

[illegible]

[illegible]

[illegible]

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Trying LSDV residual variance to estimate Var[e].
Trying to estimate Var[u] with EE1 - Q * Var[e]
Current estimates: Var[e]= 0.130068E-03, Var[u]= 0.285476E-01
Error: Models - Regression; regressors are collinear.
Exit status for this model command is 2.0.
18 Regress ; LHS = Cy
; RHS = Prices, LQ
; Rls: B(2) + B(3) + B(4) +B(5) + B(6) = 1 $
Results begin on page 94 in output.
Exit status for this model command is 0.0.
19 ; Panel
; Str = Industry
; Period = time
; Output = 2
; Het
; Het = Industry
; List
; Printvc $
Error: Unrecognized command. (Missing ; ?)
20 Regress ; LHS = Cam
; RHS = Prices, LQ
; Rls: B(2) + B(3) + B(4) +B(5) + B(6) = 1 $
Results begin on page 96 in output.
Exit status for this model command is 0.0.
21 ; Panel
; Str = Industry
; Period = time
; Output = 2
; Het
; Het = Industry
; List
; Printvc $
Error: Unrecognized command. (Missing ; ?)
22 Regress ; LHS = Caf
; RHS = Prices, LQ
; Rls: B(2) + B(3) + B(4) +B(5) + B(6) = 1 $
Results begin on page 98 in output.
Exit status for this model command is 0.0.
23 ; Panel
; Str = Industry
; Period = time
; Output = 2
; Het
; Het = Industry
; List
; Printvc $
Error: Unrecognized command. (Missing ; ?)
24 Plot ; Lhs = Cy
; Rhs = Wy
; Title = Male_youth
; regression $
Exit status for this model command is 0.0.
~
#####
#####
° LIMDEP Execution Trace. This run: 06/29/98. Time now 16:16:33.
Page 7 °
#####
#####

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$$\frac{1}{4}$$

Estimated Fixed Effects			
Group	Group Size	Coefficient	Standard Error
1	13	0.24507	0.06774
2	13	0.28432	0.07702
3	13	0.27001	0.07080
4	13	0.27192	0.07390
5	13	0.32424	0.07180
6	13	0.25493	0.06086
7	13	0.25289	0.07175
8	13	0.22832	0.06167

[illegible]

Test Statistics for the Classical Model

	Model	Log-Likelihood	Sum of Squares	R-squared
(1)	Constant term only	243.44398	0.564104E-01	0.0000000
(2)	Group effects only	357.92817	0.624034E-02	0.8893761
(3)	X - variables only	245.70400	0.540112E-01	0.0425309
(4)	X and group effects	374.34949	0.455051E-02	0.9193320

Hypothesis Tests

Likelihood Ratio Test					F Tests			
	Chi-squared	d.f.	Prob value	F	num.	denom.	Prob value	
(2) vs (1)	228.968	7	0.00000	110.258	7	96	0.00000	
(3) vs (1)	4.520	2	0.10435	2.243	2	101	0.11138	
(4) vs (1)	261.811	9	0.00000	119.030	9	94	0.00000	
(4) vs (2)	32.843	2	0.00000	17.453	2	94	0.00000	
(4) vs (3)	257.291	7	0.00000	145.959	7	94	0.00000	

$$\mathbb{E} \mathbb{I}_{\frac{1}{4}}$$
[illegible]

0 LIMDEP Estimation Results

Run log line 9

Page 50

Current sample contains 104 observations.

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0 LIMDEP Estimation Results                                Run log line    9

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0 Current sample contains 104 observations.
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$$\frac{1}{4}$$

Estimated Fixed Effects			
Period	No. of Obs.	Coefficient	Standard Error
1	8	0.01671	0.00487
2	8	0.01087	0.00310
3	8	0.01137	0.00361
4	8	0.00786	0.00311
5	8	0.00559	0.00257
6	8	0.00232	0.00237
7	8	-0.00197	0.00244
8	8	-0.00370	0.00241
9	8	-0.00574	0.00249
10	8	-0.00895	0.00262
11	8	-0.00938	0.00293
12	8	-0.01186	0.00317
13	8	-0.01313	0.00380

[illegible]

Test Statistics for the Classical Model

	Model	Log-Likelihood	Sum of Squares	R-squared
(1)	Constant term only	243.44398	0.564104E-01	0.0000000
(2)	Group effects only	357.92817	0.624034E-02	0.8893761
(3)	X - variables only	245.70400	0.540112E-01	-0.2678211
(4)	X and group effects	374.34949	0.455051E-02	0.9193320
(5)	X ind.&time effects	405.54426	0.249763E-02	0.9557240

Hypothesis Tests

Likelihood Ratio Test					F Tests			
	Chi-squared	d.f.	Prob value	F	num.	denom.	Prob value	
(2) vs (1)	228.968	7	0.00000	110.258	7	96	0.00000	
(3) vs (1)	4.520	2	0.10435	2.243	2	101	0.11138	
(4) vs (1)	261.811	9	0.00000	50.372	9	94	0.00000	
(4) vs (2)	32.843	2	0.00000	38.466	2	94	0.00000	
(4) vs (3)	257.291	7	0.00000	145.240	7	94	0.00000	
(5) vs (4)	62.390	12	0.00000	5.617	12	82	0.00000	

$\frac{1}{4}$

Observation Interval	Observed Y	Predicted Y	Residual	95% Forecast Interval
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1	0.22119E-01	0.37882E-01	-0.0158	-0.0255	0.1012
2	0.21677E-01	0.37402E-01	-0.0157	-0.0259	0.1007
3	0.19068E-01	0.37019E-01	-0.0180	-0.0263	0.1004
4	0.14887E-01	0.34454E-01	-0.0196	-0.0288	0.0977
5	0.21416E-01	0.33379E-01	-0.0120	-0.0299	0.0967
6	0.11347E-01	0.32844E-01	-0.0215	-0.0305	0.0962
7	0.16134E-01	0.33151E-01	-0.0170	-0.0301	0.0964
8	0.15629E-01	0.32135E-01	-0.0165	-0.0311	0.0954
9	0.14067E-01	0.31231E-01	-0.0172	-0.0320	0.0945
10	0.94011E-02	0.30282E-01	-0.0209	-0.0330	0.0935
11	0.10857E-01	0.31930E-01	-0.0211	-0.0313	0.0952
12	0.87023E-02	0.30804E-01	-0.0221	-0.0326	0.0942
13	0.87236E-02	0.29264E-01	-0.0205	-0.0340	0.0925
14	0.38601E-01	0.22308E-01	0.0163	-0.0418	0.0864
15	0.36903E-01	0.14043E-01	0.0229	-0.0499	0.0779
16	0.28938E-01	0.20767E-01	0.0082	-0.0434	0.0849
17	0.28396E-01	0.19746E-01	0.0087	-0.0444	0.0839
18	0.29087E-01	0.17893E-01	0.0112	-0.0464	0.0821
19	0.27261E-01	0.16564E-01	0.0107	-0.0478	0.0809
20	0.23486E-01	0.15869E-01	0.0076	-0.0484	0.0801
21	0.18084E-01	0.15821E-01	0.0023	-0.0484	0.0800
22	0.16065E-01	0.15683E-01	0.0004	-0.0485	0.0798
23	0.15982E-01	0.15991E-01	0.0000	-0.0482	0.0802
24	0.13756E-01	0.14721E-01	-0.0010	-0.0495	0.0790
25	0.13290E-01	0.14313E-01	-0.0010	-0.0500	0.0786
26	0.11997E-01	0.13436E-01	-0.0014	-0.0509	0.0777
27	0.31421E-01	0.31265E-01	0.0002	-0.0320	0.0945
28	0.39279E-01	0.22126E-01	0.0172	-0.0411	0.0854
29	0.32505E-01	0.28263E-01	0.0042	-0.0350	0.0915
30	0.30349E-01	0.27679E-01	0.0027	-0.0355	0.0909
31	0.26863E-01	0.27211E-01	-0.0003	-0.0360	0.0905
32	0.30779E-01	0.24189E-01	0.0066	-0.0391	0.0875
33	0.27094E-01	0.22653E-01	0.0044	-0.0406	0.0859
34	0.25946E-01	0.24080E-01	0.0019	-0.0392	0.0873
35	0.22122E-01	0.24566E-01	-0.0024	-0.0386	0.0878
36	0.19378E-01	0.24244E-01	-0.0049	-0.0390	0.0875
37	0.21790E-01	0.23915E-01	-0.0021	-0.0393	0.0872
38	0.16736E-01	0.23016E-01	-0.0063	-0.0403	0.0863
39	0.19059E-01	0.21796E-01	-0.0027	-0.0415	0.0851
40	0.25707E-01	0.27685E-01	-0.0020	-0.0359	0.0912
41	0.31262E-01	0.17862E-01	0.0134	-0.0455	0.0813
42	0.22493E-01	0.25716E-01	-0.0032	-0.0378	0.0893
43	0.25128E-01	0.25391E-01	-0.0003	-0.0381	0.0889
44	0.26675E-01	0.23139E-01	0.0035	-0.0404	0.0867
45	0.22541E-01	0.21440E-01	0.0011	-0.0422	0.0851
46	0.19839E-01	0.20860E-01	-0.0010	-0.0428	0.0845
47	0.16433E-01	0.21164E-01	-0.0047	-0.0423	0.0847
48	0.17840E-01	0.21611E-01	-0.0038	-0.0419	0.0851
49	0.13770E-01	0.20477E-01	-0.0067	-0.0430	0.0839
50	0.10990E-01	0.20223E-01	-0.0092	-0.0433	0.0838
51	0.16393E-01	0.17336E-01	-0.0009	-0.0463	0.0810

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° LIMDEP Estimation Results

Run log line 9

Page 14 °

° Current sample contains 104 observations.

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Observation Interval	Observed Y	Predicted Y	Residual	95% Forecast	
52	0.14614E-01	0.15973E-01	-0.0014	-0.0478	0.0797
53	0.11471	0.31676E-01	0.0830	-0.0317	0.0950
54	0.10282	0.23801E-01	0.0790	-0.0394	0.0870
55	0.97736E-01	0.29818E-01	0.0679	-0.0335	0.0932
56	0.89200E-01	0.28782E-01	0.0604	-0.0345	0.0921
57	0.85483E-01	0.27978E-01	0.0575	-0.0353	0.0913
58	0.82447E-01	0.26004E-01	0.0564	-0.0373	0.0893
59	0.71350E-01	0.25368E-01	0.0460	-0.0379	0.0887
60	0.70840E-01	0.24930E-01	0.0459	-0.0384	0.0882
61	0.66236E-01	0.23575E-01	0.0427	-0.0397	0.0869
62	0.61224E-01	0.22540E-01	0.0387	-0.0408	0.0858
63	0.64423E-01	0.22090E-01	0.0423	-0.0412	0.0854
64	0.61768E-01	0.21881E-01	0.0399	-0.0415	0.0852
65	0.68067E-01	0.20165E-01	0.0479	-0.0432	0.0835
66	0.39767E-01	0.45985E-01	-0.0062	-0.0187	0.1107
67	0.35850E-01	0.39763E-01	-0.0039	-0.0252	0.1047
68	0.48037E-01	0.42690E-01	0.0053	-0.0220	0.1073
69	0.43981E-01	0.41206E-01	0.0028	-0.0234	0.1058
70	0.40822E-01	0.40111E-01	0.0007	-0.0244	0.1046
71	0.49348E-01	0.38483E-01	0.0109	-0.0259	0.1029
72	0.36926E-01	0.37631E-01	-0.0007	-0.0267	0.1020
73	0.37292E-01	0.37263E-01	0.0000	-0.0271	0.1017
74	0.35587E-01	0.37054E-01	-0.0015	-0.0273	0.1014
75	0.33589E-01	0.36801E-01	-0.0032	-0.0276	0.1012
76	0.42606E-01	0.35033E-01	0.0076	-0.0293	0.0994
77	0.35549E-01	0.34373E-01	0.0012	-0.0298	0.0985
78	0.34760E-01	0.33671E-01	0.0011	-0.0305	0.0978
79	0.78772E-02	0.30721E-01	-0.0228	-0.0325	0.0939
80	0.73882E-02	0.22574E-01	-0.0152	-0.0407	0.0858
81	0.92319E-02	0.27815E-01	-0.0186	-0.0354	0.0910
82	0.63088E-02	0.26932E-01	-0.0206	-0.0363	0.0902
83	0.69076E-02	0.24882E-01	-0.0180	-0.0384	0.0881
84	0.70999E-02	0.22868E-01	-0.0158	-0.0404	0.0861
85	0.84279E-02	0.22874E-01	-0.0144	-0.0404	0.0862
86	0.46715E-02	0.22686E-01	-0.0180	-0.0406	0.0860
87	0.28774E-02	0.21879E-01	-0.0190	-0.0415	0.0852
88	0.30378E-02	0.19795E-01	-0.0168	-0.0436	0.0832
89	0.41140E-02	0.18627E-01	-0.0145	-0.0448	0.0821
90	0.24197E-02	0.18797E-01	-0.0164	-0.0448	0.0824
91	0.25705E-02	0.17065E-01	-0.0145	-0.0466	0.0807
92	0.95709E-02	0.46269E-01	-0.0367	-0.0182	0.1107
93	0.14714E-01	0.35157E-01	-0.0204	-0.0296	0.0999
94	0.14224E-01	0.42526E-01	-0.0283	-0.0217	0.1068
95	0.13294E-01	0.41434E-01	-0.0281	-0.0228	0.1057
96	0.12364E-01	0.38341E-01	-0.0260	-0.0260	0.1026
97	0.10793E-01	0.37805E-01	-0.0270	-0.0264	0.1020
98	0.13452E-01	0.35802E-01	-0.0223	-0.0285	0.1001
99	0.10176E-01	0.37795E-01	-0.0276	-0.0263	0.1019
100	0.93128E-02	0.35324E-01	-0.0260	-0.0289	0.0995
101	0.88307E-02	0.36462E-01	-0.0276	-0.0276	0.1006

102	0.60949E-02	0.32795E-01	-0.0267	-0.0315	0.0971
103	0.82149E-02	0.34552E-01	-0.0263	-0.0295	0.0986

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° LIMDEP Estimation Results Run log line 9

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° Current sample contains 104 observations.

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Observation	Observed Y	Predicted Y	Residual	95% Forecast
Interval				
104	0.93998E-02	0.33391E-01	-0.0240	-0.0306 0.0974

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° LIMDEP Estimation Results Run log line 10

Page 16 °

° Current sample contains 104 observations.

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»

° OLS Without Group Dummy Variables

°

° Ordinary least squares regression Weighting variable = ONE

°

° Dependent variable is CAM Mean = 0.32888, S.D. = 0.1371

°

° Model size: Observations = 104, Parameters = 3, Deg.Fr. = 101

°

° Residuals: Sum of squares= 0.996834 Std.Dev. = 0.09935

°

° Fit: R-squared = 0.48549, Adjusted R-squared = 0.47530

°

° Model test: F[2, 101] = 47.65, Prob value = 0.00000

°

° Diagnostic: Log-L = 94.1036, Restricted(á=0) Log-L = 59.5476

°

° Amemiya Pr. Crt.= 0.010, Akaike Info. Crt.= -1.752

°

° Panel Data Analysis of CAM [ONE way]

°

° Unconditional ANOVA (No regressors)

°

Source	Variation	Deg. Free.	Mean Square
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°

Between	1.84751	7.	0.263930
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Residual	0.899315E-01	96.	0.936787E-03
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Total	1.93744	103.	0.188101E-01
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Variable      Coefficient    Standard Error   t-ratio     P[³T³òt]       Mean of X  
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA  
LWAM          -0.4672706E-01    0.42819E-01    -1.091      0.27775        2.416  
LQ            0.1391225      0.14527E-01    9.577      0.00000        9.894  
Constant      -0.9347125        0.14989        -6.236      0.00000  
  
»  
° LIMDEP Estimation Results                                Run log line    10  
Page 17 °  
° Current sample contains           104 observations.  
°  
¼  
»  
° Least Squares with Group Dummy Variables  
°  
° Ordinary least squares regression Weighting variable = ONE  
°  
° Dependent variable is CAM         Mean =      0.32888, S.D. =      0.1371  
°  
° Model size: Observations =       104, Parameters =   10, Deg.Fr. =    94  
°  
° Residuals: Sum of squares=    0.513772E-01 Std.Dev. =      0.02338  
°  
° Fit: R-squared = 0.97348, Adjusted R-squared =      0.97094  
°  
° Model test: F[ 9, 94] = 383.42, Prob value =      0.00000  
°  
° Diagnostic: Log-L = 248.3039, Restricted(á=0) Log-L = 59.5476  
°  
° Amemiya Pr. Crt.= 0.001, Akaike Info. Crt.= -4.583  
°  
° Estd. Autocorrelation of e(i,t) 0.469765  
°  
° White/Hetero. corrected covariance matrix used.  
¼  
Variable      Coefficient    Standard Error   t-ratio     P[³T³òt]       Mean of X  
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA  
LWAM          -0.8038754E-01    0.23557E-01    -3.412      0.00092        2.416  
LQ            -0.4154949E-01    0.35263E-01    -1.178      0.24142        9.894  
  
»  
° LIMDEP Estimation Results                                Run log line    10  
Page 18 °  
° Current sample contains           104 observations.  
°  
¼  
Covariance matrix
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	LWAM	LQ
LWAM	0.5549E-03	

LQ	-0.6704E-03	0.1243E-02
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0  LIMDEP Estimation Results                                Run log line   10

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0 Current sample contains      104 observations.

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$$\frac{1}{4}$$

Estimated Fixed Effects			
Group	Group Size	Coefficient	Standard Error
1	13	0.73490	0.29906
2	13	1.14161	0.33846
3	13	1.06637	0.31031
4	13	1.16415	0.32337
5	13	0.92221	0.31687
6	13	0.82030	0.26914
7	13	0.88766	0.31469
8	13	0.73655	0.26732

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0 Test Statistics for the Classical Model

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Model	Log-Likelihood	Sum of Squares	R-squared
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° (1)	Constant term only	59.54759	0.193744E+01	0.0000000
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° (2)	Group effects only	219.19147	0.899315E-01	0.9535823
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° (3)	X - variables only	94.10361	0.996834E+00	0.4854892
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° (4)	X and group effects	248.30386	0.513772E-01	0.9734819
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0 Hypothesis Tests

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0	Likelihood Ratio Test	F-Tests
2		

	Chi-squared	d.f.	Prob value	F	num.	denom.	Prob value
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° (2) vs (1)	319.288	7	0.00000	281.740	7	96	0.00000
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° (3) vs (1)	69.112	2	0.00000	47.651	2	101	0.00000
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° (4) vs (1)	377.513	9	0.00000	383.417	9	94	0.00000
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° (4) vs (2)	58.225	2	0.00000	35.270	2	94	0.00000
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0	(4)	vs	(3)	308.401	7	0.00000	247.116	7	94	0.00000
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Estimated Fixed Effects			
Period	No. of Obs.	Coefficient	Standard Error
1	8	0.10175	0.03116
2	8	0.07633	0.02536
3	8	0.05122	0.02169
4	8	0.02927	0.01486
5	8	0.00691	0.01139
6	8	-0.01511	0.00817
7	8	-0.01910	0.00883
8	8	-0.02424	0.01096
9	8	-0.03365	0.01280
10	8	-0.03756	0.01643
11	8	-0.04071	0.01823
12	8	-0.04280	0.02157
13	8	-0.05231	0.02592

Test Statistics for the Classical Model				
	Model	Log-Likelihood	Sum of Squares	R-squared
(1)	Constant term only	59.54759	0.193744E+01	0.0000000
(2)	Group effects only	219.19147	0.899315E-01	0.9535823
(3)	X - variables only	94.10361	0.996834E+00	0.0115788
(4)	X and group effects	248.30386	0.513772E-01	0.9734819
(5)	X ind.&time effects	269.39939	0.342440E-01	0.9823251

Hypothesis Tests								
Likelihood Ratio Test					F Tests			
	Chi-squared	d.f.	Prob value	F	num.	denom.	Prob value	
(2) vs (1)	319.288	7	0.00000	281.740	7	96	0.00000	
(3) vs (1)	69.112	2	0.00000	47.651	2	101	0.00000	
(4) vs (1)	377.513	9	0.00000	154.606	9	94	0.00000	
(4) vs (2)	58.225	2	0.00000	49.762	2	94	0.00000	

	LWAF	LQ
LWAF	0.4252E-04	
LQ	-0.6152E-04	0.2580E-03

Estimated Fixed Effects			
Group	Group Size	Coefficient	Standard Error
1	13	0.29846	0.14608
2	13	0.35189	0.16649
3	13	0.32279	0.15296
4	13	0.37821	0.15980
5	13	0.48711	0.15514
6	13	0.69474	0.13325
7	13	0.33915	0.15614
8	13	0.88719	0.13414

0 Test Statistics for the Classical Model

	Likelihood Ratio Test	F Tests
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		Chi-squared	d.f.	Prob value	F	num.	denom.	Prob value
(2) vs (1)		599.610	7	0.00000	4362.423	7	96	0.00000
(3) vs (1)		114.264	2	0.00000	101.012	2	101	0.00000
(4) vs (1)		615.826	9	0.00000	3884.658	9	94	0.00000
(4) vs (2)		16.216	2	0.00030	7.931	2	94	0.00066
(4) vs (3)		501.562	7	0.00000	1655.764	7	94	0.00000

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0  LIMDEP Estimation Results                                Run log line   11

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0 Current sample contains      104 observations.
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E#####  
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° LIMDEP Estimation Results Run log line 11  
Page 43 °  
° Current sample contains 104 observations.  
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E#####  
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Observation Interval	Observed Y	Predicted Y	Residual	95% Forecast	
1	0.17460E-01	0.19559	-0.1781	-0.3209	0.7121
2	0.25263E-01	0.19396	-0.1687	-0.3225	0.7104
3	0.16871E-01	0.19527	-0.1784	-0.3212	0.7117
4	0.14116E-01	0.19342	-0.1793	-0.3230	0.7098
5	0.19691E-01	0.19405	-0.1744	-0.3224	0.7105
6	0.17864E-01	0.19385	-0.1760	-0.3226	0.7103
7	0.18819E-01	0.19096	-0.1721	-0.3255	0.7074
8	0.23356E-01	0.18931	-0.1659	-0.3271	0.7057
9	0.27131E-01	0.19032	-0.1632	-0.3261	0.7068
10	0.20380E-01	0.18855	-0.1682	-0.3279	0.7050
11	0.20772E-01	0.18818	-0.1674	-0.3282	0.7046
12	0.25878E-01	0.19529	-0.1694	-0.3212	0.7118
13	0.18362E-01	0.18937	-0.1710	-0.3270	0.7058
14	0.44745E-01	0.15973	-0.1150	-0.3579	0.6774
15	0.43500E-01	0.15793	-0.1144	-0.3597	0.6756
16	0.41498E-01	0.15734	-0.1158	-0.3602	0.6749
17	0.38729E-01	0.15633	-0.1176	-0.3612	0.6739
18	0.38600E-01	0.15409	-0.1155	-0.3636	0.6718
19	0.38857E-01	0.15197	-0.1131	-0.3657	0.6696
20	0.35490E-01	0.15174	-0.1163	-0.3659	0.6693
21	0.39782E-01	0.15226	-0.1125	-0.3652	0.6698
22	0.35164E-01	0.15304	-0.1179	-0.3644	0.6705
23	0.34758E-01	0.15222	-0.1175	-0.3652	0.6696
24	0.33922E-01	0.15079	-0.1169	-0.3667	0.6683
25	0.31881E-01	0.14983	-0.1179	-0.3677	0.6673
26	0.30258E-01	0.14937	-0.1191	-0.3681	0.6669
27	0.32852E-01	0.18341	-0.1506	-0.3329	0.6998
28	0.34696E-01	0.18069	-0.1460	-0.3357	0.6971
29	0.31744E-01	0.17909	-0.1473	-0.3373	0.6955
30	0.27286E-01	0.17928	-0.1520	-0.3371	0.6956
31	0.26520E-01	0.17693	-0.1504	-0.3394	0.6933
32	0.20455E-01	0.17335	-0.1529	-0.3430	0.6897
33	0.26239E-01	0.17256	-0.1463	-0.3439	0.6890
34	0.26055E-01	0.17453	-0.1485	-0.3419	0.6909
35	0.28164E-01	0.17727	-0.1491	-0.3391	0.6936
36	0.35313E-01	0.17562	-0.1403	-0.3408	0.6920
37	0.27860E-01	0.17367	-0.1458	-0.3427	0.6901
38	0.29834E-01	0.17152	-0.1417	-0.3449	0.6879
39	0.26906E-01	0.17108	-0.1442	-0.3454	0.6875
40	0.75030E-01	0.17169	-0.0967	-0.3451	0.6885
41	0.79387E-01	0.16985	-0.0905	-0.3470	0.6867
42	0.70866E-01	0.16955	-0.0987	-0.3472	0.6863
43	0.75971E-01	0.16950	-0.0935	-0.3472	0.6862


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E#####
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° LIMDEP Estimation Results                                Run log line    12
Page  48 °
° Current sample contains          104 observations.
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	LWY	LWAM	LWAF	LWK	LQ
LWY	0.1602E-04				
LWAM	-0.1421E-04	0.9875E-04			
LWAF	0.6537E-05	-0.6096E-04	0.5790E-04		
LWK	0.1602E-05	-0.1502E-04	0.3699E-05	0.2251E-04	
LQ	-0.2387E-05	-0.1650E-04	-0.1695E-05	-0.1083E-04	0.3940E-04

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E#####
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° LIMDEP Estimation Results                                Run log line    12
Page  49 °
° Current sample contains          104 observations.
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E#####
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[illegible]

	Model	Log-Likelihood	Sum of Squares	R-squared
(1)	Constant term only	243.44398	0.564104E-01	0.0000000
(2)	Group effects only	357.92817	0.624034E-02	0.8893761
(3)	X - variables only	262.20667	0.393239E-01	0.3028962
(4)	X and group effects	406.23561	0.246464E-02	0.9563088

Hypothesis Tests

[illegible]

Covariance matrix

	LWY	LWAM	LWAF	LWK	LQ
ONE					
LWY	0.1205E-04				
LWAM	-0.1059E-04	0.1335E-03			
LWAF	0.1405E-05	-0.8410E-04	0.8046E-04		
LWK	0.3425E-06	-0.1747E-04	-0.4521E-05	0.2963E-04	
LQ	0.1065E-05	-0.2855E-04	0.3806E-05	-0.5645E-05	0.5353E-04
ONE	-0.1066E-04	0.1535E-03	-0.3113E-04	0.1470E-03	-0.4790E-03

0.4761E-02

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° LIMDEP Estimation Results Run log line 12
Page 52 °

° Current sample contains 104 observations.

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° Least Squares with Group Dummy Variables and Period Effects

°

° Ordinary least squares regression Weighting variable = ONE

°

° Dependent variable is CY Mean = 0.02756, S.D. = 0.0234

°

° Model size: Observations = 104, Parameters = 26, Deg.Fr. = 78

°

° Residuals: Sum of squares= 0.221960E-02 Std.Dev. = 0.00533

°

° Fit: R-squared = 0.96015, Adjusted R-squared = 0.94738

°

° Model test: F[25, 78] = 75.17, Prob value = 0.00000

°

° Diagnostic: Log-L = 411.6810, Restricted(á=0) Log-L = 243.4440

°

° Amemiya Pr. Crt.= 0.000, Akaike Info. Crt.= -7.417

°

° Estd. Autocorrelation of e(i,t) 0.367090

°

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Variable	Coefficient	Standard Error	t-ratio	P[³ T ³ òt]	Mean of X
AAAAA					
LWY	0.3761092E-02	0.68638E-02	0.548	0.58496	1.897
LWAM	-0.1477925E-01	0.21696E-01	-0.681	0.49735	2.416
LWAF	-0.1878970E-01	0.12411E-01	-1.514	0.13326	2.337
LWK	-0.1845760E-01	0.72766E-02	-2.537	0.01277	-1.317
LQ	0.3253771E-01	0.91498E-02	3.556	0.00058	9.894
Constant	-0.2461842	0.10055	-2.448	0.01612	

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° LIMDEP Estimation Results Run log line 12
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0 Current sample contains      104 observations.

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$\frac{1}{4}$

Covariance matrix

	LWY	LWAM	LWAF	LWK	LQ
ONE					
LWY	0.4711E-04				
LWAM	-0.4266E-05	0.4707E-03			
LWAF	0.2598E-04	-0.4195E-05	0.1540E-03		
LWK	0.3817E-05	-0.1827E-04	0.1257E-04	0.5295E-04	
LQ	0.1033E-04	-0.5160E-04	-0.2368E-05	-0.3366E-05	0.8372E-04
ONE	0.0000	0.0000	0.0000	0.0000	0.0000
0.1011E-01					

[illegible]

◦ LIMDEP Estimation Results Run log line 12

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0 Current sample contains 104 observations.
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$$\frac{1}{4}$$

Estimated Fixed Effects

Group	No. of Obs.	Coefficient	Standard Error
1	13	-0.00697	0.00651
2	13	-0.03622	0.00878
3	13	0.01148	0.00657
4	13	-0.02575	0.00533
5	13	0.04663	0.00481
6	13	0.02617	0.01120
7	13	-0.04202	0.00559
8	13	0.02668	0.01090

[illegible]

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0  LIMDEP Estimation Results                                Run log line   12

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⁰ Current sample contains 104 observations.

$$\frac{1}{4}$$

Estimated Fixed Effects

Period	No. of Obs.	Coefficient	Standard Error
1	8	-0.00176	0.00938
2	8	-0.00186	0.00663
3	8	-0.00049	0.00622
4	8	-0.00027	0.00426
5	8	0.00217	0.00288
6	8	0.00464	0.00204
7	8	0.00174	0.00225
8	8	0.00014	0.00271
9	8	-0.00066	0.00337
10	8	-0.00114	0.00455
11	8	0.00010	0.00506
12	8	-0.00165	0.00567

0.00687

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E|iiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiii»
° Random Effects Model: v(i,t) = e(i,t) + u(i) + w(t) °
° Estimates: Var[e] = 0.284564E-04 °
° Var[u] = 0.936544E-03 °
° Corr[v(i,t),v(i,s)] = 0.970511 °
° Var[w] = 0.319601E-05 °

```

Variable	Coefficient	Standard Error	z=b/s.e.	P[³ Z ³ ðz]	Mean of X
LWY	0.2771567E-02	0.43342E-02	0.639	0.52252	1.897
LWAM	-0.2265573E-01	0.12821E-01	-1.767	0.07722	2.416
LWAF	-0.1397688E-01	0.95876E-02	-1.458	0.14489	2.337
LWK	-0.1017312E-01	0.60557E-02	-1.680	0.09297	-1.317
LQ	0.2658773E-01	0.77016E-02	3.452	0.00056	9.894
Constant	-0.1667431	0.72743E-01	-2.292	0.02189	

Covariance matrix

[illegible]

Predicted Values					
Observation	Observed Y	Predicted Y	Residual	95% Forecast Interval	
1	0.22119E-01	0.39989E-01	-0.0179	-0.0690	0.1490
2	0.21677E-01	0.35043E-01	-0.0134	-0.0740	0.1441
3	0.19068E-01	0.37283E-01	-0.0182	-0.0717	0.1463
4	0.14887E-01	0.31887E-01	-0.0170	-0.0771	0.1409
5	0.21416E-01	0.26391E-01	-0.0050	-0.0827	0.1355

Observation	Observed Y	Predicted Y	Residual	95% Forecast
Interval				
104	0.93998E-02	-0.12757E-01	0.0222	-0.1228 0.0973

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° LIMDEP Estimation Results Run log line 13

Page 61 °

° Current sample contains 104 observations.

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° OLS Without Group Dummy Variables

° Ordinary least squares regression Weighting variable = ONE

° Dependent variable is CAM Mean = 0.32888, S.D. = 0.1371

° Model size: Observations = 104, Parameters = 6, Deg.Fr. = 98

° Residuals: Sum of squares= 0.979997 Std.Dev. = 0.10000

° Fit: R-squared = 0.49418, Adjusted R-squared = 0.46837

° Model test: F[5, 98] = 19.15, Prob value = 0.00000

° Diagnostic: Log-L = 94.9894, Restricted(á=0) Log-L = 59.5476

° Amemiya Pr. Crt.= 0.011, Akaike Info. Crt.= -1.711

° Panel Data Analysis of CAM [ONE way]

° Unconditional ANOVA (No regressors)

Source	Variation	Deg. Free.	Mean Square
Between	1.84751	7.	0.263930
Residual	0.899315E-01	96.	0.936787E-03
Total	1.93744	103.	0.188101E-01

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Variable	Coefficient	Standard Error	t-ratio	P[³ T ³ òt]	Mean of X
LWY	0.3720601E-01	0.64094E-01	0.580	0.56291	1.897
LWAM	-0.1471760E-01	0.98445E-01	-0.150	0.88147	2.416
LWAF	-0.5447693E-01	0.10921	-0.499	0.61902	2.337
LWK	-0.1195097E-01	0.26213E-01	-0.456	0.64945	-1.317
LQ	0.1402115	0.16632E-01	8.430	0.00000	9.894
Constant	-0.9818078	0.22556	-4.353	0.00003	

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° LIMDEP Estimation Results Run log line 13

[illegible]


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0 Current sample contains      104 observations.

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$\frac{1}{4}$

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o Random Effects Model:  $v(i,t) = e(i,t) + u(i)$  o
o Estimates: Var[e] = 0.308190E-03 o
o Var[u] = 0.555498E-02 o
o Corr[v(i,t),v(i,s)] = 0.947436 o
o Lagrange Multiplier Test vs. Model (3) = 483.64 o
o ( 1 df, prob value = 0.000000) o
o Fixed vs. Random Effects (Hausman) = 0.00 o
o ( 5 df, prob value = 1.000000) o
o Reestimated using GLS coefficients: o
o Estimates: Var[e] = 0.324307E-03 o
o Var[u] = 0.756839E-01 o
o Sum of Squares 0.199794E+01 o
o R-squared -0.312277E-01 o
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[illegible]

Page 66 0

$$\frac{1}{4}$$

	LWY	LWAM	LWAF	LWK	LQ
ONE					
LWY	0.1371E-03				
LWAM	-0.1199E-03	0.1480E-02			
LWAF	0.1566E-04	-0.9499E-03	0.9109E-03		
LWK	0.4055E-05	-0.1860E-03	-0.5486E-04	0.3229E-03	
LQ	0.1166E-04	-0.2874E-03	0.4624E-04	-0.5909E-04	0.5245E-03
ONE	-0.1169E-03	0.1470E-02	-0.3933E-03	0.1580E-02	-0.4703E-02
	0.4690E-01				

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0 LIMDEP Estimation Results                                Run log line   13

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0 Current sample contains      104 observations.
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$$\frac{1}{4}$$

[illegible]

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Biiiiiiiiiiiii  
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° LIMDEP Estimation Results Run log line 13  
Page 71 °  
° Current sample contains 104 observations.  
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E|iiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiii»
o Random Effects Model: v(i,t) = e(i,t) + u(i) + w(t) o
o Estimates: Var[e] = 0.272572E-03 o
o Var[u] = 0.555772E-02 o
o Corr[v(i,t),v(i,s)] = 0.953249 o
o Var[w] = 0.260697E-04 o
o Corr[v(i,t),v(j,t)] = 0.087294 o
o Lagrange Multiplier Test vs. Model (3) = 485.18 o
o ( 2 df, prob value = 0.000000) o
o Fixed vs. Random Effects (Hausman) = 23.59 o
o ( 5 df, prob value = 0.000261) o
o Reestimated using GLS coefficients: o
o Estimates: Var[e] = 0.313537E-03 o
o Var[u] = 0.782274E-01 o
o Var[w] = 0.462496E-04 o
o Sum of Squares 0.206389E+01 o
o R-squared -0.652636E-01 o
E|iiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiii|
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Variable	Coefficient	Standard Error	z=b/s.e.	P[³ Z ³ dz]	Mean of X
LWY	0.2632575E-01	0.13144E-01	2.003	0.04520	1.897
LWAM	0.8881760E-01	0.38905E-01	2.283	0.02243	2.416
LWAF	-0.1155869	0.29483E-01	-3.920	0.00009	2.337
LWK	-0.1217751	0.18230E-01	-6.680	0.00000	-1.317
LQ	0.3425597E-01	0.22325E-01	1.534	0.12493	9.894
Constant	-0.1648168	0.21140	-0.780	0.43561	

76	0.25644	0.39613	-0.1397	-0.1650	0.9572
77	0.28579	0.39184	-0.1061	-0.1692	0.9529
78	0.28265	0.39063	-0.1080	-0.1703	0.9516
79	0.32455	0.46808	-0.1435	-0.0916	1.0277
80	0.31496	0.46578	-0.1508	-0.0938	1.0254
81	0.29848	0.44470	-0.1462	-0.1148	1.0042
82	0.27716	0.43567	-0.1585	-0.1238	0.9951
83	0.25093	0.42062	-0.1697	-0.1387	0.9799
84	0.25226	0.40015	-0.1479	-0.1591	0.9594
85	0.24661	0.41448	-0.1679	-0.1449	0.9739
86	0.25393	0.41030	-0.1564	-0.1492	0.9698
87	0.22737	0.40094	-0.1736	-0.1585	0.9604
88	0.23352	0.40574	-0.1722	-0.1538	0.9653
89	0.22981	0.40890	-0.1791	-0.1508	0.9686
90	0.22184	0.39526	-0.1734	-0.1644	0.9549
91	0.23103	0.41463	-0.1836	-0.1454	0.9747
92	0.16934	0.26154	-0.0922	-0.3000	0.8231
93	0.17487	0.27985	-0.1050	-0.2812	0.8409
94	0.15530	0.26542	-0.1101	-0.2956	0.8264
95	0.17124	0.27036	-0.0991	-0.2907	0.8314
96	0.15157	0.25319	-0.1016	-0.3079	0.8142
97	0.15428	0.24419	-0.0899	-0.3168	0.8052
98	0.15818	0.25084	-0.0927	-0.3104	0.8121
99	0.15431	0.24562	-0.0913	-0.3154	0.8066
100	0.14401	0.25489	-0.1109	-0.3060	0.8158
101	0.14567	0.22835	-0.0827	-0.3327	0.7894
102	0.16719	0.23731	-0.0701	-0.3238	0.7984
103	0.16684	0.24389	-0.0770	-0.3170	0.8048

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° LIMDEP Estimation Results Run log line 13

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° Current sample contains 104 observations.

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Observation	Observed Y	Predicted Y	Residual	95% Forecast Interval
104	0.16209	0.25239	-0.0903	-0.3084 0.8132

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° LIMDEP Estimation Results Run log line 15

Page 76 °

° Current sample contains 104 observations.

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° OLS Without Group Dummy Variables

°

° Ordinary least squares regression Weighting variable = ONE

°

° Dependent variable is CY Mean = 0.02756, S.D. = 0.0234

°

° Model size: Observations = 104, Parameters = 10, Deg.Fr. = 94

TIME	0.2711E-06	0.1493E-05	0.5482E-06
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Estimated Fixed Effects			
Group	Group Size	Coefficient	Standard Error
1	13	-0.40685	0.09397
2	13	-0.44316	0.10094
3	13	-0.40886	0.09678
4	13	-0.43430	0.09946
5	13	-0.36380	0.09711
6	13	-0.36758	0.09275
7	13	-0.44334	0.09888
8	13	-0.38255	0.09108

Test Statistics for the Classical Model

Hypothesis Tests

$$\frac{\mathbb{E}[\text{...}]}{\sqrt{...}}$$

EDAM

