

LAMPIRAN 1. Hasil Program Frontier untuk nilai parameter dengan Fungsi Translog

Output from the program FRONTIER (Version 4.1c)

instruction file = sfa3-ins.txt  
data file = sfa3-dta.txt

Tech. Eff. Effects Frontier (see B&C 1993)  
The model is a production function  
The dependent variable is logged

the ols estimates are :

	coefficient	standard-error	t-ratio
beta 0	-0.99063584E+02	0.37378516E+02	-0.26502813E+01
beta 1	0.19852886E+02	0.45279426E+01	0.43845268E+01
beta 2	-0.12173972E+02	0.56189544E+01	-0.21665902E+01
beta 3	-0.65977513E+01	0.30923494E+01	-0.21335724E+01
beta 4	-0.89883086E+00	0.21901114E+00	-0.41040417E+01
beta 5	-0.40468909E+00	0.19752617E+00	-0.20487872E+01
beta 6	-0.11677646E+00	0.17577262E+00	-0.66436091E+00
beta 7	0.56986686E+00	0.14331074E+00	0.39764420E+01
beta 8	0.31537518E+00	0.19037182E+00	0.16566274E+01
beta 9	-0.17949236E+00	0.13993031E+00	-0.12827269E+01
sigma-squared	0.54516112E-01		

log likelihood function = 0.75065835E+01

the estimates after the grid search were :

beta 0	-0.98833783E+02
beta 1	0.19852886E+02
beta 2	-0.12173972E+02
beta 3	-0.65977513E+01
beta 4	-0.89883086E+00
beta 5	-0.40468909E+00
beta 6	-0.11677646E+00
beta 7	0.56986686E+00
beta 8	0.31537518E+00
beta 9	-0.17949236E+00
delta 0	0.00000000E+00
delta 1	0.00000000E+00
sigma-squared	0.97589258E-01
gamma	0.85000000E+00

the final mle estimates are :

	coefficient	standard-error	t-ratio
beta 0	-0.84717927E+02	0.37133918E+01	-0.22814163E+02
beta 1	0.10929483E+02	0.99362180E+00	0.10999641E+02
beta 2	-0.10973623E+02	0.59917456E+00	-0.18314568E+02
beta 3	0.13286359E+01	0.91628763E+00	0.14500206E+01
beta 4	-0.34497744E+00	0.56176160E-01	-0.61409936E+01
beta 5	-0.44991844E+00	0.25759336E-01	-0.17466228E+02
beta 6	-0.69619897E-01	0.57456140E-01	-0.12117051E+01
beta 7	0.31141914E+00	0.29895247E-01	0.10417012E+02
beta 8	0.14665009E-01	0.52148752E-01	0.28121495E+00
beta 9	0.87777805E-01	0.32158545E-01	0.27295328E+01
delta 0	-0.22424185E+01	0.63575978E+00	-0.35271475E+01
delta 1	-0.18837949E+01	0.73318632E+00	-0.25693263E+01
sigma-squared	0.79951025E+00	0.16841711E+00	0.47472033E+01
gamma	0.99999999E+00	0.12013133E-06	0.83242233E+07

log likelihood function = 0.16292724E+02

LR test of the one-sided error = 0.17572281E+02  
with number of restrictions = 3  
[note that this statistic has a mixed chi-square distribution]

number of iterations = 58  
(maximum number of iterations set at : 100)

number of cross-sections = 28

number of time periods = 2

total number of observations = 56

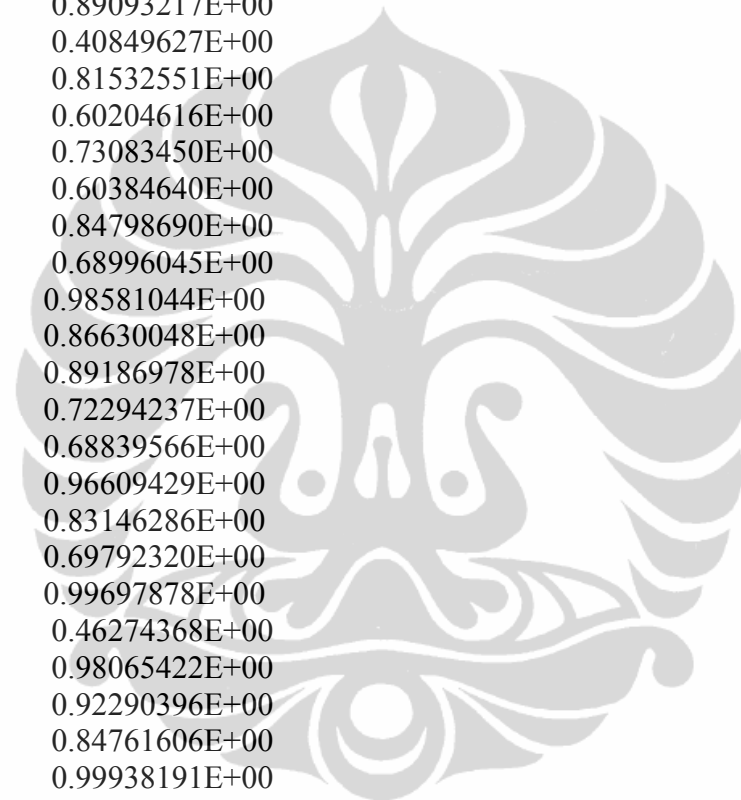
thus there are: 0 obsns not in the panel

technical efficiency estimates :

firm	year	eff.-est.
1	1	0.99767290E+00
2	1	0.90234987E+00
3	1	0.96610829E+00
4	1	0.57317379E+00
5	1	0.61426360E+00
6	1	0.81768171E+00
7	1	0.70944355E+00
8	1	0.77361466E+00
9	1	0.99967446E+00

10	1	0.31770225E+00
11	1	0.86493192E+00
12	1	0.98542533E+00
13	1	0.89379671E+00
14	1	0.83126680E+00
15	1	0.42434530E+00
16	1	0.86606341E+00
17	1	0.55148617E+00
18	1	0.76789076E+00
19	1	0.61346482E+00
20	1	0.68071964E+00
21	1	0.89093217E+00
22	1	0.40849627E+00
23	1	0.81532551E+00
24	1	0.60204616E+00
25	1	0.73083450E+00
26	1	0.60384640E+00
27	1	0.84798690E+00
28	1	0.68996045E+00
1	2	0.98581044E+00
2	2	0.86630048E+00
3	2	0.89186978E+00
4	2	0.72294237E+00
5	2	0.68839566E+00
6	2	0.96609429E+00
7	2	0.83146286E+00
8	2	0.69792320E+00
9	2	0.99697878E+00
10	2	0.46274368E+00
11	2	0.98065422E+00
12	2	0.92290396E+00
13	2	0.84761606E+00
14	2	0.99938191E+00
15	2	0.46765760E+00
16	2	0.99984756E+00
17	2	0.68536845E+00
18	2	0.88365094E+00
19	2	0.69001314E+00
20	2	0.69565314E+00
21	2	0.87157600E+00
22	2	0.53999564E+00
23	2	0.96331561E+00
24	2	0.65970166E+00
25	2	0.78378925E+00
26	2	0.81821450E+00
27	2	0.91566866E+00
28	2	0.84362417E+00

mean efficiency = 0.77535104E+00



summary of panel of observations:  
(1 = observed, 0 = not observed)

t:	1	2
n		
1	1	2
2	1	2
3	1	2
4	1	2
5	1	2
6	1	2
7	1	2
8	1	2
9	1	2
10	1	2
11	1	2
12	1	2
13	1	2
14	1	2
15	1	2
16	1	2
17	1	2
18	1	2
19	1	2
20	1	2
21	1	2
22	1	2
23	1	2
24	1	2
25	1	2
26	1	2
27	1	2
28	1	2

28 28 56

