PN-ACB-212

95003

TIPPS

Cost - Benefit Model

(Test Version)

OPTIONS Project

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TECHNICAL NOTES

1. The demographic module and the full model are two separate and independent programs. The former is stored in files CBM.*, the latter -- in files CBM1.*. Complete list of program files is the following :

CBM.EXE, CBM.0, CBM.1, CBM.2, CBM.3, CBM.4, CBM.5, and
CBM1.EXE, CBM1.0, CBM1.1, CBM1.2, CBM1.3, CBM1.4, CBM1.5.

The correct sizes of executable modules are: CBM.EXE = 81904, and CBM1.EXE = 93520. Full disk space occupied is 160K for the demographic module, and 225K for the full model.

Associated data files have extension *.CBM for the demographic module, and *.CBM1 for the full model. The data files employ different format and may not be exchanged between the programs.

The reference to the program below relates to both demographic module and the complete model.

2. The program does not need installation. It may run from any directory of a hard disk or floppy diskette. However, all program files must be located in the same directory which must be default when the program is called.

Data files may be located in a different directory. The program may change directory while in execution, but returns to the original directory after a normal termination. In a case of run-time error however, the original directory may be lost.

3. The program uses conventional (low) memory only. It expands in memory immediately after its kernel is loaded and does not take any additional memory while in execution. Total memory size for the demographic module is 260K and for the full model -- 365K.

The program does not employ any formal overlay construction. It reads additional code program files immediately after loading.

4. Neither program files nor associated data files may be altered by a user with an editor of any kind, or by any other means outside of the program. To make communication with disk faster, the program does not check for validity a data file it reads from disk. Therefore, if accidently altered by a user, the data file may destroy program, and cause a run-time error.

5. For some tasks the program employs an absolute disk read and write (interrupts 25h and 26h) bypassing the DOS file system. It may not support a floppy diskette with a format other than standard: 360K, 720K, 1.2M, or 1.44M.

A floppy diskette must have drive designator A: or B:.

6. The program operates in text video mode only. If the computer equipped with VGA video card, the program uses nonstandard text font (28 rather than 25 lines on the screen) and employs light background colors without blinking. An original video mode is restored after execution is completed normally.

On some laptop computers, the nonstandard video mode may conflict with the proprietary hardware switch between external and internal monitor. Hence, no redirection must be done during the program execution.

7. The program requires a keyboard fully compatible with an IBM 101-key enhanced keyboard. If a computer does not have one, some program control key combinations (for example these for scrolling) are not available.

8. The program is designed to be used as a worksheet with predefined formulas rather than a menu-driven application. Although the main menu is accessible virtually from any point of the program, it may be used minimally. After execution of a menu command the control normally is passed back to the worksheet.

The program attempts to compute result even if a user does not complete data entering or makes an error. If an output variables can not be computed then its location on the output screen is left blank. A numerical result which does not match the size of its output field, is shown as a string of asterisks (*).

Recalculation is done automatically, and the output screen always corresponds to the most recent alterations of the input worksheet.

9. The program does not employ a numerical coprocessor and stores numbers with exactly the same precision as they are shown on the screen. The precision of computation is therefore low.

10. Interpolation "faster than linear" and "slower than linear" -- is done employing a quadratic parabola whose first derivative assumes zero at initial ("slower") or terminal ("faster") point of interpolation.