The City Disc

an exploration of the City of London

The User Guide

THE CITY DISC

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User's Guide

•The City Disc was produced by the BBC Interactive Television Unit
•The production was made possible with the co-operation of Citicorp/Citibank and the Corporation of London.
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•Corporation of London Computer Services Director: Roger Marshall

Acknowledgements

Please Note: We recognise that in the vast body of textual information contained on these discs some spelling mistakes have occurred. We regret that it was not possible to correct all these errors before publication deadline.

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INTRODUCTION

The City is the 'square mile' in the heart of Central London. Its importance as a centre of trading stretches over 2000 years, from Roman Britain to the present. Today rapid technological change has caused a revolution in the City's activities. To understand the City's development, this set of four videodiscs explores its historical background, customs and traditions, its role as a modern local authority, as well as the workings of the modern financial market place.

The City Disc set is divided into two packages each containing two discs:

1. **The Cultural Disc**
2. **The Financial Disc**

Each package contains two discs, this User Guide, and control software (in the AIV version the software is encoded on the disc).

THE CULTURAL DISC

These two discs explore the geographical, historical, archaeological and architectural patterns which distinguish the City's development. Using maps, prints, archive material and guided tours, users can roam at will through the City, selecting key sites and important buildings to focus on physical, economic and social aspects of development.

There is a survey of City churches, the craft guilds and livery companies, the functions of the Corporation of London and the City police.

A store of original documents, maps, prints, photographs and explanatory text allows users to research and analyse different types of evidence.

THE FINANCIAL DISC

This set of two discs explores the activities, institutions and significance of the City as a world financial centre. It introduces the processes and terminology used by people in business.

The user can discover and investigate the nature and workings of the key financial markets, the Stock Exchange, the Bank of England, Lloyd's, etc. and learn how they interrelate through simulations of different kinds of dealing.

The lifestyle of a City worker, the career opportunities and demands are examined. A financial glossary is included.

WHO IS IT FOR?

For training

As a training resource the City Discs are of specific value for financial service training, and for company training departments' induction courses for new employees entering the City or business for the first time.

For education

As an educational resource the City of London videodiscs support GCSE and A level courses in History, Geography, Economics and Business Studies, as well as courses in General Studies and Careers Guidance.

AIV AND DOS VERSIONS

These videodiscs are available in two versions. The BBC AIV (Advanced Interactive Video) version runs on a Domesday System, and the DOS version on an IBM or IBM compatible PC. For information about the different versions see Chapters 1 - 5.

THIS USER GUIDE

This User Guide gives information about both the Cultural and Financial Discs, and both the AIV and DOS versions. It gives guidance and explanation of:

1. how to install and start the videodiscs and software;

2. how to operate all the functions on the discs;

3. the contents and purpose of each section of each disc.

It is suggested that trainers and teachers should spend some time becoming familiar with the different sections and functions of the discs. Time spent in exploring what is a rich resource will enable users to exploit the discs effectively for their own purposes, to discover the most relevant content sections, and to 'navigate' through the data smoothly.

1 GETTING STARTED

(AIV VERSION)

STARTING UP

Full details of how to set up the equipment are given in the User Guide which is supplied with the hardware. The following is intended only as a summary.

The various components of the system should be connected as shown below:
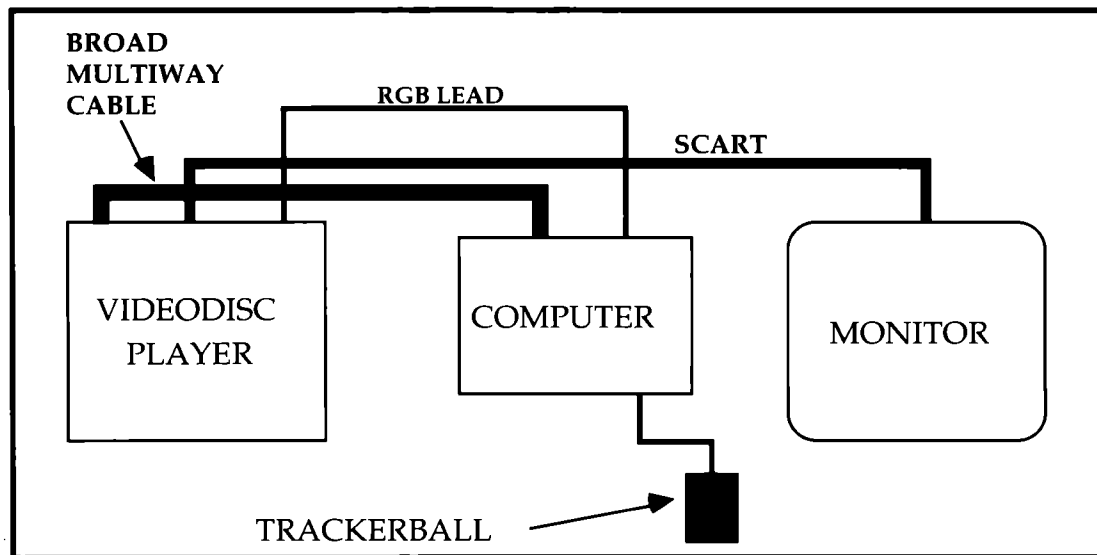
Turn on the computer, the monitor and the videodisc player. Press the Eject button on the front of the videodisc player and the drawer will open. Place the videodisc into the drawer with the City Disc label facing upwards and gently push the drawer in. It will automatically be drawn into the player and the disc will start to spin. To start the program:

1.   Press the keys CTRL and Q together. Whilst holding down these two keys, press the BREAK key. Release the BREAK key and then finally the CTRL and Q keys. You should then see a prompt sign (>) on the screen.

2.   Press down the SHIFT key and whilst holding it down, press and release the BREAK key. Finally, release the SHIFT key.

The software will then load into the computer. This will take between 45 and 60 seconds. Once loading is complete, the opening titles will play automatically. At the end of the sequence the titles dissolve into the top level menu. (If you press

ESCAPE while the opening titles are playing, you can exit and go straight to the top level menu.) From this menu you can choose to go to each of the main sections of the disc. Using the trackerball, point at the required section (the pointer will change to a small magnifying glass) and press the ACTION (left hand) button on the trackerball. You will then see the menu for the section you have chosen.
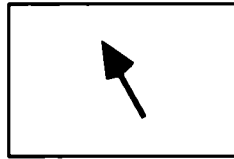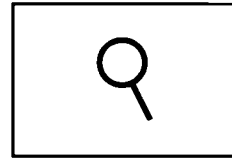
The pointer   **The magnifying glass**

CLOSING DOWN

When you have finished using the City Disc and want to close the system down, press CTRL and Q together. Whilst holding down these two keys, press and release the BREAK key. Release the other two keys and press the Eject button on the front of the videodisc player. When the disc stops spinning it will be ejected. Remove the disc and store it carefully for the next user. Close the drawer of the videodisc player and turn it off at the back. Turn off the computer and the monitor.

THE COMPUTER CONFIGURATION

The computer should have been set up by your dealer to work with an Advanced Interactive Videodisc System. However, if you are experiencing difficulties whilst booting up the City Disc, it may be because the computer's configuration has been changed or lost, (the batteries inside the computer may need replacing). This can be checked as follows:

1.   At the prompt (>) type:

      *STATUS [RETURN]

      A list will be displayed on the monitor.

2.   The list should read as follows:

BAUD 7
No boot
Caps
Data
No directory
Internal Tube
FDrive 1
File 13
Hard
Ignore 10
Lang 12
Mode 0
Tube
Print 1
Repeat 3
Scroll
TV 255,0
VFS Dir
Eject

3.   If any of these are different they can be changed as follows. For
example, if the words "No Tube" rather than "Tube" appear in the list,
then type:

*CONF.TUBE [RETURN]

The abbreviation *CONF. stands for configure and changes the 'status'
of the computer.

If the display has "Lang 13" rather than "Lang 12", then type:

*CONF. LANG 12 [RETURN]

You can continue in this way making all the changes as required. You
can check the revised 'status' by again typing:

*STATUS [RETURN]

The list should now be revised as required.

2 HOW TO USE THE SYSTEM

(AIV VERSION)

THE TRACKERBALL

Although all functions can be controlled from the keyboard, the best way to operate this system is by using the trackerball. You can interact with the system by moving the pointer on the screen and then pressing either the left hand ACTION button or the centre CHANGE button. In general terms, if you want to select something point at it and press the ACTION button. In parts of the discs where there are sequences of text or still pictures, you can turn to the next or previous 'page', by placing the pointer at the right hand side of the screen, and pressing the CHANGE (middle) button. The right hand button is not active.

MAKING CHOICES

The first screen you will see at the end of the title sequence will be one of those shown below, depending on whether you are using the Cultural or Financial disc.
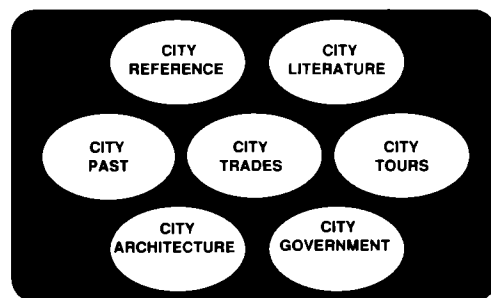
The Cultural Disc
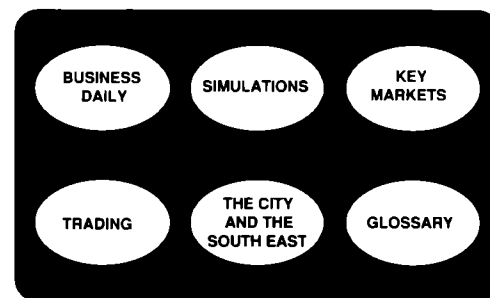
The Financial Disc

To select a topic, point at it and press the ACTION button. Sometimes you will be taken to a film, sometimes to a series of text pages, or sometimes to a series of text and picture pages.

Throughout the disc you will see a menu bar with six boxes across the bottom of the screen. A typical menu bar is shown below:

◀	Back Step	Menu	Help	Find	Fast >	Skip

To select any item from the menu bar move the pointer over it (the pointer will change to a cross ✚) and press the ACTION button on the trackerball. The contents of the menu bar change depending on where you are in the disc. However, there will always be **Backstep**, **Menu** and **Help**.

◀ On the left hand side of the menu bar there is a blue triangle. If you point at it and press the ACTION button the menu bar will be removed. To redisplay the menu bar point at the yellow triangle and press the ACTION button. You can remove all the computer graphics from the screen by pressing the red function key F9. To reinstate the graphics press F9 again.

Backstep The menu always contains **Backstep** which is particularly useful for moving around the disc. Wherever you are, if you select **Backstep** you will move back to the last point you chose. In this way you can retrace your path up to a maximum of nine steps.

Menu If at any time you want to return to the top level menu, select **Menu** from the menu bar.

Help If at any point you are unsure what to do, select **Help** from the menu bar and you will be shown some text relevant to the options available at that particular place in the videodisc. On selecting **Help** you will also be offered **General Help** which describes the major functions and how to use them.

Find Selecting **Find** from the menu bar will take you to this screen:


```
        BBC City Project
What do you want to know about?



Previous Query:



Groups to exclude:
  [Pic.]   [Text]   [Dict]
Percentage through search:
'Perfect matches' found:
```

Move the pointer over the top box which will change from dark blue to light blue. Then type in the word or words describing your area of interest. When you have typed in the words, press the RETURN button

on the keyboard or ACTION button on the trackerball. The computer will search its hidden index for topics, using the keywords you have entered. During the search the computer will continually update the **Percentage through search** and the number of **Perfect matches** it has found.

Note: if the computer finds a hundred perfect matches before it has reached a hundred percent of its search, it will stop and display these perfect matches. If you wish to refine your search criteria, you can choose to exclude either pictures, text or the dictionary by pointing at the appropriate box on the first **Find** screen and pressing the ACTION button.

When the computer has finished its search, it will display the perfect matches as a list on the screen similar to that shown below.

These items have been found:		
1	Text	CITY MARSHAL
2	Text	CITY OF THE GALLOWS
3	Dict	City Police Office
4	Text	COMPTROLLER AND CITY SOLICITOR
5	Text	EARLY HISTORY
6	Text	MOORGATE TUBE DISASTER
7	Text	OLD BAILEY BOMBING
8	Text	PICKETS AND PROTESTS
9	Pic.	Police Captions
10	Text	POLICING FOR THE FUTURE
11	Text	POST WAR RECONSTRUCTION
12	Text	STRIKES AND ZEPPELINS

The computer will display up to twenty-one lines on the first page. If there is more than one page, the subsequent pages can be selected by moving the pointer to the right hand side of the screen and pressing the CHANGE button.

To select any item from the list move the pointer over it (the number on the left hand side will highlight) and press the ACTION button. You will be taken directly to that section of the videodisc. The topic you want may be on the other disc and you will be offered the choice of inserting this disc or not.

Fast > This option appears on the menu bar when you are playing a film. Select this to fast forward the film at three times the normal speed.

Skip This option appears on the menu bar when you are playing a film. Select this to jump to the end of the film.

THE FUNCTION KEYS

The functions on the menu bar are replicated by the function keys as follows:

- F0   To remove or display the menu bar
- F1-6 These mimic the six boxes on the menu bar
- F7   To move backwards through pages of text or still photos
- F8   To move forwards through pages of text or still photos
- F9   To turn the graphic overlay on or off

CHOOSING FROM A LIST OF OPTIONS

Sometimes you will be presented with a menu - a list of options on the screen, that typically look like this:

```
KEY FINANCIAL MARKETS
 BALTIC EXCHANGE
 BANK OF ENGLAND
 FUTURES & OPTIONS EXCHANGE (FOX)
 FINANCIAL FUTURES (LIFFE)         ▶
 LLOYD'S OF LONDON
 LONDON METAL EXCHANGE
 STOCK EXCHANGE




 ◀ Backstep   Menu   Help   Find
```
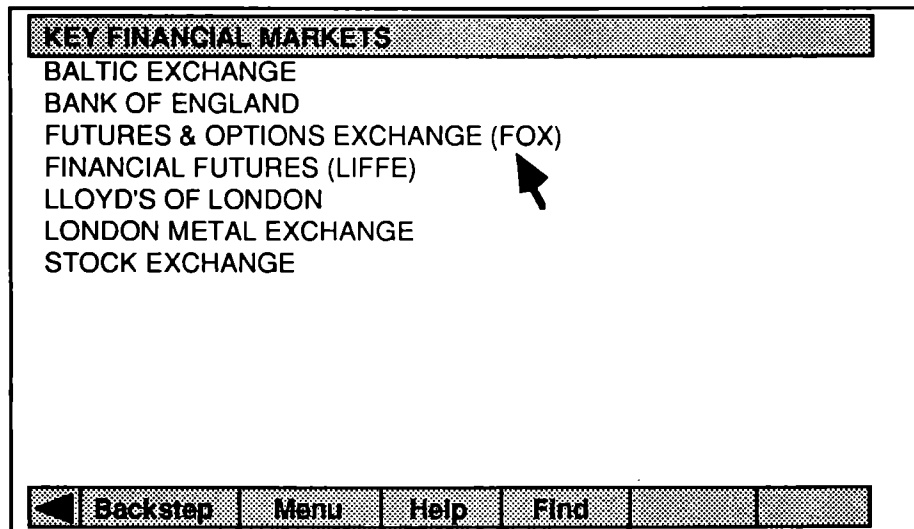
To select an item from the menu, move the pointer to the chosen line and press the ACTION button. Sometimes the menu will be more than one page in length. You can go to the next page by pointing at the word **MORE** at the bottom of the list and pressing the ACTION button. Similarly, to go to the previous page, point at the word **BACK** at the top of the list and press the ACTION button.

TEXT ESSAYS

Some of the information on the disc comes in the form of 'Text Essays'. To turn to the next or previous page, you place the pointer to the right or left hand side of the screen respectively, and press the CHANGE (middle) button.

TEXT AND PICTURE ESSAYS

In some cases, the information is available as a 'Text and Picture Essay'. Page turning works in the same way. You will also see **[Fig x]** within the text. If you move the pointer between the brackets and press the ACTION button, you will be taken to a picture associated with the text. To return to the text, select **Back Step** from the menu bar.

DESCRIPTION AND INDEX

When you are reading a text and picture essay, you will see two new items on the menu bar: **Description** and **Index**.

To see a caption of the picture on the screen, select **Description**. To see a list of all the pictures in the text and picture essay, select **Index**. The list of pictures is 'active'; if you select any item from the list, the correct picture will appear.

CHANGING DISCS

You may want to go from Side 1 to Side 2 (or vice versa) of the Cultural or Financial Discs, whichever you are using.

NB Side 1 and 2 are separate discs. Never turn a disc over so that the label 'BLANK SIDE - DO NOT PLAY' is uppermost in the player.

If you choose a topic from a menu which is stored on the other disc, the computer will beep and display a message at the top of the screen.

Turn videodisc over for this item

This means that you should remove the current disc and insert the other disc, rather than literally turning the disc over.

The message will immediately be followed by:

Do you want to eject disc? (Y/N)_

Press **Y** (=YES) to eject the disc.

Press **N** (=NO) to stay with the same disc, and make a different choice.

If you select **Y**, the computer will automatically eject the disc and let you insert the other disc. **You do not have to re-boot the software.** Once you have inserted the other disc, push the drawer shut. The computer will automatically take you to the topic you have already chosen.

To change from the Cultural Disc to the Financial Disc, or vice versa, you should follow the first part of the procedure described in Chapter 1, 'Closing Down'. Press CTRL and Q together, and while holding them down, press and release the BREAK key. Release the other two keys and press the Eject button on the front of the videodisc player. When the disc has stopped spinning, it will be ejected. Remove the disc and store it carefully. Then load the other disc as described in Chapter 1, 'Starting Up'.

3 GETTING STARTED

(DOS VERSION)

THE SYSTEM AND SOFTWARE

The various components of the system should be connected as shown below:
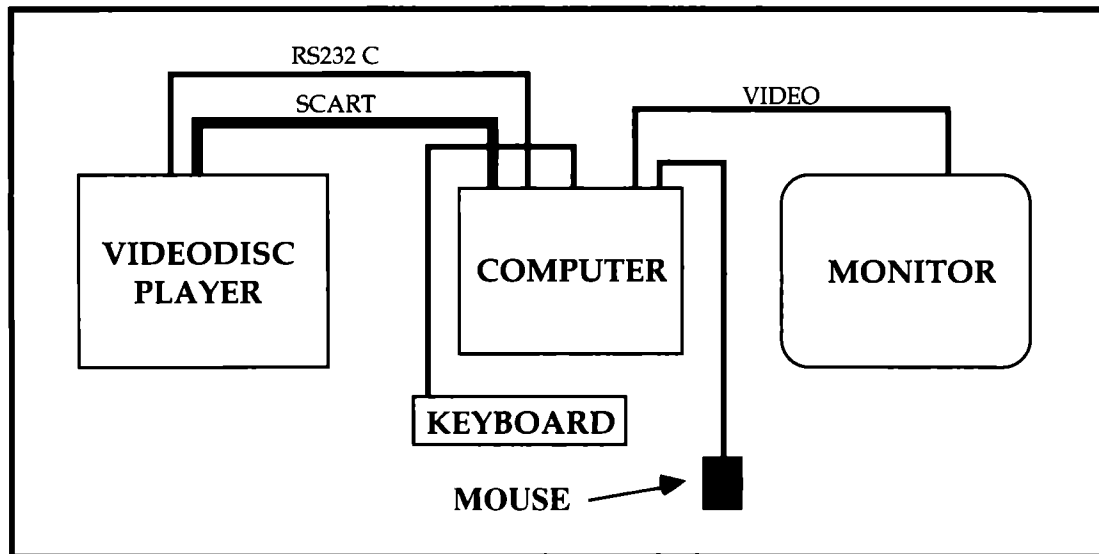
The computer should be configured for MS-DOS version 3.3. It should also have a MIC board installed with the associated driver (software). The MIC board overlays computer generated graphics, text or data on the video images seen on the monitor. To use all the software on the City Disc, you need a multisync monitor (see CITYLINK below).

You will need to install the City Disc software onto the hard disc of your computer before you can use the City Disc. Once installed it can be left there.

HAVE YOU ENOUGH HARD DISC SPACE?

Before you start loading the City Disc software you should ensure that you have enough space on the hard disc. To do this, you should type the following:

    C:\> **CHKDSK**   [RETURN/ENTER]

Wait for a few seconds and then the computer will display information about space on the disc.

The following line tells you how much free space there is on the disc.

xxxxxxxx bytes available on disc

The Cultural Disc requires approximately 10 Mbytes.
The Financial Disc requires approximately 6.5 Mbytes.
The Cultural and Financial Discs together require approximately 16 Mbytes.

INSTALLING THE CITY DISC SOFTWARE

The first floppy disc of the software supplied in your package is labelled **City Installation**. It is designed to assist you to load the appropriate software in the correct order.

You a have a number of choices depending on whether you have the Cultural Disc, or the Financial Disc, or both.

Follow the installation carefully to ensure that the program runs correctly.

Selecting a hard disc drive

Put the disc labelled **City Installation** into the drive **a:**.
Type (at the cursor):

a:install [RETURN/ENTER]

and then answer the question:

Install City onto which drive [c]?

You may install the City Disc software onto either drive **c** or **d**. Enter the letter for the drive you wish to keep the software on. **c** is the default. Press RETURN/ENTER to accept the default of drive **c**.

IF YOUR HARD DISC IS *NOT* CALLED C OR D

NB If you want to install the software on to a hard disc other than **c** or **d** you must take the following actions.

1. To copy the install command file from the **City Installation** disc, type:

copy a:install bat

2. Edit install bat using EDLIN or some other text editor to replace the question mark in the line

set ctydrv= ? [RETURN/ENTER]

with the letter of the drive of your choice. E.g.

set ctydrv= e [RETURN/ENTER]

3. To install the City software, type:

install [RETURN/ENTER]

After you have selected the drive, you will see the messages:

1 File(s) copied
1 File(s) copied

Cultural and/or Financial Disc Software?

Answer the question:

Do you wish to install the Financial, the Cultural, or both?
Enter F, C, or B

You may install just the Financial software, just the Cultural software, or both the Financial and the Cultural software. Enter

F for Financial, or
C for Cultural, or
B for both.   [RETURN/ENTER]

Installing the Financial Disc software alone

The City Financial Disc requires approximately 6.5 Mbytes. The software is held on eight floppy discs (in addition to the **City Installation** disc):

> City General 1/1
> City Financial 1/4, 2/4, 3/4, 4/4
> City Citylink 1/3, 2/3, 3/3

If you have selected **F** or **B** you will then be asked the following question:

> **The Citylink simulation requires approximately 2 megabytes of disc space and a multisync monitor. Do you wish to install the Citylink software?**
> **Enter Y or N**

NB Citylink is a simulation containing information about events, financial rates and other indices which can be used separately from the City Disc. See Chapter 8. Only load Citylink if you have a multisync monitor. Consult your supplier if you are in any doubt. If you choose not to use Citylink, you will save approximately 2 megabytes of disc space and will only need to load the City General and City Financial floppy discs. (If you install a multisync monitor later on, you can always load the Citylink software then. In that case, you would install it, as with any other piece of software.)

Press **Y** if you want to load the Citylink software.
Press **N** if you do not want to load the Citylink software.

Having answered all the questions, you will be prompted to insert the appropriate discs according to their labels. E.g.,

> **Insert the floppy disc labelled City General 1/1 into drive a**
> **Insert backup diskette 01 in drive A:**
> **Strike any key when ready**

After putting in the appropriate disc in the drive, press any key. You will then see the files being listed as they are copied to your hard disc. When the next disc is required you will see

> **Insert backup diskette 02 in drive A:**
> **Strike any key when ready**

Continue putting in the required discs until all files have been copied.

When the installation is complete, you will see the message:

> **City installation complete**

You are now ready to run the Financial Disc software. See Chapter 7.

Installing the Cultural Disc software alone

The City Cultural Disc requires approximately 10 Mbytes. The software is held on eleven floppy discs (in addition to the **City Installation** disc):

City General 1/1
City Cultural 1/11, 2/11, 3/11, 4/11, 5/11, 6/11, 7/11, 8/11, 9/11, 10/11, 11/11

Having selected the drive in the way described above, you will be prompted to insert the appropriate discs according to their labels. E.g.,

Insert the floppy disc labelled City General 1/1 into drive a
Insert backup diskette 01 in drive A:
Strike any key when ready

After putting the appropriate disc in the drive, press any key. You will then see the files being listed as they are copied to your hard disc. When the next disc is required you will see:

Insert backup diskette 02 in drive A:
Strike any key when ready

Continue putting in the required discs until all files have been copied.

When the installation is complete, you will see the message:

City installation complete

You are now ready to run the Cultural Disc software. See Chapter 6.

Installing both the Cultural and Financial Disc software

Having selected the drive in the way described in the previous section, you will be prompted to insert the appropriate discs according to their labels, in the following order:

City General 1/1
City Cultural 1/11, 2/11, 3/11, 4/11, 5/11, 6/11, 7/11, 8/11, 9/11, 10/11, 11/11
City Financial 1/4, 2/4, 3/4, 4/4
City Citylink 1/3, 2/3, 3/3

After putting the appropriate disc in the drive, press any key. You will then see the files being listed as they are copied on to your hard disc. Continue putting in the

required discs until all files have been copied. When the installation is complete, you will see the message:

City installation complete

You are now ready to run the City Disc.

STARTING UP

Ensure that the computer, monitor and videodisc player are turned on.

Press the Eject button on the front of the videodisc player and the drawer will open. Place the videodisc into the drawer with the City Disc label facing upwards and gently push the drawer in. It will automatically be drawn into the player and start to spin the disc. To start the program, type the following next to the prompt C:/ >

City [RETURN]

The computer will now load the software into its memory (this takes about 20 seconds) and the title sequence will play.

You can exit from this opening film by pressing Q on the keyboard.

CLOSING DOWN

When you have finished your session on the disc it is preferable to leave using **EXIT**. **EXIT** is only available on a Navigate screen. Select **EXIT** to close the software, leaving the computer ready for another user, or turn it off in the usual way.

4 HOW TO USE THE SYSTEM

(DOS VERSION)

The system is operated using the mouse. You interact with the system by moving the screen pointer and then pressing the button on the mouse when the pointer is over your chosen subject or action.

MAKING CHOICES

The first screen you will see at the end of the title sequence will be one of those shown below, depending on whether you are using the Cultural or Financial Discs.
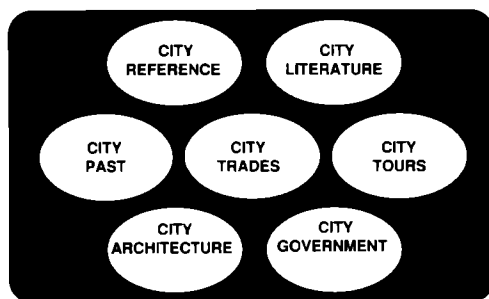
The Cultural Disc
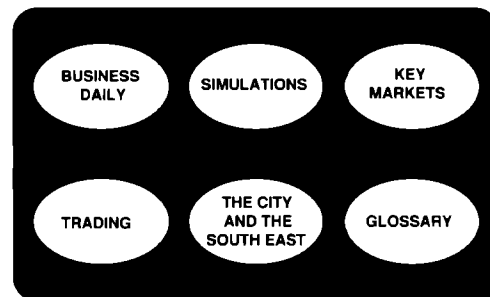
The Financial Disc

To select a topic, point at it and press the button on the mouse.

On making your selection, you will usually be taken to a secondary menu. This menu could be made up of text or pictures or both. To see an item, move the pointer over the text or picture and press the mouse button and you will be taken to that topic. Occasionally menus are longer than a single page. To see subsequent pages of the menu, select the forward or backward pointing arrows underneath the list.

BUTTONS

This function is available on every screen. If you select the BACK button you will return to the previous menu or point where you selected something. You continue to select BACK up to nine times to backtrack along your route.

Help is always available at any point on the disc and is accessed by selecting the **HELP** button. A box containing text will appear in the middle of the screen. The text explains the various options at that particular point and how to access those options.

You can scroll through the the text by placing the pointer over the up or down arrow on the right hand side of the text box and holding down the mouse button. When you have finished reading the **HELP** text, remove the box by clicking anywhere on the screen. There is different **HELP** text at each point on the disc.

If you select the **KEEP** button, you will be taken to the 'Knapsack' facility. The 'Knapsack' is a place where you can store particular items - film, still photographs, or text - that you would like to keep to use at a later stage. For a full description of how to use **KEEP**, see Chapter 5.

There are different **REFERENCE** sections, depending on whether you are using the Cultural or the Financial Discs. This function is described more fully below.

You can select **NAVIGATE** anywhere in the disc to show you where you are. This function is described more fully below.

When you have finished your session on the disc it is preferable to leave using **EXIT**. **EXIT** is only available on a Navigate screen. Select **EXIT** to close the software, leaving the computer ready for another user, or turn it off in the usual way.

This function is available only on the Cultural Disc and is found at the top level menu and also on all the Navigate pages.

If you select the **TIMELINE** the computer will display a text box. (This takes a few moments to load.) The text box contains three columns showing: a date; events that happened in the United Kingdom; events that happened in London.

The **TIMELINE** is very long and can be seen by scrolling the text using the up and down arrows on the right hand side of the screen. To remove the **TIMELINE** when you have finished using it, click anywhere outside the text box.

Reference

Cultural Disc

On selecting the **REF** button on the Cultural Disc you will be shown an index for Stow's Survey of London. You can page through the menu until you see an item you wish to select. Move the pointer to the item and click the mouse button and you will be taken to the appropriate section of the Survey. Stow's Survey of London is described more fully in Chapter 6.

Financial Disc

On selecting the **REF** button on the Financial Disc you will be shown a dictionary of financial terms. You will be offered the choice of accessing the dictionary in two ways: **Index** or **Browse**. You can also access the dictionary via **Help.**

If you select **Index**, you will be asked to type in the first letter of the topic you are interested in, followed by pressing the RETURN or ENTER key on the keyboard. You will then be given all the dictionary entries for that letter, (sometimes they will occupy more than one page). To see a particular entry simply move the pointer over the word in the index and press the mouse button.

To exit from **Index** select **NAV** or **BACK**.

If you select **Browse** you will again be asked to type in the first letter of the topic you are interested in, followed by pressing the RETURN or ENTER keys. In this case you will be taken to the first item listed under the letter of your choice. You will then be able to page backwards and forwards through each of the dictionary entries using the white arrows at the bottom of the text. Click on **REF** to select another letter.

To exit from **Browse** select **NAV** or **BACK**.

Within the dictionary entries some of the words appear in yellow text. If you select one of these highlighted words you will be taken to another dictionary entry which explains that term. (To return to the previous word, select **BACK**.)

Navigate

You can select **NAV** anywhere in the disc to show you where you are. The ability to **Navigate** through the City Disc is a particular facility of the DOS version.
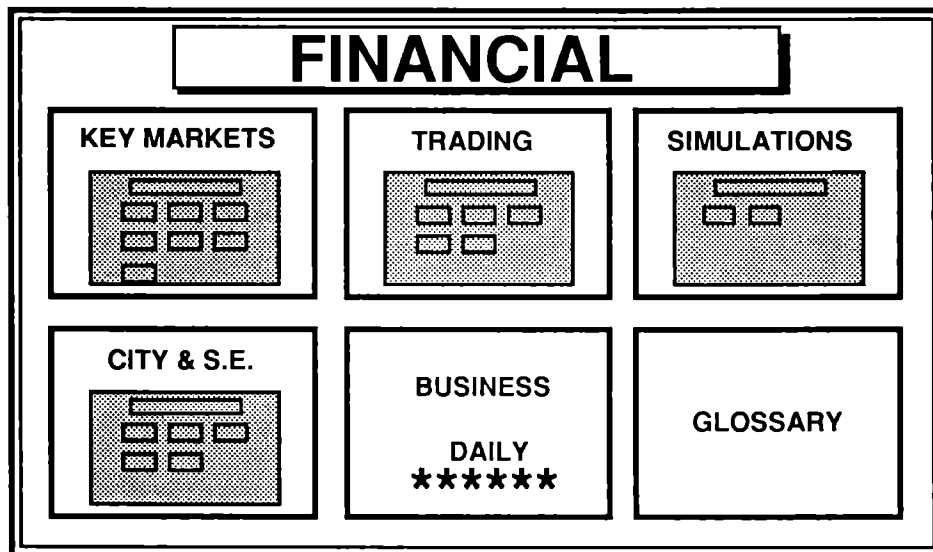
Navigate has an upper and a lower level. At the upper level the screen will show the main subject areas of either the Cultural or Financial Disc as appropriate. A line of green asterisks will appear inside a box indicating where your current position is.

There is also a second level of Navigate. You can access this level by selecting the small rectangular icon within any of the grey topic boxes. An example of a second level Navigate screen is shown below.
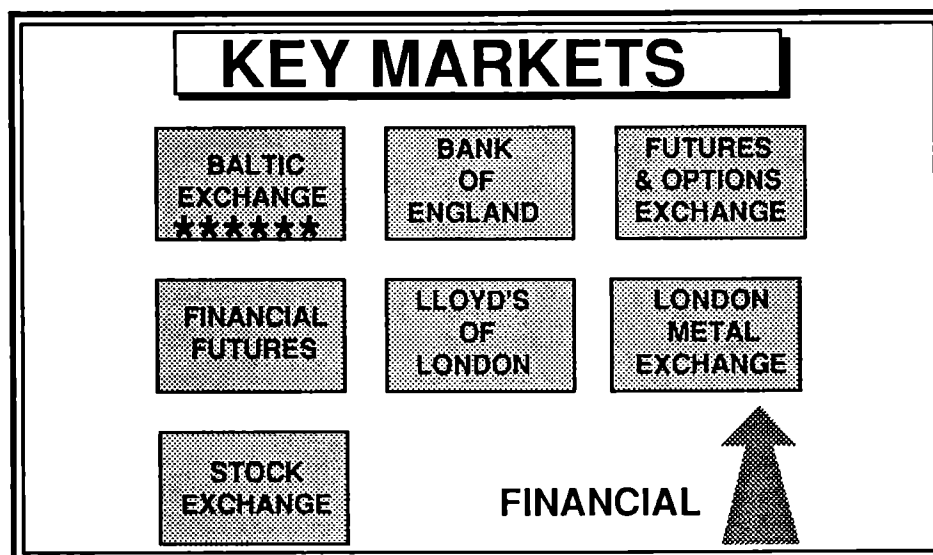
You can select any topic of interest from this screen. If you wish to return to the higher level of Navigate, select the 'up' arrow at the bottom right hand side of the screen.

If you select **BACK** at this stage you will return to the topic you were looking at when you selected Navigate. If you wish to go to another part of the disc, move the pointer to the appropriate box and click the mouse button.
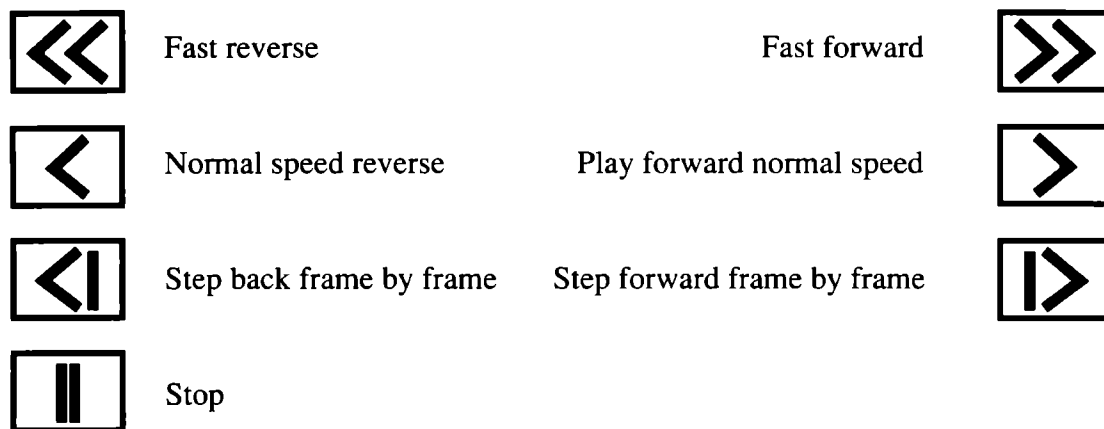
TEXT AND PICTURE ESSAYS

Some essays are made up only of text and some are a mixture of text and pictures. These essays are nearly always more than a single page in length. You can change pages using the arrows at the bottom of the text; the right hand arrow takes you forward through the pages and the left hand arrow takes you backwards. The arrows immediately followed by a vertical line take you directly to the first and last pages respectively.

If there is a picture associated with a page of text, it will appear next to the text. Move the pointer over the picture, press the mouse button and the picture will expand to fill the whole screen. If you want to return to the text and small picture, click the mouse button anywhere on the screen.

FILMS

In several places on the disc there are small, still photos which are in fact the beginning of a film. If you select the small picture it will expand to fill the screen and the film will play from the beginning. You can control the film using the video controller at the bottom of the screen.

Fast reverse		Fast forward	
Normal speed reverse		Play forward normal speed	
Step back frame by frame		Step forward frame by frame	
Stop			

If you select fast forward or any of the reverse options you will not hear the sound. You can go between any two functions without having to select **Stop**.

5 KEEP

(DOS VERSION ONLY)

Selecting **KEEP** will take you to the 'Knapsack' facility. The Knapsack is a place or file where you can store particular items that you would like to keep for your own use at a later stage. You can store a film sequence, still photographs or text as well as creating new text for yourself. Each user can create and keep their own Knapsacks. You can select **KEEP** at any point on the disc.

It is important to note that each Knapsack should contain items from only ONE side of the videodisc. For example, a Knapsack should not contain items from Cultural Disc Side 1 and Financial Disc Side 2. But it is easy to create a new Knapsack and identify the owner and content of the disc (e.g. JOHN F1, JOHN C2, etc.).

OPENING A KNAPSACK
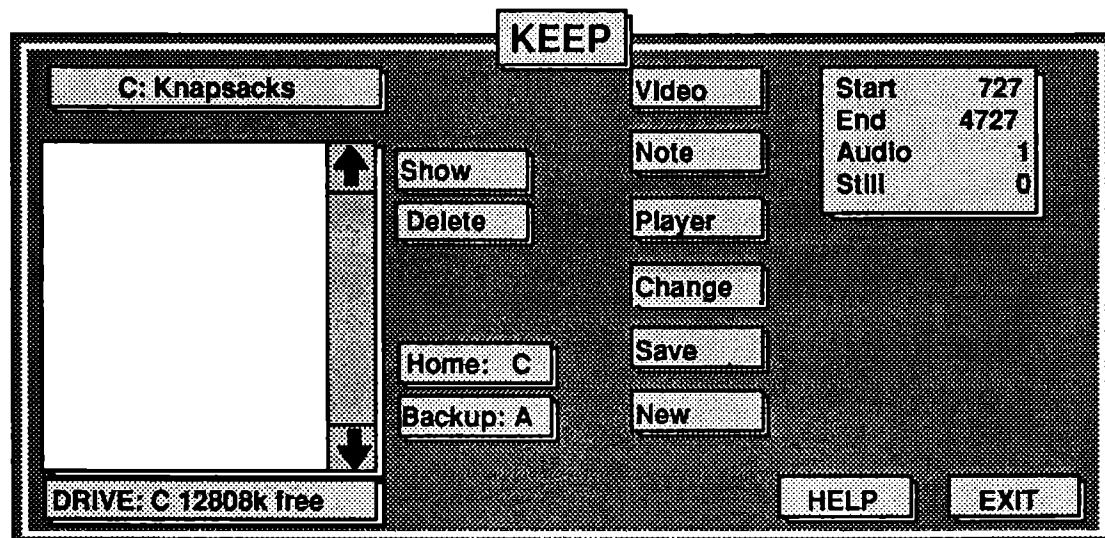
When you first use the **KEEP** function there will be no existing Knapsacks. To create a new one, select **New** and type in your chosen file name in the box which appears on the screen. Press RETURN or ENTER to store the file name. A Knapsack of this name will be created and the name will appear in the box at the left hand side of the screen.

Once the City Disc has been used several times, there may be a large number of Knapsacks in use by different people. All Knapsack names will appear in the box. You can scroll up and down using the red arrows at the top and bottom of the Knapsack box. To open a particular Knapsack, move the pointer over the name and click the mouse button.

Once you have selected a particular Knapsack, the list of Knapsack names in the box will be replaced with the list of items in that particular Knapsack. Initially a new Knapsack will be empty and there will be no list of items in the box.

SAVING AN ITEM IN YOUR KNAPSACK

You can save the item you are currently displaying on the screen (it is visible behind the **KEEP** box). An item can be:

- a page of text;
- a film clip;
- a film clip with accompanying text;
- a still photograph;
- a still photograph with text.

SAVING TEXT

For example, if you have been reading a page of text and you want to save it, you would open or create a Knapsack as described above and then select **Save.** A pop-up box appears.
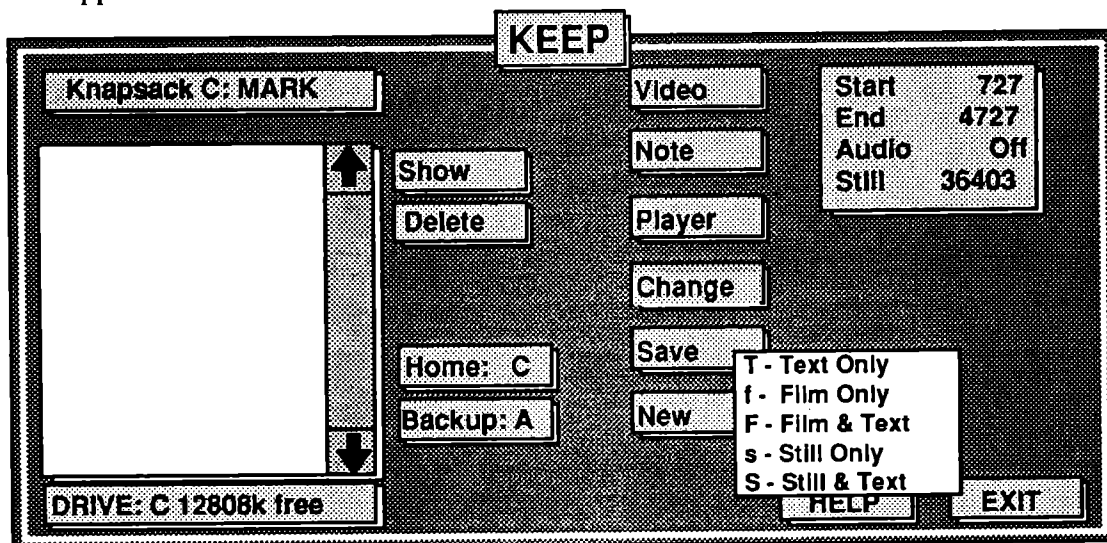
To save the page of text, move the pointer over **Text Only** and press the mouse button. You will then be prompted to give this item a name, e.g. Bank. (The name should not contain any spaces.) Press RETURN or ENTER on the keyboard and the item name will be added to the contents of the Knapsack.

SAVING PHOTOGRAPHS

To save a still photo which is being displayed on the screen, select **Save** and then **Still Only** in the pop-up box. If you want to save both the photo and the text which accompanies it, select **Still & Text**.

SAVING FILMS

You can also save all or part of a film in your Knapsack. When you select **KEEP** during a film you will see details of that film in a box at the top right of the screen as shown below.
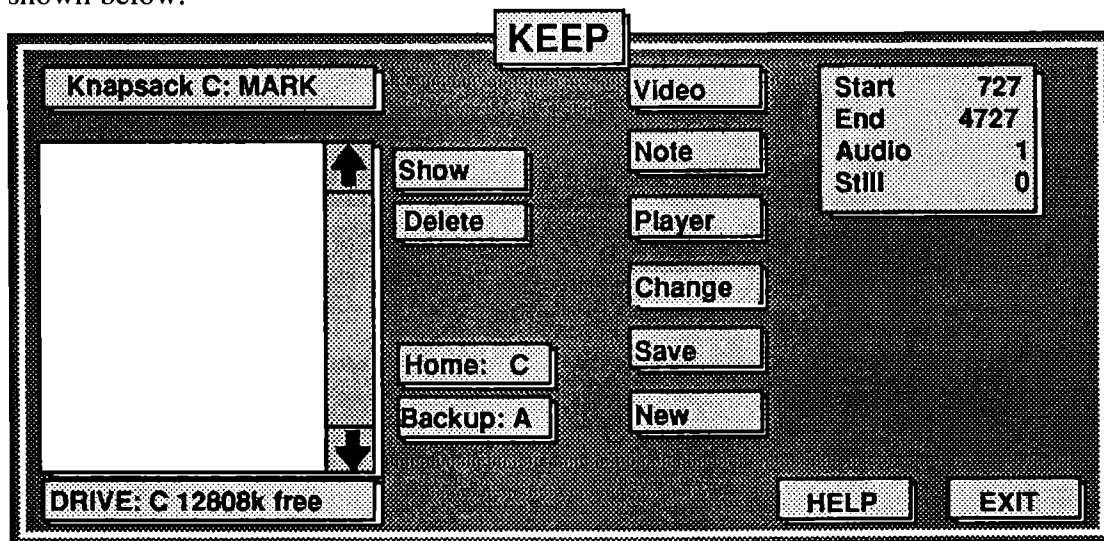
The box shows the start and end frame numbers and also tells you which audio channel is being used (the videodisc has two audio channels).

Saving a complete film

If you select **Save** you will have the option of saving only the film or the film together with any overlaid text. Type in the name you wish to call this item, and press RETURN or ENTER. The entire film sequence is saved and the item is added to the Knapsack contents list.

Saving part of a film

You can also save a particular part of a film. To do this you select **Video** from the top of the list of options in red. The **KEEP** box will disappear and a new video controller will appear at the bottom left hand corner of the screen.

Page 25

This controller has the usual controls to play, step forward, stop, etc.

There are also six new boxes.

The **Frame** box shows the current frame number on which you have stopped.

The **Start** and **End** boxes show the respective frame numbers for the whole film. Using the video controller you can move at a variety of speeds through the film, backwards or forwards, starting and stopping, until you reach the point where you wish your film clip to start. Move the pointer over the **Start** box and press the mouse button and the current frame number will be inserted as the new start frame number. You can then continue playing the film until you reach the point where you wish to end. (Again, you can adjust this end point using the various controls.) If you now select the **End** box the current frame number will be inserted as the new end frame number.

If you select the **Audio** box you have four options:

- Audio 1: audio from channel one only;
- Audio 2: audio from channel two only;
- Audio On: audio from both channels (be careful how you use this!);
- Audio Off: no audio from either channel.

If you select the **Step** box you can choose to move 1, 5, 10, 15, 20 or 25 frames at a time, when you use either the step forward or step backward buttons on the video controller.

If you select the **Still** box, you can save the current frame from the film. When you have found a still frame you want to keep (using the video controller) select **Still** and the current frame number appears in the box. Then Select **Save** and you will be prompted to enter a name for the still. Type in a name to identify the item, then press RETURN or ENTER. The still will be added to your Knapsack.

In this way you can insert new values for the start and end of the film and so keep only the chosen part in your Knapsack. By selecting the return arrow to the right of the video controller you will be taken back to the **KEEP** option (do not confuse the return arrow with the BACK button). At this stage you should select **Save** and you will be prompted to enter a name for your edited film. Type in a name to identify the item, then press RETURN or ENTER. This film clip will be added to the Knapsack contents.

ADDING YOUR OWN NOTES TO USE WITH KNAPSACK

You can make your own notes to use alongside Knapsack using the **Note** option. If you select **Note** you will be prompted to assign it a name. Type this in and then press RETURN or ENTER to be taken to the word processing function. Type in your notes in the usual way.

This word processor is a separate LinkWay program using the function keys on the keyboard to carry out various actions. Three important ones are:

F1 - Help   a list of the functions carried out by the function keys;
F2 - Save text file;
F3 - Quit   (back to the Keep option).

VIEWING ITEMS FROM A KNAPSACK

At any time you can look at the items in your Knapsack. Move the pointer over the name of the item, e.g. Bank of England, press and <u>hold down the mouse button</u> and drag the name over the box called **Show**. Release the mouse button and the item will be displayed. If the item is a film clip, you will also see the video controller to control the film in the usual way. The return arrow to the right of the video controller will take you back to the **KEEP** option.

Viewing Notes

To recall text which has been created using the **Note** option, move the pointer to the text bar (**C: Knapsacks**) in the top left of the **KEEP** box and press the mouse button. The text bar changes to **C: Notes**. In the box underneath is a list of all the text files.

DELETING ITEMS FROM A KNAPSACK

To remove an item which is no longer needed from Notes or a Knapsack, move the pointer over the item, press and <u>hold down the mouse button</u>, drag the item over the box called **Delete** and then release the mouse button. The computer will ask you to confirm if you want to delete the item (OK) or not (CANCEL).

An entire Knapsack can be deleted in the same way. Just drag the title of the Knapsack over the **Delete** box.

OTHER OPTIONS IN KEEP

There are a number of other options available in the **KEEP** section.

Player

Player has four options:

- **Init** allows you to re-set the video sub-system following a videodisc player error;
- **Video Off** allows you to remove the video picture behind the Keep box;
- **Video On** allows you to re-instate the video picture if it has been removed;
- **Frame** allows you to display a particular frame from the videodisc by typing in the number and pressing RETURN or ENTER.

Change

Unless you choose otherwise, Knapsacks will be stored on the hard disc in the computer. However, you could choose to store the file on a floppy disc which would mean that each user could have their own floppy disc for their own Knapsacks.

Select **Change** to choose the disc drive on which you wish your Knapsack files to be stored:

- **Backup** to assign an alternative to the default backup drive;
- **Current** to assign an alternative to the default current drive.

Exit

To leave **KEEP** select **EXIT** in the bottom right hand side of the box.

6 THE CULTURAL DISC

The two sides of the Cultural Disc explore the history and development of the 'Square Mile' over 2000 years of change - from its pre-Roman origins to its late 20th century position as a world financial centre and heart of the Capital.

The discs survey the geographical, historical, archaeological and architectural patterns which distinguish the City's development. Using maps, prints, archive material and guided tours, users can roam at will through the City selecting key sites and important buildings to focus on physical, economic and social aspects of development.

The contents of the Cultural Discs are divided into seven major areas:
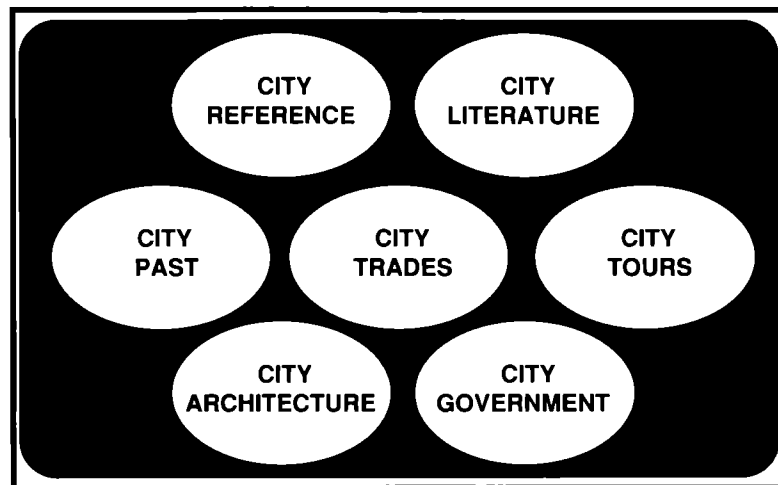
Each major area comprises several options. The different areas are covered by the two discs in the Cultural Disc package. You will occasionally be prompted to change discs when you choose an area or option which is not on the disc you are currently using.

CITY GOVERNMENT (SIDE 1)

City Government has three options:

Here be Dragons (Film)
City Corporation
City Police

Here be Dragons

This is a film which can be started, in the DOS version, by moving the pointer over the picture and pressing the mouse button. If you are using the AIV version, you should select the film from the menu by moving the arrow over the text title and pressing the RETURN button on the keyboard or ACTION button on the trackerball.

The film explores the history and unique tradition and pageantry of the City of London. The film is supported by visual and textual material examining the role of the Corporation in the City and its functions, duties and ceremony.

DOS version: As the film is running, captions appear on the screen. If you click on one of these captions you will see an essay. Select **BACK** to return to the film. Click on the Captions icon at the beginning of the film to prevent them from appearing.

City Corporation and City Police

To read these text and picture essays, move the pointer over the words and select them in the usual way. You can page backwards and forwards through the text using the techniques described previously.

City Corporation describes:

- the structure and functions of the Corporation;
- the history of the office of Lord Mayor;
- other important offices, e.g. Sheriff and Chamberlain;
- some of the important departments;
- other City institutions like the markets, museums and schools with which the Corporation is closely involved.

City Police follows and describes the development of the policing of the City, from the mediaeval city guards and watchman through to the establishment of the City of

London Police in 1839. It describes some famous crime cases, from the Houndsditch Murders in 1910 to modern day cases of fraud involving millions of pounds. Other roles of the Police are shown: their work in two world wars; crowd control during state occasions and security.

A full breakdown of the contents of City Government is shown in Chapter 12.

CITY REFERENCE (SIDES 1 & 2)

Stow's Survey of London

First published in 1598 Stow's Survey has always been regarded as a major authority on the history of London. It gives a vivid picture of Shakespeare's London and combines detailed surveys with personal observation.

Stow's Survey describes general features of the original 'defensive city' - towers, walls and city gates - in addition to an account of each of the 26 wards.

A full breakdown of the contents of the Survey is given in Chapter 12.

A Dictionary of London (Harben) - AIV version only

This is an alphabetical directory of buildings and streets in the City first published in 1912. It includes places which have disappeared as well as places with changed names and the current and former uses of buildings.

For example, to read about Back Bear Alley, select **B** from the main index of the Dictionary, then page through the alphabetical list of entries until you see and select Back Bear Alley.

You can also access Harben by typing **Harben**, **Index** or **Reference** in the **Find** option.

CITY LITERATURE   (SIDE 2)

A section which captures the experiences of bystanders, eye-witnesses and commentators on the City scene from Roman times until the present.

On choosing this option you will see an index where you can select your particular area of interest which will be displayed as a text and picture essay.

Areas of interest include quotations from Julius Caesar and Tacitus, early graffiti, well known writings from literary Londoners like Chaucer, Shakespeare, Pepys, Dr Johnson and Charles Dickens and even some modern day references like Peter Ackroyd's Hawksmoor.

A full list of contents is given in Chapter 12.

CITY PAST   (SIDE 2)

This is a major section of the disc with a wealth of original historical resource material. It covers the following areas:

- City Maps;
- City Prints;
- Bank Corner;
- Ironmonger Lane;
- Leadenhall Street (DOS version only);
- City Archaeology;
- City Churches.

City Past contains geographical, historical, archaeological and architectural plans of the City from Roman times to the present. It provides a series of visual representations of the City through the ages. Key sites have been selected, each a microcosm of the City as a whole. Here the user can examine original records in order to construct a detailed picture of the buildings, their uses, and their successive denizens for each area.

City in Maps and Prints

A visual representation of the City's history using original maps and prints as well as historical reconstructions to trace the changing image of the City through the centuries. A full list of the contents of the maps and prints appears in Chapter 12.

City Maps

This section includes old maps of the City, ranging from the earliest surviving map showing the whole of the City (c. 1561) to the Ordnance Survey map of 1872/4.

From this option you can choose a particular map for a particular date. The maps have been divided up into sections. (If the whole map occupied a single screen it would not be possible to see sufficient detail.)

DOS version: you can move from one section to another by using the arrows at the left and right hand side of the screen. The final selection of the right hand arrow will take you to a page of text giving background information about the map.

AIV version: you are first taken to the text and you select [**Fig. x**] to see the map. You can move around the map by 'page turning' as described in **Text Essays** in Chapter 2.

City Prints

This contains a selection of prints dating from c. 1600 to 1846. They show different information and represent different artistic styles.

Some of the prints have been divided up into smaller sections so their detail can be appreciated.

DOS version: you can move from one section to the next by selecting the right and left hand arrows on the screen.

AIV version: You can move around by 'page turning' as described in **Text Essays** in Chapter 2.

Bank Corner

This is a collection of text and picture essays about the buildings located around the Bank of England: the Bank itself, the Mansion House and the Royal Exchange.

The various essays are accessed through the usual type of menu.

This section examines the architectural and demographical development of "...the great crossroads in front of the Bank of England and the Mansion House, the hub from which radiate the eight spokes which form the City's inner wheel". The story is

presented using original sources such as maps, prints, documents and photographs complimented by explanatory and descriptive text. Users are able to explore the area, or part of it, through the centuries.

Ironmonger Lane

A historical 'tool kit' the aim of which is to introduce users to some of the main themes in the physical, social and economic development of the City from the Middle Ages to the present day. Users will be able to explore the historical records for this area from the 13th century onwards and relate them to the buildings and streets of today. The emphasis is on identifying elements of continuity and change over the centuries.

The physical pattern of Ironmonger Lane and the adjacent part of Cheapside retains both important elements from the distant past and exhibits some of the major changes which have taken place. It also exemplifies the City's role as a centre of commerce, marketing, crafts and as a setting for public spectacle.

Today, Ironmonger Lane is a quiet, narrow lane leading north from the east end of Cheapside to Gresham Street. But of all the streets in the City, it is remarkable, for it is still possible to obtain a sense of the living and working environment which prevailed many centuries ago. It was the City's principal commercial street and this section of the disc contains documentary records from 1200 to 1980 about owners and occupiers of the properties.

When you select this option you will see a menu. One way of accessing the information is to choose the first item, **View the Changing Boundaries**, which will take you to a succession of maps for different dates from 1200 to 1983. The maps and the dates change as the film runs.

DOS version: If you want to interrupt the film and find out about the buildings of a particular time, you can stop the film at any point using the video controller. Having paused at a particular date, press the mouse button anywhere on the map to see a list of properties which existed at that particular date. The numbers of the properties are highlighted in yellow. To find detailed information about a property, select one of the yellow numbers. Selecting a property number will take you to a description of that property.

AIV version: If you want to interrupt the film and find out about the buildings of a particular time, select the appropriate date from the list which builds up down the side of the screen. The film will stop and a list will appear, containing the numbers or names of buildings from the date you have chosen. You can page through the list

and select any of the buildings listed. Selecting a property number will take you to a description of that property.

In this way you can access different properties at different dates. You can change dates either by paging through or by returning to the map film.

Other sections of **Ironmonger Lane** include useful indexes of property owners, residents (their status and occupations) and institutions. It is an excellent resource for studying history using archives and data.

City Archaeology

Through the menus you can look at text and picture essays of many different aspects of the archaeology of the City of London.

You can explore specific periods: Pre-Roman, Roman, Saxon, Early and Late Mediaeval. You can also read about archaeological methods: conservation, record keeping and examination techniques.

City Churches

A visual and textual survey of the rich collection of churches, many by Wren and Hawksmoor, which survive within the square mile, including references to those which have now vanished from the contemporary landscape.

Through the menu you will see text and picture essays about each of 53 churches (some ruined and demolished) in the City. A full list of the churches appears in Chapter 12.

Leadenhall Street (DOS version only)

The study of an archaeological site deep in the City. Here urban archaeology is a race against time to capture the evidence of previous generations before it is finally obliterated, already having suffered the depredations of previous builders.

There are two films about Leadenhall Street:

- The Dig
- Background Information

You will see a screen with two still frames. Select either picture to start the film. You can control either film with the video controller at the bottom left of the screen.

The Dig is a documentary film showing archaeologists at work.

Background Information uses graphics to show how evidence from different periods builds up and can be interpreted many years later.

CITY TRADES (SIDE 2)

This section of the disc offers two options: **Livery Companies** and **Book Trade** .

Livery Companies

Livery Companies are associations of trades and professions active in the City since mediaeval times. The text and picture essays in this section describe the structures of the different liveries and how they have evolved. This section contains the history of two livery companies: The Mercers, who are one of the oldest and largest; and the The Chartered Architects, who were only granted Livery status in 1988.

Book Trade

The printing industry has been closely associated with the City since 1500 when William Caxton's successor moved into Fleet Street.   The text and picture essay follows the history of the printing, publishing and distribution trade which at its height included 1500 different companies.

CITY TOURS (SIDE 2)

You can choose your tour - a text and picture essay - by **Location, Period** or **Topic**. A complete list of tours is given in Chapter 12.

Location

You can choose one of thirteen important places in the City to explore - for example, St Paul's Cathedral, The Barbican, Inns of Court, Old Jewry and the Guildhall.

Period

You can choose one of seven historical periods to find out how London looked then and compare it with other times.

Topic

You can choose one of six themes which characterise the City: from the Great Fires which destroyed huge parts of the City at different times, to the underworld activities of disposessed monks in the Reformation or of Victorian criminals like Fagin. **DOS version only** In the essay some text will be highlighted in yellow. If you select one of these words the computer will display a box containing other places on the disc which also refer to the same subject. If you select one of the sections in the box you will be taken directly to that part of the disc. Select **BACK** to return to the original text.

CITY ARCHITECTURE (SIDE 2)

If you select **City Architecture,** you will see a screen showing two still pictures representing two films which give contrasting and controversial views about the City's different architectural styles.

Richard Rogers gives a modernist view and argues that new buildings, like his own Lloyd's building, are designed "to create a modern language out of classical lessons".

H.R.H. Prince Charles (right hand picture) in an extract from a BBC Television Omnibus programme, talks about "devastation" and "lack of sensitivity".

The contrasting films provides an opportunity to compare two schools of thought.

7 THE FINANCIAL DISC

This disc explores the activities, institutions and significance of the City as a world financial centre. It introduces the processes and terminology used by the people in the business of the City.

The contents of the Financial Discs are divided into six major areas:
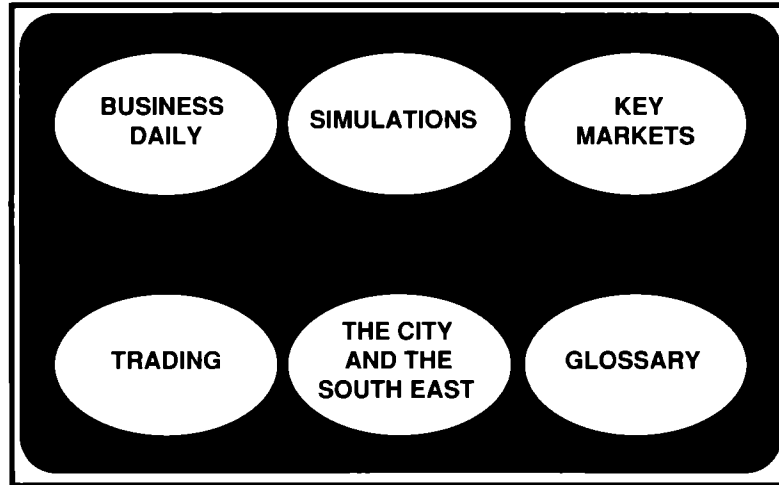
BUSINESS DAILY (SIDE 1)

This section is a useful introduction to the two Financial Discs.

It is a specially produced version of the Channel 4 Business Daily television programme. Business Daily gives daily updated information on share prices, financial indices, international markets, company news and general City news using complex and impressive studio and graphic sequences.

In this special edition, each time financial or city terminology is used, it appears on the screen in yellow text. Users can select the terms and access explanations, before continuing to watch the film.

DOS version: The film can be controlled in the usual way using the video controller. If you select one of the yellow words, a box in the centre of the screen will appear with an explanation of that particular topic. Scroll through the text using the up and down arrows on the right of the box. You can remove the box by clicking the mouse button anywhere on the screen. If you need an explanation of a word which does not appear in yellow text, you can use the **REF** section.

AIV version: A list of terms appears down the left hand side of the screen. Move the pointer over a word and press the ACTION button on the trackerball or RETURN on the keyboard, to see a separate page of text. To continue watching the Business Daily film, select **Back Step**. If you need an explanation of any word which does not appear in the list of terms you can use the **Find** option on the menu bar.

You can remove the list if you wish to view the film without the text overlay by pressing the F9 function key. Press F9 again to restore the text.

KEY MARKETS (SIDE 1)

If you select this option you will see a menu of text and picture essays about seven key markets in London. Each of the seven represents a different kind of market:

- The Baltic Exchange
- The Bank of England
- Futures & Options Exchange (FOX)
- Financial Futures (LIFFE)
- Lloyd's of London
- London Metal Exchange
- The Stock Exchange

The Baltic Exchange

This is the only international exchange in the world where ships are found for cargoes and cargoes for ships. The 600 member companies of the exchange are involved in many different activities, most of which are worldwide. The importance of the Baltic Exchange is reflected in the achievement of its members as invisible export earners for the U.K. Their net contribution is calculated to be in the region of £225m annually.

A full list of contents appears in Chapter 12.

The Bank of England

This was founded to finance a war in 1694 and has become the nation's most important financial institution. It is responsible for printing bank notes, running Government bank accounts, raising Government loans, supervising banks, managing gold and currency reserves and protecting sterling against inflation.

A full list of contents appears in Chapter 12.

The Futures and Options Exchange (FOX)

Formerly the London Commodity Exchange, FOX was launched in 1987. The Futures Market deals in the purchase and sale of commodities when both delivery and payment are made at a future date. The futures contracts can be passed on. London FOX trades in a range of commodities including sugar, coffee, cocoa, etc.

A full list of contents appears in Chapter 12.

The London International Financial Futures Exchange (LIFFE)

This was opened in 1982 in the Royal Exchange building dealing in futures contracts including short-term interest rates, Government bonds, stock indices and foreign currencies.

The contracts offered by LIFFE have a range of uses and allow traders to control their exposure to risk with great precision. By using futures and options it is possible to increase or reduce risk exposure to the degree required. LIFFE prices are agreed in a public market and displayed worldwide.

A full list of contents appears in Chapter 12.

Lloyd's of London

This is the world's leading insurance market. Almost anything can be, and is, insured here; from ships to communications satellites; from livestock to power stations. This business flows to Lloyd's from all parts of the world and represents an income of over £30m in premiums every working day. In fact, Lloyd's contribution to the U.K. economy exceeds £2,000 million every year.

Lloyd's is not a company. It is a society of underwriters, all of whom accept insurance risks for their personal profit or loss and who are liable to the full extent of their private fortunes to meet their insurance obligations.

A full list of contents appears in Chapter 12.

The London Metal Exchange

This was established in 1877 and acts as a barometer of supply and demand for metals worldwide. Its official prices are used by producers and consumers for their

long term contracts. These prices can be hedged on the exchange through a variety of futures and options contracts. Dealing takes place for copper, lead, zinc, aluminium and silver.

A full list of contents appears in Chapter 12.

The Stock Exchange

The Stock Exchange touches the lives of the majority of people in the United Kingdom. More than nine million individuals now own shares directly, whilst those who belong to a pension scheme or have an insurance policy are indirectly involved in the market. It serves the needs of Government, industry and investors in providing the central market place for the issue and trading of securities.

The abiding image of the busy trading floors has now given way in reality to the influence of new information technology. The floor is now an automated quotation system situated in a broker's office. The same market price information once found on the floor is now used by brokers all over the world to conclude deals over the phone and through computer systems.

A full list of contents appears in Chapter 12.

TRADING

On selecting this option you have five choices:

- Who would be a trader? (Side 2)
- Corporate Foreign Exchange (Side 2)
- Interbank Foreign Exchange (Side 2)
- Computerised Trading (Side 1)
- Commodity Trading (Side 2)

This section of the disc looks at the day to day processes of buying and selling of an individual deal. The processes can be linked to the institutions and functions of the City as a whole.

Some of the scenarios stress the human input, the human perspective on the deal. The player in the deal talks about his or her job so that the user can experience the atmosphere and the implications of making decisions in every day situations. Other scenarios establish the ever increasing role played by information technology as a tool for the dealers.

Each section includes film and text which allows you to explore different types of trading from different points of view.

Who would be a Trader? (Side 2)

This section has two case studies:

> - a film following Richard Hill, a **Foreign Exchange Dealer** with Barclays Bank, through a typical working day. The user can eavesdrop on Richard as he buys sterling to sell to 'Boris' (the Bank of Foreign Trade Moscow). After three frantic minutes he has bought and sold £35 million, making a quick profit of £75,000 for the bank.

> - **Senior Trader:** an essay about a day in the life of Joyce Chauvin who works at the American bank Citicorp/Citibank. You can find out about the professional and personal pressures and the risk of 'burn out' she faces, as the head of a team which services the needs of clients buying and selling in the different markets.

Corporate Foreign Exchange (Side 2)

This extensive case study follows Mario Aresti, Financial Director of Hi-Tech Sports, looking to exchange currencies to pay an invoice for raw materials. The case study examines his strategy for foreign exchange exposure and also the role of the Corporate Dealers in a bank dealing room.
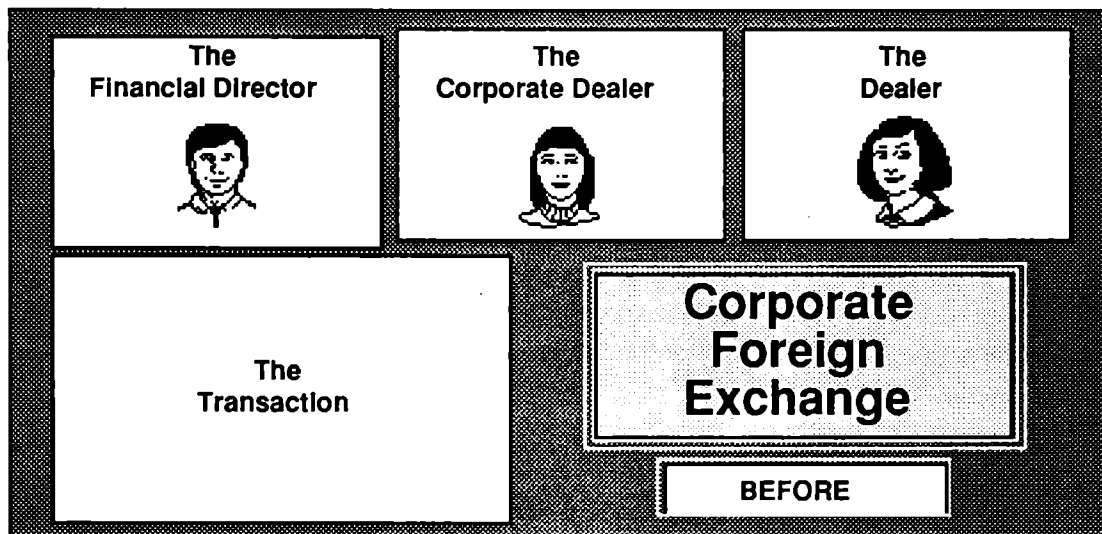
The first screen you will see contains four still photographs, each representing the beginning of a film. The top three are films about the three players:

- Mario Aresti, Financial Director
- Susan Blaxall, Corporate Dealer
- Julia Jones, Dealer

If you select any of these films, the player will give an account of their job and their role in the transaction.

DOS version: you can also read their biographies.

The fourth, larger, picture represents the film of the transaction as it is made and how the three different players interact.

Before and After modes

These four films are all shown the first time in the **BEFORE** mode. If you select the button **GO TO AFTER** you will be able to see each of the films in the **AFTER** mode. Mario, Susan and Julia explain their reactions, and why they did what they did. In the fourth film, you will see the same film together with keywords displayed on the screen as they are spoken. You can select any of these words to get an explanation.

Interbank Foreign Exchange   (Side 2)

This case study sets the scene in a Foreign Exchange dealing room on the afternoon of the announcement of the monthly U.S. trade figures. It examines the different roles, performances and expectations of the people involved, as well as capturing the events of the day. The users are able to appreciate the vagaries of the world currency market.

As with the **Corporate Foreign Exchange** case study, it is possible to follow the events of the afternoon in a **BEFORE** or **AFTER** mode. The first screen, in the **BEFORE** mode, contains six still photographs, each representing either film, text or audio.
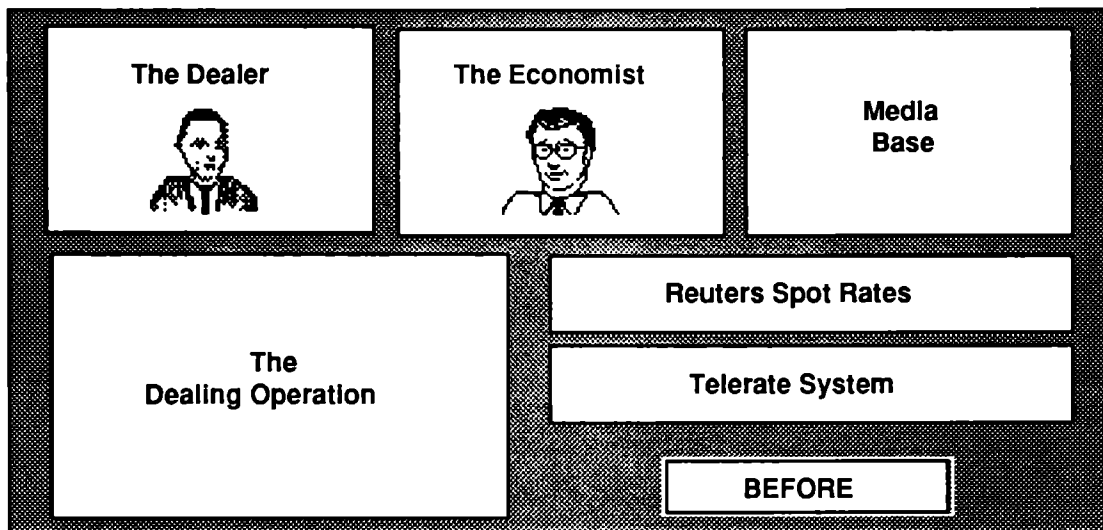
Dealer **(James Kemp)** The Chief Cable Trader at Citibank introduces himself and his job. In the film he predicts the imminent U.S. trade deficit figures and the probable market reaction. He plans to buy U.S. dollars following the announcement.

Economist (John Atkins) Citibank's Senior Economist predicts the market's reaction to the U.S. trade figures announcement by looking at the recent trends of the trade deficit and its effect on the foreign exchange markets.

Media Base This option gives you an opportunity to listen to the predictions and reactions of representative newspapers, radio commentators and cable dealers in Tokyo, Hong Kong and America.

Reuters Spot Rates This is a page from the Reuters Information system used in all major dealing rooms and trading floors. The screen displayed in this section shows buying and selling price of various international currencies quoted in U.S. dollars. Select **HELP** to get a detailed explanation of each column of figures.

Telerate System This is a world news and information system used in all major dealing rooms and trading floors. It provides up to the minute information about currency prices and news which might affect them. The information is contributed by banks all over the world. The main part of the screen is divided into four 'hot-spots'. If you select one of these areas you will be able to read text explaining the columns of figures which you can see. Each quarter of the screen represents a particular currency: top left, Sterling; top right, Japanese Yen; bottom left, West German Deutschmarks; bottom right, Swiss Francs.

The Dealing Operation A film of what happens on the dealing floor when the trade figures are announced. This film is the core of the Interbank Foreign Exchange section. You can watch the action unravel minute by minute as Sterling is bought and sold. Despite the reliance on highly sophisticated technology, the deals are still made with a wave of the hand and a firm "Yours!" or "Take them".

Before and After modes

These six sections are all shown the first time in the **BEFORE** mode. If you select the button **GO TO AFTER** you can return to each of the six sections and discover the reactions of: the dealer; the economist; the media; the Reuters Spot Rate screen and the Telerate screen, to the U.S. trade figure announcement.

In the **Dealing Operation** film, you will see the same film together with keywords displayed on the screen as they are spoken. You can select any of these words to get an explanation.

NB The films of the Reuters Spot Rate and the Telerate screens in the **AFTER** mode appear on Side One. The films show what appears on the screen as different information and prices are received during the course of the deal.

DOS version: You can get additional text information about the dealer and the economist, the foreign exchange markets and the different information systems by selecting from the list which appears alongside the films of **The Dealer** and **The Economist**.

Computerised Trading   (Side 1)

This introduces the phenomenon of person-less dealing rooms looking at the ever increasing practice of deferring 'decisions' to a computer. It looks at the attitude of people who are quite happy to carry out the computer's instructions together with the implications of this practice for the money market.

The future need for centrally positioned market places, like the City is questioned as the use of modems and satellites increasingly bring the market place to the broker.

This section comprises a film, which you can control using the video controller, and a series of essays about the effects of computerisation on the way the City does business, and the control and regulation mechanisms.

Commodity Trading   (Side 2)

This section includes a film and text essays about the cocoa industry as an example of commodity trading. It links producers in the Ivory Coast to cocoa dealers in the U.K. and the U.S.

You can follow one 'fundamentalist' dealer, (someone who speculates on a market as a result of information gathered from news programmes and magazine articles), along the uneasy road that awaits those who dare to deal in cocoa. Different strategies and influencing factors are examined.

The accompanying essays describe the whole chain of sellers involved in the cocoa industry, from the grower through to the exporter, chocolate manufacturer and the speculator.

THE CITY AND THE SOUTH EAST   (SIDE 1)

This section contains a film and a number of text and picture essays about many aspects of the relationship between the City and the South East of England.

The film looks at the re-development of the Docklands area of East London and the office space and transport system it is offering to the City.

The text and picture essays contain information and data on recent economic and employment changes in the City. You can look at and compare data about employment, where City workers live and how they travel to work, etc.

Using a succession of maps you can see how long it takes to travel to the City from areas within the South-East region using either the train or tube. You can find out

about the pressure on the transport system in London caused by the thousands of people who commute into the City every day and improvements which are being made to reduce the problem. There are details of the recent high demand for offices in the City and dramatic changes in house prices.
The case study is based on Coopers & Lybrand (known as Coopers & Lybrand Deloitte since January 1990).

GLOSSARY   (SIDES 1 AND 2)

DOS version: this section is an alternative way of accessing the dictionary of financial terms described in detail under **REFERENCE** in Chapter 4.

AIV version: an alphabetic list of entries in a dictionary of financial terms. You page through the list of words until you find the one you are looking for, select it and an explanation will then be displayed on the screen. Select **Back Step** to return to the alphabetic list.

SIMULATIONS   (SIDE 1)

There are two independent software programs available on each of the versions of the Financial Disc:

DOS Version

1. **Citylink** This software comprises two elements:
    - A series of events within which you can explore the roles of, and links between, the various City associations and institutions.
    - A glossary of terms and phrases used in the financial world, and a database of performances a variety of financial indices.

2. **Cocoa Trader** This simulation is based on the trading of cocoa on the New York futures exchange, allowing you the opportunity of carrying out the equivalent of contacting a broker and placing your orders to buy or sell.

AIV Version

1. **Financial Statistics** Financial statistics for the last fifteen years. A full list of the topics covered is given in Chapter 12.

2. **Bulls and Bears** This is an equities trading simulation based on the Stock Exchange and gives experience of portfolio management.

Full details of how to use these programs are given in the following two chapters.

8 CITYLINK

(DOS VERSION ONLY)

This is an independent software program produced by Oxford Schools' Science and Technology Centre, University of Oxford for the Banking Information Service, The International Stock Exchange, Lloyd's of London, London Fox and The Baltic Exchange.

The software comprises two elements: **Events** and **Glossary/Index.**

A series of **Events** are presented, through which you can explore the roles of, and links between, the various City and associated institutions. The **Events** covered are:

- Collapse of the Tin Market;
- Starting a Small Business;
- Recovery of Satellites;
- Gas Privatisation;
- Channel Tunnel.

The links are between institutions such as: The Bank of England; The International Stock Exchange; Lloyd's of London; the High Street and Merchant Banks.

In the **Glossary/Index** you can find out the meaning of a word or phrase used in the financial world from a glossary of over 400 terms. The **Glossary/Index** also includes a database (**Economic Data Index**) of graphs which show how a variety of financial indices have performed in recent years. The **Economic Data Index** includes:

- The Current Account Balance;
- FT-SE 100 index; Interest Rates (Base);
- % Increase in M0, M1, M3, M4 and M5;
- U.K. Inflation;
- U.K. Unemployment (%).

To run the **Citylink** program you require a multisync monitor. When you select **Citylink** from the menu you will be asked to confirm that you have the necessary monitor. Select **YES** to continue, or **NO** to return to the **SIMULATIONS** menu.

The first screen you will see, once the software has loaded, will be a WELCOME page and you should click on the **Continue** button to enter the program.

CITYLINK EVENTS MENU

The menu page lists the events events available together with the following four
buttons at the right hand side of the screen:

PRINTER This allows you to produce a screen dump of the
current page. Your printer should be connected and ready to use
before you select this button.

INDEX CARDS Select this to access the Glossary/Index.

HELP Whenever you see this button, you can select it to display a
text box which will explain where you are in the program and what
you can do. To remove the box, click anywhere outside it.

CREDITS Details of the software developers and writers.

To select an event, move the pointer to one of the elements in the menu, and press
the mouse button. A flowchart will appear outlining the various stages of the event.

```
┌─────────────────────────────────────────────────┐
│        1877-1985  Tin traded on the L.M.E.        │
│                         │                         │
│                         ▼                         │
│         1956  First International Tin Agreement   │
│                  set up at the I.T.C.             │
│                         │                         │
│                         ▼                         │
│              1982: 6th I.T.C. launched            │
│                         │                         │
│                         ▼                         │
│         1982-1985  Tin Prices come under threat   │
│                         │                         │
│                         ▼                         │
│     Spring '85 The Bank of England warns I.T.C.   │
│          about increasing financial pressure      │
│                         │                         │
│                         ▼                         │
│                 I.T.C. orders audit               │
│                         │                         │
│                         ▼                         │
│   October 1985 I.T.C. announces it has run out of funds │
│                         │                         │
│                         ▼                         │
└─────────────────────────────────────────────────┘
```
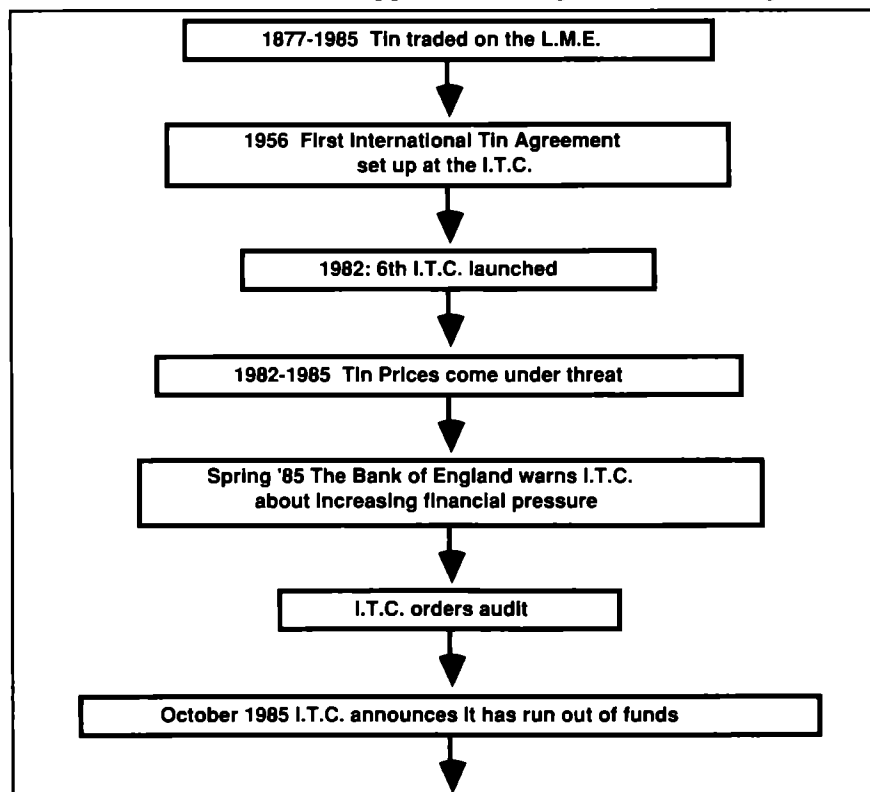
Select any of these elements on the flowchart to see text giving more detail of that particular stage. If there is more than one page of text, select the Down Arrow button to see the next page, or the Up Arrow button to see the previous page. To return to the flowchart, click inside the text box. If the flowchart is longer than one page, you can load the following page by selecting the **MORE** button at the right hand side of the screen. To return to the previous flowchart page, select the **PREVIOUS** button.

Other buttons on the right hand side of the screen are as follows:

VIEW GRAPHS will display any graphical material, e.g. a supply and demand curve, associated with the event in question. Select the **VIEW GRAPHS** button again to see the next graph.
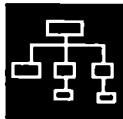
FLOWCHART will take you back to the flowchart if you have selected a graph. Select this to display the next, or previous, page of a flowchart if **MORE** or **PREVIOUS** appears in the button.

SEE LINKS will display a diagram of the links between various City institutions, and the interactions between them, during the development of the event.
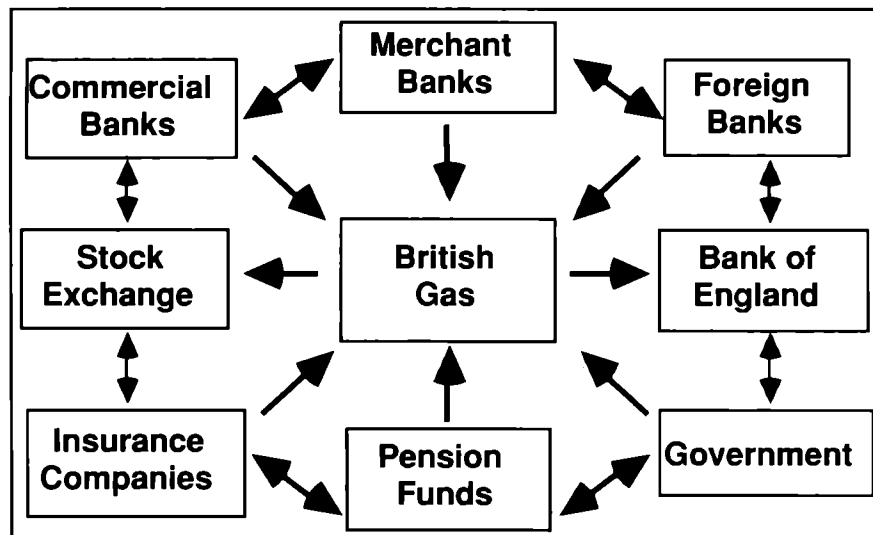
If you select one of the institutions in this diagram you will see a text explanation of the institution or interaction concerned. To return to the diagram, click the **DONE** button.

Select one of the following buttons at the right hand side of the screen to continue:
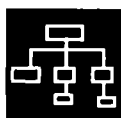
If you select **MAIN** you will return to the **Events** menu.

GLOSSARY/INDEX MENU

To enter this part of the Citylink program, select the index card button at the right hand side of the Events Menu screen.

There is a list of options and three buttons - **PRINTER, MAIN, HELP** - which have the same functions as described in the **Events** section.

Inspect Index

When you select this, you will load an alphabetic list of over 400 financial terms and phrases. Select the Down Arrow or Up Arrow to display the next or previous page of entries. To see an explanation of one of the terms, select it from the list by moving the pointer over it and pressing the mouse button. A text page will appear on the screen. To return to the index, select the **DONE** button in the bottom right hand corner.

Select the **MENU** button to return to the Glossary/Index Menu.

Find Selection

When you select this from the menu, a text input box will appear on the screen with the following prompt: **ENTER WORD OR PHRASE TO BE FOUND.** Type in a word or phrase and then press the mouse button or ENTER/RETURN on the keyboard to start the search of the Glossary. A new text box appears containing the explanation of the phrase. If there is no match for the word or phrase, a beep will sound. The **VIEW GRAPHS** button will display any associated graphical material, and if you select the **DONE** button you will return to the menu.

Inspect Data

If you select this from the menu, you can inspect financial information and indices for the following topics:

- Current Account Balance
- FT-SE 100 (July Values)
- Interest Rates (base)
- 3 Month Interbank Rate (%)
- % Increase in M0
- % Increase in M1
- % Increase in M3
- % Increase in M4
- % Increase in M5
- U.K. Growth
- U.K. Inflation
- U.K. PSBR (£ million)
- U.K. Unemployment (%)
- £ vs $ (Dollars per Pound)
- Sterling Exchange Rate Index

When you select one of the above a graph will be displayed on the screen. Select **Click here for details** for an explanation of the graph, or **Done** to return to the Glossary/Index menu.

Explore Events

If you select this from the menu you will return to the **Events Menu**.

QUIT CITYLINK

When you select this, you will exit from the Citylink program. The Financial Disc software will automatically start playing the film sequence at the beginning of the disc. To skip the film, press the Q button on the keyboard.

9 COCOA TRADER

(DOS VERSION ONLY)

This independent software program simulates closely what you would do and see if you were actually trading cocoa futures from a private dealing room, connected by live wire and satellite to the major commodity futures markets of the world.

STARTING THE SIMULATION

Note: In most cases the following instructions should be followed by pressing the RETURN or ENTER key on the keyboard.

After selecting **Cocoa Trader** from the Financial Disc menu, you will see a series of prompts.

1. Enter the number of players taking part (maximum 4).
2. Enter names for each of the player's accounts.
3. Enter **Y** to accept the names or **N** to re-enter.
4. Press ENTER or RETURN to load the 'COCOA' contract.
5. You are then asked to select the 'type of market' (in the top right hand box) you want to play. Move the red choice-bar with the <Up> <Down> cursor keys and then press [RETURN]. After a few seconds' calculation, the MAIN PLAYING SCREEN appears.

THE MAIN PLAYING SCREEN

1. The current (simulated) time. Your trading room is in the U.K. The New York cocoa market actually opens at 09.30 local time or 15.30 London time.

You trade in five 'hourly' price-bars per day (i.e. you have five opportunities to buy and/or sell each day). The 'clock' therefore runs from 15.30 to 19.30 and then returns to 15.30, i.e. to the start of a new day's trading.

2. The figure (200 at the start of the game) shows how many 'hourly bars' you have left to play before the game is over. You don't have to play all the hours. You can agree to play only 100 or 50 (or, for instance 'first to reach $50,000 profit'). But you can never play more than 200 hourly bars, or 40 trading days.

3. These are the short names for the 'contract' you are dealing in (cocoa) plus several other 'dummy' contracts. In real life you would probably be dealing in anything between four and ten different futures. The price for all of them would be handled on screen at the same time.

4. A menu of choices using the 'F' function keys on the keyboard. A selection is made from these by pressing one of the 'F' or function keys. To end the game hold down the <Alt> key and press <F10>.

5. News bulletins are available in real life and arrive at different times during the trading day. These news items refer either to general world news or to the state of the various markets during the course of the day. They may offer (sometimes useless) opinions and predictions about these markets from brokers, traders and analysts.

6. The 'on-line' prices for cocoa will arrive when you start to play. This field contains only one price when it is first displayed.

7. Column headings:

> **HIGH** and **LOW** of the last hour's prices. At the start of a game these are the same, since no 'on-line' prices will yet have appeared.

> **LAST** price or **CLOSE** for the previous hour. At the start of a game this is the same as the previous **HIGH** and **LOW** since no actual on-line prices have arrived.

> **ONLINE PRICES**

SPEED: 50 This would not be part of a real-life display. It is included because the game simulates the arrival of an entire hour's worth of on-line cocoa prices in a time ranging from a few seconds to a minute or so. **SPEED** allows you to alter the rate at which they appear on screen. In real life, the price for cocoa might change several times a minute if trading were brisk, or remain unchanged for ten minutes or more in slow trading. In the simulation you can alter the trading speed by pressing the <Up> cursor key to increase it (to a maximum 100) or the <Down> cursor key to decrease it (to a minimum 0). At 100, the prices will arrive so fast that you will barely be able to see them, which lets you play the game very rapidly. On the other hand, you may prefer to use a slower rate and have the excitement of seeing whether your price will be 'hit'.

BAR CHARTS - RECENT PRICE MOVES

Select **F1** to clear the main screen and replace it with a **BAR CHART** display of recent price moves in cocoa. Charts like these are used as statistical tools to predict in what direction prices may move.
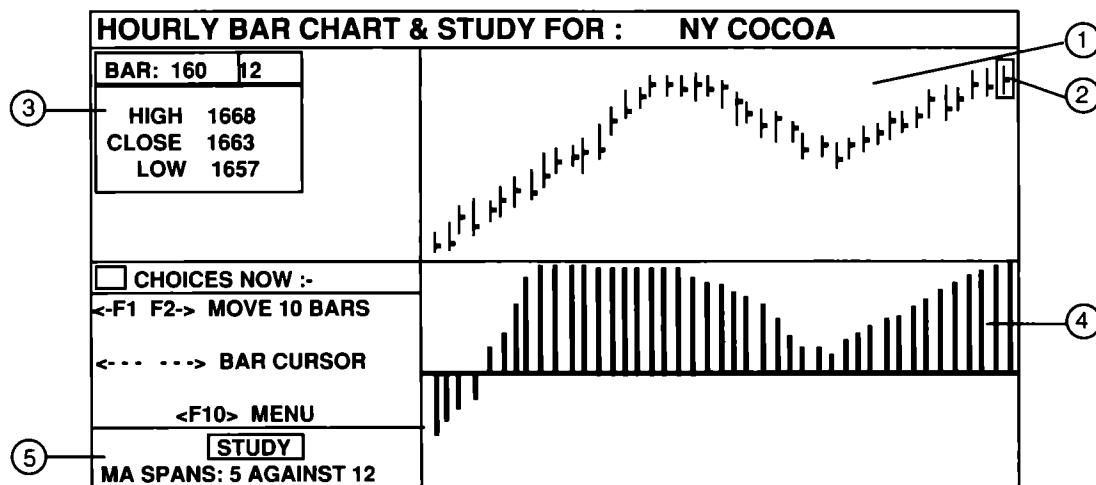
1. Each bar in the panel represents one hour of prices. The top of each bar shows the highest price reached in that hour. The bottom of the bar shows the lowest price. The small mark on the right of each bar shows the last or closing price for the hour in question.

2. This bar, surrounded by a box-like cursor, represents the most recent price move. You can move this cursor one bar at a time with the <left> or <right> cursor keys; or ten bars at a jump with the **F1** key to move left, or the **F2** key to move right.

3. As you move to each bar, the actual HIGH, LOW and CLOSE prices for the hour that you have selected are shown in this panel. Each bar is numbered. Next to the bar number is the length of the bar in 'ticks'. A 'tick' is the smallest price change possible for whatever commodity-future you are dealing with. In the case of cocoa it represents one US dollar per metric tonne. For example, a quoted price of 1630 means that the current price of cocoa is $1630 per tonne.

4. The series of thicker bars extending above or below a horizontal 'zero line' shows the difference between two 'MOVING AVERAGES' (MA) of closing prices. When the bars are BELOW the central hotizontal line the 'Price Trend' is downwards. When the bars are ABOVE the line the trend is upwards - that is 'on average', the price of cocoa is going up.

It is possible for the 'long-term' trend (say, over several weeks or months) to be going down while the 'short-term' trend (over a couple of days) is actually going up, and vice versa. If you make both moving averages large (say 20 and 50) you are looking at the long-term trend in cocoa; if you make the figures small (say 5 and 12) you are looking at a short-term trend in cocoa price.

5. This shows the lengths or 'spans' (in numbers of bars) for the two moving averages plotted in the chart.

F10 allows you either to go back to the MAIN SCREEN by pressing **X** (for exit), or to alter the spans of the two moving averages being plotted, by pressing **M** and then entering the new spans you want.

RECENT NEWS BULLETINS

Select **F2** to display a screen which shows more recent news bulletins. Use the <Up> and <Down> cursor keys to scroll through these. Press **F10** to return to the MAIN SCREEN.

BUYING AND SELLING COCOA ORDERS

Select **F3** and enter your account number (1, 2, 3 or 4) in the panel and press RETURN or ENTER. This is like telephoning your broker to place your order.

A new panel is displayed. A blue cursor rests in a central column between **BUY** and **SELL**. Press the <left> cursor key to **BUY**, or the <right> cursor key to **SELL**.

First enter the number of contracts you want to buy or sell , then press RETURN. Then enter either the price at which you want to buy or sell, (if the on-line price reaches this target). Alternatively, if you want to buy or sell 'at market' i.e. at the price prevailing now in the **LAST** column, press **M** and RETURN or ENTER instead of a entering a target price.

The **BUY** or **SELL** column will now display your order and the cursor returns to centre for you to enter another transaction.

You can correct any order simply by re-entering it. If you enter a price level which is apparently ridiculous (for example, suppose the current price is 1600 and you want to buy at 1595, but you mis-key and enter 595 in error), the program will ask you to check the price figure you've just entered.

When you have entered a **BUY** ('long') and/or **SELL** ('short') order, or both, and you are sure that you have not made any errors, press **F10** to return to the main screen.

You have now telephoned your broker and placed your orders with him.

WATCHING THE PRICE CHANGE

Select **F7** to 'run' the next hour's prices for cocoa. You will see the **ONLINE** prices change. Wait until the hour's trading has finished before continuing.

OTHER FUNCTION KEY OPTIONS

Select **F8** to get more menu choices:

> **F4 View A/c** Look at your trading account .
>
> **F5 View trades** Look at your outstanding trades.
>
> **F9** Return to the MAIN SCREEN .

View A/c - Your trading account

Enter the number of the account you want to examine (1, 2, 3 or 4) and press RETURN or ENTER. Having done so, the screen shows you the financial state of your account at the point in the game you have reached. All figures are in US dollars.

The top line of the screen shows your account name. The next line of headings shows, from left to right:

- the commodity name, i.e. cocoa;

- the total **NUMBER** of contracts you have made a loss on, and how much loss you have made doing so;

- the total **NUMBER** of contracts you have made a profit on, and how much profit you have made doing so;

- the **BALANCE** of these figures, i.e. Gross Trading Profit or Loss so far.

The screen also shows the Broker's **COMMISSION** of $20 per contract you are being charged. After deducting this commission, you see your net trading profit (shown in white figures) or loss (shown in red figures) so far, **NET BAL ON A/C**.

MARGIN AVAILABLE shows the total amount of capital you have available for trading. At the start of the game each player is given $100,000 trading capital. Later in the game you will either have more than this, if you have traded profitably, or less if you have lost money.

MARGIN IN TRADES shows the capital tied up in trades, which you have opened but not yet closed out at a profit or a loss.

Whenever you open a trade for one contract of cocoa (i.e. you 'go long' or 'go short' one contract) you have to put up $1500 in the 'MARGIN'. When you close out a trade you get this margin back, no matter whether you have made a profit or a loss on the trades screen iteself.

Each contract in cocoa is for 10 metric tonnes. Since the quoted prices are in dollars per tonne, if the price moves one point in your favour, you make $10. If it moves against you, you lose $10.

A typical trade might look like this:

Bar 100:   bought cocoa at 1610.
           your account is debited 5 x $1500 = $7500

Bar 123:   sold 5 cocoa at 1628. You have closed out your 5 contracts. Your account is credited with the $7500 you put up in margin when you bought them. You have 'made 18 points' (1628 minus 1610). Therefore you have made a profit of 5 x 18 x $10 = $900 for this trade, and this is credited to your account as well.

Press any key to return to the MAIN SCREEN.

THE TRADES SCREEN

Select **F5** (from F8 at the Main Menu) to **VIEW CURRENT** or **CLOSED-OUT TRADES**. Enter your account number (1, 2, 3 or 4) and press RETURN or ENTER, then press **1** if to view **CURRENT**, or **2** if you want to view **CLOSED TRADES**.

1 Current Trades

Suppose the price of cocoa is 1600. You have put in an order (the **ORDERS** panel) to buy 3 contracts if the price goes down to 1590 or below. Since the price hasn't gone down there yet, this trade appears on the **Trades Screen** with a status of **SEEKING ENTRY**. You haven't entered the trade yet and it hasn't tied up any of your margin capital.

If the price drops to below 1590, your order will be 'filled' and you will have bought ('gone long') 3 cocoa at 1590. This trade will now appear on the **Trades Screen** with a status **OPEN**.

If you now put in an order to sell 3 at 1620, this will appear on the **Trades Sceen** as **SEEKING ENTRY** and you will therefore now see two trades; one **L** ('long') at 1590, status **OPEN**; and one **S** ('short') at 1620, status **SEEKING ENTRY**.

You can cancel a trade order while it still has a **SEEKING ENTRY** status, by moving the cursor to it and pressing **F1**, at the **Trades Screen**. This is the same as phoning your broker and telling him to cancel an order. The trade order immediately appears as status **CANCEL** on the screen, and next time you come back to this screen it will have vanished.

You cannot, obviously, cancel an **OPEN** trade because you are already in it; the only way to get out of it is to sell the same number of contracts if it's a 'long' trade, or buy back the same number of contracts if it's 'short'.

Now suppose that the price goes up to 1620 and your **SEEKING ENTRY** order is filled. You are already 'long' 3 contracts at 1590. Hence your order to sell 3 at 1620, now filled, doesn't open a new trade; it closes out the existing **OPEN** trade. The trade now disappears from the **CURRENT Trades Screen**. It is transferred to the **CLOSED-OUT Trades Screen**, and any profit or loss made on it is transferred to the information on your account (and will appear on the **View A/c** screen).

2 Closed-Out Trades

This screen shows you a list of all the trades you have closed out so far.

The **IN (BAR & PRICE) OUT** columns show the bar number of entry, the bar-number at which it was closed out and the prices at which these actions occurred.
The **P/L: PTS & CASH** columns show the number of points or 'ticks' and the profit or loss made.

Press **F10** to return to the MAIN SCREEN.

QUIT COCOA TRADER

To quit the game, press and hold down <Alt>, and press <F10> on the keyboard.

10 FINANCIAL STATISTICS
(AIV VERSION ONLY)

This software program was produced by Computer in Economics Unit, Department of Economics, Staffordshire Polytechnic for BiS (Banking Information Service).

Finstat is a financial database in two parts.

> 1. **TIME SERIES** contains 58 different financial variables from 1970 to 1988.

> 2. **BALANCE SHEETS** contains 9 items, details of financial balance sheets and policy variables.

All choices should be followed by pressing **RETURN** on the keyboard.

If you select **END (Z)** you will quit this simulation and the Financial Disc.

Select either **TIME SERIES** or **BALANCE SHEETS** from the main menu and confirm your choice by pressing RETURN.

TIME SERIES

The TIME SERIES menu shows six groups of data:

> **A** Financial Institutions - items 1-9
> **B** Household Financial Behaviour - 10-20
> **C** Firm Financial Behaviour - 21-32
> **D** Definitions of Money - 33-38
> **E** Government Policy - 39-46
> **F** Exchange Rates -   47-58

To select a group press the corresponding letter on the keyboard and RETURN. The list of items in the group appears as a second level menu. To select an item from this group, type in the corresponding number and press RETURN. A full list of items is shown in Chapter 12.

You will then be asked to enter the FIRST year of a ten year period between 1970 and 1988.

You may want to choose another item for comparison, e.g. imports compared with exports. You select the second item and the first year of the time series in the same way. You will then be shown the figures for your chosen years.

You can then choose to see the information in different ways.

G   **Graph** plots the figures as a graph.

T   **Table** displays the table of figures.

F   **Format** allows you to display different relationships between the figures in the series as follows:

I   **Index** relative to a chosen year;

P   **% change** relative to a chosen year;

D   **Deflated value** relative to a recent year;

O   **Original** the initial statistics.

Y   **Years** allows you to specify a new start date.

A   **Add** allows you to include another item from the list as a comparison. All the options will show two sets of figures.

(N)   **New** takes you back to the TIMES SERIES menu.

BALANCE SHEETS

The BALANCE SHEETS menu shows nine aspects of the economy:

   A   Retail Banks
   B   Discount Houses
   C   Building Societies

   D   Personal Sector Funds
   E   Industrial and Commercial Funds

   F   Money, Stock and Liquidity
   G   Public Sector Borrowing Requirement
   H   Medium Term Financial Strategy
   I   UK Balance of Payments

Select the aspect you are interested in, by typing the corresponding letter on the keyboard. You will then shown the years for which the balance sheets are available. Type in the year you wish to see and press RETURN. You can then choose to see the figures for one year, or two years for comparison. If you choose to see statistics for two years you will be asked to type in a second year.

Once the figures have been displayed a number of the following options become available, depending on which aspect you are looking at.

(G)   **Graph** plots the figures as a chart.

(T)   **Table** returns you to the list.

(P)   **Percent** expresses the figures as a percentage.

(Y)   **Years** allows you to change the dates.

(N)   **New** takes you back to the BALANCE SHEETS menu.

You will see a note on the screen when there are related **TIME SERIES**.

QUIT FINANCIAL STATISTICS

When you have finished exploring **FINANCIAL STATISTICS**, press **Z** on the keyboard and you will exit from the software program and return to the start of the Financial Disc.

11 BULLS AND BEARS

(AIV VERSION ONLY)

The aim of the game is to play the stock market. The game can be played by one or two players with a choice of 48 companies for you to choose from. You start with £50,000 and by selecting stocks and shares from your broker, you can then buy, sell, or find out information on any company.

You can access information about market trends and invidual company performance to help you decide about particular investments.

This computer game is fun to play. It should also give you some idea of how the Stock Exchange works. Do remember that it is only a game and the results you get do not represent what is happening, or has happened, in real life. The game has been made as simple and entertaining as possible.

HOW TO PLAY

This is a game for one or two players, or even two teams.

The rules are simple to follow.   At every stage the screen gives a 'prompt' as to what to do next. It is a very realistic game and every clue to market trends, news bulletins and past share performance should be heeded, in order to make wise choices when buying and selling shares.

Each player or team starts the game with £50,000. This money can be invested in any of the 48 shares listed. The value of your shares is regularly updated by the computer. In this way you can tell how profitable - or otherwise - your choices have been.

You may need plenty of practice to know when to buy and sell. For example, if you have bought a share which rises steadily for several turns and then starts to fall, it might be wise to sell. On the other hand, if a news bulletin gives good news about a company whose shares have been falling, it might be wise to buy some!

Remember, however, that nothing is certain! As in real life, the game's share prices are affected by several different influences and no one can accurately predict how the market will perform. The game is never the same on any two occasions - so don't expect a share that does very well in one game to do equally well next time.

STRATEGY

There are many points of strategy that can be employed when playing against an opponent. For example, it is not wise to buy shares when the other player has just bought - this purchase makes the share price rise at once. On the other hand, if your opponent buys into shares which you already have in your portfolio, you can sell yours. This will probably make the value of the shares fall.

GETTING STARTED

The first part of the program requires the player or players to set up the game. The computer prompts you to enter:

1) the starting time of the game,
2) how many minutes represent each Account,
3) the length of time the game is to last,
4) the number and names of the players,
5) the price of the shares.

All information put into the computer at this stage has to be confirmed by pressing **Y** or **N**. **Y** confirms that the information is correct, **N** that the information is incorrect. **N** allows the player to correct the input. Setting up the game correctly is important for fun and realism, so input the information carefully.

Introductory Screens These give general information on playing the game.

Information Screen 1 Setting the real time clock. Give the minutes in numbers 0 to 60. Confirm.

Screen 2 Account periods. Select the length of time for each Account period (2-5 minutes). The Account is the principal division of the Stock Exchange calendar, normally running for two weeks.

Screen 3 Choosing the length of the game. The clock is similar to Screen 1, but you may choose up to 12 hours. For best results, allow at least 30 minutes.

Screen 4 Players. Choose the number of players 1 or 2. Give their names - not more than 8 letters. Confirm each name.

Screen 5 Share prices. You may: a) use the computer's prices;
b) input your own prices;
c) input the latest prices.

PLAYING THE GAME

Once all the information is loaded, your computer inputs the rest of the program. You are now ready to play 'Bulls and Bears'.

Market Place : Main Menu

This is the first screen shown. From here you can select any option you wish, simply by pressing the corresponding number on the keyboard.

1. TRENDS This shows you which way the Market is moving. The Bull indicator means a rising market, Bear a falling market. The game always starts on a fixed upward trend - but changes once play begins.

2. BROKER Via this screen it is possible to:

1) read your personal **PORTFOLIO** which records all the shares you hold, what you paid for them and their present prices;

2) survey the **MARKET**. Use the up and down arrow keys on the keyboard to look through the shares. Select the share of your choice by pressing [RETURN].

3) return to the **MAIN MENU**.

4) read **NEWS** bulletins which are an important clue as to which shares are moving up or down.

3. STATUS This shows how the players' shares are doing. Money lying idle is of no use in this game.

4. NEWS You can access company news when **NEWS BULLETIN** flashes at the top left of the screen.

5. FREEZE GAME allows you to suspend the game until later.

6. END GAME The game can be ended at any time. When you select this you will exit from the Bulls and Bears game and return to the start of the Financial Disc.

12 CONTENTS

This Contents lists the main sections and sub-sections of each of the four sides of the City Disc. You will be able to find the item you are interested in by stepping back through the section headings.

For example, suppose you see **The Mercers** in this contents list and want to find it on the disc. **The Mercers** is in
> **Livery Companies**, which is in
> **City Trades**, which is on
> **Side Two** of the
> **Cultural Disc.**

You can select these headings in reverse order:
> **Cultural Disc**
> Side Two
> City Trades
> Livery Companies
> The Mercers

CULTURAL DISC : SIDE ONE

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Timeline (DOS only)

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Glossary of Financial Terms

FINANCIAL DISC : SIDE TWO

Trading

Interbank Foreign Exchange

Glossary of Financial Terms

FINANCIAL DISC : SIDE TWO

Trading

Interbank Foreign Exchange

Before

      The Dealer

      The Economist

      Media Base

      Reuters Screen

      Telerate Screen

      The Dealing Operation

After

      The Dealer

      The Economist

      Media Base

      Reuters Screen

      Telerate Screen

      The Dealing Operation

          $10.35 adjusted

          Salamons...I need a few

          30/35 in 10

          I get them at 23

          24 bid for 5

          22/27...Yours

          Take them

          Want to do 20?

          Take some details

Cables please
73/78 in £20.7
At 73
74/79
We are out

Corporate Foreign Exchange
Before
The Financial Director
The Corporate Dealer
The Dealer
The Deal
After
The Financial Director
The Corporate Dealer
The Dealer
The Deal
L/C Department
Level
Rate on Cable
Exact Amount
160-157
Rate for three months
£ appreciate and weaker $
Forward Adjustment
Going Forward

Who would be a Trader?
Senior Dealer
A Day in the Life...(Film)

Commodity Trading
The Cocoa Industry
The Cocoa Market
Harvesting Cocoa
The Risks!
Cocoa Merchants
Cocoa Standards
Chocolate Manufacture
End User Risks
Cocoa Hedging
The Role of the Merchant
Hedging by a Producer
Who uses the Cocoa Market?
Commodity Trading (Film)