Two-tier stochastic frontier analysis for the social sciences.

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README for Application ch. 2.2-Personal Computers - 2TSF model in Levels

Files and their contents

|  |  |
| --- | --- |
| Gretl 2TSF code\_Levels.inp | Gretl code to replicate the application 2.2(ML estimation and computation of metrics) |
| Gretl 2TSF code\_Levels.txt | The same, in .txt format |
| Gretl\_App.ch\_2.2\_Session.gretl | The gretl session file with the ZEOS data.  NOTE: the data sample is currently subsampled to match the application presented in the book. Use "restore full sample" to access the whole. |
| App\_2.2\_ZEOS data sample.csv | Full data sample in .csv format |

DATA SAMPLE

The data sample relates to computers' characteristics advertised by the company ZEOS, and covers three years, 1993 to 1995. n= 5076. Each observation has a year, a semester, a quarter, and a monthly identifier (see below).

| **Label in software** | **Variable description** | **Name in book** | **Comments** |
| --- | --- | --- | --- |
| hard | Size of hard drive(MB) |  |  |
| ram | Size of Random Access Memory (MB) |  |  |
| scrn | Size of screen (inches) |  |  |
| year | Year of ad publication |  |  |
| price | Price of computer (USD nominal) |  | Dependent variable |
| id | Internal obs id |  |  |
| speed | Copmuter clock speed (MHz) |  |  |
| trend | Monthly time trend |  | It also indicates the month at which the ad was published (t=1,2,...,36) |
| dpentium | Pentium or not | D\_pentium |  |
| d486 | 486 processor or not |  |  |
| dcd | CD drive or not | D\_CD |  |
| dmulti | Multimedia accessories or not | D\_multimedia |  |
| dscrn14 | 14 inch screen or not |  |  |
| dscrn15 | 15 inch screen or not | D\_scrn15 |  |
| dscrn17 | 17 inch screen or not | D\_scrn17 |  |
| dquarter | Quarter indicator |  | Values 1,2,...,12 |
| dsemester | Semester indicator |  | Values 1,2,3,4,5,6 |
| hard\_above | Hard drive size above 85 MB | Hard drive size > 85 MB | hard (-) 85 |
| ram\_above | RAM above 2MB | RAM > 2 MB | ram (-) ram |
| speed\_above | Clock speed above 25MHz | Clock speed > 25MHz | speed (-) 25 |