
Test Group as at 30/06/93



20/04/94

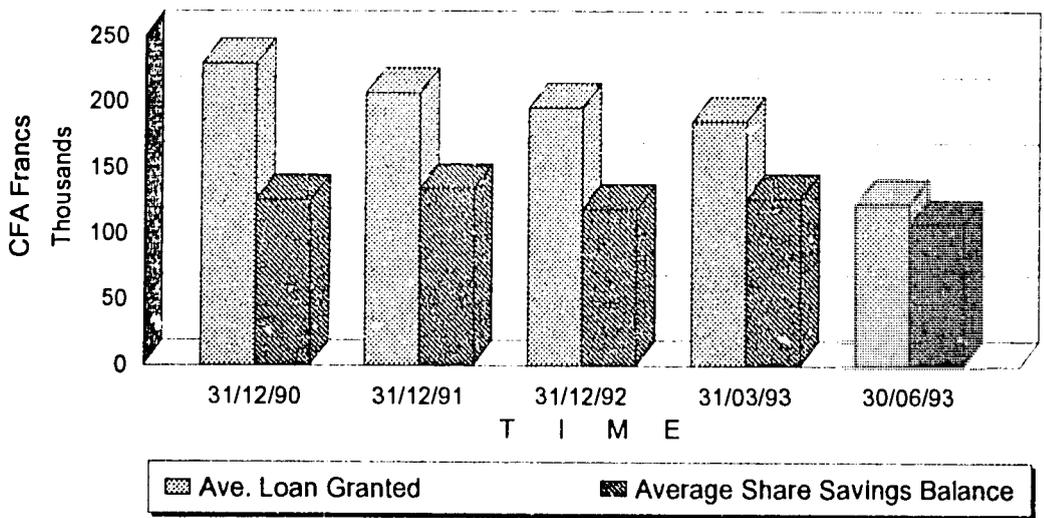
Growth of Membership by Milieu

Test Group as at 30/06/93



Ave. Share Savings & Loans Outstanding per Member

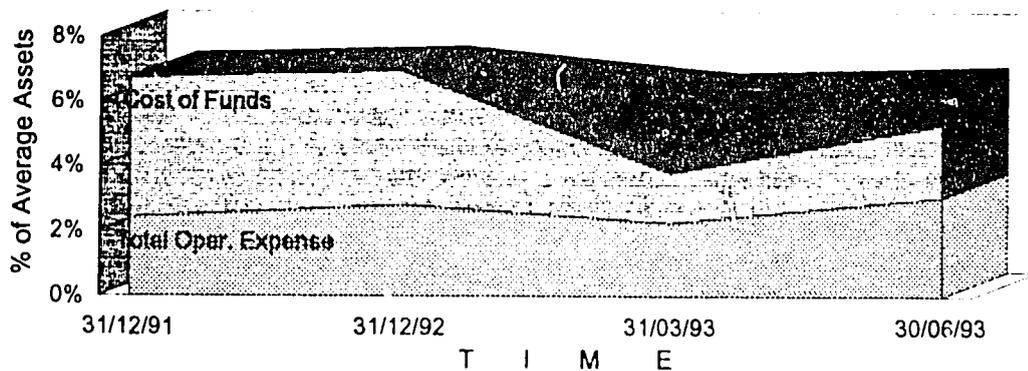
Test Group as at 30/06/93



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Comparative Spread Analyses

Test Group as at 30/06/93

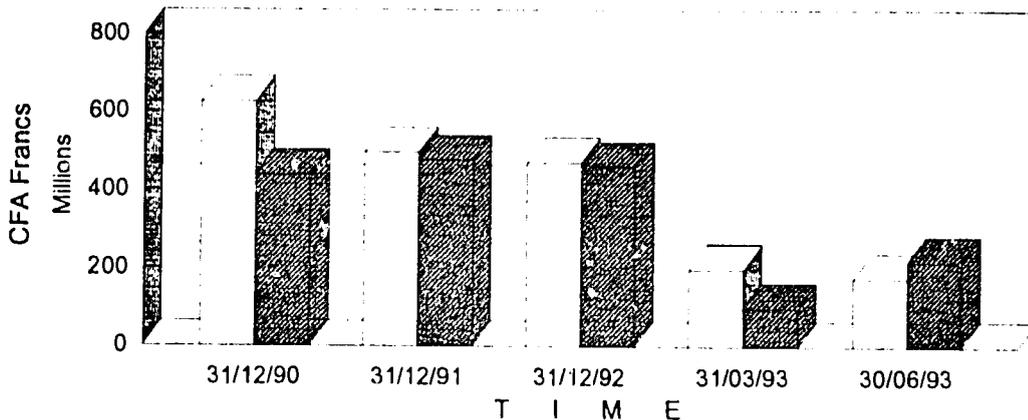


Operating Costs
 Cost of Capital
 Net Income

Note: This graph's top line represents the credit union or group's Gross Income

Growth of Income & Expenses

Test Group as at 30/06/93

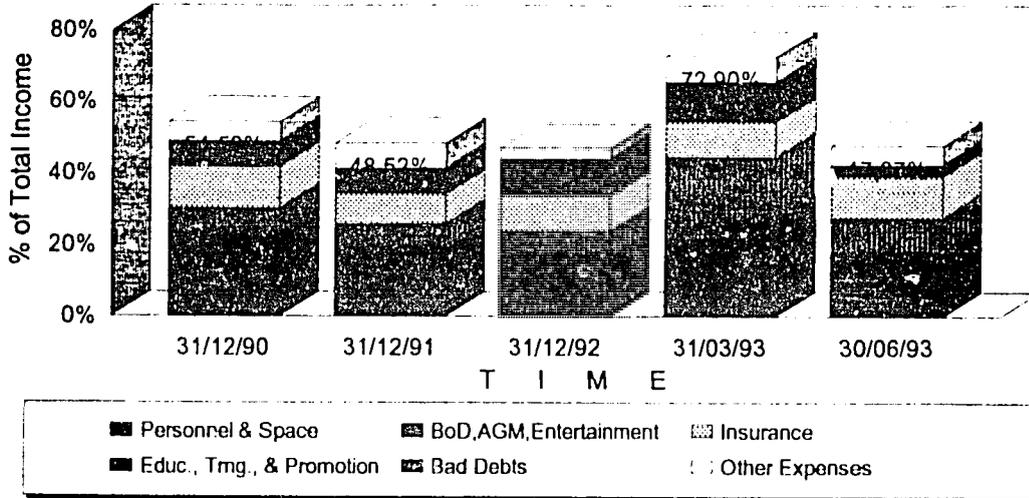


Total Expenses
 Total Income

20/04/94

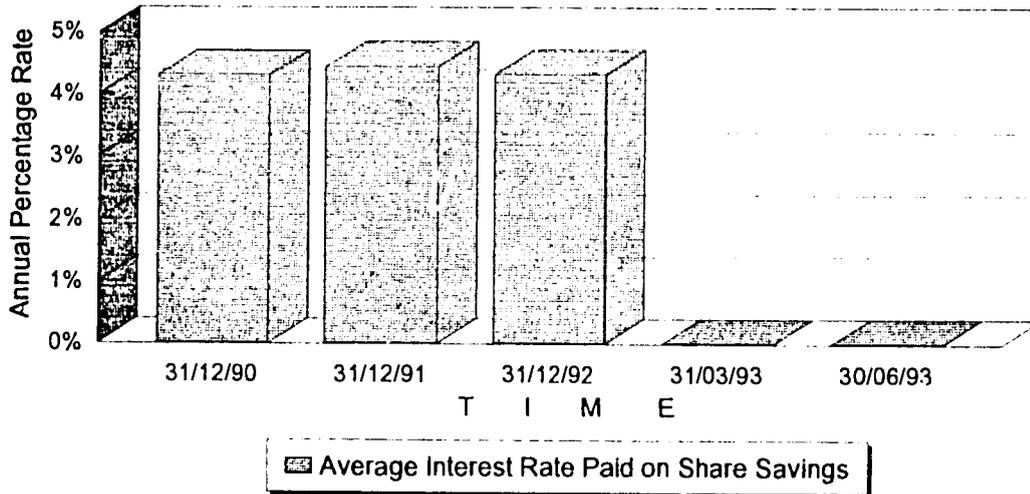
Operating Costs to Total Income Ratios

Test Group as at 30/06/93



Interest Rates Paid on Member Savings

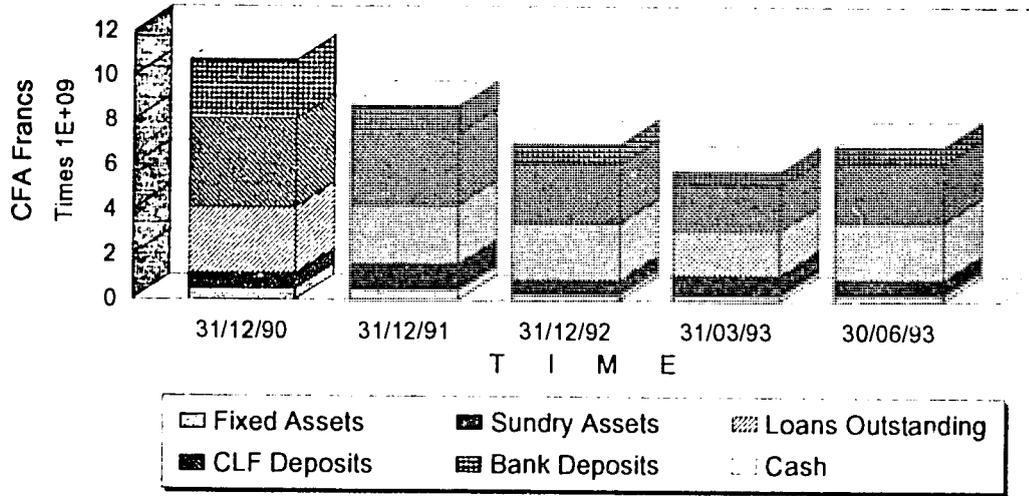
Test Group as at 30/06/93



20/04/94

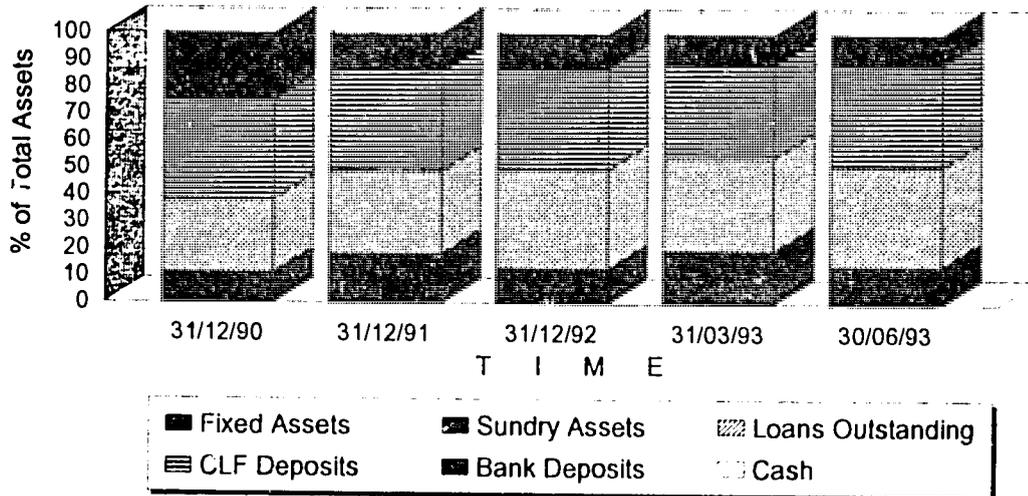
Asset Composition over Time

Test Group as at 30/06/93



Relative Asset Composition over Time

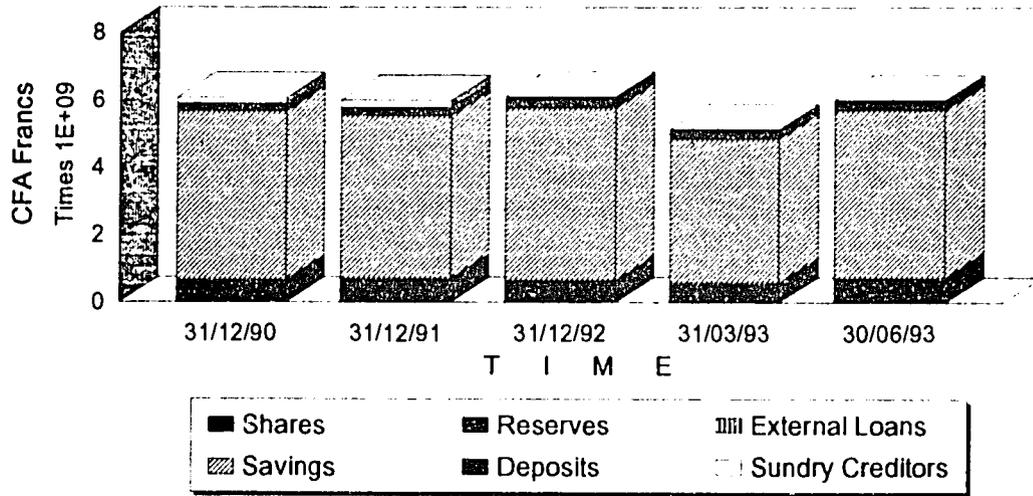
Test Group as at 30/06/93



20/04/94

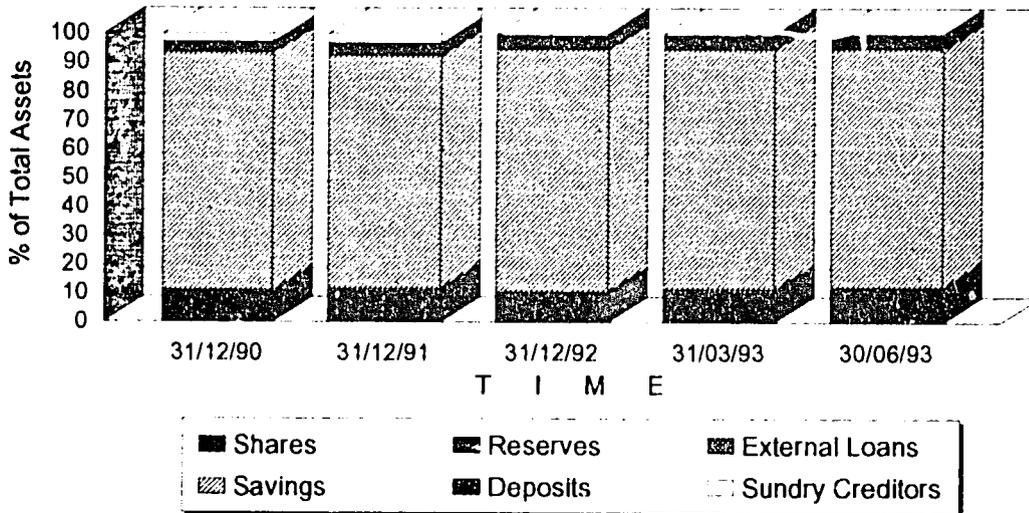
Composition of Liabilities & Capital Over Time

Test Group as at 30/06/93



Relative Composition of Liabilities & Capital Over Time

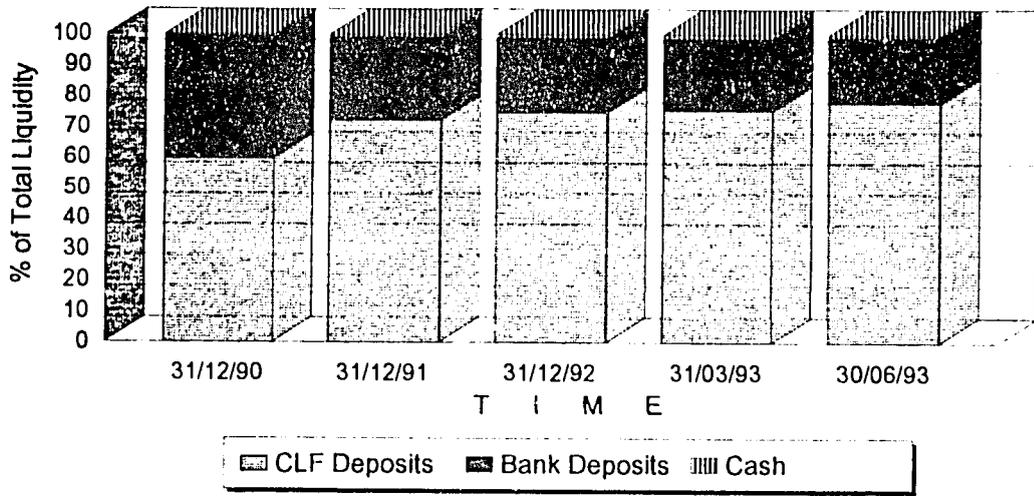
Test Group as at 30/06/93



20/04/94

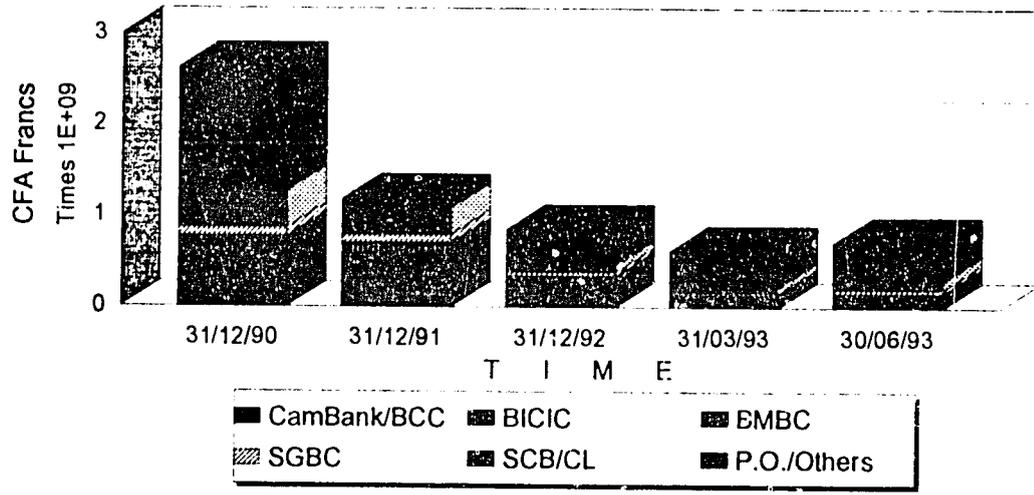
Relative Composition of Liquidity Over Time

Test Group as at 30/06/93



Bank Deposits Over Time by Financial Institution

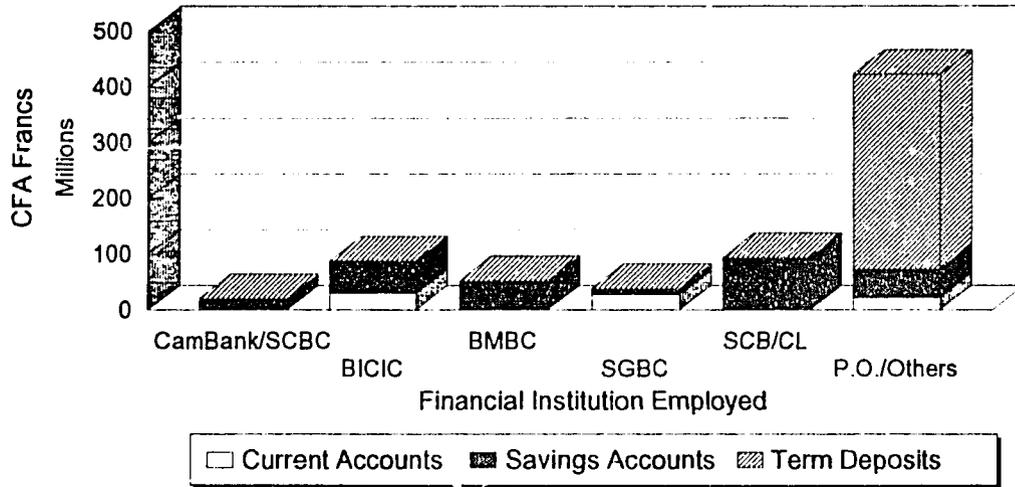
Test Group as at 30/06/93



20/04/94

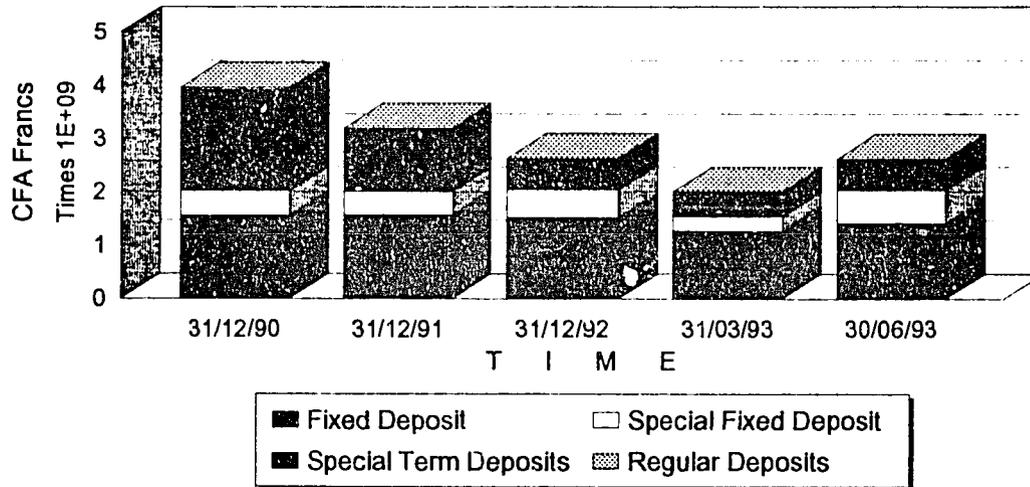
Types of Bank Accounts Held

Test Group as at 30/06/93



League Deposits by Type Over Time

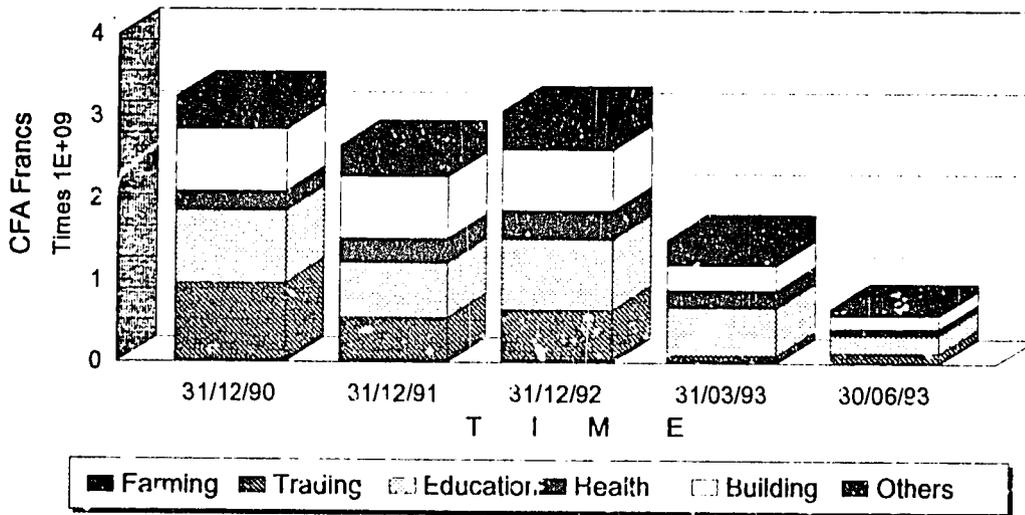
Test Group as at 30/06/93



20/04/94

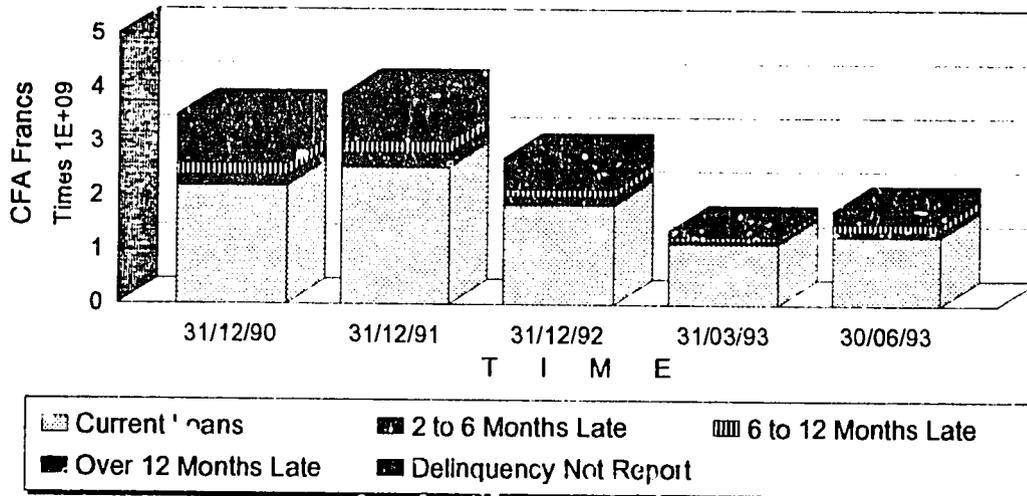
Amount of Loans Granted Over Time by Purpose

Test Group as at 30/06/93



Loan Delinquency Over Time

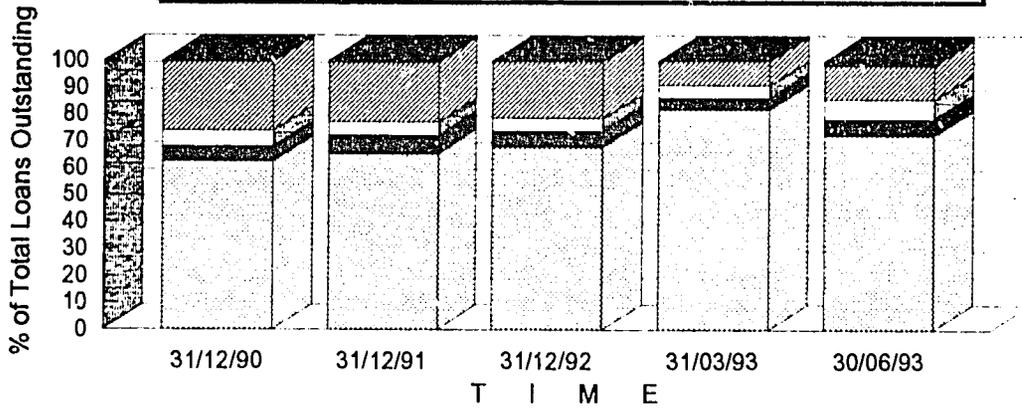
Test Group as at 30/06/93



20/04/94

Relative Loan Delinquency Over Time

Test Group as at 30/06/93

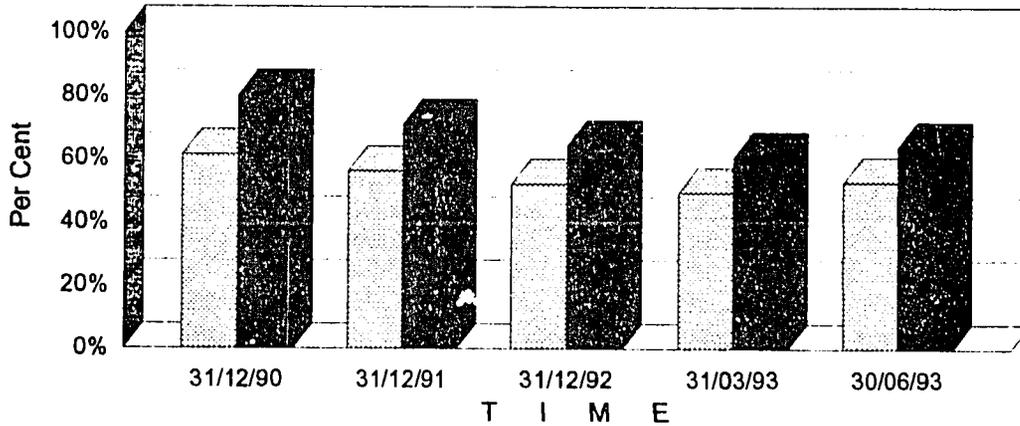


Current Loans
 2 to 6 Months Late
 6 to 12 Months Late

Over 12 Months Late
 Delinquency Not Report

Loans Outstanding to Available Funds Ratios

Test Group as at 30/06/93

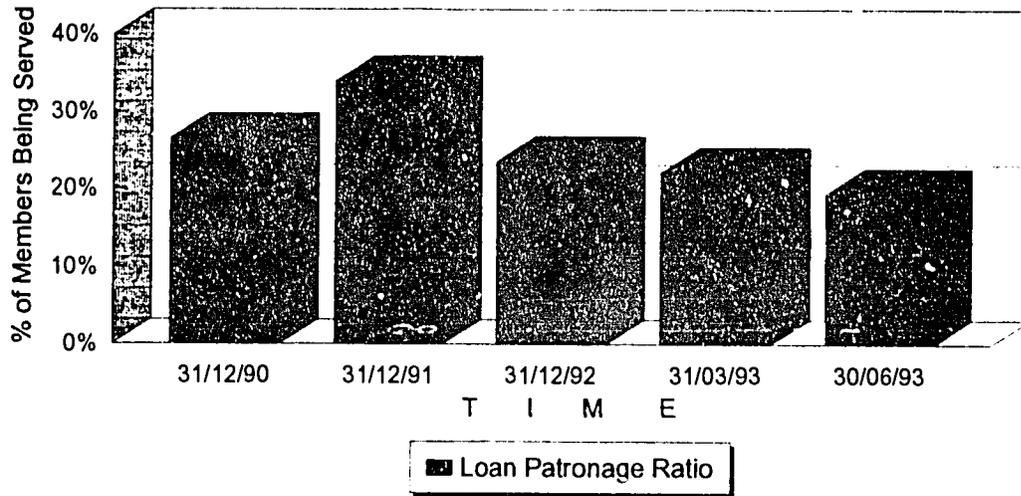


Loans/Share Savings Ratio
 Loans/Loanable Funds Ratio

20/04/94

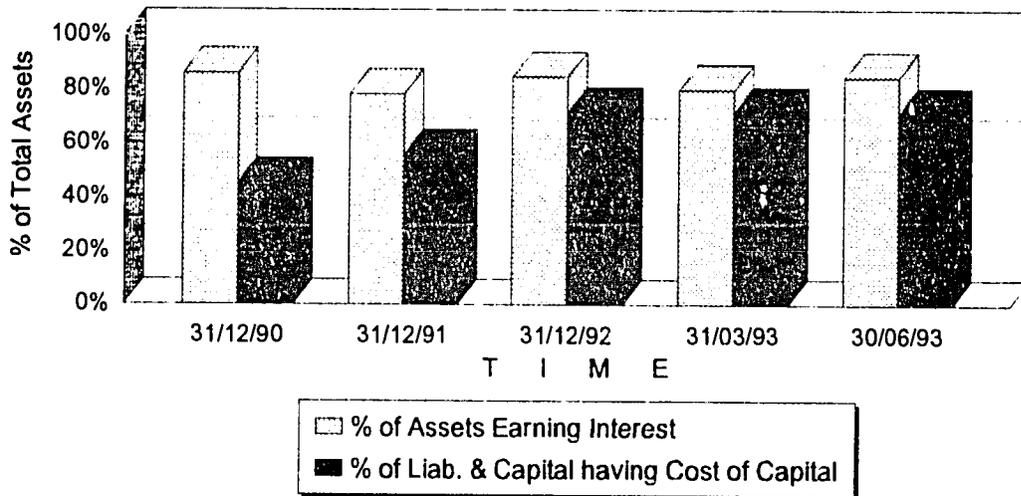
Evolution of Loan Patronage Ratio

Test Group as at 30/06/93



% of Asset & Liability Portfolios Bearing Interest

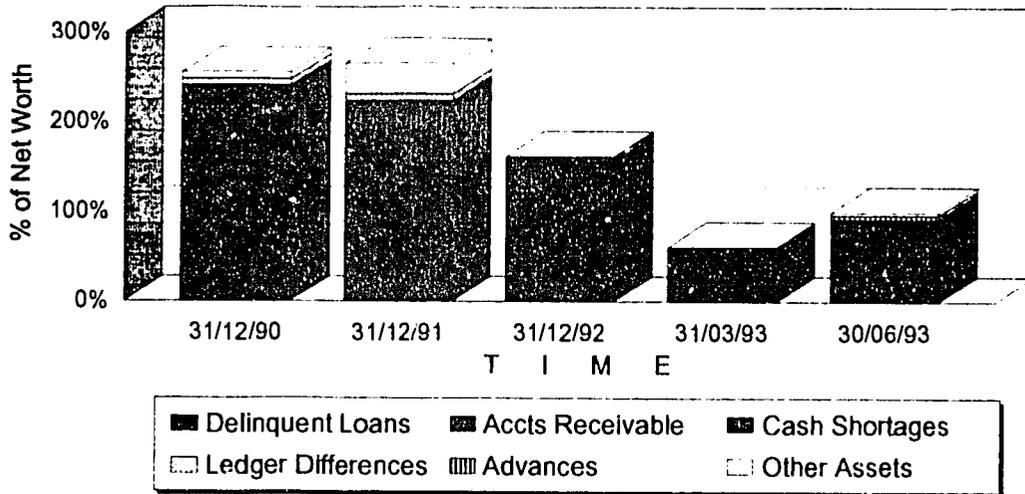
Test Group as at 30/06/93



20/04/94

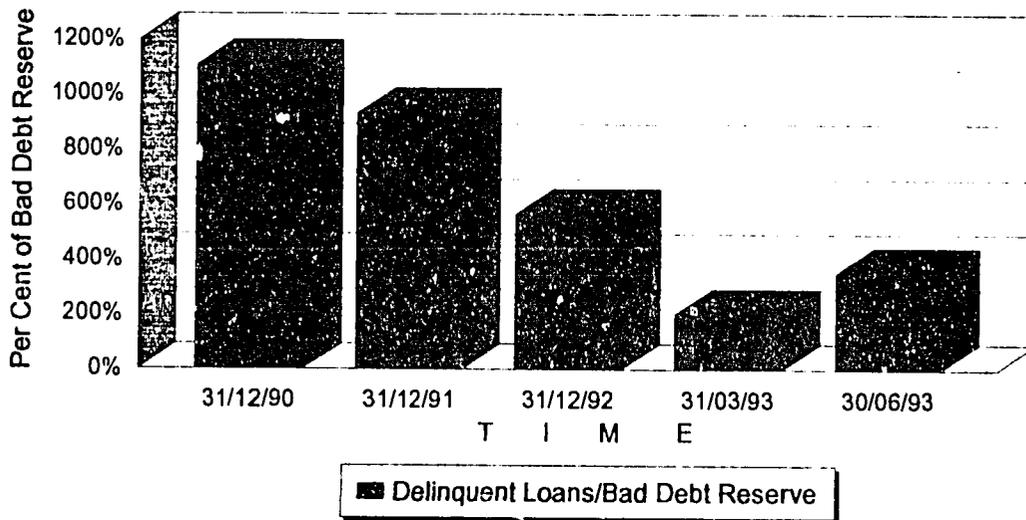
Doubtful Assets/Net Worth Ratio Over Time

Test Group as at 30/06/93



Evolution of Delinquent Loans/Bad Debts Reserve Ratio

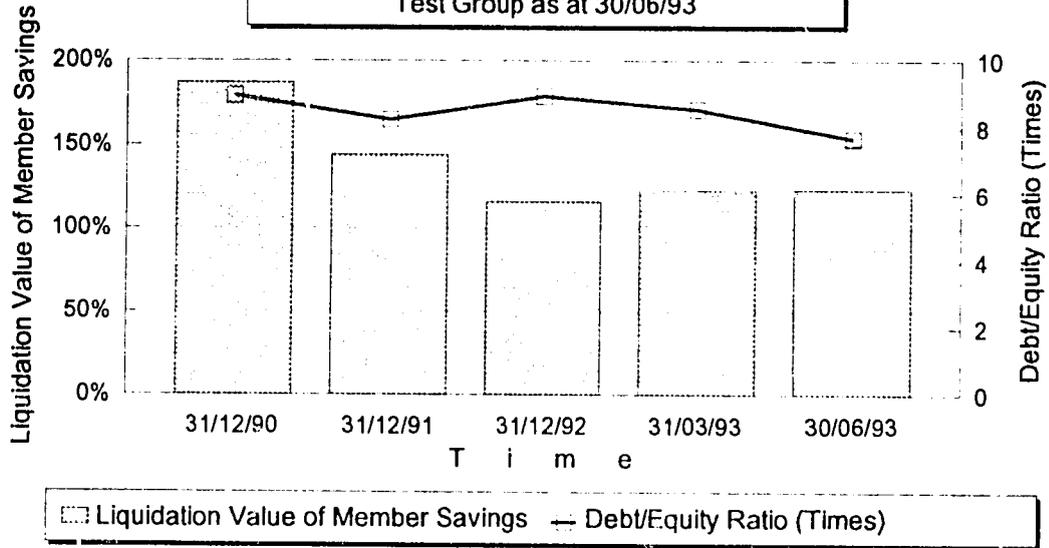
Test Group as at 30/06/93



20/04/94

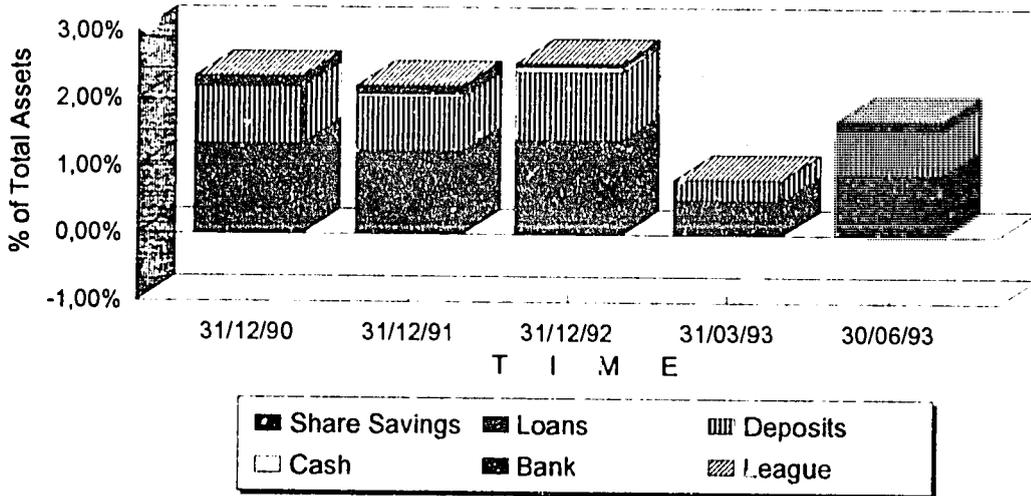
Solvency Ratios over Time

Test Group as at 30/06/93



Ledger Differences Over Time as a % of Assets

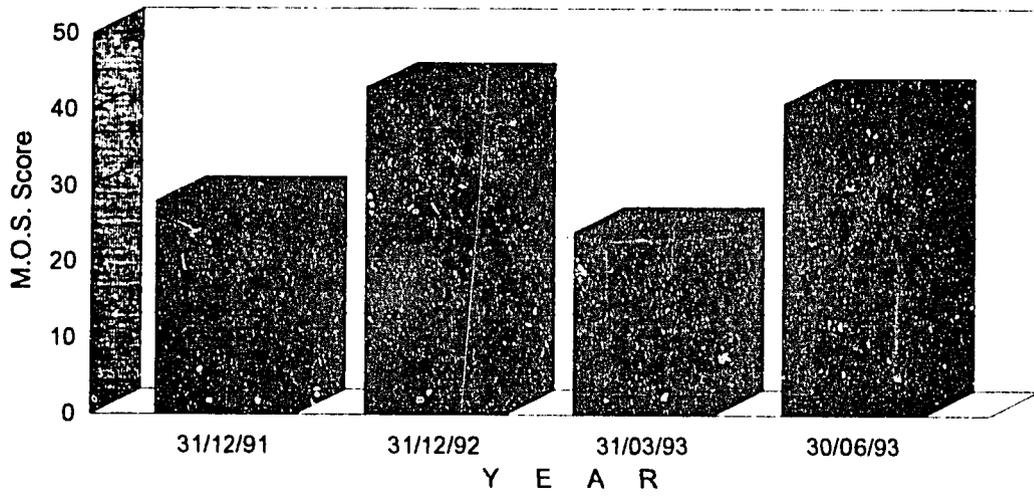
Test Group as at 30/06/93



20/04/94

Evolution of M.O.S. Health Index

Test Group as at 30/06/93



20/04/94

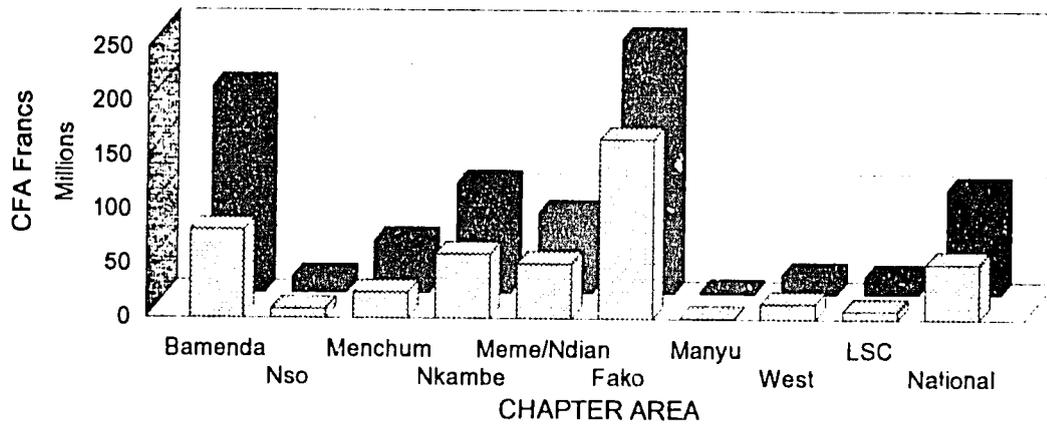
Attachment H-3

Spatial Series for Widely-Distributed Group of CUs

Visualization of Widely-Dispersed CU Group Series

Average Total Savings & Loans per Society

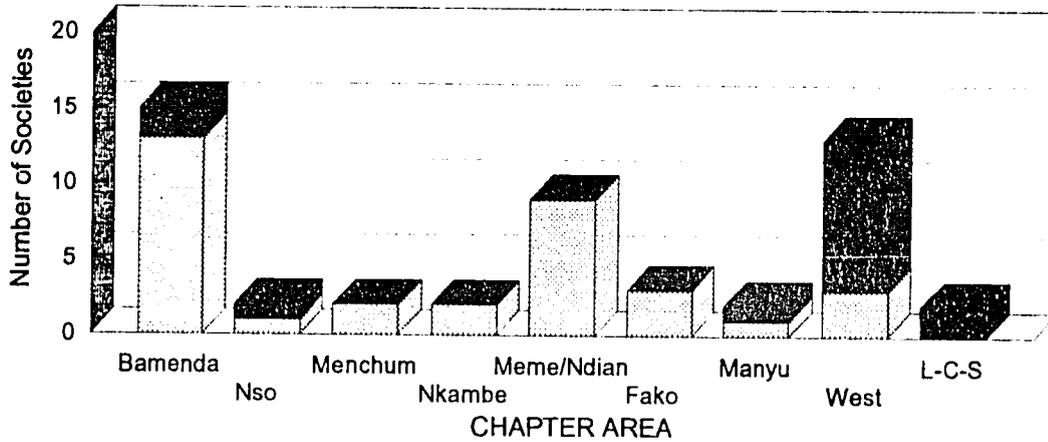
Test Group as at 30/06/93



□ Average Loans Outstanding per CU ■ Average Share Savings per Society

No. of Credit Unions & Discussion Groups by Chapter

Test Group as at 30/06/93

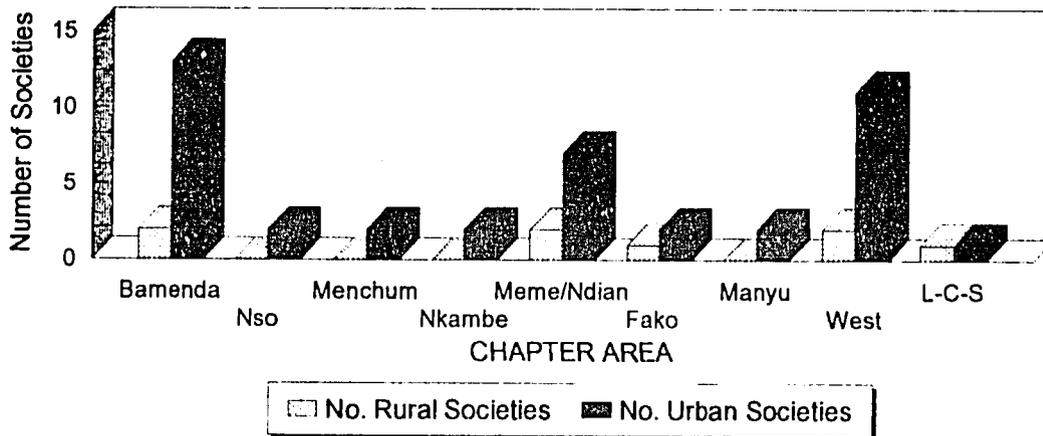


□ No. Credit Unions ■ No. Discussion Groups

20/04/94

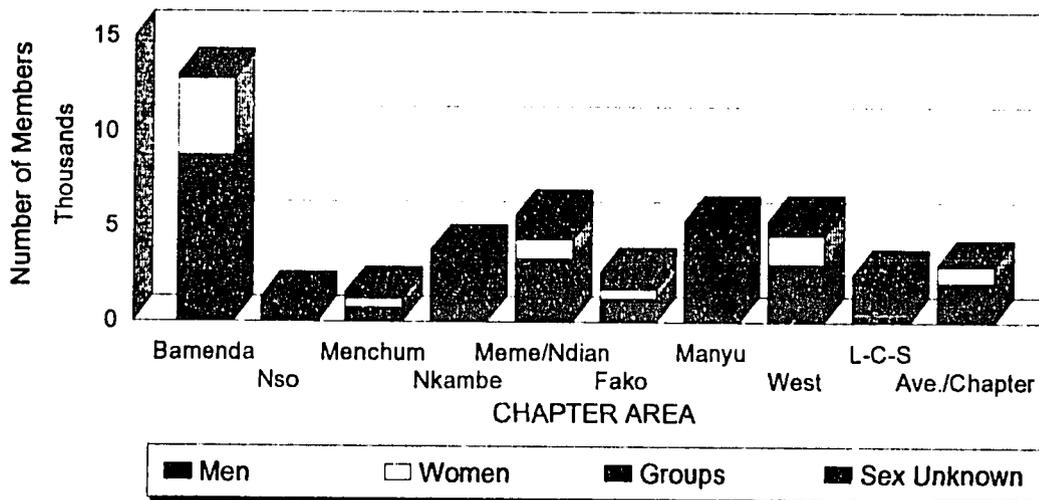
Number of Societies per Chapter by Milieu

Test Group as at 30/06/93



Total Membership by Chapter and by Gender

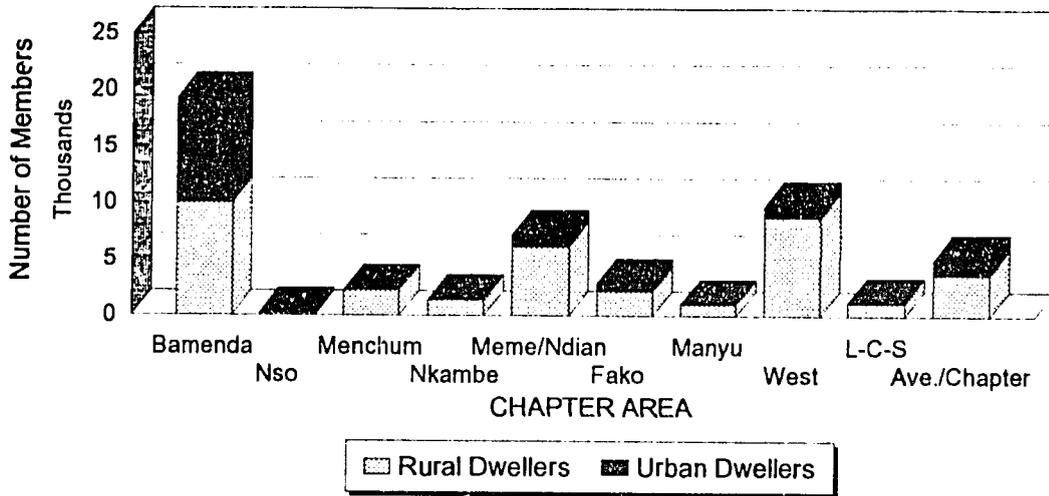
Test Group as at 30/06/93



20/04/94

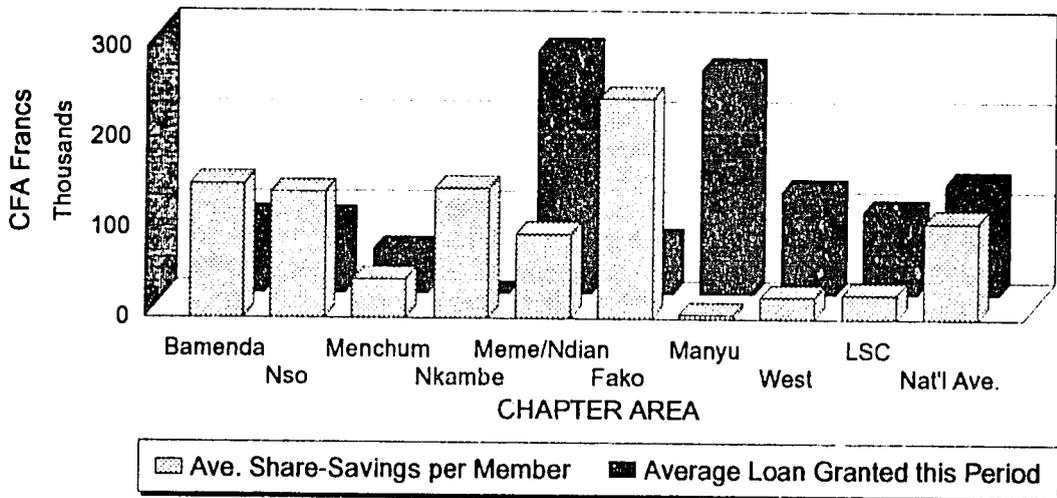
Total Membership by Chapter and by Milieu

Test Group as at 30/06/93



Average Account Size by Chapter

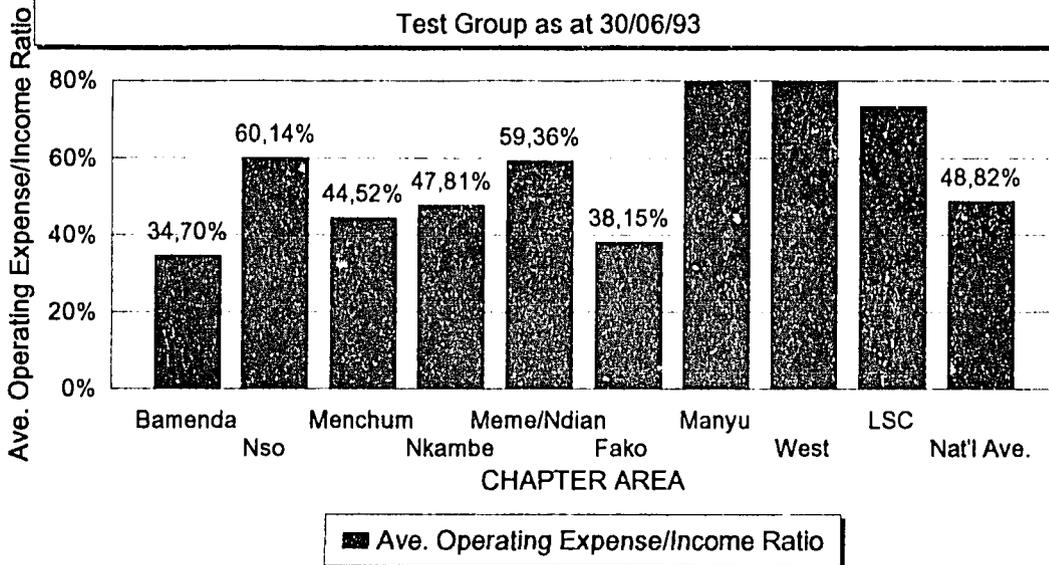
Test Group as at 30/06/93



20/04/94

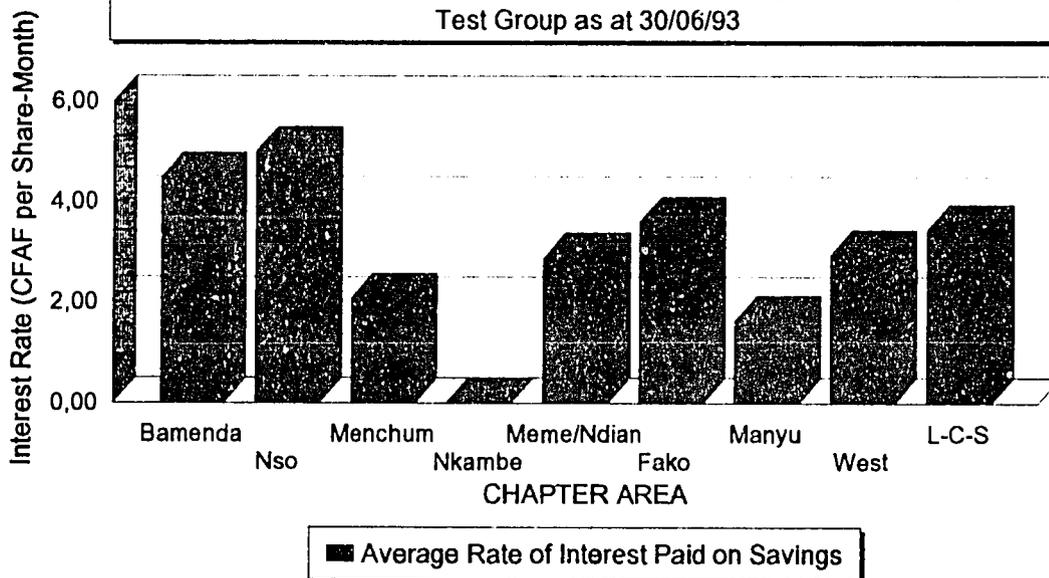
Operating Expenses/Income Ratios by Chapter

Test Group as at 30/06/93



Average Rates of Interest Paid on Savings per Chapter

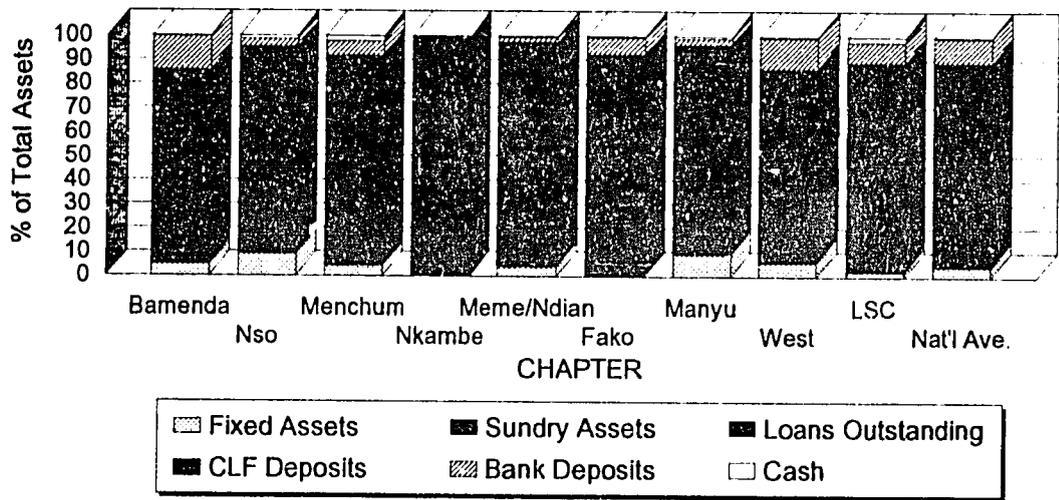
Test Group as at 30/06/93



20/04/94

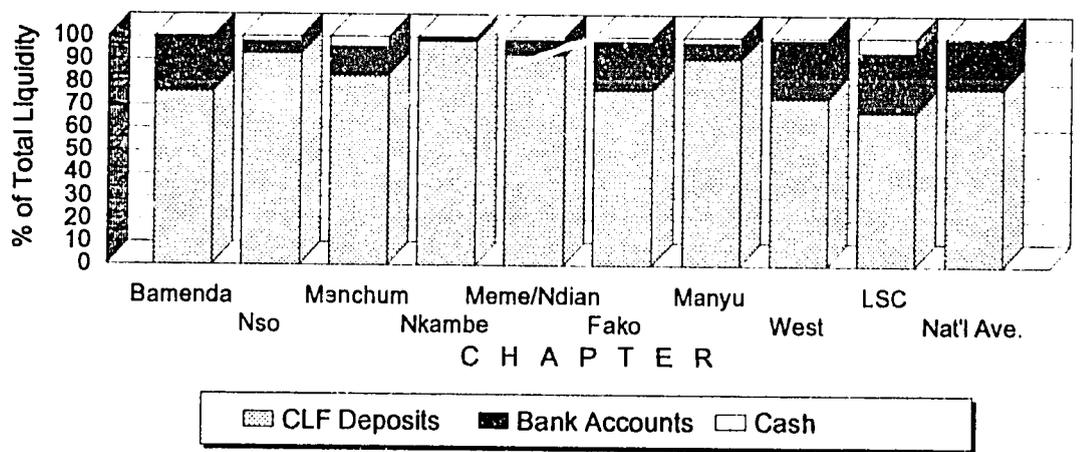
Relative Asset Composition by Chapter

Test Group as at 30/06/93



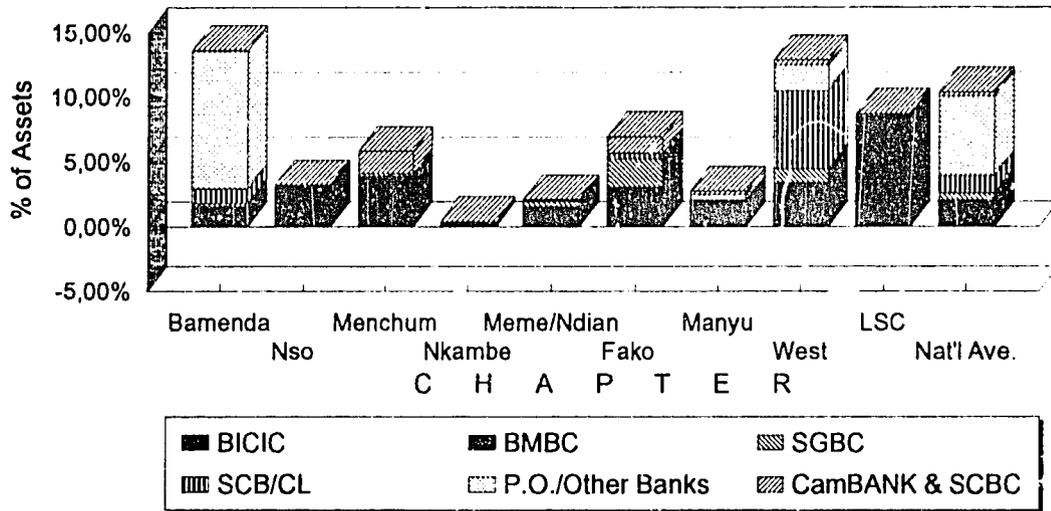
Relative Composition of Liquidity by Chapter

Test Group as at 30/06/93

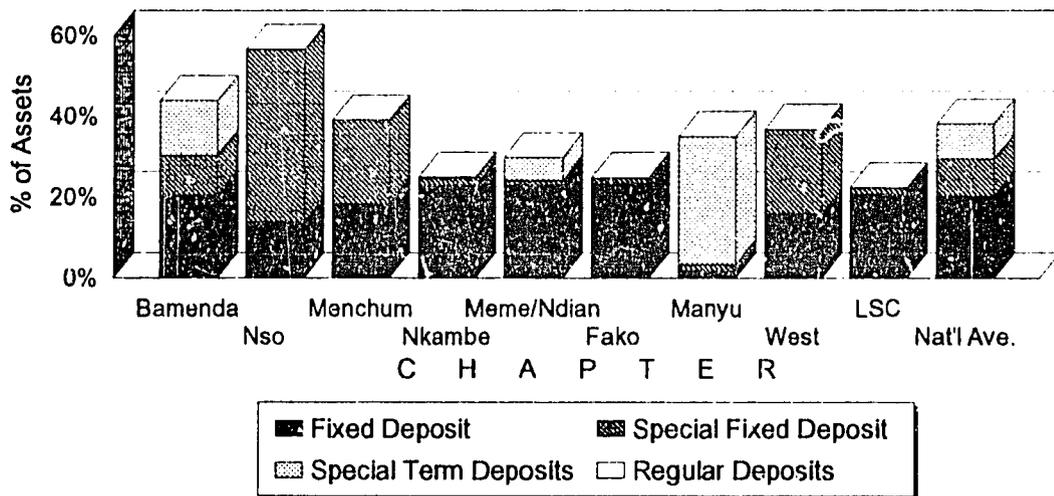


20/04/94

Bank Deposits by Financial Institution & Chapter
Test Group as at 30/06/93



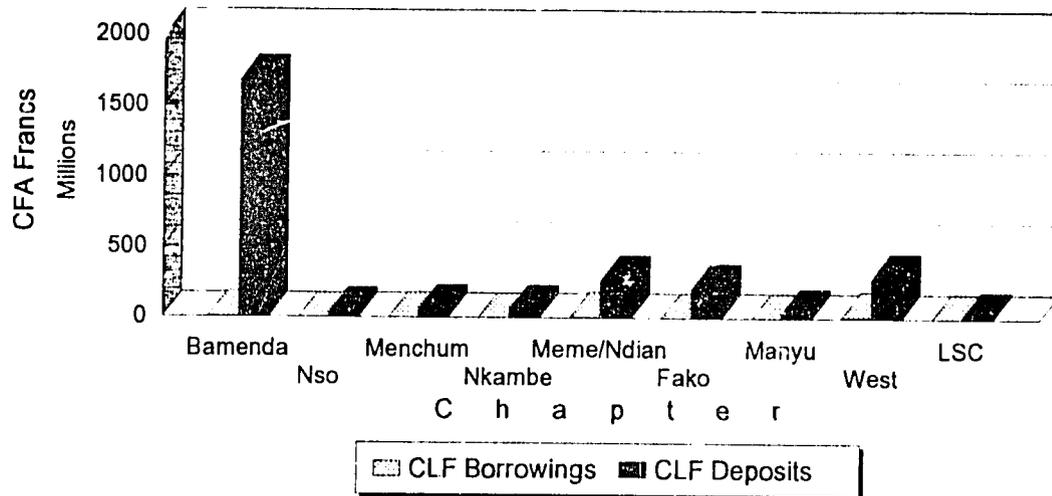
League Deposits by Account Type and Chapter
Test Group as at 30/06/93



20/04/94

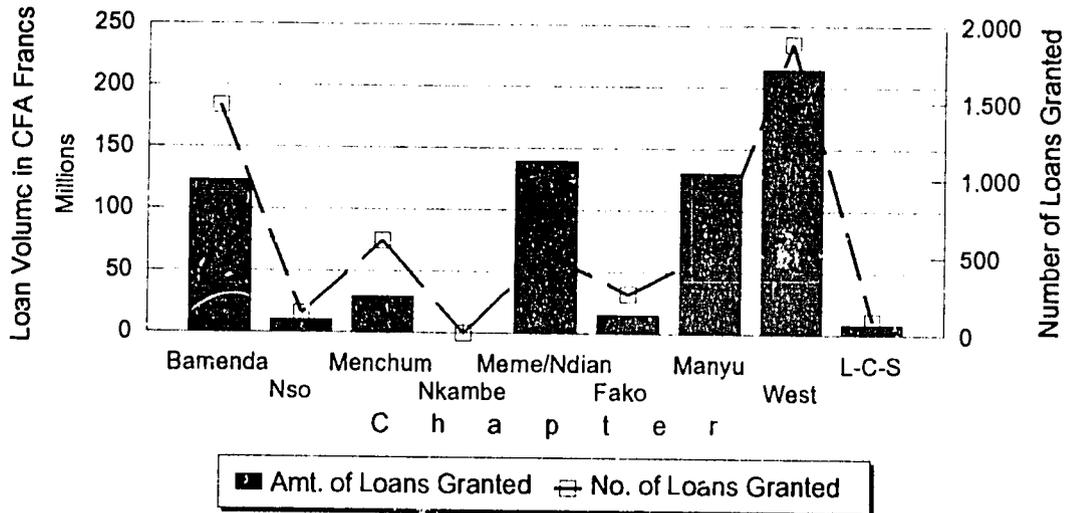
CLF Deposits & Loans by Chapter

Test Group as at 30/06/93



Number & Amount of Loans Granted

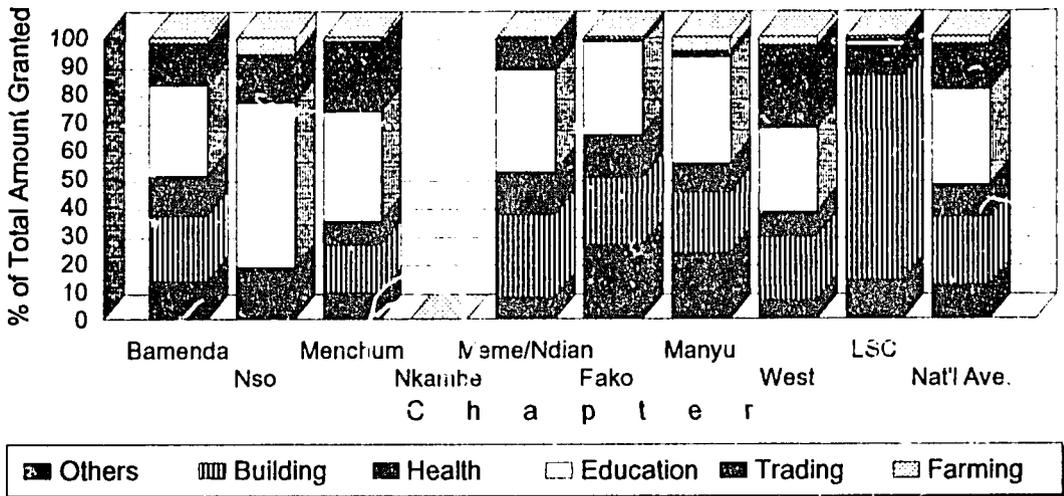
Test Group as at 30/06/93



20/04/94

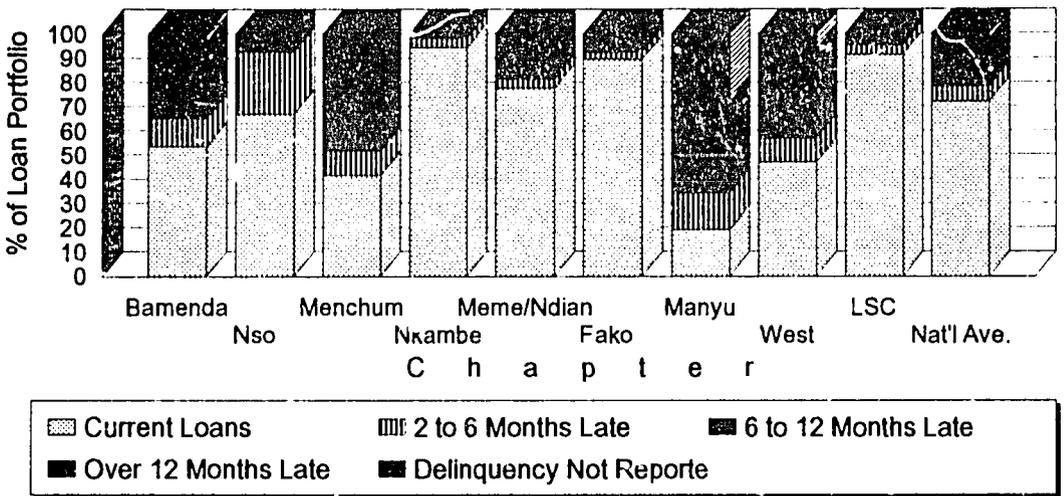
Amount of Loans Granted by Chapter & Purpose

Test Group as at 30/06/93



Loan Delinquency by Chapter

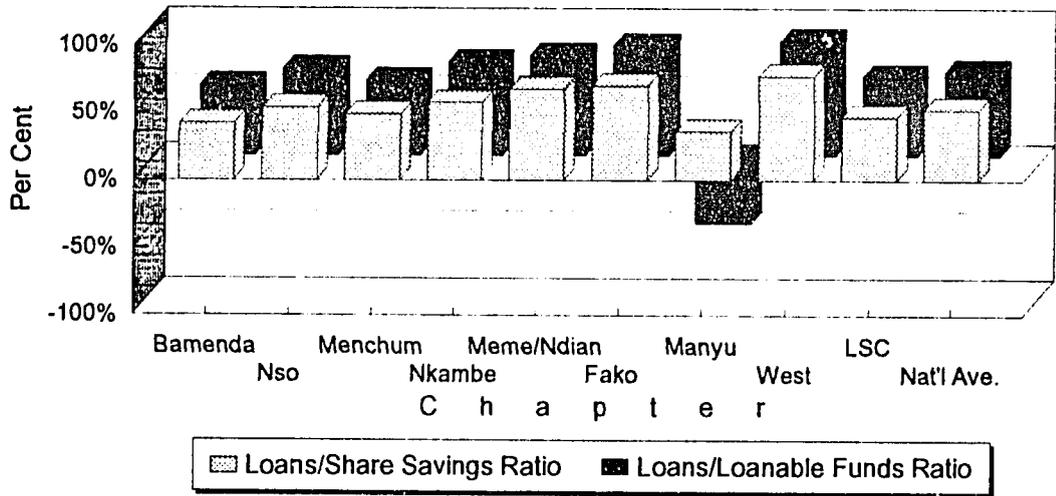
Test Group as at 30/06/93



20/04/94

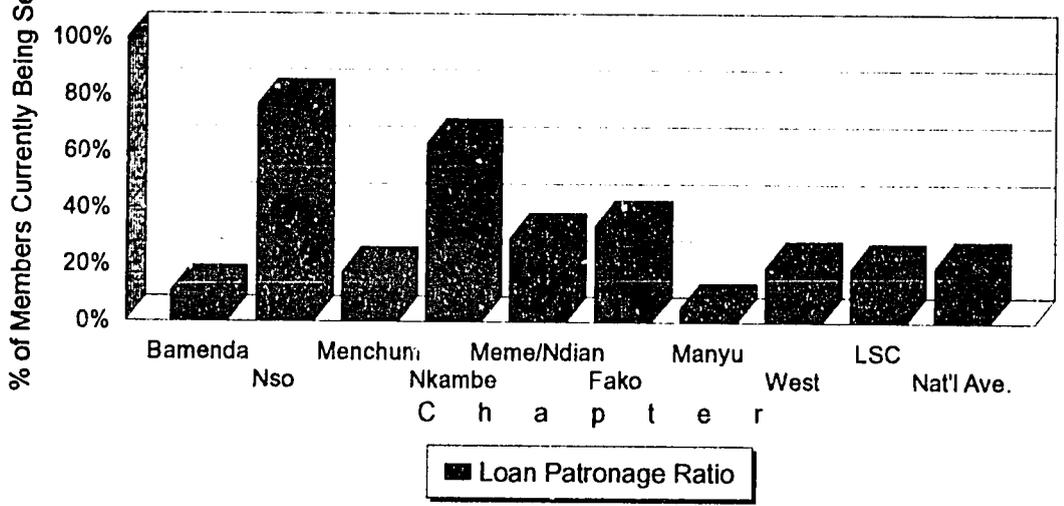
Loans Outstanding to Available Funds Ratios

Test Group as at 30/06/93



Loan Patronage Ratio by Chapter

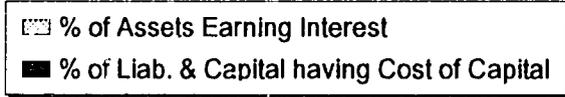
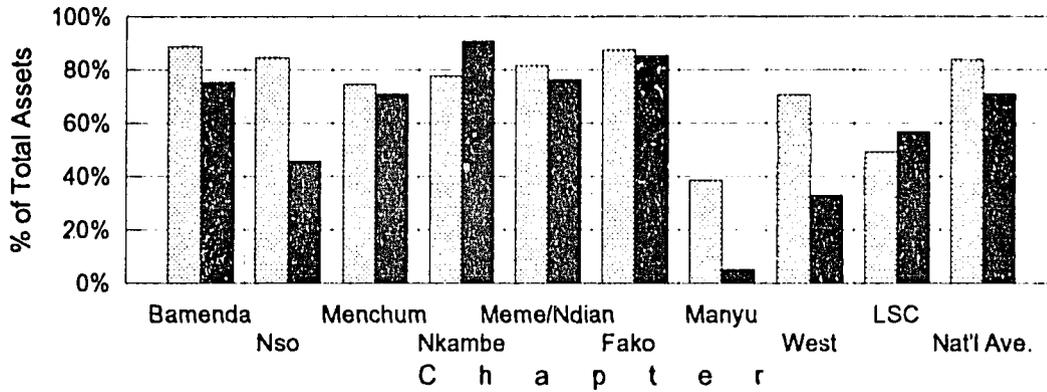
Test Group as at 30/06/93



20/04/94

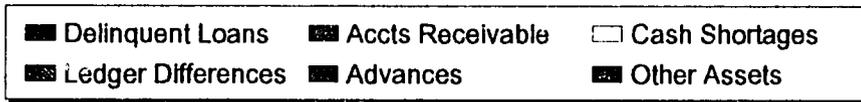
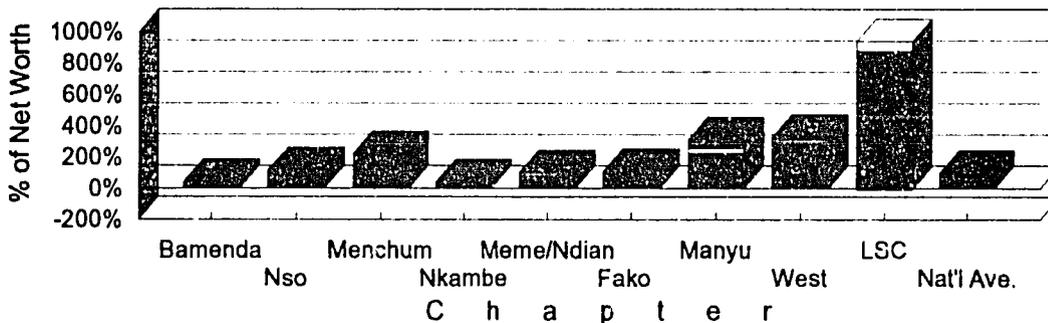
% of Asset & Liability Portfolios Bearing Interest

Test Group as at 30/06/93



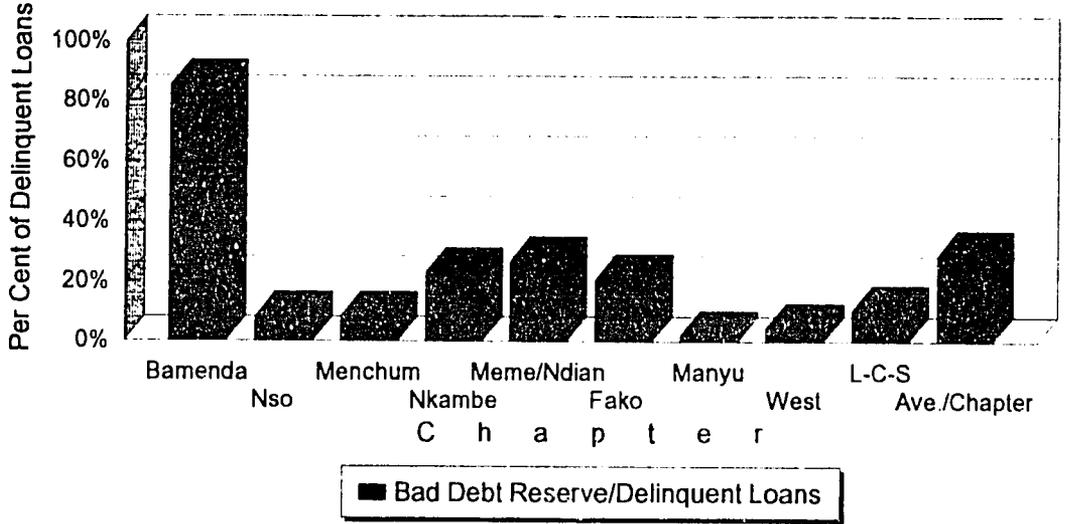
Doubtful Assets/Net Worth Ratio By Chapter

Test Group as at 30/06/93

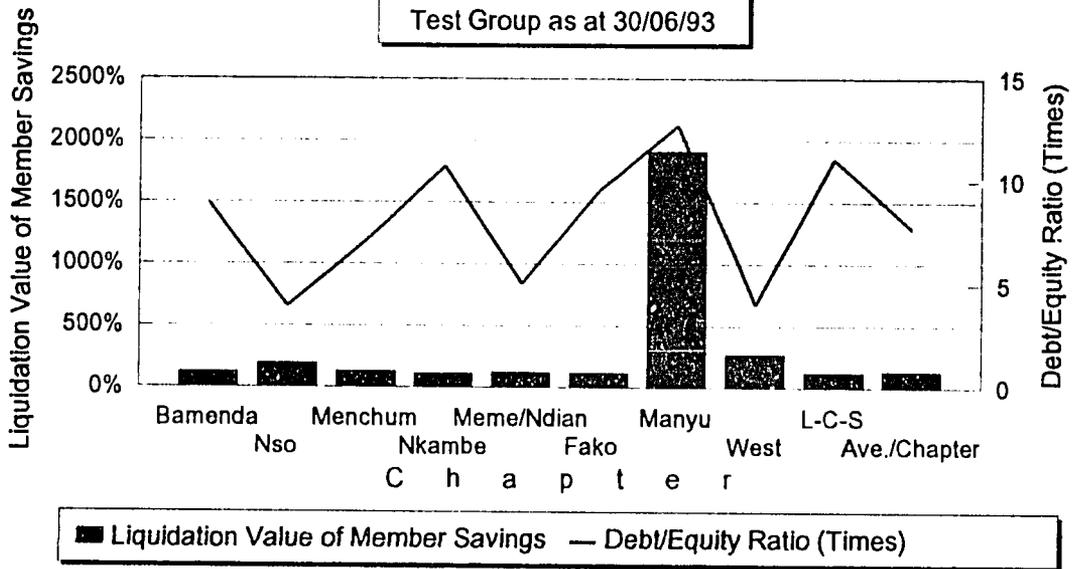


20/04/94

Bad Debts Reserve/Delinquent Loans Ratio by Chapter
 Test Group as at 30/06/93



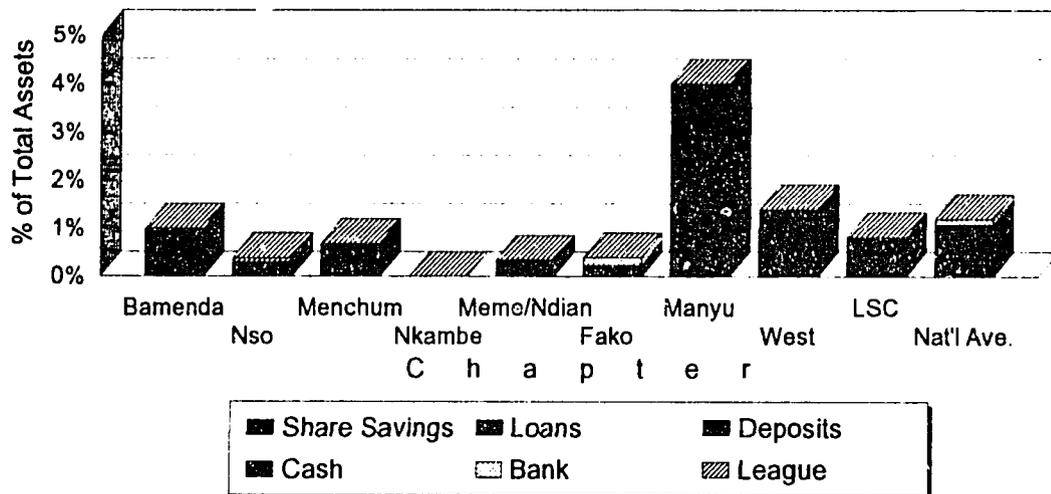
Solvency Ratios
 Test Group as at 30/06/93



20/04/94

Ledger Differences by Chapter as a % of Assets

Test Group as at 30/06/93



20/04/94

Attachment I

**Definition and Description of MOS and Other
CUdBASE Performance Indicators**

Attachment J

Definition and Description of MOS and Other CUdBASE Performance Indicators

The following describes the formulas and rationale behind all the ratios and other indicators employed in CUdBASE's various reports and charts. It is based on WOCCU's PEARLS⁵ credit union monitoring and rating system developed in Central America (originally in Spanish using the acronym PERLAS). While many different approaches exist for categorizing the different ratios used by financial analysts, notably the American CAMEL system, CamCCUL prefers PEARLS over CAMEL, primarily because CAMEL completely neglects *growth* as an important factor in credit union performance. Some argue that if a credit union has a high score on the C, A, M, E, and L elements, growth will automatically take care of itself. This document will not settle that argument, but will hopefully represent one small step toward better approaches to managing the worldwide credit union movement. Each indicator will be presented in its section by a formula and by a brief indication of its meaning and/or interpretation.

PROTECTION:

Protection primarily refers to the credit union's current degree of solvency, and its likely ability to weather economic hard times in case of slowdowns or unexpected losses. As such, the amount of built-up reserves, particularly vis-à-vis delinquent loans, is a prime consideration.

The first ratio in this group is the delinquent loans to bad debt reserves ratio. Since half or more of most loan portfolios is covered by the borrowers' and comakers' savings, the entire amount of delinquency will generally not be totally lost, so a ratio in the neighborhood of 200% to 300% is probably healthy, but as with many performance indicators, the current level is not half as important as its *trend*.

$$\frac{\text{Delinquent Loans}}{\text{Bad Debt Reserves}} \text{ Ratio} = \frac{\text{Total Amount of Delinquent Loans}}{\text{Bad Debt Reserves}} \times 100\%$$

⁵ P for Protection, E for Earnings or profitability, A for Asset Quality, R for Rates of Growth, L for Liquidity, and S for Financial Structure.

The next "protection" indicator is the ratio of delinquent loans to the credit union's net worth. It is similar to the first ratio, but broadens the denominator to include the credit union's entire capital position. For the same reasons evoked in the first ratio, a score of 100% or less, while desirable, is usually unrealistic, and scores anywhere between 100% and 150% should be considered normal.

$$\frac{\text{Delinquent Loans}}{\text{Net Worth}} \text{ Ratio} = \frac{\text{Total Amount of Delinquent Loans}}{\text{Member Shares} + \text{Reserves} + \text{Accumulated Surplus}} \times 100\%$$

The next ratio is similar to the last, except that this time the numerator has been expanded to include ALL risk assets. By risk assets, one refers to total delinquent loans plus the total (absolute) value of unreconciled ledger differences, doubtful accounts and junk assets (for which the eventual conversion into cash is in considerable doubt) in general. A score of 100% to 200% is typical, and becomes more and more worrisome the higher the ratio gets.

$$\frac{\text{Risk Assets}}{\text{Net Worth}} \text{ Ratio} = \frac{\text{Delinquent Loans} + \text{Ledger Differences} + \text{Other Doubtful Accounts}}{\text{Member Shares} + \text{Reserves} + \text{Accumulated Surplus}} \times 100\%$$

Another way of approaching the question of protection of members' funds is to compare the society's net worth to its total liabilities using, to employ the usual term, the debt/equity ratio. Note that this ratio is not a percentage. It has traditionally been measured in "times". A range of 5 to 8 times can be considered healthy.

$$\text{Debt/Equity Ratio} = \frac{\text{Member Savings} + \text{Deposits} + \text{Other Liabilities}}{\text{Member Shares} + \text{Reserves} + \text{Accumulated Surplus}}$$

The final indicator in this section is the Liquidation Value of Share-Savings. This indicator attempts to answer the question, "If the credit union were liquidated today, what percentage of members' paid-in share-savings could be returned to them?" Obviously, credit unions, like any financial institution, should be able to return ALL the members' share-savings to them. In reality, because this ratio makes the conservative assumption that all delinquent loans and other doubtful assets are absolutely worthless, when in fact much of the delinquent loan portfolio and other junk assets will probably be at least partially recovered. The ratio is, hence, a *floor*

below which we're fairly certain a failing credit union is unlikely to descend. Because of the indicator's conservative basis, scores from 90% up can be considered fairly healthy.

$$\text{Liquidation Value of Member Share-Savings} = \frac{\text{Total Assets} - \text{Delinquent Loans} - \text{Other Doubtful Accounts} - \text{League Loans} - \text{Other Liabilities}}{\text{Total Member Share-Savings}} \times 100\%$$

EARNINGS:

The second category of performance indicators basically attempt to find out whether the credit union is generating sufficient levels of income to cover the full cost of providing necessary services to members. The term "earnings" is equivalent to "profitability." The first five indicators form an ensemble, that is, they go together to make what credit union financial analysts call "Spread Analysis" or "Margin Analysis". Here, the approach is to relate the principal income and expense accounts to the average assets for the year. Each of the following five "earnings elements" are thus divided by average assets and annualized (converted to annual rates for comparison purposes for periods of less than 12 months):

1. Total (Gross) Income
2. Cost of Capital (Dividends plus interest paid)
3. Gross Spread (#1 less #2)
4. Operating Costs & Provisions
5. Net Income (Net Spread) = #3 less #4

The formula used to calculate this suite of indicators is as follows::

$$\text{Standard Spread Element Formula} = \frac{\text{Individual Spread Element}}{\left(\frac{\text{Beginning Total Assets} + \text{Ending Total Assets}}{2} \right)} \times \frac{365}{\text{Period Elapsed (days)}} \times 100\%$$

To use the formula, just substitute each of the five elements into the equation, and solve. In principle, to get the best results, we should use the average of beginning total assets for each month in the "period", but in reality, CUdBASE must estimate this more complete average by using an average of beginning and ending figures. The greater the seasonal variation in asset size and composition, the greater the distortion will be.

Gross income should be between 10% and 16%, depending on the loans/assets ratio (see below), the nominal lending rate, and the degree to which interest due on loans is actually collected. Cost of capital should generally approximate what other financial institutions pay on savings. Gross spread, then, depends on cost of capital, but should be fairly constant over time, as should indicator four, and net income (additions to net worth) should be at least 1%, and hopefully 2% per year. Generally, credit unions with low operating costs (worker societies where the employer covers many costs) and provisions should have low interest rates on loans (and hence return on assets), while smaller (mostly community-based) credit unions with high fixed costs (relative to assets) should have much higher interest rates on loans and returns on assets. Lending rates should be as high as 24% in small credit unions and no less than 12% in large societies with economies of scale, and the gross rate of return on assets (individual element No. 1 above) should be slightly less than that. Medium-sized credit unions would be somewhere in the middle.

The next Earnings indicator is generally calculated at the same time as the spread analysis, since it has a major impact on the analysis' results. The question is, what is the rate of return on loans vis-à-vis the nominal rate of interest charged member borrowers. The formula, too, is very similar:

$$\text{Gross Yield on Loans} = \frac{\text{Interest RECEIVED on Loans}}{\left(\frac{\text{Beginning Loans Outstanding} + \text{Ending Loans Outstanding}}{2} \right)} \times \frac{365}{\text{Period Elapsed (days)}} \times 100\%$$

One of CamCCUL's traditional MOS Earnings measures, the "Gross Return on Working Assets," is similar, too:

$$\text{Gross Return on Working Assets} = \frac{\text{Total (Gross Earned) Income}}{\left(\frac{\text{Beginning Working Assets} + \text{Ending Working Assets}}{2} \right)} \times \frac{365}{\text{Period Elapsed (days)}} \times 100\%$$

Working Assets include all assets earning interest or otherwise directly producing income such as rents or store sales. Generally, fixed assets, stocks of office supplies, and accounts receivable would not be considered working assets. The result should, because of its smaller denominator, be slightly higher than spread analysis formula No. 1.

Another MOS Earnings indicator is the ratio of net income to share-savings. Again, because of the generally smaller denominator, it is a little higher than the spread analysis formula 5 above.

$$\text{Net Income / Share-Savings Ratio} = \frac{\text{Net Income for Year}}{\text{Year-End Total Share-Savings}} \times 100\%$$

The last Earnings indicator, the widely-used Expense/Income Ratio, or simply "Expense Ratio", varies widely, particularly depending on economies of scale enjoyed by large societies or lower expenses of workplace credit unions. It is, then, of limited use in comparing credit unions, but is useful to track in a particular credit union, to make sure it declines or at least stays constant over time as the credit union grows. A gross rule of thumb is that this indicator should generally be less than 50%, since beyond that point a credit union generally has difficulty paying competitive interest rates on members' share-savings.

$$\text{Expense Ratio} = \frac{\text{Total Operating Expenses for Year}}{\text{Total (Gross) Income for Year}} \times 100\%$$

ASSET QUALITY:

This PEARLS component attempts to measure the degree to which the asset values shown on the credit union's balance sheet reflect real values, or whether they should be discounted. In particular, this section critically examines credit unions' usual biggest asset, loans to members.

The first two Asset Quality indicators are generally known as loan delinquency rates. One measures seriously overdue loans, while the other looks at overall delinquency. It's difficult to give targets here, but surely delinquency over 15% to 20% is cause for great alarm. The two delinquency rate formulas are as follows:

$$\frac{\text{Long-Term Delinquency Rate}}{\text{Rate}} = \frac{\text{Loans Delinquent } \geq \text{ One Year}}{\text{Total Loans Outstanding}} \times 100\%$$

$$\frac{\text{Overall Delinquency Rate}}{\text{Rate}} = \frac{\text{All Delinquent Loans}}{\text{Total Loans Outstanding}} \times 100\%$$

In both cases, the numerator contains the delinquent borrowers' *balances*, not just the overdue installments. Thus, for example, for a member three installments in arrears, the entire remaining balance is shown as three months delinquent.

Sometimes through shame, incompetence or dishonesty, credit union managers do not report the true levels of delinquency. The next two indicators attempt to spot such "covered up" loan delinquency. The first of the two, the loan turnover rate, is another measure that is not shown in percentages, but rather in "times." Just as a retailer calculates his merchandise inventory turnover by dividing cost of goods sold by average inventory, so a credit union's turnover rate is:

$$\text{Annual Loan Turnover Rate} = \frac{\text{Loans Granted During Period}}{\left(\frac{\text{Beginning Loans Outstanding} + \text{Ending Loans Outstanding}}{2} \right)} \times \frac{365}{\text{Period Elapsed (days)}}$$

If the loan turnover rate is declining sharply, it may indicate rising (but hidden, unreported loan delinquency). When loan repayments slow down, the credit union has less cash flow and hence cannot grant as many loans as before. A decreasing loan turnover rate, accompanied by a rising value of the next indicator, the "Average Effective Repayment Period", if not confirmed by rising *reported* loan delinquency, is probably proof enough to make CamCCUL conduct a spot inspection of the credit union's loan portfolio. The Average Effective Repayment Period indicator asks the question, "If members continue to repay their loans at the rate of the recent past, and there were no new loans granted, how long would it take for the entire loan portfolio to be completely paid off?" If the credit union's loan policy forbids loans greater than, say, 18 months, and the value of the indicator starts growing higher than that, true delinquency is almost certainly rising, unless the reported amount of loans granted during the period is incorrect. The latter figure is important because the indicator's denominator, the amount of loans repaid during the period, is calculated according to the formula:

$$\left(\begin{array}{c} \text{Loans} \\ \text{Repaid} \\ \text{During} \\ \text{Period} \end{array} \right) = \left(\begin{array}{c} \text{Beginning} \\ \text{Loans} \\ \text{Outstanding} \end{array} \right) + \left(\begin{array}{c} \text{New Loans} \\ \text{Granted} \\ \text{During} \\ \text{Period} \end{array} \right) - \left(\begin{array}{c} \text{Ending} \\ \text{Loans} \\ \text{Outstanding} \end{array} \right)$$

The second surrogate measure of delinquency, measured in months, is calculated according to the following formula:

$$\frac{\text{Average Loan Repayment Period}}{\text{Period}} = \frac{\text{Loans Currently Outstanding}}{\left(\frac{\text{Loans Repaid}}{\text{During Period}} \right)} \times \frac{\text{Period Elapsed (Months)}}{\text{Period}}$$

Another MOS indicator, the patronage ratio, can, like the Loan Turnover Rate, be an indicator of increasing (hidden) delinquency and decreased cash flow coming in to finance new loans:

$$\frac{\text{Patronage Ratio}}{\text{Ratio}} = \frac{\text{Number of Loans Outstanding}}{\text{Total Number of Members}} \times 100\%$$

Another aspect of asset quality is the proportion of assets which are earning interest. Obviously, if a large proportion of a credit union's funds are lying idle in physical cash and non-interest-bearing accounts, the credit union will have a hard time paying a reasonable dividend on share-savings and in covering all of its operating costs. Therefore, the next indicator is:

$$\frac{\text{Earning Assets Ratio}}{\text{Ratio}} = \frac{\text{Amount of Interest-Bearing Assets}}{\text{Total Assets}} \times 100\%$$

This ratio is frequently compared with the next indicator of this group, which at first glance may not seem to belong in this category. However, it has been found statistically in some countries that a low Earning Assets Ratio coupled with a high value with the next indicator were the best early predictors of likely credit union failure. The next ratio is:

$$\frac{\text{Interest-Bearing Liabilities Ratio}}{\text{Ratio}} = \frac{\text{Amount of Dividend/Interest-Bearing Liabilities}}{\text{Total Assets}} \times 100\%$$

The last indicator in this section concerns ledger differences. The numerator of this ratio is the sum of the absolute values of all ledger differences (cash, bank, shares, savings, deposits and loans) regardless of whether the difference is a debit or credit. It thus is fairly conservative. While a very low ratio (1% or less) is certainly a worthwhile target, an intermediate goal is to stabilize or decrease total ledger differences in Francs and, assuming growing savings and assets, declining Ledger Difference Ratios.

$$\frac{\text{Ledger Differences Ratio}}{\text{Ratio}} = \frac{\text{Total Ledger Differences}}{\text{Total Assets}} \times 100\%$$

RATES OF GROWTH:

This section of PEARLS examines the rates of growth of membership and certain key financial aggregates. Annualized rates of growth are calculated for membership, share-savings, Loans Outstanding, Net Worth, Income and Expenses. The formula for calculating each one's annual growth rate is:

$$\text{Annual Growth Rate} = \frac{\left(\begin{array}{c} \text{Ending} \\ \text{Aggregate} \\ \text{Value} \end{array} \right) - \left(\begin{array}{c} \text{Beginning} \\ \text{Aggregate} \\ \text{Value} \end{array} \right)}{\left(\begin{array}{c} \text{Beginning} \\ \text{Aggregate} \\ \text{Value} \end{array} \right)} \times \frac{365}{\left(\begin{array}{c} \text{Period} \\ \text{Elapsed} \\ \text{(days)} \end{array} \right)} \times 100\%$$

As a general rule of thumb, all financial aggregates should be growing by at least the overall inflation rate. Otherwise, the members' savings and the credit union assets are losing real value, and produce less real income.

LIQUIDITY MANAGEMENT:

This PEARLS section examines whether the credit union has too little or too much liquidity, and where that liquidity is maintained. Liquidity management varies widely, depending on whether a credit union is in an urban or rural environment and how close they are to a reputable bank or other financial institution where they can deposit their liquidity. The first two indicators check on the credit union's fixed and other deposits in CamCCUL:

$$\frac{\text{CamCCUL Liquidity Ratio}}{\text{Ratio}} = \frac{\text{Total Fixed Deposits}}{\text{Share Savings}} \times 100\%$$

$$\frac{\text{CLF Deposit Ratio}}{\text{Ratio}} = \frac{\text{Total CLF Deposits}}{\text{Share Savings}} \times 100\%$$

The next liquidity indicator looks at the overall liquidity position of the credit union:

$$\text{Overall Liquidity Ratio} = \frac{\text{Cash} + \text{Bank} + \left(\frac{\text{CLF}}{\text{Deposits}} \right)}{\text{Total Assets}} \times 100\%$$

The final liquidity measure narrows the focus down to only physical cash:

$$\text{Acid Test Ratio} = \frac{\text{Cash}}{\text{Total Assets}} \times 100\%$$

FINANCIAL STRUCTURE:

This last section of the PEARLS analysis examines the equilibrium between certain parts of the balance sheet.

The first measure, the Fixed Assets/Building Fund Ratio, attempts to see whether the credit union has invested too much in buildings and equipment:

$$\text{Fixed Assets Ratio} = \frac{\text{Net Fixed Assets}}{\text{Total Assets}} \times 100\%$$

The next two indicators compare current loans outstanding with funds available for lending. The second one, although more widely used, is a much less precise measure of overall funds use than the first one, particularly if the credit union has borrowed money from the League or other lenders), but in the spirit of fairness, both are presented:

$$\text{Loans/Loanable Funds Ratio} = \frac{\text{Current Total Loans Outstanding}}{\left(\frac{\text{Total Assets} - \text{Fixed Assets}}{\text{Assets}} \right)} \times 100\%$$

$$\text{Loans/Share-Savings Ratio} = \frac{\text{Current Total Loans Outstanding}}{\text{Share-Savings}} \times 100\%$$

The last indicator examines the degree to which the credit union uses member-generated funds or relies more on outside borrowings:

$$\text{External Funds Ratio} = \frac{\text{League Loans} + \text{Other External Loan Balances}}{\text{Share/Savings}} \times 100\%$$

Attachment J

**List of Range Names Used in CUdBASE
and Their Locations**

List of Range Names & Coordinates

<u>RANGE NAMES</u>	<u>LOCATION</u>
CODEQ4	A:B14..A:B14
CODEQ5	A:B15..A:B15
DATE1	A:B7..A:B7
DATE2	A:B8..A:B8
DATE3	A:B9..A:B9
DATE4	A:B10..A:B10
DATE4CODE	A:B14..A:B14
DATE5	A:B11..A:B11
DATE5CODE	A:B15..A:B15
DATE5WORDS	A:B12..A:B12
SUBTITLE	A:B13..A:B13
ALERT1	B:B2..B:B2
COUNTER	B:B1..B:B1
DCTR1	B:A198..B:A198
DCTR2	B:A208..B:A208
DCTR3	B:A225..B:A225
DCTR4	B:A235..B:A235
DCTR5	B:A274..B:A274
DCTR6	B:A288..B:A288
DIALOGUE1	B:A200..B:H202
DIALOGUE2	B:A210..B:H212
DIALOGUE3	B:A227..B:C229
DIALOGUE4	B:A237..B:D239
DIALOGUE5	B:A276..B:F278
DIALOGUE6	B:A290..B:C292
MAINMENU	B:A13..B:Q17
MENU	B:A1..B:A1
MENUINSERT	B:A8..B:A11
\0	B:A3..B:A3
\M	B:A6..B:A6
\NUMBER	B:B1..B:B1
\R	B:C2..B:C3
\S	B:C7..B:C8
\SBR	B:B43..B:B45
INPUT_SCREEN	C:A1..C:F158
INPUT_SCREEN2	C:M1..C:R157
PANEL	C:C148..C:F157
PANELSUM	C:C148..C:C157
MODSCREEN	D:A1..D:F158
MODSCREEN2	D:M1..D:R158
PANEL2	D:C148..D:C157
DATABASE	E:A3..E:FJ267
DESTINATION	E:A3..E:A3
INPUT	E:A3..E:FJ352
DESTINATION2	F:A3..F:FJ3
EDATA	F:A3..F:A3

List of Range Names & Coordinates

<u>RANGE NAMES</u>	<u>LOCATION</u>		
EXTRACT	F:A3..F:FJ896		
OUTPUT	F:A3..F:FJ263		
CHRON_DETAILS	G:A7..G:H338		
CHRON_SUMMARY	G:A1..L:H105		
CHAPTERS	H:AN7..H:AX243		
DIVISIONS	H:E7..H:AM243		
PROVINCES	H:AY7..H:BI243		
ATAGLANCE	I:A1..I:I116		
ATAGLANCER	J:A1..J:N66		
CHRONGRAFS	K:A1..K:A32		
LOCALGRAFS	K:A1..K:A31		
ONEGRAF	K:C1..K:C2		
REGIONALGRAFS	K:B1..K:B24		
REGLGRAFS	K:B1..K:B24		
SPAT_SUMMARY	M:A1..M:J89		
VB	N:T3..N:T3		
1DATE	O:A5..O:A6	EMPLNTEM	O:BI98..O:BK99
2DATE	O:B5..O:B6	EMPLOCEAN	O:BF98..O:BH99
3DATE	O:C5..O:C6	EMPLS_M	O:AH98..O:AJ99
4DATE	O:D5..O:D6	EMPLWOURI	O:AB98..O:AD99
5DATE	O:E5..O:E6	EMPLXNORTH	O:CA98..O:CC99
ADAM	O:AU67..O:AV68	FAKO	O:Q67..O:R68
BAMB	O:AC67..O:AD68	H_NKAM	O:A167..O:AJ68
BOYO	O:BC67..O:BD68	H_PLATEAU	O:BM67..O:BN68
BUI	O:E67..O:F68	KOM	O:G67..O:H68
CENTRE	O:AS67..O:AT68	KOUNGKHI	O:BO67..O:BP68
COMMADAM	O:BR101..O:BT102	KOUCPE	O:BI67..O:BJ68
COMMBAMB	O:AQ101..O:AS102	LEBIALEM	O:BK67..O:BL68
COMMBOYO	O:CD101..O:CF102	MANYU	O:K67..O:L68
COMMBUI	O:G101..O:I102	MEME	O:O67..O:P68
COMMCENTRE	O:BO101..O:BQ102	MENOUA	O:AE67..O:AF68
COMMD_LOBO	O:BL101..O:BN102	MEZAM	O:A67..O:B68
COMMD_M	O:M101..O:O102	MIFI	O:AA67..O:AB68
COMMEAST	O:BU101..O:BW102	MOMO	O:C67..O:D68
COMMFAKO	O:Y101..O:AA102	MUNGO	O:U67..O:V68
COMMH_NKAM	O:AZ101..O:BB102	MVILA	O:BG67..O:BH68
COMMH_PLATEAU	O:CS101..O:CU102	NDE	O:AK67..O:AL68
COMMKOM	O:J101..O:L102	NDIAN	O:M67..O:N68
COMMKOUNGKHI	O:CV101..O:CX102	NDOP	O:BE67..O:BF68
COMMKOUCPE	O:CM101..O:CO102	NKAM	O:Y67..O:Z68
COMMLEBIALEM	O:CP101..O:CR102	NORTH	O:AY67..O:AZ68
COMMMANYU	O:P101..O:R102	NOUN	O:AG67..O:AH68
COMMEME	O:V101..O:X102	NTEM	O:AO67..O:AP68

List of Range Names & Coordinates

<u>RANGE NAMES</u>	<u>LOCATION</u>		
COMMMENOUA	O:AT101..O:AV102	OCEAN	O:AM67..O:AN68
COMMMEZAM	O:A101..O:C102	PCADAM	O:BR88..O:BT89
COMMMIFI	O:AN101..O:AP102	PCBAMB	O:AQ88..O:AS89
COMMMOMO	O:D101..O:F102	PCBOYO	O:CD88..O:CF89
COMMMUNGO	O:AE101..O:AG102	PCBUI	O:G88..O:I89
COMMMVILA	O:CJ101..O:CL102	PCCENTRE	O:BO88..O:BQ89
COMMNDE	O:BC101..O:BE102	PCD_LOBO	O:BL88..O:BN89
COMMNDIAN	O:S101..O:U102	PCD_M	O:M88..O:O89
COMMNDOP	O:CG101..O:CI102	PCEAST	O:BU88..O:BW89
COMMNKAM	O:AK101..O:AM102	PCFAKO	O:Y88..O:AA89
COMMNORTH	O:BX101..O:BZ102	PCH_NKAM	O:AZ88..O:BB89
COMMNOUN	O:AW101..O:AY102	PCH_PLATEAU	O:CS88..O:CU89
COMMNTEM	O:BI101..O:BK102	PCKOM	O:J88..O:L89
COMMOCEAN	O:BF101..O:BH102	PCKOUNGKHI	O:CV88..O:CX89
COMMS_M	O:AH101..O:AJ102	PCKOUCPE	O:CM88..O:CO89
COMMWOURI	O:AB101..O:AD102	PCLEBIALEM	O:CP88..O:CR89
COMMXNORTH	O:CA101..O:CC102	PCMANYU	O:P88..O:R89
CUADAM	O:BR72..O:BT73	PCMEME	O:V88..O:X89
CUBAMB	O:AQ72..O:AS73	PCMENOUA	O:AT88..O:AV89
CUBOYO	O:CD72..O:CF73	PCMEZAM	O:A88..O:C89
CUBUI	O:G72..O:I73	PCMIFI	O:AN88..O:AP89
CUCENTRE	O:BO72..O:BQ73	PCMOMO	O:D88..O:F89
CUD_LOBO	O:BL72..O:BN73	PCMUNGO	O:AE88..O:AG89
CUD_M	O:M72..O:O73	PCMVILA	O:CJ88..O:CL89
CUEAST	O:BU72..O:BW73	PCNDE	O:BC88..O:BE89
CUFAKO	O:Y72..O:AA73	PCNDIAN	O:S88..O:U89
CUH_NKAM	O:AZ72..O:BB73	PCNDOP	O:CG88..O:CI89
CUH_PLATEAU	O:CS72..O:CU73	PCNKAM	O:AK88..O:AM89
CUKOM	O:J72..O:L73	PCNORTH	O:BX88..O:BZ89
CUKOUNGKHI	O:CV72..O:CX73	PCNOUN	O:AW88..O:AY89
CUKOUCPE	O:CM72..O:CO73	PCNTEM	O:BI88..O:BK89
CULEBIALEM	O:CP72..O:CR73	PCOCEAN	O:BF88..O:BH89
CUMANYU	O:P72..O:R73	PCS_M	O:AH88..O:AJ89
CUMEME	O:V72..O:X73	PCWOURI	O:AB88..O:AD89
CUMENOUA	O:AT72..O:AV73	PCXNORTH	O:CA88..O:CC89
CUMEZAM	O:A72..O:C73	PRDADAM	O:BR93..O:BT94
CUMIFI	O:AN72..O:AP73	PRDBAMB	O:AQ93..O:AS94
CUMOMO	O:D72..O:F73	PRDBOYO	O:CD93..O:CF94
CUMUNGO	O:AE72..O:AG73	PRDBUI	O:G93..O:I94
CUMVILA	O:CJ72..O:CL73	PRDCENTRE	O:BO93..O:BQ94
CUNDE	O:BC72..O:BE73	PRDD_LOBO	O:BL93..O:BN94
CUNDIAN	O:S72..O:U73	PRDD_M	O:M93..O:O94
CUNDOP	O:CG72..O:CI73	PRDEAST	O:BU93..O:BW94
CUNKAM	O:AK72..O:AM73	PRDFAKO	O:Y93..O:AA94
CUNORTH	O:BX72..O:BZ73	PRDH_NKAM	O:AZ93..O:BB94
CUNOUN	O:AW72..O:AY73	PRDH_PLATEAU	O:CS93..O:CU94
CUNTEM	O:BI72..O:BK73	PRDKOM	O:J93..O:L94
CUOCEAN	O:BF72..O:BH73	PRDKOUNGKHI	O:CV93..O:CX94
CUS_M	O:AH72..O:AJ73	PRDKOUCPE	O:CM93..O:CO94

List of Range Names & Coordinates

<u>RANGE NAMES</u>	<u>LOCATION</u>
CUWOURI	O:AB72..O:AD73
CUXNORTH	O:CA72..O:CC73
DATE1ASSN	O:A37..O:B38
DATE1COMM	O:A34..O:B35
DATE1CU	O:A10..O:B11
DATE1DG	O:A13..O:B14
DATE1EMPL	O:A31..O:B32
DATE1PC	O:A42..O:B43
DATE1PR	O:A26..O:B27
DATE1R	O:A18..O:B19
DATE1RMACT	O:A53..O:B54
DATE1RMMBR	O:A47..O:B48
DATE1U	O:A21..O:B22
DATE2ASSN	O:C37..O:D38
DATE2COMM	O:C34..O:D35
DATE2CU	O:C10..O:D11
DATE2DG	O:C13..O:D14
DATE2EMPL	O:C31..O:D32
DATE2PC	O:C42..O:D43
DATE2PR	O:C26..O:D27
DATE2R	O:C18..O:D19
DATE2RMACT	O:C53..O:D54
DATE2RMMBR	O:C47..O:D48
DATE2U	O:C21..O:D22
DATE3ASSN	O:E37..O:F38
DATE3COMM	O:E34..O:F35
DATE3CU	O:E10..O:F11
DATE3DG	O:E13..O:F14
DATE3EMPL	O:E31..O:F32
DATE3PC	O:E42..O:F43
DATE3PR	O:E26..O:F27
DATE3R	O:E18..O:F19
DATE3RMACT	O:E53..O:F54
DATE3RMMBR	O:E47..O:F48
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DATE4R	O:G18..O:H19
DATE4RMACT	O:G53..O:H54
DATE4RMMBR	O:G47..O:H48
DATE4U	O:G21..O:H22
DATE5ASSN	O:I37..O:J38
PRDLEBIALEMO	O:CP93..O:CR94
PRDMANYU	O:P93..O:R94
PRDMEME	O:V93..O:X94
PRDMENOUA	O:AT93..O:AV94
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PRDMIFI	O:AN93..O:AP94
PRDMCMO	O:D93..O:F94
PRDMUNGO	O:AE93..O:AG94
PRDMVILA	O:CJ93..O:CL94
PRDNDE	O:BC93..O:BE94
PRDNDIAN	O:S93..O:U94
PRDNDOP	O:CG93..O:CI94
PRDNKAM	O:AK93..O:AM94
PRDNORTH	O:BX93..O:BZ94
PRDNOUN	O:AW93..O:AY94
PRDNTEM	O:BI93..O:BK94
PRDOCEAN	O:BF93..O:BH94
PRDS_M	O:AH93..O:AJ94
PRDWOURI	O:AB93..O:AD94
PRDXNORTH	O:CA93..O:CC94
RMAADAM	O:BR111..O:BT11
RMABAMB	O:AQ111..O:AS11
RMABOYO	O:CD111..O:CF11
RMABUI	O:G111..O:I112
RMACENTRE	O:BO111..O:BQ11
RMAD_LOBO	O:BL111..O:BN11
RMAD_M	O:M111..O:O112
RMAEAST	O:BU111..O:BW11
RMAFAKO	O:Y111..O:AA112
RMAH_NKAM	O:AZ111..O:BB11
RMAH_PLATE	O:CS111..O:CU11
RMAKOM	O:J111..O:L112
RMAKOUNGKI	O:CV111..O:CX11
RMAKOUPE	O:CM111..O:CO11
RMALEBIALEMO	O:CP111..O:CR11
RMAMANYU	O:P111..O:R112
RMAMEME	O:V111..O:X112
RMAMENOUA	O:AT111..O:AV11
RMAMEZAM	O:A111..O:C112
RMAMIFI	O:AN111..O:AP11
RMAMOMO	O:D111..O:F112
RMAMUNGO	O:AE111..O:AG11
RMAMVILA	O:CJ111..O:CL11
RMANDE	O:BC111..O:BE11
RMANDIAN	O:S111..O:U112
RMANDOP	O:CG111..O:CI11
RMANKAM	O:AK111..O:AM11

List of Range Names & Coordinates

<u>RANGE NAMES</u>	<u>LOCATION</u>
DATE5COMM	O:I34..O:J35
DATE5CU	O:I10..O:J11
DATE5DG	O:I13..O:J14
DATE5EMPL	O:I31..O:J32
DATE5PC	O:I42..O:J43
DATE5PR	O:I26..O:J27
DATE5R	O:I18..O:J19
DATE5RMACT	O:I53..O:J54
DATE5RMMBR	O:I47..O:J48
DATE5U	O:I21..O:J22
DCRITERIA	O:A10..O:J14
DGADAM	O:BR77..O:BT78
DGBAMB	O:AQ77..O:AS78
DGBOYO	O:CD77..O:CF78
DGBUI	O:G77..O:I78
DGCENTRE	O:BO77..O:BQ78
DGD_LOBO	O:BL77..O:BN78
DGD_M	O:M77..O:O78
DGEAST	O:BU77..O:BW78
DGFAKO	O:Y77..O:AA78
DGH_NKAM	O:AZ77..O:BB78
DGH_PLATEAU	O:CS77..O:CU78
DGKOM	O:J77..O:L78
DGKOUNGKHI	O:CV77..O:CX78
DGKOUPE	O:CM77..O:CO78
DGLEBIALEM	O:CP77..O:CR78
DGMANYU	O:P77..O:R78
DGMEME	O:V77..O:X78
DGMENOUA	O:AT77..O:AV78
DGMEZAM	O:A77..O:C78
DGMIFI	O:AN77..O:AP78
DGMOMO	O:D77..O:F78
DGMUNGO	O:AE77..O:AG78
DGMVILA	O:CJ77..O:CL78
DGNDE	O:BC77..O:BE78
DGNDIAN	O:S77..O:U78
DGNDOP	O:CG77..O:CI78
DGNKAM	O:AK77..O:AM78
DGNORTH	O:BX77..O:BZ78
DGNOUN	O:AW77..O:AY78
DGNTEM	O:BI77..O:BK78
DGOCEAN	O:BF77..O:BH78
DGS_M	O:AH77..O:AJ78
DGWOURI	O:AB77..O:AD78
DGXNORTH	O:CA77..O:CC78
D_LOBO	O:AQ67..O:AR68
D_M	O:I67..O:J68
RMANORTH	O:BX111..O:BZ111
RMANOUN	O:AW111..O:AY111
RMANTEM	O:BI111..O:BK111
RMAOCEAN	O:BF111..O:BH111
RMAS_M	O:AH111..O:AJ111
RMAWOURI	O:AB111..O:AD111
RMAXNORTH	O:CA111..O:CC111
RMMADAM	O:BR106..O:BT106
RMMBAMB	O:AQ106..O:AS106
RMMBOYO	O:CD106..O:CF106
RMMBUI	O:G106..O:I107
RMMCENTRE	O:BO106..O:BQ106
RMMD_LOBO	O:BL106..O:BN106
RMMD_M	O:M106..O:O107
RMMEAST	O:BU106..O:BW106
RMMFAKO	O:Y106..O:AA107
RMMH_NKAM	O:AZ106..O:BB106
RMMH_PLATEAU	O:CS106..O:CU106
RMMKOM	O:J106..O:L107
RMMKOUNGKHI	O:CV106..O:CX106
RMMKOUPE	O:CM106..O:CO106
RMMLEBIALEM	O:CP106..O:CR106
RMMMANYU	O:P106..O:R107
RMMMEME	O:V106..O:X107
RMMMENOUA	O:AT106..O:AV106
RMMMEZAM	O:A106..O:C107
RMMMIFI	O:AN106..O:AP106
RMMMOMO	O:D106..O:F107
RMMMUNGO	O:AE106..O:AG106
RMMMVILA	O:CJ106..O:CL106
RMMNDE	O:BC106..O:BE106
RMMNDIAN	O:S106..O:U107
RMMNDOP	O:CG106..O:CI106
RMMNKAM	O:AK106..O:AM106
RMMNORTH	O:BX106..O:BZ106
RMMNOUN	O:AW106..O:AY106
RMMNTEM	O:BI106..O:BK106
RMMOCEAN	O:BF106..O:BH106
RMMS_M	O:AH106..O:AJ106
RMMWOURI	O:AB106..O:AD106
RMMXNORTH	O:CA106..O:CC106
S_M	O:W67..O:X68
UADAM	O:BR83..O:BT84
UBAMB	O:AQ83..O:AS84
UBOYO	O:CD83..O:CF84
UBUI	O:G83..O:I84
UCENTRE	O:BO83..O:BQ84

List of Range Names & Coordinates

<u>RANGE NAMES</u>	<u>LOCATION</u>		
EAST	O:AW67..O:AX68	UD_LOBO	O:BL83..O:BN84
EMPLADAM	O:BR98..O:BT99	UD_M	O:M83..O:O84
EMPLBAMB	O:AQ98..O:AS99	UEAST	O:BU83..O:BW84
EMPLBOYO	O:CD98..O:CF99	UFAKO	O:Y83..O:AA84
EMPLBUI	O:G98..O:I99	UH_NKAM	O:AZ83..O:BB84
EMPLCENTRE	O:BO98..O:BQ99	UH_PLATEAU	O:CS83..O:CU84
EMPLD_LOBO	O:BL98..O:BN99	UKOM	O:J83..O:L84
EMPLD_M	O:M98..O:O99	UKOUNGKHI	O:CV83..O:CX84
EMPLEAST	O:BU98..O:BW99	UKOUBE	O:CM83..O:CO84
EMPLFAKO	O:Y98..O:AA99	ULEBIALEM	O:CP83..O:CR84
EMPLH_NKAM	O:AZ98..O:BB99	UMANYU	O:P83..O:R84
EMPLH_PLATEAU	O:CS98..O:CU99	UMEME	O:V83..O:X84
EMPLKOM	O:J98..O:L99	UMENOUA	O:AT83..O:AV84
EMPLKOUNGKHI	O:CV98..O:CX99	UMEZAM	O:A83..O:C84
EMPLKOUPE	O:CM98..O:CO99	UMIFI	O:AN83..O:AP84
EMPLLEBIALEM	O:CP98..O:CR99	UMOMO	O:D83..O:F84
EMPLMANYU	O:P98..O:R99	UMUNGO	O:AE83..O:AG84
EMPLMEME	O:V98..O:X99	UMVILA	O:CJ83..O:CL84
EMPLMENOUA	O:AT98..O:AV99	UNDE	O:BC83..O:BE84
EMPLMEZAM	O:A98..O:C99	UNDIAN	O:S83..O:U84
EMPLMIFI	O:AN98..O:AP99	UNDOP	O:CG83..O:CI84
EMPLMOMO	O:D98..O:F99	UNKAM	O:AK83..O:AM84
EMPLMUNGO	O:AE98..O:AG99	UNORTH	O:BX83..O:BZ84
EMPLMVILA	O:CJ98..O:CL99	UNOUN	O:AW83..O:AY84
EMPLNDE	O:BC98..O:BE99	UNTEM	O:BI83..O:BK84
EMPLNDIAN	O:S98..O:U99	UOCEAN	O:BF83..O:BH84
EMPLNDOP	O:CG98..O:CI99	US_M	O:AH83..O:AJ84
EMPLNKAM	O:AK98..O:AM99	UWOURI	O:AB83..O:AD84
EMPLNORTH	O:BX98..O:BZ99	UXNORTH	O:CA83..O:CC84
EMPLNOUN	O:AW98..O:AY99	WOURI	O:S67..O:T68
		XNORTH	O:BA67..O:BB68
INPUTRG1	P:A3..P:FJ4		
INPUTRG2	P:A4..P:FJ4		
MODIFY3	P:A10..P:FJ10		
LOOK1	Q:E6..Q:L7		
LOOK10	Q:E33..Q:L34		
LOOK11	Q:E36..Q:L37		
LOOK12	Q:E39..Q:L40		
LOOK13	Q:E42..Q:L43		
LOOK14	Q:E45..Q:N46		
LOOK2	Q:E9..Q:K10		
LOOK3	Q:E12..Q:M13		
LOOK4	Q:E15..Q:L16		
LOOK5	Q:E18..Q:N19		
LOOK6	Q:E21..Q:N22		

List of Range Names & Coordinates

RANGE NAMES

LOCATION

LOOK7

Q:E24..Q:N25

LOOK8

Q:E27..Q:N28

LOOK9

Q:E30..Q:L31

CELL

VARIABLE LOCATION

Attachment K

M.O.S. Lookup Table

MOS Health Index Lookup Tables

	Min	Max										
1. Gross Return on Working Assets Score	0	6	0,00%	5,00%	7,50%	9,00%	10,00%	12,00%	15,00%	1000,00%		
			0	2	3	4	5	6	6	6		
2. Interest Collection Rate Score	0	7	0,00%	25,00%	50,00%	75,00%	90,00%	100,00%	300,00%			
			0	1	3	6	7	7	7			
3. Dividend Rate (Frs/Share-Month) Score	-5	6	0,00	1,00	2,00	3,00	4,00	5,00	10,00	15,00	1.000,00	
			(5)	1	2	3	4	5	6	6	6	
4. Net Income/Share-Savings Score	-5	5	-10000%	0,00%	0,50%	0,75%	1,00%	2,00%	3,00%	1000000,00%		
			-5	1	2	3	4	4,5	5	5		
5. Expenses/Income Ratio Score	-16	6	0,00%	15,00%	25,00%	35,00%	50,00%	60,00%	70,00%	80,00%	100,00%	100000,00%
			0	3	6	3	0	-5	-7	-8	-10	-10
6. Loan Patronage Ratio Score	0	8	0,00%	20,00%	30,00%	40,00%	50,00%	60,00%	70,00%	80,00%	90,00%	1000,00%
			0	2	3	5	6	7	8	8	8	8
7. Loans/Savings Ratio Score	-10	8	0,00%	40,00%	50,00%	60,00%	70,00%	75,00%	80,00%	90,00%	100,00%	200,00%
			0	3	6	7	8	7	4	0	-5	-10
8. % Loans Delinquent Score	-10	12	0,00%	5,00%	10,00%	15,00%	20,00%	35,00%	50,00%	75,00%	100,00%	1000000,00%
			12	10	8	5	3	0	(5)	(10)	(10)	(10)
9. Reserves/Loans Outstanding Score	-10	8	0,00%	3,00%	6,00%	9,00%	15,00%	25,00%	100,00%	100000,00%		
			-10	0	3	6	8	8	4	0		
10. Member Growth Rate Score	-3	8	-10000%	-0,05	0,00%	5,00%	10,00%	15,00%	20,00%	10000,00%		
			-3	0	1	2	4	6	8	0		
11. Savings Growth Rate Score	-3	8	-100%	-0,05	0,00%	5,00%	10,00%	15,00%	20,00%	1000,00%		
			-3,00	0	1	2	4	6	8	0		
12. Loan Growth Rate Score	-3	8	-100%	-0,05	0,00%	5,00%	10,00%	15,00%	20,00%	1000,00%		
			-3	0	1	2	4	6	8	0		
13. Cash Shortage/Total Assets Score	-10	5	0,00%	0,01%	0,50%	1,00%	3,00%	5,00%	10,00%	200,00%		
			5	0	-1	-3	-5	-7	-10	-10		
14. Liquidity Ratio (FD/SS) Score	-5	5	0,00%	1,00%	10,00%	15,00%	25,00%	30,00%	35,00%	40,00%	50,00%	1000,00%
			-5	0	2	3	5	5	4	0	-5	-5
TOTAL	-80	100										

Attachment L

Sample Credit Union Periodic Financial Statements

COOP CREDIT UNION

MONTHLY FINANCIAL STATEMENT
End of month of

ASSETS:

Cash accounts

571 Cash on Hand	
572 Mission or CPMS Safe	
5612 Bank Current Accounts	
6512 Bank Savings Account	
565 League Shares	
5622 League Fixed Deposit	
5623 League Special Fixed Deposit	
5621 League Regular Deposit	
566 League Special term Deposit	
567 Insurance Premium Deposit	
480 Accounts Recievable	
Total cash Accounts	
251 Loans to Members	
.....	
.....	

FIXED ASSETS

211 Land	
221 Building	
222 Furniture and Office Equipment	
TOTAL FIXED ASSETS	
22 Other Assets	
TOTAL ASSETS	

LIABILITIES:

101 Shares	
111 Savings	
441 Deposit	
471 Loans payable	
473 Interest on saving payable	
371 Dividend payable	
472 Other Liabilities	
121 Undivided Earning	
PATRIMONY	
111 Compulsory Reserve Fund	
112 Education Reserve	
113 Generral Reserve	
114 Building Reserve	
115 Other Reserve	
291 Provisions	
TOTAL LIABILITIES	

STATISTICAL INFORMATION

	Males.....	Females.....
Number of members	Number	Amount
<i>Loans</i>		
Current and Less than 2 months deliquent .....	.....	.....
2 months to 6 months deliquent .....	.....	.....
9 months to 12 months deliquent .....	.....	.....
Over 12 months deliquent .....	.....	.....
Total number of outstanding loans .....	.....	.....

EXPLANATION Building and furniture and office Equipment Accounts must be shown net of depreciation
NOTE: A Copy of this from should be sent to CamCCUL Office every month.

COOP. CREDIT UNION

STATEMENT OF INCOME AND EXPENSES

End of month of 19.....

	<u>THIS MONTH</u>	<u>THIS YEAR</u>
INCOME ACCOUNTS:		
771 Loan Interest
774 Interest on Various League Deposits
772 Bank Interests.
763 fines
762 Entrance fees
761 Donations Received
641 other income
764
765
.....
.....
.....
TOTAL INCOME (A)
EXPENSES ACCOUNTS:		
651 Salary or Remuneration
611 Stationery/Postage
654 Rents.
621 Transportation
641 League Dues.
672 Interest on Loan Paid
671 Interest on Savings
642 Insurance Premium
661 Bank Charges & Taxes
631 Board Expenses
644 Seminar Fees/Education
643 Other Expenses.
645 Electricity & Water
647 AGM Expenses
653 Social Insurance
681 Provisions for Bad/Doubtful Debts
Depreciation
.....
.....
.....
.....
TOTAL EXPENSES (B)
UNDIVIDED EARNINGS (A) - (B) (C)

EXPLANATION

The amounts written under THIS YEAR column are the totals of the previous THIS MONTH total including the present month. The amount found as UNDIVIDED EARNINGS that (C) is to be carried on the Monthly Financial Statement - If this amount represents a Surplus it must be added - if on the contrary it represents a loss it must be subtracted.

NOTE: A copy of this form should be sent to Can/CCUL office every Month.

-----**COOPERATIVE CREDIT UNION**
ANNUAL ACCOUNTS FORM FOR 19 _____

I. GENERAL INFORMATION & IDENTIFICATION DATA:

Chapter		Date Established	
Province		Date Registered	
Division		Registration Number	
Sub-Division		Total Number of Potential	
Million (Urb/Rur)		Members (Max)	
With Payroll Deduction			
Common Bond Type (EMPL/COMM)			
In P.C. Programme? (Y/N)			
Active in P.C Programme? (Y/N)			
In RM Programme? (Y/N)			
Active in RM Programme? (Y/N)			

II. GROWTH AT A GLANCE:	Last Year (/ /)	This Year (/ /)	Increase/ <Decrease>
Membership:			
Males			
Females			
Groups			
Total Membership			
Total Income			
Total Expenses			
Net Surplus			
Shares			
Savings			
Loans Outstanding			
Total Assets			
Average S/Savings			

III. BEGINNING BALANCE SHEET (AS AT 1ST JANUARY 19)

ASSETS:		LIABILITIES & CAPITAL:	
Liquidity:		Liabilities:	
571	Cash	102	Members' Savings
572	Mission or CPMS Safe	161	Members' Deposits
Bank Current Accounts:			
561	BICIC		
562	BMBC	171	ST League Loans
563	SGBC	172	LT League Loans
564	SCB/CL	173	Other Loans Payable
565	SCBC		
566	Other Banks		
567	League Regular Deposit	471	Dividends Payable
		472	Inter. Payable on Savings
Bank Savings Accounts:		473	Other Interest Payable
5811	BICIC	474	Expenses Payable
5812	BMBC	491	Ledger Differences
5813	SGBC		
5814	SCB/CL		
5815	SCBC		
5816	Postal Savings		
5817	Other Bank		
Bank Term Deposits:			
5821	BICIC		
5822	BMBC		
5823	SGBC		
5824	SCB/CL		
5825	Other:		
League Investments:			
5831	League Fixed Deposit	121	Previous year Surplus
5832	League Special Fixed Deposit	141	Capital Grants
5833	League Special Term Deposit		
5834	League Shares		
Sundry Assets:			
481	Doubtful Accounts	291	Provn. for Doubtful Acc's
487	Other Assets	292	Provision for Depreciation
480	Accounts Receivable		
481	Interest Receivable		
482	Payroll Deductions Receivable		
483	Advances		
580	Insurance Deposit		
580	Ledger Differences		
251	Loans to Members		
Fixed Assets:			
211	Land		
221	Building		
222	Furniture & Equipment		
Total Assets		Total Liab. & Capital	

V. LEDGER COMPARISONS (COMPARISON OF TOTALS OF INDIVIDUAL LEDGER BALANCES WITH GENERAL LEDGER ACCOUNT BALANCES AS AT DECEMBER 31ST)

<u>ACCOUNT</u>	<u>GENERAL LEDGER</u>	<u>INDIVIDUAL LEDGERS</u>	<u>DIFFERENCE</u>
Shares			
Savings			
Loans			
Deposits			
Cash			
League			
Bank			
Totals			

VI. GENERAL JOURNAL ADJUSTING ENTRIES AT YEAR END

<u>EXPLANATION</u>	<u>DEBIT</u>	<u>CREDIT</u>
To: _____		
Being: _____		_____

To: _____		
Being: _____		_____

To: _____		
Being: _____		_____

To: _____		
Being: _____		_____

To: _____		
Being: _____		_____

VII. STATEMENT OF INCOME AND EXPENSES FOR THE YEAR 19
 Being the Income and Expenditure after adjusting entries.

Expenses:		FRANCS	Income :	FRANCS
611	Stationery		740	Entrance Fees
612	Electricity & Water		741	Fines
621	Transportation		742	Rental Income
631	Rental Expenses		743	Other Income
632	Entertainment		744	Risk Mgmt Income
633	Postage/Telecoms.		761	Donations/Grants
634	Board Expenses		762	Sales of Stationeries
640	League & Chapter Dues		771	Interest from Loans
641	Insurance Premium		772	Interest from Banks
642	Seminar/Education		773	Interest from the League
643	Promotional Expenses			
644	Maintenance & Repairs			
645	Legal Expenses			
648	AGM Expenses			
662	Bad Debts			
648	Other Expenses			
649	Losses			
651	Salary or Remuneration			
652	Staff Rent			
653	Seniority Bonus			
654	Soc. Ins. & Taxes			
661	Bank Charges & Taxes			
671	Interest on Savings			
672	Interest on League Loans			
673	Other Interest Expense			
681	Depreciation Expense			
682	Provision for Doubtful Debts			
	Sub-Total			
	Surplus		Deficit	
	TOTALS		TOTALS	

VIII. PROPOSED APPROPRIATIONS OF YEAR'S SURPLUS:

Total Surplus for the year _____

APPROPRIATIONS:

 Computery Reserve Fund (20%) _____

 Education Fund (5%) _____

 General Reserve _____

 Dividend on Shares _____

IX. ENDING BALANCE SHEET AS AT 31ST DECEMBER 19

ASSETS :		LIABILITIES & CAPITAL	
Liquidity:			
571	Cash		Liabilities:
572	Mining or CPMS Safe	102	Members' Savings
	Bank Current Accounts:	161	Members' Deposits
561	BICIC		
562	BMBC		
563	SGBC	171	ST League Loans
564	SCB/CL	172	LT League Loans
565	SCBC	173	Other Loans Payable
566	Other Banks		
567	League Regular Deposit		
	Bank Savings Accounts:	471	Dividends Payable
5611	BICIC	472	Inter. Payable on Savings
5612	BMBC	473	Other Interest Payable
5613	SGBC	474	Expenses Payable
5614	SCB/CL	475	Provision for AGM
5615	SCBC	476	Other Provisions
5616	Other Banks		
5617	Postal Savings	491	Ledger Differences
	Bank Term Deposits:		
5621	BICIC		
5622	BMBC		
5623	SGBC		Patrimony:
5624	SCB/CL	101	Members' Shares
5626	Others	111	Compulsory Reserve
	League Investments:	112	Education Fund
5631	League Fixed Deposit	113	General Reserve
5632	League Special Fixed Deposit	114	Building Reserve
5633	League Special Term Deposit	115	Building Reserve
5634	League Shares	121	Year's Surplus
	Sundry Assets:	122	Special Reserve
481	Doubtful Accounts		
487	Other Assets	0291	Provn. for Doubtful Accts
480	Accounts Receivable	0292	Provision for Depreciation
481	Interest Receivable		
482	Payroll Deductions Receivable	141	Capital Grants
483	Advances		
680	Insurance Deposit		
490	Ledger Differences		
251	Losses to Members		
	Fixed Assets (Net):		
211	Land		
221	Building		
222	Furniture & Equipment		
	Total Assets		Total Liab. & Capital

PRESIDENT'S NAME: _____ BOOK KEEPER'S NAME: _____

PRESIDENT'S SIGNATURE: _____ BOOK KEEPER'S SIGNATURE: _____

CERTIFICATION:

AUDITOR'S NAME: _____ AUDITOR'S NAME: _____

AUDITOR'S SIGNATURE: _____ AUDITOR'S SIGNATURE: _____

DATE: _____ DATE: _____

THE PROPOSED APPROPRIATION, INCOME & EXPENSES AND BALANCES SHEET
 THERE OFF HAVE BEEN APPROVED BY THE ANNUAL GENERAL MEETING OF _____

X. LOAN DELINQUENCY SCHEDULE AS AT 31ST DECEMBER 19

<u>Category</u>	<u>Number of Loans Out- standing</u>	<u>Amount of Loans Outstanding</u>	<u>PERCENTAGE</u>
Current Loans	_____	_____	_____
Loans Delinquent 2 to 6 Months	_____	_____	_____
Loans Delinquent 6 to 12 Months	_____	_____	_____
Loans Delinquent Over 12 Months	_____	_____	_____
Total Loans Outstanding	=====	=====	=====

XI. LOANS GRANTED DURING YEAR ENDING 31ST DECEMBER 19

<u>Purpose</u>	<u>Number Granted</u>	<u>Amount Granted</u>	<u>PERCENTAGE</u>
Farming	_____	_____	_____
Business	_____	_____	_____
Education	_____	_____	_____
Health	_____	_____	_____
Building	_____	_____	_____
Other	_____	_____	_____
Total Loans Granted	=====	=====	=====

XII. CREDIT UNION PERFORMANCE VIS - A - VIS MINIMUM OPERATING STANDARDS

INDICATOR:	MINIMUM OPERATING STANDARD	PERFORMANCE LAST YEAR	PERFORMANCE THIS YEAR	INCREASE/ <DECREASE>
Profitability:				
1.Gr. Return on Working Assets	9%	%	%	%
2.Gross Return on Loans	11%	%	%	%
3.Expenses/Income Ratio	35%	%	%	%
4 Interest Collection Rate	90%	%	%	%
5 Net income/Share - Savings	1%	%	%	%
6 Interest on Savings Rate (CPA Frs. per Share - Month)	6 FR8	Frs.	Frs.	%
Liquidity Management:				
7 Liquidity Ratio	25%	%	%	%
Credit Management:				
8 Loan Patronage Ratio	50% & Above	%	%	%
9 Loans/Share - Savings Ratio	85% & Above	%	%	%
10 Loan Delinquency	10% or Less	%	%	%
11 Loans Delinquent > 1 Yr.	3% or Less	%	%	%
Solvency:				
12 Reserves/Loans Ratio	15%	%	%	%
13 Fixed Assets/Net Worth Ratio	Less than 100%	%	%	%
14 Debt/Equity Ratio	8/1			%
15 Real Capital Ratio	8%	%	%	%
16 Earning Assets/Int. - Bearing Liab.	110% & Above	%	%	%
Growth:				
17 Ann. Gr. Rate - Membership	15%	%	%	%
18 Ann. Gr. Rate - Share Savings	15%	%	%	%
19 Ann. Gr. Rate - Total Income	15%	%	%	%
20 Ann. Gr. Rate - Loans Outstdg	15%	%	%	%
21 Ann. Gr. Rate - Amt. Loans Granted	15%	%	%	%
Ledger Differences:				
21 Share Savings	0%	%	%	%
22 Loans Outstanding	0%	%	%	%
23 Deposits	0%	%	%	%
24 Cash Shortages	0%	%	%	%
25 Bank Deposits	0%	%	%	%
26 League Deposits	0%	%	%	%
No. of BoD Meetings	12			
MEMBERSHIP INFORMATION:				
Number of Males				
Number of Females				
Number of Groups				
Total Number of Members				

Attachment M

Division Field Codes

PROVINCE & DIVISION CODES

Province	Division	Division Code
LI	Mungo	MUNGO
LI	Nkam	NKAM
LI	Sanaga-Maritime	S_M
LI	Wouri	WOURI
NW	Boyo	BOYO
NW	Bui	BUI
NW	Donga-Mantung	D_M
NW	Menchum	KOM
NW	Mezam	MEZAM
NW	Momo	MOMO
NW	Ngo-Ketunjia	NDOP
SO	Dja et Lobo	D_LOBO
SO	Mvila	MVILA
SO	Ocean	OCEAN
SO	Vallee du Ntem	NTEM
SW	Fako	FAKO
SW	Koupe-et-Manengouba	KOUCPE
SW	Lebialem	LEBIALEM
SW	Manyu	MANYU
SW	Meme	MEME
SW	Ndian	NDIAN
WE	Bamboutos	BAMB
WE	Haut-Nkam	H_NKAM
WE	Haut-Plateau	H_PLATEAU
WE	Koung-Khi	KOUNGKHI
WE	Menoua	MENOUA
WE	Mifi	MIFI
WE	Nde	NDE
WE	Noun	NOUN
XN	XNorth	XNORTH
AD	Adamoua	ADAM
CE	Centre	CENTRE
EA	East	EAST
NO	North	NORTH

Attachment N

Summary of Contents of Each of CUdBASE's Worksheets

Attachment N

Summary of Contents of Each of CUDBASE's Worksheets

<u>Sheet No.</u>	<u>Tab Name</u>	<u>Sheet Contents</u>
A	DatesEtc	"DatesEtc Dates and Chart Sub:itle Table
B	(Hidden)	Macros and menus (hidden)
C	NewRec	New Record Input Screen
D	ModScr	Existing Record Modification Screen
E	CUDB	Data Base Table
F	Query	Query Table
G	Chron	Detailed Chron Report
H	Geog	Detailed Spatial Report
I	SumC	At-a-Glance Summary Chron Report
J	ReglSum	At-a-Glance Summary Spatial Report
K	Charts	Chron & Spatial Chart Series & Individual Chart
L	Stats	Chron Statistical Summary (Incomplete)
M	ReglStats	Geographic Summary Breakdown - Principal stats
N	(Hidden)	Additional Graph Data
O	(Hidden)	@DSUM & @DCOUNT Formulae Criteria
P	(Hidden)	Record Staging Area
Q	(Hidden)	MOS Health Index Lookup Table

Attachment O

CUdBASE Macros/Menus Programme Code

B:A1: {SWISS14 B U1} [W66] 'CUdBASE Menus & Macros:
 B:B1: U [W58] 152
 B:C1: {SWISS12 B} [W53] 'Macro to Recalculate New Record Input Screen (\R):
 B:A2: {SWISS12 B} [W66] "Alert1:
 B:B2: U [W58] 1
 B:C2: [W53] '/cinput_screen~input_screen~
 B:A3: [W66] '/WGDOIPBC(Esc)F~SDBQQ
 B:C3: [W53] '/cinput_screen~input_screen~
 B:A4: [W66] '{GoTo)A:A1~(Home){R 1)(D 5)
 B:A5: [W66] '(Alert "Make sure you fill out the DatesEtc table on Sheet A b
 B:A6: [W66] '(Menu~Insert MenuInsert)
 B:B6: [W58] '(Menu~Reset)
 B:C6: {SWISS12 B} [W53] 'Macro to Recalculate Record Modification Screen (\
 B:C7: [W53] '/cmodscreen~modscreen~
 B:A8: [W66] '&CUdBASE
 B:C8: [W53] '/cmodscreen~modscreen~
 B:A9: [W66] 'CU&dBASE Manager Pull-Down Menu
 B:A10: U [W66] 0
 B:A11: [W66] 'MainMenu
 B:A13: [W66] 'Input &New Record
 B:B13: [W58] '&Append New Record to DataBase
 B:C13: [W53] '&Modify Existing Record
 B:D13: [W51] 'Re&integrate Modified Record into DataBase
 B:E13: [W70] 'Insert Ne&w Record
 B:F13: [W49] '&Query
 B:G13: [W70] 'Displa&y a Document
 B:H13: [W48] '&Print a Document
 B:I13: [W43] 'Disp&lay Chart(s)
 B:J13: [W47] 'Print C&harts
 B:K13: [W29] 'Sa&ve a Chart
 B:L13: [W48] 'S&ort Data Base Table
 B:M13: [W40] 'Sort Query Ta&ble
 B:N13: [W48] '&File Operations
 B:O13: [W35] '&Utilities
 B:P13: 'Lotus S&tandard Menu
 B:Q13: 'E&xit
 B:A14: [W66] 'Input new credit union financial report (A/C or MFSR) in the
 B:B14: [W58] 'Incorporate new record in DATABASE
 B:C14: [W53] 'Modify an existing record in the Modify Screen
 B:D14: [W51] 'Reintegrate the modified record into DATABASE
 B:E14: [W70] 'Return modified record to Data Base as New Record
 B:F14: [W49] 'Specify record selection criteria and refresh query table
 B:G14: [W70] 'Show a user-specified document on the screen
 B:H14: [W48] 'Print a user-specified document
 B:I14: [W43] 'Show one or more user-specified charts on the screen
 B:J14: [W47] 'Print one or more user-specified charts
 B:K14: [W29] 'Save a chart to the Windows Clipboard
 B:L14: [W48] 'Sort the Data Base Table according to user-specified criteria
 B:M14: [W40] 'Sort the Query Table with user-defined keys
 B:N14: [W48] 'Save CUdBASE & DATABASE to Specified Disk
 B:O14: [W35] 'Run a utility macro (currently inoperative)
 B:P14: 'Return to Lotus' S'tandard Menu
 B:Q14: 'Return to READY mode
 B:A15: U [W66] 1
 B:B15: U [W58] 0
 B:C15: U [W53] 0
 B:D15: U [W51] 0
 B:E15: U [W70] 0
 B:F15: U [W49] 0
 B:G15: U [W70] 0

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B:H15: U [W48] 0
B:I15: U [W43] 0
B:J15: U [W47] 0
B:K15: U [W29] 0
B:L15: U [W48] 0
B:M15: [W40] 0
B:N15: U [W48] 0
B:O15: U [W35] @NA
B:P15: U 0
B:Q15: U 0
B:A17: [W66] '(EDIT-GOTO INPUT_SCREEN)
B:B17: [W58] '(GoTo)INPUT_SCREEN~
B:C17: [W53] '(GoTo)Staging:~(Home)/WTC/WGPD(D 11)
B:D17: (DUTCH8) [W51] '/XI@sum(PANEL2)<>0~(Beep 1){Beep 2}{Beep 3}{GoTo)PAN
B:E17: (DUTCH8) [W70] '/XI@sum(PANEL2)<>0~(Beep 1){Beep 2}{Beep 3}{GoTo)PAN
B:F17: [W49] '(GoTo)ATAGLANCE~(Home)
B:G17: (DUTCH8 B) [W70] '(CHOOSE-ONE DIALOGUE1;dctr1;"Choose the Document Y
B:H17: (DUTCH8 B) [W48] '(CHOOSE-ONE DIALOGUE2;dctr2;"Print a Particular Do
B:I17: (DUTCH8 B) [W43] '(CHOOSE-ONE DIALOGUE3;dctr3;"Choose the Type of Ch
B:J17: (DUTCH8 B) [W47] '(CHOOSE-ONE DIALOGUE4;dctr4;"Choose the Chart or S
B:K17: [W29] '(SELECT "<CURRENT>";;"CHART")
B:L17: (DUTCH8 B) [W48] '(CHOOSE-ONE DIALOGUE6;dctr6;"Sort the Data Base YO
B:M17: [W40] '(GoTo)Query:~/WGPD
B:N17: (DUTCH8 B) [W48] '(CHOOSE-ONE DIALOGUE5;dctr5;"Save CUDBASE && &DAT
B:P17: '(Menu-Reset)
B:Q17: '(Quit)
B:A18: [W66] '(Esc)(R 4)(D 6)
B:B18: [W58] '/WGPD
B:C18: [W53] '(SELECT "QUERY2";;"query")
B:D18: [W51] '(WindowsOff){PanelOff}
B:E18: [W70] '(WindowsOff){PanelOff}
B:F18: (DUTCH8) [W49] '(WindowsOff){PanelOff}
B:K18: [W29] '(DIALOG? "Go-To")
B:M18: [W40] '(SELECT "QUERY1";;"QUERY")
B:A19: [W66] '/cinput_screen2-input_screen~
B:B19: [W58] '/CINPUT_SCREEN~INPUT_SCREEN~
B:C19: [W53] '(DIALOG? "SET-CRITERIA")
B:D19: [W51] '(EDIT-GOTO "QUERY2";;"QUERY")
B:E19: [W70] '(EDIT-GOTO "QUERY2";;"QUERY")
B:F19: [W49] '(EDIT-GOTO "query1";;"QUERY")
B:K19: [W29] '(EDIT-COPY)
B:M19: [W40] '(DIALOG? "QUERY-SORT")
B:B20: (DUTCH8) [W58] '/XI@sum(PANELSUM)<>0~(Beep 1){Beep 2}{Beep 3}{GoTo)P
B:C20: [W53] '(GoTo)MODSCREEN~(Home)(R 4)(D 2)
B:D20: [W51] '(Home)/WGPD
B:E20: [W70] '(Home)/WGPD
B:F20: [W49] '(DIALOG? "SET-CRITERIA")
B:B21: [W58] '(GoTo)INPUT_SCREEN~
B:C21: [W53] '/WGPD
B:D21: [W51] '/CMODIFY3~MODIFY3~
B:E21: [W70] '/CMODIFY3~MODIFY3~
B:F21: [W49] '(INDICATE "I'm Effecting your Query; Please be patient....")
B:B22: [W58] '(INDICATE "APPENDING NEW RECORD TO DATA BASE TABLE; PLEASE WA
B:C22: [W53] '/CMODSCREEN2~MODSCREEN~
B:D22: [W51] '/RVMODIFY3~MODIFY2~
B:E22: [W70] '(EDIT-GOTO "DATABASE";;"RANGE")
B:F22: [W49] '(EDIT-GOTO Query:A4)
B:B23: [W58] '(WindowsOff){PanelOff}
B:C23: [W53] '/WGPE
B:D23: [W51] '(EDIT-GOTO "QUERY2";;"QUERY")

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B:E23: [W70] '/WGPD
B:F23: [W49] '{HOME}(D 2)
B:B24: (D4) [W58] '{GoTo}INPUTRG2~
B:D24: [W51] '{HOME}(D 11)(R 15)
B:E24: [W70] '{EDIT-GOTO "QUERY2";;"QUERY"}
B:F24: [W49] '/rncoutput~(END)(D)(END)(HOME)~
B:B25: [W58] '/WGPD
B:D25: [W51] '{FOR \NUMBER;1;151;1;\SBR}
B:E25: [W70] '{HOME}(D 11)(R 15)
B:F25: (DUTCH8) [W49] '{WindowsOn}(PanelOn)
B:B26: (D4) [W58] '/CINPUTRG2~~
B:D26: [W51] '{L 165}
B:E26: [W70] '{FOR \NUMBER;1;151;1;\SBR}
B:F26: [W49] '{Calc}
B:B27: [W58] '/WGPE
B:D27: [W51] '{GoTo}DATABASE~(Home)
B:E27: [W70] '{L 165}
B:F27: [W49] '{GoTo}ATAGLANCE~/WTC(Home)(R 4)(D 2)/WT
B:B28: [W58] '{GoTo}DATABASE~/WGPD
B:D28: [W51] '/WGPD
B:E28: [W70] '{SELECT "MODIFY3";;"RANGE"}
B:F28: (DUTCH8) [W49] '{INDICATE}
B:B29: [W58] '{APPENDBELOW DATABASE;INPUTRG2}
B:D29: [W51] '{SELECT "QUERY2";;"QUERY"}
B:E29: [W70] '{APPENDBELOW DATABASE;MODIFY3}
B:B30: [W58] '{GoTo}DATABASE~
B:D30: [W51] '/WGPD
B:E30: [W70] '{WindowsOn}(PanelOn)
B:B31: [W58] '{End)(D)(R 15)
B:D31: [W51] '{QUERY-OPTIONS "ALLOW-UPDATES";"ON"}
B:E31: [W70] '/WGPE
B:B32: [W58] '{FOR \NUMBER;1;151;1;\SBR}
B:D32: [W51] '{QUERY-UPDATE}
B:E32: [W70] '{SELECT "DATABASE";;"RANGE"}
B:B33: [W58] '{L 165}
B:D33: [W51] '{QUERY-OPTIONS "ALLOW-UPDATES";"OFF"}
B:E33: [W70] '/WGPE
B:B34: [W58] '/WGPE
B:D34: [W51] '{Home}
B:E34: [W70] '{GoTo}MODSCREEN~(Home)(D 2)(R 4)
B:B35: [W58] '{GoTo}INPUT_SCREEN~(R 4)(D 2)
B:D35: [W51] '/WGPE
B:B36: [W58] '/RV~(R 12)~(D 4)
B:D36: [W51] '/RNDCELL~
B:B37: [W58] '/cinput_screen2~input_screen~
B:D37: [W51] '{GoTo}DATABASE~
B:B38: [W58] '{WindowsOn}(PanelOn)
B:D38: [W51] '/WGPE
B:B39: [W58] '/WGPE
B:D39: [W51] '{GoTo}MODSCREEN~(Home)(D 2)(R 4)
B:B40: [W58] '{INDICATE}
B:D40: [W51] '{WindowsOn}(PanelOn)
B:B43: [W58] '/RNDCELL~/RNCCELL~~
B:B44: [W58] '/XICELL=0~/RE~
B:B45: [W58] '{R}(RETURN)
B:F144: [W49] '{(SELECT "PRINSTAT";;"CHART")}
B:A197: [W66] 'Dialogue Box 1 Counter:
B:A198: (BL0100 BT0100 BR0100 BB0100) U [W66] 0
B:A200: [W66] '&Data Base
B:B200: [W58] 'E&xtract

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B:C200: [W53] 'Detailed &Chron Report
B:D200: [W51] '&At-a-Glance Chron Report
B:E200: [W70] 'Detailed &Spatial Report
B:F200: [W49] 'At-a-&Glance Spatial Report
B:G200: [W70] 'Chron Statistics &Table
B:H200: [W48] 'Spatial Statistics Ta&ble
B:A201: U [W66] 0
B:B201: U [W58] 0
B:C201: U [W53] 0
B:D201: U [W51] 0
B:E201: U [W70] 0
B:F201: U [W49] 0
B:G201: U [W70] 0
B:H201: U [W48] 0
B:A202: [W66] '{GoTo)DATABASE~/WTC(Home)(D 3)(R 2)
B:B202: [W58] '{GoTo)OUTPUT~/WTC(Home)(D 3)(R 2)
B:C202: [W53] '{GoTo)G:~/WTC(Home)(R 3)(D 5)/WTE
B:D202: [W51] '{GoTo)ATAGLANCE~/WTC(Home)(R 4)(D 2)/WTB
B:E202: [W70] '{EDIT-GOTO "H:";"RANGE"/WTC
B:F202: [W49] '{GoTo)ATAGLANCER~/WTC(Home)(R 4)(D 3)/WTB
B:G202: [W70] '{GoTo)M:~/WTC(Home)(R 2)(D 5)/WTH
B:H202: [W48] '{GoTo)N:~/WTC(Home)(R 4)(D 5)/WTB
B:A203: [W66] '/WTB
B:B203: [W58] '/WTB
B:E203: [W70] '{HOME)(D 5)(R 4)
B:E204: [W70] '{WORKSHEET-TITLES "BOTH"
B:E205: [W70] '{R 33)(D 4)(L)
B:A207: [W66] 'Dialogue Box 2 Counter:
B:A208: {BL0100 BT0100 BR0100 BB0100) U [W66] 1
B:A210: [W66] '&Input Screen
B:B210: [W58] 'Record &Modification Screen
B:C210: [W53] 'Detailed &Chron Report
B:D210: [W51] '&At-a-Glance Chron Report
B:E210: [W70] 'Detailed &Spatial Report
B:F210: [W49] 'At-a-&Glance Spatial Report
B:G210: [W70] 'Chron Statistics &Table
B:H210: [W48] 'Spatial Statistics Ta&ble
B:A211: U [W66] 0
B:B211: U [W58] 0
B:C211: U [W53] 0
B:D211: U [W51] 0
B:E211: U [W70] 0
B:F211: U [W49] 0
B:G211: U [W70] 0
B:H211: U [W48] 0
B:A212: [W66] '{PRINT-RESET)
B:B212: [W58] '{PRINT-RESET)
B:C212: [W53] '{PRINT-RESET)
B:D212: [W51] '{PRINT-RESET)
B:E212: [W70] ':PLDRQRCRSCHAPTERS~LP1ML0,2~R0,2~
B:F212: [W49] ':PLDRQRCRSATAGLANCER~LPC18~13~ML0.75~R0.5~T1~
B:G212: [W70] ':PLDRQRCRSCHRON_SUMMARY~LP1CABCAQQ
B:H212: [W48] ':PLDRQRCRSSPAT_SUMMARY~LPC10.5~11.25~CABCAQQ
B:A213: [W66] ':PLCAQQ
B:B213: [W58] ':PLCAQQ
B:C213: [W53] ':PLCAQQ
B:D213: [W51] ':PLCAQQ
B:E213: [W70] 'T0,5~B0,55~QBTP:A1..P:A6~LP:A7..P:D7~QQ
B:F213: [W49] 'B0.25~QCAQCOPBLQG
B:G213: [W70] 'SB1~E1~QCOPBMQG

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B:H213: [W48] 'SB1~E1~QCOPBLP1QG
B:A214: [W66] '(SELECT INPUT_SCREEN;;"RANGE")
B:B214: [W58] '(SELECT MODSCREEN;;"RANGE")
B:C214: [W53] '(SELECT CHRON_DETAILS;;"RANGE")
B:D214: [W51] '(SELECT ATAGLANCE;;"RANGE")
B:E214: [W70] 'COLRFBLQSB1~E1~QG
B:A215: [W66] '(SET "PRINT-SIZE";"FIT-ALL")
B:B215: [W58] '(SET "PRINT-SIZE";"FIT-ALL")
B:C215: [W53] '(SET "PRINT-SIZE";"FIT-ALL")
B:D215: [W51] '(SET "PRINT-SIZE";"FIT-ALL")
B:E215: [W70] ':PSB2~E2~QG
B:A216: [W66] '(SET "PRINT-ORIENTATION";"PORTRAIT")
B:B216: [W58] '(SET "PRINT-ORIENTATION";"PORTRAIT")
B:C216: [W53] '(SET "PRINT-ORIENTATION";"PORTRAIT")
B:D216: [W51] '(SET "PRINT-ORIENTATION";"PORTRAIT")
B:E216: [W70] ':PSB3~E3~QG
B:A217: [W66] '(SET "PRINT-MARGIN-TOP";"24")
B:B217: [W58] '(SET "PRINT-MARGIN-TOP";"24")
B:C217: [W53] '(SET "PRINT-MARGIN-TOP";"24")
B:D217: [W51] '(SET "PRINT-MARGIN-TOP";"24")
B:E217: [W70] ':PSB4~E4~QG
B:A218: [W66] '(SET "PRINT-MARGIN-BOTTOM";"14")
B:B218: [W58] '(SET "PRINT-MARGIN-BOTTOM";"14")
B:C218: [W53] '(SET "PRINT-MARGIN-BOTTOM";"14")
B:D218: [W51] '(SET "PRINT-MARGIN-BOTTOM";"14")
B:E218: [W70] ':PSB5~E5~QG
B:A219: [W66] '(SET "PRINT-MARGIN-LEFT";"25")
B:B219: [W58] '(SET "PRINT-MARGIN-LEFT";"25")
B:C219: [W53] '(SET "PRINT-MARGIN-LEFT";"25")
B:D219: [W51] '(SET "PRINT-MARGIN-LEFT";"25")
B:E219: [W70] ':PSB6~E6~QG
B:A220: [W66] '(SET "PRINT-MARGIN-RIGHT";"13")
B:B220: [W58] '(SET "PRINT-MARGIN-RIGHT";"13")
B:C220: [W53] '(SET "PRINT-MARGIN-RIGHT";"13")
B:D220: [W51] '(SET "PRINT-MARGIN-RIGHT";"13")
B:A221: [W66] '(PRINT "SELECTION";1;9999;1;1)
B:B221: [W58] '(PRINT "SELECTION";1;9999;1;1)
B:C221: [W53] '(SET "PRINT-TITLES-ROW-RANGE";Chron:A1..Chron:B5)
B:D221: [W51] '(PRINT "SELECTION";1;9999;1;1)
B:C222: [W53] '(PRINT "SELECTION";1;9999;1;1)
B:A224: [W66] 'Dialogue Box 3 Counter:
B:A225: (BL0100 BT0100 BR0100 BB0100) U [W66] 0
B:A227: [W66] 'An &Individual Chart
B:B227: [W58] '&Local CU/Group of CU's Series
B:C227: [W53] 'Multi-&Region Chart Series
B:A228: U [W66] 0
B:B228: U [W58] 0
B:C228: U [W53] 0
B:A229: [W66] '(SELECT "<CURRENT>";;"CHART")
B:B229: (DUTCH12) [W58] '(GoTo)LOCALGRAFS~
B:C229: (DUTCH12) [W53] '(GoTo)REGIONALGRAFS~
B:A230: [W66] '(DIALOG? "Go-To")
B:B230: (DUTCH12) [W58] '(INDICATE "Push ENTER then Up & Down cursor keys t
B:C230: (DUTCH12) [W53] '(INDICATE "Push ENTER then use Up & Down cursor ke
B:B231: (DUTCH12) [W58] '(?)(INDICATE)
B:C231: (DUTCH12) [W53] '(?)(INDICATE)
B:A234: [W66] 'Dialogue Box 4 Counter:
B:A235: (BL0100 BT0100 BR0100 BB0100) U [W66] 1
B:A237: [W66] 'Current Chart
B:B237: [W58] 'Local CU or Group of CUs

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B:C237: [W53] 'Multi-Region Group of CUs
 B:D237: [W51] 'All Charts
 B:A238: U [W66] 0
 B:B238: U [W58] 0
 B:C238: U [W53] 0
 B:D238: U [W51] 0
 B:A239: [W66] '{PRINT-RESET}
 B:B239: [W58] '{PRINT-RESET}
 B:C239: [W53] '{PRINT-RESET}
 B:D239: [W51] '{PRINT-RESET}
 B:A240: [W66] ':prcrsonegraf~lcm150~ml25~r25~t25~b25~qqcolqg
 B:B240: [W58] '{SELECT "CHRONGRAFS";;"RANGE"}
 B:C240: [W53] '{SELECT "REGLGRAFS";;"RANGE"}
 B:D240: [W51] '{SELECT "CHRONGRAFS";;"RANGE"}
 B:A241: [W66] '{PRINT-RESET}
 B:B241: {DUTCH12} [W58] '{SET "PRINT-SIZE";"ACTUAL"}
 B:C241: {DUTCH12} [W53] '{SET "PRINT-SIZE";"ACTUAL"}
 B:D241: {DUTCH12} [W51] '{SET "PRINT-SIZE";"ACTUAL"}
 B:B242: {DUTCH12} [W58] '{SET "PRINT-ORIENTATION";"PORTRAIT"}
 B:C242: {DUTCH12} [W53] '{SET "PRINT-ORIENTATION";"PORTRAIT"}
 B:D242: {DUTCH12} [W51] '{SET "PRINT-ORIENTATION";"PORTRAIT"}
 B:B243: {DUTCH12} [W58] '{SET "PRINT-MARGIN-TOP";"25"}
 B:C243: {DUTCH12} [W53] '{SET "PRINT-MARGIN-TOP";"25"}
 B:D243: {DUTCH12} [W51] '{SET "PRINT-MARGIN-TOP";"25"}
 B:B244: {DUTCH12} [W58] '{SET "PRINT-MARGIN-BOTTOM";"25"}
 B:C244: {DUTCH12} [W53] '{SET "PRINT-MARGIN-BOTTOM";"25"}
 B:D244: {DUTCH12} [W51] '{SET "PRINT-MARGIN-BOTTOM";"25"}
 B:B245: {DUTCH12} [W58] '{SET "PRINT-MARGIN-LEFT";"25"}
 B:C245: {DUTCH12} [W53] '{SET "PRINT-MARGIN-LEFT";"25"}
 B:D245: {DUTCH12} [W51] '{SET "PRINT-MARGIN-LEFT";"25"}
 B:B246: {DUTCH12} [W58] '{SET "PRINT-MARGIN-RIGHT";"25"}
 B:C246: {DUTCH12} [W53] '{SET "PRINT-MARGIN-RIGHT";"25"}
 B:D246: {DUTCH12} [W51] '{SET "PRINT-MARGIN-RIGHT";"25"}
 B:B247: [W58] '{SET "PRINT-FOOTER-CENTER-TEXT";"@"}
 B:C247: [W53] '{SET "PRINT-FOOTER-CENTER-TEXT";"@"}
 B:D247: [W51] '{SET "PRINT-FOOTER-CENTER-TEXT";"@"}
 B:B248: {DUTCH12} [W58] '{PRINT "SELECTION";1;9999;1;1}
 B:C248: {DUTCH12} [W53] '{PRINT "SELECTION";1;9999;1;1}
 B:D248: {DUTCH12} [W51] '{PRINT "SELECTION";1;9999;1;1}
 B:B249: [W58] '{PRINT-RESET}
 B:C249: [W53] '{PRINT-RESET}
 B:D249: [W51] '{SELECT "REGLGRAFS";;"RANGE"}
 B:D250: {DUTCH12} [W51] '{PRINT "SELECTION";1;9999;1;1}
 B:D251: [W51] '{PRINT-RESET}
 B:A273: [W66] 'Dialogue Box 5 Counter:
 B:A274: {BL0100 BT0100 BR0100 BE0100} U [W66] 1
 B:A276: [W66] 'To Drive &A WITHOUT DATABASE
 B:B276: [W58] 'To Drive &C WITH DATABASE
 B:C276: [W53] 'To Drive C &WITHOUT DATABASE
 B:D276: [W51] 'Save only &DATABASE to Archives
 B:E276: [W70] 'Save CUdBASE to Specified &Path
 B:F276: [W49] 'Restore DATABASE into CUdBASE
 B:A277: U [W66] 0
 B:B277: U [W58] 0
 B:C277: U [W53] 0
 B:D277: U [W51] 0
 B:E277: U [W70] 0
 B:F277: [W49] 0
 B:A278: [W66] '{GoTo}DESTINATION~
 B:B278: [W58] '/FS(CE)C:\CUDBASE\CUDBASE~R

B:C278: [W53] '{GoTo}DESTINATION~(D)/RE(END){HOME}~
 B:D278: [W51] '{GoTo}DESTINATION~
 B:F278: [W70] '{GoTo}DESTINATION~
 B:F278: [W49] '{GoTo}DESTINATION~
 B:A279: [W66] '/FXV{CE}C:\CUDBASE\DATABASE.WK4~(END){HOME}~
 B:B279: [W58] '/FS{CE}C:\CUDBASE!\CUDBASE~R
 B:C279: [W53] '{GoTo}EDATA~(D)/RE(END){HOME}~
 B:D279: [W51] '/FXV{CE}C:\CUDBASE\DATABASE.WK4~(END){HOME}~
 B:E279: [W70] '{Alert "Please click on OK, then type the complete path, fil
 B:F279: [W49] '/FCCE{CE}C:\CUDBASE\DATABASE.WK4~
 B:A280: [W66] '{D)/RE(END){HOME}~
 B:B280: {DUTCH8 B} [W58] '{CHOOSE-ONE DIALOGUE5;dctr5;"Save CUDBASE && &DA
 B:C280: [W53] '/FS{CE}C:\CUDBASE\CUDBASE.WK4~
 B:D280: {DUTCH8 B} [W51] '{CHOOSE-ONE DIALOGUE5;dctr5;"Save CUDBASE && &DA
 B:E280: [W70] '/FXV
 B:A281: [W66] '{GoTo}EDATA~(D)/RE(END){HOME}~
 B:C281: [W53] '/FS{CE}C:\CUDBASE\CUDBASE.WK4~
 B:A282: [W66] '/FS{CE}A:\CUDBASE~
 B:C282: {DUTCH8 B} [W53] '{CHOOSE-ONE DIALOGUE5;dctr5;"Save CUDBASE && &DA
 B:A283: {DUTCH8 B} [W66] '{CHOOSE-ONE DIALCGUE5;dctr5;"Save CUDBASE && &DA
 B:A287: [W66] 'Dialogue Box 6 Counter:
 B:A288: {BL0100 BT0100 BR0100 BB0100} U [W66] 1
 B:A290: [W66] 'By &CU in Chron Order
 B:B290: [W58] 'By &Date and CU
 B:C290: [W53] '&User-Defined Sort Keys
 B:A291: [W66] 0
 B:B291: [W58] 0
 B:C291: [W53] 0
 B:A292: [W66] '{GoTo}DATABASE~/WTC{Home}{D 3}
 B:B292: [W58] '{GoTo}DATABASE~/WTC{Home}{D 3}
 B:C292: [W53] '{GoTo}DATABASE~/WTC{Home}{D 3}
 B:A293: [W66] '{SORT-RESET}
 B:B293: [W58] '{SORT-RESET}
 B:C293: [W53] '{SORT-RESET}
 B:A294: [W66] '{SORT-KEY-DEFINE 1;CUDB:B4;"Ascend"}
 B:B294: [W58] '{SORT-KEY-DEFINE 1;CUDB:A4;"Ascend"}
 B:C294: [W53] '/DSD.(END){D}{END){HOME}~Q
 B:A295: [W66] '{SORT-KEY-DEFINE 2;CUDB:A4;"Ascend"}
 B:B295: [W58] '{SORT-KEY-DEFINE 2;CUDB:B4;"Ascend"}
 B:C295: [W53] '{DIALOG? "RANGE-SORT"}
 B:A296: [W66] '/DSD.(END){D}{END){HOME}~G
 B:B296: [W58] '/DSD.(END){D}{END){HOME}~G