

First stage regressions, revised.

18 December 2003

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_FILE 11 OECD22DT
UNIT 11 IS NOW ASSIGNED TO: OECD22DT
_SAMPLE 1 126
_READ (11) COUNTRY YEARCNTN HEALTH PENS UNEM WELF TOT TOTLAG3 & 8
INCOME INCOME3 INCOME10 GROWTH3 VOTERS TURNOVER POP POPGROW3 & 16
KAPW3 PLKAPW03 INV INV1 INV10 SCHOOL10 UNIV10 & 23
YR197880 YR198183 YR198486 YR198789 YR199092 & 28
AUSSIES AUSTRIA BELGIUM CANADA DENMARK &
FINLAND FRANCE GERMANY POSTWALL GREECE & 38
IRELAND ITALY JAPAN NETHER NZ NORWAY & 44
PORTUGAL SPAIN SWEDEN SWITZER UK US & 50
CATH PROT CORPTISM MILIT HEALTHL3 PENSL3 UNEML3 WELFL3 TOTL3 & 59
INFLOECD UNEMOECD ETHFRAC OPEN POP014 POP514 POP65 BACKWARD & 67
INCTAX CORPTAX PROPTAX CONSTAX & 71
PGROWTH3 PHEALTH PPENS PUNEM PWELF PTOT & 77
PINCTAX PCORPTAX PPROPTAX PCONSTAX EMPRATE UNEMRATE & 83
GDPPWKR NETRR NETRESW COORD EPL EPL3 PUBEMPSH PRODREG & 91
ALMP NOALMPDT 93
93 VARIABLES AND 126 OBSERVATIONS STARTING AT OBS 1
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GENR LINC = LOG(INCOME)
GENR LINC3 = LOG(INCOME3)
GENR LNKAPW3 = LOG(KAPW3)
GENR POP514SQ = POP514 ** 2
GENR POP65SQ = POP65 ** 2
GENR POP65CU = POP65 ** 3
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Here are the two OECD-wide macro shock variables:

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GENR AGDEMAND = INFLOECD - UNEMOECD
GENR MISERY = INFLOECD + UNEMOECD
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GENR VOTERSSQ = VOTERS ** 2
GENR VOTERSCU = VOTERS ** 3
GENR CATHDOM = MAX(0, CATH-.50)
GENR PORT1991 = PORTUGAL * YR199092
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GENR PENSRI = PENS/POP65
GENR PENSRI2 = (100 - POP014) * PENS / (100 * POP65)
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GENR HEALTHSQ = HEALTH ** 2
GENR PENSSQ = PENS ** 2
GENR WELFSQ = WELF ** 2
GENR UNEMSQ = UNEM ** 2
GENR TOTSQ = TOT ** 2
GENR TOTCUBED = TOT ** 3
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GENR PHEALSQ = PHEALTH ** 2
GENR PPENSSQ = PPENS ** 2
GENR PWELFSQ = PWELF ** 2
GENR PUNEMSQ = PUNEM ** 2
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GENR PTOTSQ = PTOT ** 2
GENR PTOTCU = PTOT ** 3
GENR PINCTAX2 = PINCTAX ** 2
GENR PINCTAX3 = PINCTAX ** 3
GENR PCORPTX2 = PCORPTAX ** 2
GENR PCORPTX3 = PCORPTAX ** 3
GENR PPROPTX2 = PPROPTAX ** 2
GENR PPROPTX3 = PPROPTAX ** 3
GENR PCONSTX2 = PCONSTAX ** 2
GENR PCONSTX3 = PCONSTAX ** 3
GENR YR199395 = 1 - (YR197880+YR198183+YR198486+YR198789+YR199092)
GENR SWFIN90S = (SWEDEN + FINLAND) * ((YR199092/2)+YR199395)
GENR LNEMPRAT = LOG(EMPRATE)
GENR LNGDPWKR = LOG(GDPPWKR)
GENR NETRESW2 = NETRESW ** 2

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First-stage equations, 17 December 2003, w/revised socexp

Equation (1) 1st-stage GLS growth equation, X's only

_POOL GROWTH3 BACKWARD INV1 INV10 SCHOOL10 UNIV10 &
POP514 POP514SQ POP65 POP65SQ POP65CU &
AGDEMAND MISERY CORPTISM / NC = 21 SAME LIST

REQUIRED MEMORY IS PAR= 156 CURRENT PAR= 7801
POOLED CROSS-SECTION TIME-SERIES ESTIMATION
21 CROSS-SECTIONS AND 6 TIME-PERIODS
126 TOTAL OBSERVATIONS

DEPENDENT VARIABLE = GROWTH3
...WARNING...TOO FEW DEGREES OF FREEDOM, DN OPTION USED

MODEL ASSUMPTIONS:
SAME ESTIMATED RHO FOR EACH CROSS-SECTION
DIAGONAL PHI MATRIX

OLS COEFFICIENTS
0.43704E-01 0.78288E-05 -0.79897E-05 0.30237E-04 0.10765E-04
0.36297E-01 -0.98555E-03 -.24759 0.19601E-01 -0.50387E-03
0.72250E-02 -0.16330E-01 0.53718E-02 .91163
THE DN OPTION IS IN EFFECT

RHO VECTOR
-.83159 .29381 -.64442 -.20683 -.33212
.31528 .43704 .38990 1.1518 .60213
.40322 .47609 .13101 .12036 -.47670
-0.59883E-01 .38162 .16348 .79931 -.24298
-.40982

SAME ESTIMATED RHO FOR ALL CROSS-SECTIONS = 0.83629E-01

VARIANCES (DIAGONAL OF PHI MATRIX)
0.15806E-02 0.12306E-03 0.23827E-03 0.20162E-02 0.12054E-02
0.37733E-02 0.25231E-03 0.96712E-03 0.18628E-02 0.24241E-02
0.80999E-03 0.85609E-03 0.57359E-03 0.40824E-02 0.18978E-02

0.57031E-02 0.15395E-02 0.11677E-02 0.63140E-03 0.16088E-02
 0.11779E-02

BUSE [1973] R-SQUARE = .4669 BUSE RAW-MOMENT R-SQUARE = .8183
 VARIANCE OF THE ESTIMATE-SIGMA**2 = .95144
 STANDARD ERROR OF THE ESTIMATE-SIGMA = .97542
 SUM OF SQUARED ERRORS-SSE= 119.88
 MEAN OF DEPENDENT VARIABLE = 0.55310E-01
 LOG OF THE LIKELIHOOD FUNCTION = 250.844

MODEL SELECTION TESTS - SEE JUDGE ET AL. (1985,P.242)

AKAIKE (1969) FINAL PREDICTION ERROR - FPE = 1.0572
 (FPE IS ALSO KNOWN AS AMEMIYA PREDICTION CRITERION - PC)
 AKAIKE (1973) INFORMATION CRITERION - LOG AIC = .17244
 SCHWARZ (1978) CRITERION - LOG SC = .48758

MODEL SELECTION TESTS - SEE RAMANATHAN (1992,P.167)

CRAVEN-WAHBA (1979)
 GENERALIZED CROSS VALIDATION - GCV = 1.2042
 HANNAN AND QUINN (1979) CRITERION = 1.3505
 RICE (1984) CRITERION = 1.2233
 SHIBATA (1981) CRITERION = 1.1629
 SCHWARZ (1978) CRITERION - SC = 1.6284
 AKAIKE (1974) INFORMATION CRITERION - AIC = 1.1882

ANALYSIS OF VARIANCE - FROM MEAN

	SS	DF	MS	F	P-VALUE
REGRESSION	104.99	13.	8.0759	8.488	
ERROR	119.88	126.	.95144		
TOTAL	224.87	125.	1.7989		0.000

ANALYSIS OF VARIANCE - FROM ZERO

	SS	DF	MS	F	P-VALUE
REGRESSION	539.99	14.	38.571	40.539	
ERROR	119.88	126.	.95144		
TOTAL	659.87	126.	5.2371		0.000

ASYMPTOTIC

VARIABLE NAME	ESTIMATED COEFFICIENT	STANDARD ERROR	T-RATIO	P-VALUE	PARTIAL CORR.	STANDARDIZED COEFFICIENT	ELASTICITY AT MEANS
BACKWARD	0.33620E-01	0.1658E-01	2.028	.043	.188	.2154	.2617
INV1	0.55432E-05	0.4426E-05	1.252	.210	.118	.1471	.3149
INV10	-0.69543E-05	0.6239E-05	-1.115	.265	-.105	-.1398	-.2263
SCHOOL10	0.48156E-04	0.2341E-04	2.057	.040	.191	.1721	.8979
UNIV10	-0.35160E-04	0.7798E-04	-.4509	.652	-.043	-.0349	-.0491
POP514	0.27766E-01	0.1917E-01	1.449	.147	.136	1.2510	7.0804
POP514SQ	-0.75261E-03	0.6493E-03	-1.159	.246	-.109	-1.0157	-2.7683
POP65	-.19640	.1430	-1.373	.170	-.129	-8.5767	-47.2052
POP65SQ	0.15574E-01	0.1080E-01	1.442	.149	.135	18.0142	50.9574
POP65CU	-0.40339E-03	0.2680E-03	-1.505	.132	-.141	-9.5059	-18.3635
AGDEMAND	0.97767E-02	0.1466E-02	6.670	0.000	.533	.6081	-.1223
MISERY	-0.19152E-01	0.2265E-02	-8.456	0.000	-.624	-.7775	-4.6383
CORPTISM	0.40698E-02	0.1893E-02	2.150	.032	.199	.1373	.1086
CONSTANT	.81600	.6250	1.306	.192	.122	.0000	14.7534

OBS. NO.	OBSERVED VALUE	PREDICTED VALUE	CALCULATED RESIDUAL			
1	1.4036	1.9136	-.51002		*	I
2	.36011	.64406	-.28395		*	I
3	1.7962	1.2749	.52131			I *
4	1.7581	1.9601	-.20202			*I
5	-.46170	1.4726	-1.9343	*		I
6	2.2890	.74758	1.5414			I *
7	7.3660	7.8650	-.49903		*	I
8	2.7172	2.4926	.22463			I*
9	4.3184	4.2888	0.29637E-01			*
10	5.9257	6.5612	-.63552		*	I
11	6.3233	5.3547	.96855			I *
12	1.7708	2.6434	-.87262		*	I
13	4.7126	4.5011	.21147			I*
14	.64104	.83532	-.19428			*I
15	2.2455	2.5953	-.34978		*	I
16	5.0524	4.5105	.54190			I *
17	5.0677	4.1625	.90523			I *
18	.31689	2.0942	-1.7773	*		I
19	1.9308	1.8184	.11234			I*
20	.10521	.58867	-.48345		*	I
21	2.0711	1.0757	.99538			I *
22	2.0075	1.7696	.23790			I*
23	-.82837	1.3766	-2.2050	*		I
24	.76668	.66404	.10264			I*
25	1.5212	2.1085	-.58727		*	I
26	.33319	.49713	-.16395			*I
27	3.3890	1.4948	1.8942			I *
28	1.0383	2.3002	-1.2619		*	I
29	.81090	1.9218	-1.1109		*	I
30	1.3631	.75023	.61284			I *
31	1.2005	1.1324	0.68032E-01			*
32	1.4132	.30990	1.1033			I *
33	1.0129	.75321	.25973			I*
34	1.7280	1.4152	.31275			I *
35	-.81993	1.1721	-1.9920	*		I
36	-.33489	.32840	-.66328		*	I
37	4.9560	4.1453	.81075			I *
38	1.2209	.82293	.39798			I *
39	1.7518	2.3864	-.63464		*	I
40	4.6266	4.3792	.24742			I*
41	2.7476	3.6454	-.89781		*	I
42	.11449	1.3952	-1.2807	*		I
43	3.2043	1.8632	1.3411			I *
44	-0.43824E-01	-.33890	.29508			I *
45	1.9748	.59356	1.3813			I *
46	2.1163	1.4662	.65016			I *
47	2.5745	1.3900	1.1845			I *
48	0.58136E-01	.44254	-.38440		*	I
49	1.9856	2.0931	-.10747			*I
50	.11140	.76073	-.64933		*	I
51	.88036	1.4428	-.56243		*	I
52	1.0597	2.0533	-.99360	*		I

53	1.4111	1.8310	-.41992		*	I	
54	-1.1917	.54394	-1.7357		*	I	
55	2.5097	1.7026	.80713			I	*
56	.43932	.72300	-.28368			*I	
57	.61590	1.4027	-.78682		*	I	
58	2.0156	1.8820	.13365			I*	
59	3.2187	1.7829	1.4358			I	*
60	2.5802	1.0842	1.4959			I	*
61	4.2016	2.3019	1.8998			I	*
62	1.2988	.55656	.74225			I	*
63	1.6890	1.4531	.23593			I*	
64	3.0798	2.2659	.81392			I	*
65	1.8379	1.3861	.45176			I	*
66	.52643	-.30388	.83031			I	*
67	3.8485	3.4914	.35710			I	*
68	2.6846	1.2845	1.4001			I	*
69	2.9612	2.1527	.80848			I	*
70	3.6617	2.9352	.72657			I	*
71	3.8410	2.4660	1.3749			I	*
72	.47156	1.2458	-.77423		*	I	
73	2.3300	3.0720	-.74192		*	I	
74	-1.1141	.77324	-1.8874		*	I	
75	2.1645	1.8705	.29404			I	*
76	2.0801	2.9555	-.87541		*	I	
77	3.0683	2.5044	.56388			I	*
78	1.4396	1.1377	.30187			I	*
79	-.23394	1.2210	-1.4549		*	I	
80	.99000	.40583	.58417			I	*
81	.79531	.92548	-.13017			*I	
82	0.83213E-01	1.4457	-1.3625		*	I	
83	-.48262	1.1464	-1.6291		*	I	
84	1.1192	.61553	.50365			I	*
85	2.8822	2.1985	.68369			I	*
86	1.0436	.98978	0.53804E-01			*	
87	2.8996	1.3951	1.5044			I	*
88	.73557	1.9687	-1.2331		*	I	
89	.60609	1.2631	-.65705		*	I	
90	2.0542	.54963	1.5046			I	*
91	1.0424	1.1598	-.11734			*I	
92	.53488	.40507	.12981			I*	
93	0.53887E-01	.82369	-.76980		*	I	
94	2.2952	1.2514	1.0438			I	*
95	3.0251	1.0602	1.9649			I	*
96	-0.70469E-01	.63505	-.70552		*	I	
97	.10159	2.0313	-1.9297		*	I	
98	-.28888	.72448	-1.0134		*	I	
99	.96645	1.5386	-.57219		*	I	
100	3.6167	2.4471	1.1696			I	*
101	2.3161	2.2221	0.93978E-01			*	
102	1.4371	1.1153	.32177			I	*
103	.67071	1.7602	-1.0895		*	I	
104	.73384	.17559	.55825			I	*
105	2.0702	.33760	1.7326			I	*
106	1.8113	1.3630	.44832			I	*

107	-.22494	1.1121	-1.3370	*	I	
108	0.48946E-02	.25244	-.24755		*I	
109	1.9829	2.0572	-0.74296E-01		*	
110	1.4653	-.12989	1.5951		I	*
111	1.4952	1.0796	.41564		I	*
112	2.5697	2.3571	.21261		I*	
113	.56962	1.2894	-.71978		I	*
114	-2.0962	-.68860	-1.4076	*	I	
115	1.7639	1.7950	-0.31094E-01		*	
116	-0.48308E-01	.40943	-.45774		*I	
117	2.3103	1.1549	1.1554		I	*
118	2.9973	1.8904	1.1069		I	*
119	-0.92357E-01	1.6445	-1.7369	*	I	
120	1.0575	.76264	.29482		I	*
121	2.3518	1.5703	.78153		I	*
122	-.63443	.16953	-.80397		I	*
123	2.4841	1.2586	1.2255		I	*
124	1.6892	1.9971	-.30790		*I	
125	.16212	1.6791	-1.5169	*	I	
126	1.4009	.73103	.66989		I	*

DURBIN-WATSON = 1.6282 VON NEUMANN RATIO = 1.6412 RHO = .03491
 RESIDUAL SUM = 1.3326 RESIDUAL VARIANCE = .95144
 SUM OF ABSOLUTE ERRORS= 101.43
 R-SQUARE BETWEEN OBSERVED AND PREDICTED = .6240
 RUNS TEST: 50 RUNS, 68 POS, 0 ZERO, 58 NEG NORMAL STATISTIC = -2.4490

Total transfer equations, with full and partial exog. lists

Equation (2) 1st-stage GLS total transfers, Z's only

_POOL TOT TOTLAG3 LINC3 POP65 POP65SQ POP65CU &
 VOTERS VOTERSSQ VOTERSCU TURNOVER &
 CATHDOM ETHFRAC OPEN MILIT / NC = 21 SAME LIST

REQUIRED MEMORY IS PAR= 156 CURRENT PAR= 7801
 POOLED CROSS-SECTION TIME-SERIES ESTIMATION
 21 CROSS-SECTIONS AND 6 TIME-PERIODS
 126 TOTAL OBSERVATIONS
 DEPENDENT VARIABLE = TOT
 ...WARNING...TOO FEW DEGREES OF FREEDOM, DN OPTION USED

MODEL ASSUMPTIONS:
 SAME ESTIMATED RHO FOR EACH CROSS-SECTION
 DIAGONAL PHI MATRIX

OLS COEFFICIENTS
 .94333 .85788 .70833 -0.62755E-01 0.20092E-02
 -91.419 145.16 -73.573 0.13863E-01 .55134
 -.49854 -0.23942E-02 -0.40237E-01 9.2504
 THE DN OPTION IS IN EFFECT

RHO VECTOR

-.35739	.51286	.41803	-.70379	-0.13859E-01
.41936	-.10607	.54874	.55563	.30250
-.38913	.62984	-.10811	-.38344	0.88733E-01
.39545	0.63734E-01	0.51772E-01	-.19572	-0.48807E-01
-.12874				

SAME ESTIMATED RHO FOR ALL CROSS-SECTIONS = .10981

VARIANCES (DIAGONAL OF PHI MATRIX)

.79789	.57520	1.3846	1.1046	1.6618
6.6746	.87764	1.1133	.93525	1.6797
.30727	.75401	2.0592	5.9359	12.473
.50916	.41900	3.4857	.66891	2.1040
.66173				

BUSE [1973] R-SQUARE = .9605 BUSE RAW-MOMENT R-SQUARE = .9966
 VARIANCE OF THE ESTIMATE-SIGMA**2 = .95439
 STANDARD ERROR OF THE ESTIMATE-SIGMA = .97693
 SUM OF SQUARED ERRORS-SSE= 120.25
 MEAN OF DEPENDENT VARIABLE = 18.519
 LOG OF THE LIKELIHOOD FUNCTION = -193.006

MODEL SELECTION TESTS - SEE JUDGE ET AL. (1985,P.242)

AKAIKE (1969) FINAL PREDICTION ERROR - FPE = 1.0604
 (FPE IS ALSO KNOWN AS AMEMIYA PREDICTION CRITERION - PC)
 AKAIKE (1973) INFORMATION CRITERION - LOG AIC = .17554
 SCHWARZ (1978) CRITERION - LOG SC = .49068

MODEL SELECTION TESTS - SEE RAMANATHAN (1992,P.167)

CRAVEN-WAHBA (1979)
 GENERALIZED CROSS VALIDATION - GCV = 1.2079
 HANNAN AND QUINN (1979) CRITERION = 1.3547
 RICE (1984) CRITERION = 1.2271
 SHIBATA (1981) CRITERION = 1.1665
 SCHWARZ (1978) CRITERION - SC = 1.6334
 AKAIKE (1974) INFORMATION CRITERION - AIC = 1.1919

ANALYSIS OF VARIANCE - FROM MEAN

	SS	DF	MS	F
REGRESSION	2924.8	13.	224.99	235.740
ERROR	120.25	126.	.95439	P-VALUE
TOTAL	3045.1	125.	24.361	0.000

ANALYSIS OF VARIANCE - FROM ZERO

	SS	DF	MS	F
REGRESSION	35151.	14.	2510.8	2630.734
ERROR	120.25	126.	.95439	P-VALUE
TOTAL	35271.	126.	279.93	0.000

ASYMPTOTIC

VARIABLE NAME	ESTIMATED COEFFICIENT	STANDARD ERROR	T-RATIO	P-VALUE	PARTIAL CORR.	STANDARDIZED COEFFICIENT	ELASTICITY AT MEANS
TOTLAG3	.92589	0.3602E-01	25.70	.000	.925	.8993	.8764
LINC3	.86520	.5783	1.496	.135	.140	.0427	.4346

POP65	-.20305	4.969	-0.4087E-01	.967	-.004	-.0704	-.1458
POP65SQ	0.11750E-01	.3852	0.3050E-01	.976	.003	.1079	.1148
POP65CU	0.61273E-04	0.9850E-02	0.6221E-02	.995	.001	.0115	.0083
VOTERS	-165.71	86.05	-1.926	.054	-.179	-3.1420	-6.8742
VOTERSSQ	251.86	126.1	1.997	.046	.185	6.8168	8.1993
VOTERSCU	-123.32	60.25	-2.047	.041	-.190	-3.6860	-3.2044
TURNOVER	-0.25525E-01	0.7315E-01	-.3490	.727	-.033	-.0067	-.0035
CATHDOM	1.3285	.6866	1.935	.053	.180	.0499	.0113
ETHFRAC	-.16815	.6590	-.2551	.799	-.024	-.0060	-.0021
OPEN	-0.36827E-02	0.4632E-02	-.7951	.427	-.075	-.0176	-.0124
MILIT	0.22758E-02	0.8583E-01	0.2651E-01	.979	.003	.0005	.0003
CONSTANT	29.395	26.23	1.121	.262	.105	.0000	1.5873

OBS. OBSERVED PREDICTED CALCULATED
NO. VALUE VALUE RESIDUAL

1	11.784	12.325	-.54074			*	I	
2	11.382	10.905	.47707				I	*
3	12.310	12.352	-0.41766E-01				*	
4	11.762	13.106	-1.3445			*	I	
5	14.228	12.261	1.9664				I	*
6	14.891	14.606	.28542				I*	
7	23.498	23.274	.22489				I*	
8	21.784	23.025	-1.2411			*	I	
9	22.771	23.228	-.45712				*	I
10	22.785	24.002	-1.2168			*	I	
11	23.127	24.586	-1.4592			*	I	
12	25.237	24.973	.26437				I*	
13	18.474	17.440	1.0336				I	*
14	18.542	17.141	1.4014				I	*
15	18.544	18.873	-.32916				*	I
16	17.704	18.998	-1.2938			*	I	
17	17.437	18.441	-1.0049			*	I	
18	18.785	18.437	.34773				I	*
19	10.214	11.167	-.95287			*	I	
20	11.127	9.7474	1.3794				I	*
21	11.756	11.910	-.15315				*	I
22	11.606	12.561	-.95461			*	I	
23	13.677	12.574	1.1030				I	*
24	13.251	14.137	-.88580			*	I	
25	19.176	18.226	.94937				I	*
26	18.229	17.656	.57297				I	*
27	16.469	18.386	-1.9171			*	I	
28	17.293	17.095	.19763				I*	
29	18.099	17.904	.19484				I*	
30	19.748	18.626	1.1221				I	*
31	7.3445	6.4999	.84453				I	*
32	6.7403	6.8468	-.10652				*	I
33	7.7134	6.9774	.73596				I	*
34	7.8833	7.8114	0.71892E-01				*	
35	10.140	7.9658	2.1744				I	*
36	11.182	10.027	1.1545				I	*
37	23.140	21.861	1.2793				I	*
38	21.162	21.874	-.71153			*	I	
39	21.957	22.083	-.12557				*	I
40	21.278	22.702	-1.4246			*	I	

41	22.207	22.035	.17183				I*	
42	24.311	23.154	1.1563				I	*
43	18.784	20.170	-1.3862		*		I	
44	16.937	17.432	-.49553			*	I	
45	16.962	17.490	-.52737			*	I	
46	17.167	17.891	-.72414			*	I	
47	17.997	18.104	-.10728				*I	
48	20.396	19.063	1.3323				I	*
49	8.5614	8.4552	.10623				I*	
50	10.615	8.7438	1.8710				I	*
51	12.442	11.356	1.0861				I	*
52	12.681	13.079	-.39790			*	I	
53	12.774	13.488	-.71363			*	I	
54	13.254	13.963	-.70840			*	I	
55	10.545	10.267	.27804				I*	
56	10.995	9.9519	1.0434				I	*
57	13.186	11.243	1.9433				I	*
58	12.541	13.270	-.72850			*	I	
59	11.820	12.619	-.79903			*	I	
60	11.965	12.073	-.10825				*I	
61	30.806	30.642	.16364				I*	
62	30.963	29.765	1.1984				I	*
63	31.820	32.882	-1.0623			*	I	
64	33.200	33.980	-.77926			*	I	
65	37.328	35.785	1.5429				I	*
66	39.472	40.081	-.60933				*I	
67	9.0772	8.8469	.23026				I*	
68	9.1776	9.1825	-0.49066E-02				*	
69	9.6959	9.8273	-.13143				*I	
70	10.099	10.372	-.27387				*I	
71	10.035	11.616	-1.5805		*		I	
72	11.856	11.562	.29394				I	*
73	17.517	16.359	1.1588				I	*
74	17.236	15.756	1.4796				I	*
75	15.993	17.091	-1.0981			*	I	
76	15.525	16.007	-.48217				*I	
77	16.600	15.671	.92937				I	*
78	15.959	16.731	-.77126			*	I	
79	6.2378	5.2107	1.0270				I	*
80	6.4075	5.7932	.61433				I	*
81	6.1285	6.3314	-.20284				*I	
82	7.0317	6.3386	.69309				I	*
83	8.1744	7.2131	.96129				I	*
84	6.4375	8.2534	-1.8159		*		I	
85	5.1532	5.1506	0.25185E-02				*	
86	3.0296	4.9111	-1.8815		*		I	
87	4.1069	3.4547	.65225				I	*
88	5.5113	4.5089	1.0024				I	*
89	6.8356	5.8214	1.0141				I	*
90	6.7853	7.0423	-.25703				*I	
91	13.359	14.375	-1.0163			*	I	
92	12.875	13.233	-.35806				*I	
93	12.621	14.059	-1.4384		*		I	
94	13.899	13.835	0.64368E-01				*	

95	16.830	15.268	1.5612		I		*
96	18.931	18.399	.53230		I	*	
97	22.173	21.743	.43020		I	*	
98	22.469	21.496	.97347		I		*
99	23.017	23.787	-.77029		*	I	
100	23.466	24.086	-.61986		*	I	
101	26.527	24.927	1.6004		I		*
102	28.687	28.689	-0.16161E-02		*		
103	14.827	12.510	2.3168		I		*
104	14.184	13.677	.50731		I	*	
105	13.983	14.426	-.44286		*	I	
106	14.417	14.422	-0.49723E-02		*		
107	15.801	14.886	.91485		I		*
108	15.676	16.055	-.37951		*	I	
109	15.167	15.123	0.43823E-01		*		
110	13.522	14.570	-1.0477		*	I	
111	14.764	14.425	.33862		I	*	
112	14.910	15.802	-.89186		*	I	
113	16.053	16.144	-0.91560E-01		*		
114	19.298	17.525	1.7736		I		*
115	10.697	11.294	-.59749		*	I	
116	10.862	10.275	.58693		I	*	
117	10.715	11.380	-.66554		*	I	
118	9.4813	11.473	-1.9917		*	I	
119	11.251	10.453	.79797		I	*	
120	12.188	12.094	0.94448E-01		*		
121	12.512	13.697	-1.1847		*	I	
122	12.681	11.832	.84882		I	*	
123	11.769	13.291	-1.5221		*	I	
124	11.950	12.616	-.66636		*	I	
125	13.426	12.851	.57571		I	*	
126	14.345	14.202	.14289		I*		

DURBIN-WATSON = 1.7165 VON NEUMANN RATIO = 1.7302 RHO = .00189
 RESIDUAL SUM = 6.3386 RESIDUAL VARIANCE = .95439
 SUM OF ABSOLUTE ERRORS= 101.34
 R-SQUARE BETWEEN OBSERVED AND PREDICTED = .9788
 RUNS TEST: 52 RUNS, 64 POS, 0 ZERO, 62 NEG NORMAL STATISTIC = -2.1444

Equation (3) 1st-stage GLS public health, Z's only

_POOL HEALTH TOTLAG3 LINC3 POP65 POP65SQ POP65CU &
 VOTERS VOTERSSQ VOTERSCU TURNOVER &
 CATHDOM ETHFRAC OPEN MILIT / NC = 21 SAME LIST

REQUIRED MEMORY IS PAR= 156 CURRENT PAR= 7801
 POOLED CROSS-SECTION TIME-SERIES ESTIMATION
 21 CROSS-SECTIONS AND 6 TIME-PERIODS
 126 TOTAL OBSERVATIONS
 DEPENDENT VARIABLE = HEALTH
 ...WARNING...TOO FEW DEGREES OF FREEDOM, DN OPTION USED

MODEL ASSUMPTIONS:

SAME ESTIMATED RHO FOR EACH CROSS-SECTION
 DIAGONAL PHI MATRIX

OLS COEFFICIENTS

.14971	2.0080	8.0396	-.67139	0.18145E-01
-70.007	106.19	-52.443	0.98426E-01	.31757
-.45715	0.11943E-01	-0.66308E-01	-31.532	

THE DN OPTION IS IN EFFECT

RHO VECTOR

.20571	1.0245	.79415	.19827	1.0318
-.53510	1.0055	.56695	1.0071	.67423
.18010	.27760	.50266	.12035	.66793
.70050	.98702	.49197	1.1338	.66555
.64069				

SAME ESTIMATED RHO FOR ALL CROSS-SECTIONS = .62662

VARIANCES (DIAGONAL OF PHI MATRIX)

.13783	.35506	0.67961E-01	.18318	.32816
.44973	.26541	.21837	.16251	.93642
.37097	.17620	.48092	.46309	.19521
.20712	.21906	2.1818	.16226	.16717
.26701				

BUSE [1973] R-SQUARE = .6329 BUSE RAW-MOMENT R-SQUARE = .9778
 VARIANCE OF THE ESTIMATE-SIGMA**2 = .93346
 STANDARD ERROR OF THE ESTIMATE-SIGMA = .96616
 SUM OF SQUARED ERRORS-SSE= 117.62
 MEAN OF DEPENDENT VARIABLE = 6.5948
 LOG OF THE LIKELIHOOD FUNCTION = -98.2305

MODEL SELECTION TESTS - SEE JUDGE ET AL. (1985,P.242)

AKAIKE (1969) FINAL PREDICTION ERROR - FPE = 1.0372
 (FPE IS ALSO KNOWN AS AMEMIYA PREDICTION CRITERION - PC)
 AKAIKE (1973) INFORMATION CRITERION - LOG AIC = .15337
 SCHWARZ (1978) CRITERION - LOG SC = .46851

MODEL SELECTION TESTS - SEE RAMANATHAN (1992,P.167)

CRAVEN-WAHBA (1979)
 GENERALIZED CROSS VALIDATION - GCV = 1.1814
 HANNAN AND QUINN (1979) CRITERION = 1.3250
 RICE (1984) CRITERION = 1.2002
 SHIBATA (1981) CRITERION = 1.1409
 SCHWARZ (1978) CRITERION - SC = 1.5976
 AKAIKE (1974) INFORMATION CRITERION - AIC = 1.1658

ANALYSIS OF VARIANCE - FROM MEAN

	SS	DF	MS	F
REGRESSION	202.81	13.	15.601	16.713
ERROR	117.62	126.	.93346	P-VALUE
TOTAL	320.43	125.	2.5634	0.000

ANALYSIS OF VARIANCE - FROM ZERO

	SS	DF	MS	F
REGRESSION	5178.1	14.	369.87	396.231
ERROR	117.62	126.	.93346	P-VALUE
TOTAL	5295.7	126.	42.030	0.000

VARIABLE NAME	ESTIMATED COEFFICIENT	STANDARD ERROR	ASYMPTOTIC		PARTIAL P-VALUE	STANDARDIZED CORR. COEFFICIENT	ELASTICITY AT MEANS
			T-RATIO	-----			
TOTLAG3	0.80358E-01	0.2244E-01	3.581		0.000	.321	.2876
LINC3	2.7514	.4607	5.972		0.000	.491	.5010
POP65	2.3822	3.597	.6622		.508	.062	3.0444
POP65SQ	-.19280	.2864	-.6732		.501	-.063	-6.5264
POP65CU	0.51112E-02	0.7507E-02	.6809		.496	.064	3.5249
VOTERS	-117.24	50.58	-2.318		.020	-.214	-8.1927
VOTERSSQ	176.91	73.09	2.420		.016	.223	17.6472
VOTERSCU	-86.292	34.52	-2.500		.012	-.230	-9.5056
TURNOVER	0.69325E-01	0.4724E-01	1.467		.142	.137	.0671
CATHDOM	1.1508	.5423	2.122		.034	.197	.1592
ETHFRAC	-.68350	.5705	-1.198		.231	-.112	-.0901
OPEN	0.82240E-02	0.3863E-02	2.129		.033	.197	.1450
MILIT	-0.97302E-01	0.7709E-01	-1.262		.207	-.118	-.0796
CONSTANT	-5.7330	18.44	-.3108		.756	-.029	-.0000
OBS. NO.	OBSERVED VALUE	PREDICTED VALUE	CALCULATED RESIDUAL				
1	9.9291	10.843	-.91388		*	I	
2	5.2419	5.5237	-.28179			*I	
3	7.0661	6.5598	.50628			I	*
4	5.2209	6.4210	-1.2001		*	I	
5	6.3496	5.7955	.55419			I	*
6	5.7894	6.2765	-.48713			*I	
7	7.6118	8.2680	-.65624			*I	
8	3.5294	4.7531	-1.2237		*	I	
9	3.3513	4.4568	-1.1056		*	I	
10	3.6265	4.5209	-.89441			*I	
11	3.8382	5.2544	-1.4162		*	I	
12	4.5153	5.0057	-.49048			*I	
13	21.285	20.726	.55915			I	*
14	11.809	12.511	-.70188			*I	
15	10.300	11.935	-1.6350		*	I	
16	11.534	11.452	0.81444E-01			*	
17	11.877	11.681	.19587			I*	
18	11.722	11.946	-.22374			*I	
19	10.051	10.214	-.16245			*I	
20	6.8484	5.4874	1.3610			I	*
21	6.3223	6.2631	0.59155E-01			*	
22	5.8771	6.3508	-.47366			*I	
23	8.1522	6.2077	1.9445			I	*
24	5.9931	6.0582	-0.65058E-01			*	
25	10.720	9.4545	1.2657			I	*
26	4.4203	5.1701	-.74975			*I	
27	3.5072	4.5542	-1.0470		*	I	
28	4.9016	5.0972	-.19560			*I	
29	4.2657	5.3433	-1.0776		*	I	

30	3.9280	5.1767	-1.2487	*	I	
31	6.5077	6.4432	0.64537E-01		*	
32	3.8634	4.1828	-.31937		* I	
33	4.0971	3.9804	.11669		I*	
34	3.9562	4.0242	-0.68021E-01		*	
35	5.6929	4.2427	1.4501		I	*
36	2.6832	4.5785	-1.8953	*	I	
37	10.831	10.004	.82758		I	*
38	6.1986	5.2449	.95369		I	*
39	5.7796	5.2843	.49530		I	*
40	5.2576	5.2310	0.26650E-01		*	
41	5.8891	5.3398	.54926		I	*
42	7.1793	5.7108	1.4685		I	*
43	12.908	10.354	2.5537		I	*
44	4.8575	5.5737	-.71618	*	I	
45	5.7103	5.2383	.47195		I	*
46	5.5043	5.9751	-.47080		* I	
47	6.1171	6.1749	-0.57733E-01		*	
48	7.1141	6.1780	.93613		I	*
49	5.6449	6.0047	-.35978		* I	
50	4.0689	3.9271	.14174		I*	
51	3.4620	3.8455	-.38347		* I	
52	3.3810	4.4028	-1.0219	*	I	
53	3.1855	4.4068	-1.2213	*	I	
54	4.2462	4.4829	-.23668		* I	
55	6.4669	4.3909	2.0760		I	*
56	3.6460	2.5798	1.0662		I	*
57	2.6725	2.6551	0.17382E-01		*	
58	1.7344	2.7531	-1.0187	*	I	
59	2.1977	2.6405	-.44279		* I	
60	2.4928	2.8950	-.40217		* I	
61	8.1761	8.0467	.12942		I*	
62	3.9829	4.8275	-.84465	*	I	
63	3.5805	4.7033	-1.1228	*	I	
64	4.4800	4.5644	-0.84390E-01		*	
65	5.0597	4.8794	.18027		I*	
66	3.2829	5.3101	-2.0272	*	I	
67	8.8746	8.7206	.15397		I*	
68	4.9665	5.6068	-.64025	*	I	
69	4.4472	4.9925	-.54529	*	I	
70	4.4444	5.0498	-.60546	*	I	
71	4.4028	6.4334	-2.0307	*	I	
72	5.9008	5.6330	.26773		I*	
73	10.238	7.8979	2.3397		I	*
74	5.0779	4.5250	.55290		I	*
75	3.9168	4.1992	-.28234		* I	
76	4.7351	3.9223	.81280		I	*
77	5.6307	4.2326	1.3981		I	*
78	4.7620	4.5305	.23150		I*	
79	6.5162	6.7380	-.22175		* I	
80	3.8420	3.1758	.66617		I	*
81	2.5826	3.2204	-.63783	*	I	
82	5.0582	3.7770	1.2812		I	*
83	5.8228	4.1052	1.7176		I	*

84	3.4243	4.0029	-.57863	*	I		
85	13.864	11.587	2.2766		I		*
86	7.1628	6.5897	.57308		I	*	
87	6.4971	5.1297	1.3674		I		*
88	6.0988	6.9420	-.84325	*	I		
89	7.9981	7.5123	.48580		I	*	
90	6.0747	7.2536	-1.1789	*	I		
91	6.9182	7.2626	-.34442		*	I	
92	3.3365	4.4663	-1.1298	*	I		
93	2.9272	3.9256	-.99834	*	I		
94	3.7464	3.2312	.51514		I	*	
95	5.3220	4.3771	.94487		I		*
96	5.1870	5.5170	-.32993	*	I		
97	9.3912	8.3538	1.0374		I		*
98	5.3113	4.6536	.65764		I	*	
99	4.1402	4.6671	-.52694	*	I		
100	5.1962	3.9619	1.2343		I		*
101	6.0978	5.1708	.92701		I		*
102	6.0076	5.8315	.17613		I*		
103	5.7825	3.5713	2.2112		I		*
104	2.8449	2.2146	.63025		I	*	
105	2.3988	2.3430	0.55807E-01	*	I		
106	3.0282	2.3109	.71729		I		*
107	2.2287	2.2292	-0.43569E-03		*	I	
108	1.1388	2.2930	-1.1542	*	I		
109	10.505	11.581	-1.0754	*	I		
110	5.3311	6.2767	-.94567	*	I		
111	6.4353	5.9956	.43978		I	*	
112	6.5698	6.5962	-0.26447E-01	*	I		
113	7.4930	6.8882	.60481		I	*	
114	8.6294	7.2277	1.4017		I		*
115	9.7019	10.475	-.77266	*	I		
116	5.7489	5.3772	.37169		I	*	
117	4.7412	5.3292	-.58797		*	I	
118	4.5002	5.9703	-1.4701	*	I		
119	6.2925	5.9753	.31716		I	*	
120	5.8559	6.7172	-.86133	*	I		
121	6.0478	7.9416	-1.8938	*	I		
122	3.8845	3.9778	-0.93265E-01		*	I	
123	3.4015	3.8288	-.42727	*	I		
124	3.9746	4.3929	-.41833	*	I		
125	5.2460	4.4841	.76185		I	*	
126	5.5843	4.6471	.93724		I		*

DURBIN-WATSON = 1.2517 VON NEUMANN RATIO = 1.2617 RHO = .15886
 RESIDUAL SUM = -1.4457 RESIDUAL VARIANCE = .93346
 SUM OF ABSOLUTE ERRORS= 97.682
 R-SQUARE BETWEEN OBSERVED AND PREDICTED = .8837
 RUNS TEST: 52 RUNS, 59 POS, 0 ZERO, 67 NEG NORMAL STATISTIC = -2.1098

Equation (4) 1st-stage GLS public pensions, Z's only

_POOL PENS TOTLAG3 LINC3 POP65 POP65SQ POP65CU &

VOTERS VOTERSSQ VOTERSCU TURNOVER &
CATHDOM ETHFRAC OPEN MILIT / NC = 21 SAME LIST

REQUIRED MEMORY IS PAR= 156 CURRENT PAR= 7801
POOLED CROSS-SECTION TIME-SERIES ESTIMATION
21 CROSS-SECTIONS AND 6 TIME-PERIODS
126 TOTAL OBSERVATIONS
DEPENDENT VARIABLE = PENS
...WARNING...TOO FEW DEGREES OF FREEDOM, DN OPTION USED

MODEL ASSUMPTIONS:
SAME ESTIMATED RHO FOR EACH CROSS-SECTION
DIAGONAL PHI MATRIX

OLS COEFFICIENTS
.39607 -.39064 -1.6927 .19160 -0.59239E-02
-309.72 452.07 -213.46 -0.19494E-01 1.3578
-1.2461 -0.19591E-01 .16138 76.509
THE DN OPTION IS IN EFFECT

RHO VECTOR
.84052 .80862 .36425 .26461 .92792
.84601 .59432 .79461 .83881 .72963
1.5120 .36581 .19278 .58210 .35823
.61552 -.13387 .59691 .48268 .50015
.26179

SAME ESTIMATED RHO FOR ALL CROSS-SECTIONS = .67991

VARIANCES (DIAGONAL OF PHI MATRIX)
.56805 0.84179E-01 .37304 .12918 .56339
2.2391 .62336 .19960 .77061 .56928
.73727 .34475 1.0501 1.2786 2.9881
.17816 .13080 .37783 .14514 .88458
.13406

BUSE [1973] R-SQUARE = .8239 BUSE RAW-MOMENT R-SQUARE = .9759
VARIANCE OF THE ESTIMATE-SIGMA**2 = .93656
STANDARD ERROR OF THE ESTIMATE-SIGMA = .96776
SUM OF SQUARED ERRORS-SSE= 118.01
MEAN OF DEPENDENT VARIABLE = 8.0461
LOG OF THE LIKELIHOOD FUNCTION = -128.600

MODEL SELECTION TESTS - SEE JUDGE ET AL. (1985,P.242)
AKAIKE (1969) FINAL PREDICTION ERROR - FPE = 1.0406
(FPE IS ALSO KNOWN AS AMEMIYA PREDICTION CRITERION - PC)
AKAIKE (1973) INFORMATION CRITERION - LOG AIC = .15668
SCHWARZ (1978) CRITERION - LOG SC = .47182
MODEL SELECTION TESTS - SEE RAMANATHAN (1992,P.167)
CRAVEN-WAHBA (1979)
GENERALIZED CROSS VALIDATION - GCV = 1.1853
HANNAN AND QUINN (1979) CRITERION = 1.3294
RICE (1984) CRITERION = 1.2041
SHIBATA (1981) CRITERION = 1.1447

20	4.0540	3.0222	1.0318		I	*
21	4.4159	5.9456	-1.5297	*	I	
22	4.4449	5.4745	-1.0296		I	*
23	5.5457	5.0510	.49465		I	*
24	5.3188	5.2074	.11143		I*	
25	9.1053	9.7687	-.66342		I	*
26	4.3876	5.0189	-.63132		I	*
27	3.5072	5.1455	-1.6383	*	I	
28	4.1547	4.2696	-.11496		I*	
29	4.5112	4.8713	-.36008		I	*
30	5.7167	5.0035	.71326		I	*
31	4.3761	2.7061	1.6701		I	*
32	2.1441	2.2782	-.13411		I*	
33	2.9207	1.9947	.92605		I	*
34	2.3514	2.1318	.21957		I*	
35	3.7495	2.1338	1.6157		I	*
36	3.8974	3.0286	.86882		I	*
37	9.9379	9.5021	.43581		I	*
38	2.1089	4.3945	-2.2857	*	I	
39	4.2198	4.2224	-0.25888E-02		*	
40	3.8910	4.6644	-.77339		I	*
41	4.7006	4.3044	.39621		I	*
42	5.0650	5.1156	-0.50646E-01		*	
43	14.936	16.212	-1.2759	*	I	
44	6.6765	6.5176	.15891		I*	
45	6.5252	6.4935	0.31764E-01		*	
46	6.4437	7.0209	-.57713		I	*
47	6.3184	6.5056	-.18716		I*	
48	8.6041	7.8604	.74373		I	*
49	4.0180	3.6668	.35123		I	*
50	4.2259	2.3805	1.8454		I	*
51	4.6868	2.8649	1.8219		I	*
52	3.6294	2.8220	.80734		I	*
53	3.5064	2.5720	.93443		I	*
54	3.6563	3.2935	.36282		I	*
55	4.5290	4.9079	-.37888		I	*
56	3.4349	2.6768	.75808		I	*
57	2.6690	2.9691	-.30011		I	*
58	1.9856	3.7972	-1.8115	*	I	
59	1.9882	2.7938	-.80560		I	*
60	1.8207	2.3854	-.56475		I	*
61	7.7032	7.6002	.10302		I*	
62	4.8766	3.8517	1.0248		I	*
63	4.5110	4.1706	.34039		I	*
64	4.6187	4.6223	-0.36309E-02		*	
65	5.6595	4.7456	.91383		I	*
66	7.2672	5.2826	1.9846		I	*
67	3.3346	3.4703	-.13568		I*	
68	2.5115	2.3771	.13442		I*	
69	2.4237	2.3123	.11141		I*	
70	2.4551	2.8188	-.36370		I	*
71	2.3809	4.2930	-1.9121	*	I	
72	3.6324	3.8085	-.17610		I*	
73	8.0647	6.1563	1.9084		I	*

74	3.9692	3.1048	.86438		I	*
75	2.9224	3.5146	-.59223		* I	
76	3.3486	2.9102	.43840		I *	
77	4.4653	2.8081	1.6572		I	*
78	2.7565	3.4381	-.68159		* I	
79	4.6239	2.8300	1.7939		I	*
80	2.5667	2.1755	.39121		I *	
81	1.9197	2.0202	-.10047		* I	
82	1.9735	1.9818	-0.83392E-02		*	
83	2.9215	2.3565	.56505		I *	
84	.88789	2.6629	-1.7750	*	I	
85	3.6143	3.4765	.13779		I *	
86	0.44662E-01	1.8565	-1.8119	*	I	
87	1.8448	.79677	1.0480		I	*
88	3.1113	2.1185	.99285		I	*
89	3.2825	2.4776	.80494		I	*
90	2.3309	2.6253	-.29446		* I	
91	7.6962	8.8769	-1.1806	*	I	
92	4.7573	4.4797	.27760		I *	
93	3.7122	4.7186	-1.0064	*	I	
94	4.6532	4.4906	.16260		I *	
95	5.5971	5.9191	-.32193		* I	
96	6.0427	7.6063	-1.5636	*	I	
97	12.246	11.508	.73799		I	*
98	8.3042	7.3205	.98369		I	*
99	7.9517	8.0877	-.13604		* I	
100	6.8790	6.9841	-.10512		* I	
101	9.5511	8.3815	1.1696		I	*
102	10.529	10.934	-.40502		* I	
103	12.848	12.668	.18064		I *	
104	7.5445	7.8026	-.25809		* I	
105	6.0492	6.9235	-.87422	*	I	
106	6.6590	6.6102	0.48832E-01		*	
107	8.3445	7.1306	1.2139		I	*
108	9.8850	7.8399	2.0451		I	*
109	10.971	9.5272	1.4442		I	*
110	4.4479	5.4334	-.98544	*	I	
111	5.5986	4.6543	.94431		I	*
112	4.7640	5.9348	-1.1708	*	I	
113	5.0380	5.8917	-.85369	*	I	
114	6.8125	6.6864	.12606		I *	
115	5.3018	5.8900	-.58818	*	I	
116	2.8672	2.8349	0.32270E-01		*	
117	2.4381	3.0641	-.62595	*	I	
118	1.8576	3.0313	-1.1737	*	I	
119	4.2120	2.4976	1.7144		I	*
120	4.1828	3.4544	.72840		I	*
121	9.6933	9.1303	.56301		I	*
122	5.6515	4.6364	1.0151		I	*
123	3.7846	5.7284	-1.9438	*	I	
124	3.8784	4.3252	-.44671		* I	
125	4.7229	4.8750	-.15208		* I	
126	4.8529	5.5166	-.66366	*	I	

DURBIN-WATSON = 1.4303 VON NEUMANN RATIO = 1.4418 RHO = .14106
 RESIDUAL SUM = 2.9514 RESIDUAL VARIANCE = .93656
 SUM OF ABSOLUTE ERRORS= 96.778
 R-SQUARE BETWEEN OBSERVED AND PREDICTED = .9129
 RUNS TEST: 51 RUNS, 63 POS, 0 ZERO, 63 NEG NORMAL STATISTIC = -2.3256

Equation (5) 1st-stage GLS welfare payments, Z's only

_POOL WELF TOTLAG3 LINC3 POP65 POP65SQ POP65CU &
 VOTERS VOTERSSQ VOTERSCU TURNOVER &
 CATHDOM ETHFRAC OPEN MILIT / NC = 21 SAME LIST

REQUIRED MEMORY IS PAR= 156 CURRENT PAR= 7801
 POOLED CROSS-SECTION TIME-SERIES ESTIMATION
 21 CROSS-SECTIONS AND 6 TIME-PERIODS
 126 TOTAL OBSERVATIONS
 DEPENDENT VARIABLE = WELF
 ...WARNING..TOO FEW DEGREES OF FREEDOM, DN OPTION USED

MODEL ASSUMPTIONS:
 SAME ESTIMATED RHO FOR EACH CROSS-SECTION
 DIAGONAL PHI MATRIX

OLS COEFFICIENTS
 .18394 -0.29864E-01 1.9913 -.20546 0.66933E-02
 225.97 -330.47 156.98 -0.52134E-01 -.75599
 -.39962 0.66705E-02 -0.73812E-01 -56.445
 THE DN OPTION IS IN EFFECT

RHO VECTOR
 1.0073 .71960 .41958 1.4154 .68257
 .84338 .79347 .64372 1.2496 .27270
 1.2600 .95686 1.1666 .51043 .42189
 .76144 1.2206 -0.19413E-02 1.7879 .76031
 .90572

SAME ESTIMATED RHO FOR ALL CROSS-SECTIONS = .76462

VARIANCES (DIAGONAL OF PHI MATRIX)
 .12393 0.47835E-01 0.48964E-01 0.34923E-01 .33363
 .47113 0.51756E-01 0.96003E-01 .13193 .11478
 .21585 .10445 .22175 .28083 .27760
 0.83612E-01 0.78249E-01 .59397 0.28245E-01 0.77018E-01
 0.63467E-01

BUSE [1973] R-SQUARE = .6527 BUSE RAW-MOMENT R-SQUARE = .8883
 VARIANCE OF THE ESTIMATE-SIGMA**2 = .91003
 STANDARD ERROR OF THE ESTIMATE-SIGMA = .95395
 SUM OF SQUARED ERRORS-SSE= 114.66
 MEAN OF DEPENDENT VARIABLE = 2.4251
 LOG OF THE LIKELIHOOD FUNCTION = -46.6743

MODEL SELECTION TESTS - SEE JUDGE ET AL. (1985,P.242)

AKAIKE (1969) FINAL PREDICTION ERROR - FPE = 1.0111
(FPE IS ALSO KNOWN AS AMEMIYA PREDICTION CRITERION - PC)
AKAIKE (1973) INFORMATION CRITERION - LOG AIC = .12794
SCHWARZ (1978) CRITERION - LOG SC = .44308
MODEL SELECTION TESTS - SEE RAMANATHAN (1992,P.167)
CRAVEN-WAHBA (1979)
GENERALIZED CROSS VALIDATION - GCV = 1.1518
HANNAN AND QUINN (1979) CRITERION = 1.2917
RICE (1984) CRITERION = 1.1700
SHIBATA (1981) CRITERION = 1.1123
SCHWARZ (1978) CRITERION - SC = 1.5575
AKAIKE (1974) INFORMATION CRITERION - AIC = 1.1365

ANALYSIS OF VARIANCE - FROM MEAN

	SS	DF	MS	F
REGRESSION	215.47	13.	16.574	18.213
ERROR	114.66	126.	.91003	P-VALUE
TOTAL	330.13	125.	2.6410	0.000

ANALYSIS OF VARIANCE - FROM ZERO

	SS	DF	MS	F
REGRESSION	911.67	14.	65.120	71.558
ERROR	114.66	126.	.91003	P-VALUE
TOTAL	1026.3	126.	8.1455	0.000

ASYMPTOTIC

VARIABLE NAME	ESTIMATED COEFFICIENT	STANDARD ERROR	T-RATIO	P-VALUE	PARTIAL CORR.	STANDARDIZED COEFFICIENT	ELASTICITY AT MEANS
TOTLAG3	.14163	0.1823E-01	7.767	0.000	.592	.5285	1.0237
LINC3	.80725	.3443	2.344	.019	.216	.1532	3.0964
POP65	.19836	2.462	0.8056E-01	.936	.008	.2643	1.0873
POP65SQ	-0.52655E-01	.1965	-.2680	.789	-.025	-1.8582	-3.9293
POP65CU	0.23201E-02	0.5165E-02	.4492	.653	.042	1.6681	2.4089
VOTERS	60.819	28.37	2.143	.032	.199	4.4309	19.2667
VOTERSSQ	-88.405	41.44	-2.133	.033	-.198	-9.1936	-21.9775
VOTERSCU	41.836	19.82	2.111	.035	.196	4.8045	8.3012
TURNOVER	-0.41268E-01	0.3240E-01	-1.274	.203	-.119	-.0416	-.0427
CATHDOM	.35622	.4253	.8376	.402	.079	.0514	.0231
ETHFRAC	-1.2657	.4132	-3.063	.002	-.278	-.1739	-.1193
OPEN	0.81373E-02	0.2849E-02	2.857	.004	.261	.1495	.2097
MILIT	0.51478E-01	0.5305E-01	.9703	.332	.091	.0439	.0566
CONSTANT	-20.467	11.87	-1.724	.085	-.161	-.0000	-8.4398

OBS. NO.	OBSERVED VALUE	PREDICTED VALUE	CALCULATED RESIDUAL
1	2.0138	2.4840	-.47024
2	1.0763	.76669	.30965
3	1.5543	.84258	.71167
4	1.5009	1.1544	.34648
5	2.8711	1.1147	1.7563
6	3.8537	1.8810	1.9727
7	9.1054	7.1300	1.9754
8	3.6456	3.5671	0.78505E-01
9	3.0351	2.9746	0.60513E-01

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10	2.6289	3.7273	-1.0983	*	I	
11	2.7418	3.2444	-.50253		I	*
12	3.4680	3.4441	0.23894E-01		*	
13	8.5920	7.6577	.93435		I	*
14	3.8159	5.0093	-1.1934	*	I	
15	5.7380	5.0768	.66120		I	*
16	4.2787	4.2142	0.64526E-01		*	
17	3.1091	4.1552	-1.0461	*	I	
18	4.2627	4.0342	.22857		I*	
19	3.8626	3.5925	.27005		I*	
20	1.1967	.79926	.39740		I	*
21	2.0560	2.0286	0.27375E-01		*	
22	.98895	1.8662	-.87722	*	I	
23	1.6122	1.8504	-.23826		*I	
24	3.0538	3.9875	-.93370	*	I	
25	3.3027	3.4286	-.12588		*I	
26	2.6432	2.0053	.63792		I	*
27	1.4752	2.0859	-.61066	*	I	
28	2.6535	1.1874	1.4661		I	*
29	2.4509	1.8153	.63569		I	*
30	3.6965	1.8176	1.8789		I	*
31	3.6431	2.0804	1.5627		I	*
32	.42729	1.0209	-.59364	*	I	
33	1.5113	.85056	.66076		I	*
34	1.6476	1.4288	.21877		I*	
35	3.3239	1.2507	2.0733		I	*
36	2.8793	2.4868	.39257		I	*
37	7.4505	6.6721	.77843		I	*
38	6.5453	4.9705	1.5748		I	*
39	3.4454	3.2231	.22234		I*	
40	3.0524	3.6628	-.61044	*	I	
41	3.6755	3.4818	.19372		I*	
42	5.7492	4.2972	1.4520		I	*
43	4.8049	6.4443	-1.6395	*	I	
44	1.4321	2.1341	-.70199		I	*
45	2.3244	2.1282	.19615		I*	
46	3.3155	2.1493	1.1662		I	*
47	3.6649	2.7200	.94493		I	*
48	3.1107	2.7546	.35611		I	*
49	.62102	.47334	.14769		I*	
50	.44706	.79406	-.34700		I	*
51	.38878	1.6571	-1.2684	*	I	
52	.44223	1.4761	-1.0339		I	*
53	.33698	1.1560	-.81900		I	*
54	.11673	1.5052	-1.3885	*	I	
55	2.0165	3.4588	-1.4424	*	I	
56	1.8581	1.7665	0.91592E-01		*	
57	4.3949	2.3849	2.0100		I	*
58	3.1572	2.8522	.30499		I	*
59	1.8239	2.0373	-.21341		*I	
60	2.8761	2.5654	.31064		I	*
61	1.5675	2.5623	-.99478	*	I	
62	.72316	1.3284	-.60529		I	*
63	.82320	1.6204	-.79722	*	I	

64	1.2398	1.4743	-.23453		*I
65	2.1514	2.0354	.11599		I*
66	.72716	2.9136	-2.1864	*	I
67	.95721	1.4871	-.52985		* I
68	.31865	.85519	-.53654		* I
69	.28043	1.0193	-.73883		* I
70	.69905	.88016	-.18110		*I
71	.13667	.65068	-.51402		* I
72	.47337	1.2998	-.82646		* I
73	4.4891	4.7709	-.28185		*I
74	1.6608	2.3373	-.67655		* I
75	1.0712	2.5582	-1.4870	*	I
76	.95743	1.5361	-.57866		* I
77	1.3159	1.7308	-.41491		* I
78	1.1735	2.4300	-1.2565	*	I
79	2.4688	1.4919	.97690		I *
80	2.1282	1.5309	.59731		I *
81	1.9452	1.6450	.30023		I *
82	1.8398	.42416	1.4156		I *
83	1.6489	1.2557	.39328		I *
84	-0.28291E-01	1.6712	-1.6995	*	I
85	1.9205	3.0477	-1.1272		* I
86	.64446	1.7252	-1.0808		* I
87	1.6749	.11797	1.5570		I *
88	2.2299	2.1617	0.68246E-01		* I
89	4.0186	2.8804	1.1382		I *
90	3.4227	2.9983	.42435		I *
91	1.8276	1.6089	.21878		I*
92	.97875	.70056	.27819		I*
93	.91368	1.0666	-.15293		*I
94	1.8881	1.0274	.86074		I *
95	2.5290	1.9785	.55054		I *
96	1.7724	3.3709	-1.5985	*	I
97	1.5897	2.3930	-.80332		* I
98	.54486	1.2616	-.71671		* I
99	.60794	1.4132	-.80522		* I
100	1.3671	1.7777	-.41059		* I
101	1.0875	1.7886	-.70111		* I
102	.80571	3.1621	-2.3564	*	I
103	4.7916	3.0826	1.7090		I *
104	1.7760	2.3966	-.62065		* I
105	2.2103	2.2389	-0.28660E-01		* I
106	1.9928	1.5183	.47449		I *
107	3.5155	1.7155	1.8000		I *
108	1.7174	2.0691	-.35167		* I
109	4.1799	4.1845	-0.46111E-02		* I
110	1.5861	2.1057	-.51956		* I
111	1.9571	2.3190	-.36185		* I
112	1.8767	2.3925	-.51583		* I
113	1.6352	1.8833	-.24814		*I
114	3.4062	1.8557	1.5505		I *
115	5.8754	4.0657	1.8097		I *
116	3.7673	1.8641	1.9033		I *
117	2.7437	2.8849	-.14122		*I

118	1.7857	2.2652	-.47954	*	I
119	1.9234	1.6297	.29365		I *
120	2.8581	3.0408	-.18274		*I
121	1.9443	2.6568	-.71255	*	I
122	.90856	.96702	-0.58456E-01		*
123	.47895	1.5697	-1.0907	*	I
124	.49293	.74396	-.25103		*I
125	1.0019	1.2251	-.22318		*I
126	.92725	1.6159	-.68861	*	I

DURBIN-WATSON = 1.0591 VON NEUMANN RATIO = 1.0676 RHO = .30982
RESIDUAL SUM = -.39549 RESIDUAL VARIANCE = .91003
SUM OF ABSOLUTE ERRORS= 95.457
R-SQUARE BETWEEN OBSERVED AND PREDICTED = .6689
RUNS TEST: 35 RUNS, 60 POS, 0 ZERO, 66 NEG NORMAL STATISTIC = -5.1741

Equation (6) 1st-stage GLS unemployment comp, Z's only

_POOL UNEM TOTLAG3 LINC3 POP65 POP65SQ POP65CU &
VOTERS VOTERSSQ VOTERSCU TURNOVER &
CATHDOM ETHFRAC OPEN MILIT / NC = 21 SAME LIST

REQUIRED MEMORY IS PAR= 156 CURRENT PAR= 7801
POOLED CROSS-SECTION TIME-SERIES ESTIMATION
21 CROSS-SECTIONS AND 6 TIME-PERIODS
126 TOTAL OBSERVATIONS
DEPENDENT VARIABLE = UNEM
...WARNING...TOO FEW DEGREES OF FREEDOM, DN OPTION USED

MODEL ASSUMPTIONS:
SAME ESTIMATED RHO FOR EACH CROSS-SECTION
DIAGONAL PHI MATRIX

OLS COEFFICIENTS
.18698 -.34172 -8.0163 .65712 -0.17812E-01
61.419 -75.830 30.015 0.28874E-01 -.57391
1.3943 0.19266E-02 -0.50983E-01 17.699
THE DN OPTION IS IN EFFECT

RHO VECTOR
.84848 .84876 .28301 -.78115 .99946
.68495 .92474 -.11127 .53851 .65776
.99641 .46256 0.56196E-01 .87686 .27849
.54573 .98268 .50364 .64780 -.21573
.17476

SAME ESTIMATED RHO FOR ALL CROSS-SECTIONS = .76499

VARIANCES (DIAGONAL OF PHI MATRIX)
.20110 0.94626E-01 0.91019E-01 .25993 .82390
.50518 0.54225E-01 .18236 0.56227E-01 .63205
0.80289E-01 0.28561E-01 .22576 .21909 .38874
0.22973E-01 .19886 .19058 .13690 .11571

0.54035E-01

BUSE [1973] R-SQUARE = .5242 BUSE RAW-MOMENT R-SQUARE = .7065
 VARIANCE OF THE ESTIMATE-SIGMA**2 = .88605
 STANDARD ERROR OF THE ESTIMATE-SIGMA = .94130
 SUM OF SQUARED ERRORS-SSE= 111.64
 MEAN OF DEPENDENT VARIABLE = 1.4976
 LOG OF THE LIKELIHOOD FUNCTION = -58.3804

MODEL SELECTION TESTS - SEE JUDGE ET AL. (1985,P.242)

AKAIKE (1969) FINAL PREDICTION ERROR - FPE = .98451
 (FPE IS ALSO KNOWN AS AMEMIYA PREDICTION CRITERION - PC)
 AKAIKE (1973) INFORMATION CRITERION - LOG AIC = .10125
 SCHWARZ (1978) CRITERION - LOG SC = .41639

MODEL SELECTION TESTS - SEE RAMANATHAN (1992,P.167)

CRAVEN-WAHBA (1979)
 GENERALIZED CROSS VALIDATION - GCV = 1.1214
 HANNAN AND QUINN (1979) CRITERION = 1.2577
 RICE (1984) CRITERION = 1.1392
 SHIBATA (1981) CRITERION = 1.0830
 SCHWARZ (1978) CRITERION - SC = 1.5165
 AKAIKE (1974) INFORMATION CRITERION - AIC = 1.1065

ANALYSIS OF VARIANCE - FROM MEAN

	SS	DF	MS	F
REGRESSION	122.99	13.	9.4607	10.677
ERROR	111.64	126.	.88605	P-VALUE
TOTAL	234.63	125.	1.8771	0.000

ANALYSIS OF VARIANCE - FROM ZERO

	SS	DF	MS	F
REGRESSION	268.79	14.	19.199	21.668
ERROR	111.64	126.	.88605	P-VALUE
TOTAL	380.43	126.	3.0193	0.000

ASYMPTOTIC

VARIABLE NAME	ESTIMATED COEFFICIENT	STANDARD ERROR	T-RATIO	P-VALUE	PARTIAL CORR.	STANDARDIZED COEFFICIENT	ELASTICITY AT MEANS
TOTLAG3	0.97172E-01	0.1842E-01	5.274	0.000	.446	.4683	1.1374
LINC3	.91773	.3359	2.732	.006	.250	.2250	5.7002
POP65	-.71500	1.886	-.3790	.705	-.036	-1.2301	-6.3467
POP65SQ	0.52786E-01	.1496	.3529	.724	.033	2.4055	6.3785
POP65CU	-0.15256E-02	0.3899E-02	-.3913	.696	-.037	-1.4164	-2.5649
VOTERS	9.7906	38.90	.2517	.801	.024	.9211	5.0222
VOTERSSQ	-5.4668	54.69	-.1000	.920	-.009	-.7341	-2.2007
VOTERSCU	-1.5339	25.41	-0.6037E-01	.952	-.006	-.2275	-.4929
TURNOVER	-0.46740E-01	0.3264E-01	-1.432	.152	-.134	-.0609	-.0783
CATHDOM	.73373	.4078	1.799	.072	.168	.1367	.0770
ETHFRAC	.13843	.5508	.2513	.802	.024	.0246	.0211
OPEN	0.10584E-01	0.3636E-02	2.911	.004	.265	.2512	.4417
MILIT	0.82934E-01	0.5366E-01	1.545	.122	.144	.0914	.1476
CONSTANT	-9.5111	12.54	-.7584	.448	-.071	-.0000	-6.3508
OBS.	OBSERVED	PREDICTED	CALCULATED				

NO.	VALUE	VALUE	RESIDUAL				
1	1.0628	.64226	.42051	I	*		
2	1.3913	.22194	1.1693	I		*	
3	.93582	.92250	0.13318E-01	*			
4	-.15038	.37096	-.52134	*	I		
5	1.9696	0.98375E-01	1.8712	I			*
6	.79914	.82521	-0.26070E-01	*			
7	.39780	1.5662	-1.1684	*	I		
8	.76282	2.4098	-1.6470	*	I		
9	1.9157	1.4916	.42412	I	*		
10	.93237	.85972	0.72652E-01	*			
11	1.0585	1.7998	-.74134	*	I		
12	2.1752	1.6228	.55235	I	*		
13	5.4436	4.6075	.83615	I	*		
14	5.0690	3.0674	2.0016	I			*
15	2.5782	3.1910	-.61281	*	I		
16	.98920	1.9536	-.96437	*	I		
17	1.5532	2.1423	-.58915	*	I		
18	2.7076	1.6875	1.0202	I	*		
19	1.4906	1.7407	-.25003	*	I		
20	1.9954	.44146	1.5539	I		*	
21	.84581	.89699	-0.51177E-01	*			
22	.26777	.79667	-.52889	*	I		
23	1.7921	.86306	.92904	I	*		
24	-0.77336E-01	1.3512	-1.4285	*	I		
25	3.3348	1.0288	2.3060	I			*
26	1.9109	.79479	1.1162	I	*		
27	.44355	.43751	0.60390E-02	*			
28	.82941	.36853	.46088	I	*		
29	1.6661	.64632	1.0198	I	*		
30	1.6271	.70062	.92648	I	*		
31	.61617	1.2466	-.63041	*	I		
32	.49216	.78525	-.29309	*	I		
33	.89265	.42353	.46912	I	*		
34	.58460	.87383	-.28922	*	I		
35	1.9716	.66430	1.3073	I	*		
36	3.8168	1.5285	2.2883	I			*
37	3.6508	4.4832	-.83241	*	I		
38	4.6388	4.0318	.60706	I	*		
39	3.1829	2.7259	.45697	I	*		
40	1.1592	2.1714	-1.0122	*	I		
41	1.5637	1.8644	-.30072	*	I		
42	2.0008	2.0462	-0.45329E-01	*			
43	1.1914	1.4464	-.25499	*	I		
44	2.2379	.98444	1.2534	I	*		
45	.50725	.85111	-.34386	*	I		
46	.56520	1.0203	-.45508	*	I		
47	1.4289	1.2132	.21574	I	*		
48	2.9288	.80451	2.1243	I			*
49	.65186	-.40581	1.0577	I	*		
50	.53307	.51933	0.13737E-01	*			
51	.56027	1.3697	-.80941	*	I		
52	.40888	.89870	-.48982	*	I		
53	.71399	.38964	.32435	I	*		

54	.24504	-.64285	.88789		I	*	
55	.00000	1.1242	-1.1242	*	I		
56	-.00000	.53295	-.53295		* I		
57	2.9559	.75939	2.1965		I	*	
58	1.6003	.85471	.74560		I	*	
59	.59305	.63289	-0.39842E-01		*		
60	.89650	1.0005	-.10403		* I		
61	1.4547	1.7252	-.27055		* I		
62	2.1542	1.5118	.64246		I	*	
63	1.6887	1.8303	-.14157		* I		
64	0.75349E-03	.86735	-.86660	*	I		
65	.52006	1.4149	-.89481	*	I		
66	1.2218	2.0251	-.80326	*	I		
67	.00000	.17827	-.17827		* I		
68	-.00000	.67143	-.67143	*	I		
69	1.3609	.49132	.86962		I	*	
70	.61569	.23679	.37890		I	*	
71	0.93508E-01	.73519	-.64169	*	I		
72	1.0299	.12846	.90143		I	*	
73	2.2230	3.0422	-.81924	*	I		
74	4.2207	2.0679	2.1528		I	*	
75	2.0965	1.8028	.29367		I	*	
76	.44237	.90441	-.46204	*	I		
77	.75100	1.3080	-.55699	*	I		
78	2.3396	1.6942	.64540		I	*	
79	.61919	1.2404	-.62118	*	I		
80	.69596	.82052	-.12456		* I		
81	.40049	.94553	-.54504	*	I		
82	1.8256	.69322	1.1324		I	*	
83	2.0011	1.2168	.78433		I	*	
84	-.42725	1.2878	-1.7150	*	I		
85	.36154	1.2357	-.87412		*	I	
86	.42062	.64140	-.22078		* I		
87	.55263	-.44239	.99502		I	*	
88	.45912	.71280	-.25368		* I		
89	.96571	1.3267	-.36097		*	I	
90	.53908	1.6620	-1.1229	*	I		
91	1.3172	.84127	.47597		I	*	
92	.15078	.96850	-.81772	*	I		
93	.73302	1.3800	-.64696	*	I		
94	.28273	.64165	-.35892	*	I		
95	1.8197	1.6718	.14790		I*		
96	4.1905	3.2737	.91684		I	*	
97	3.0040	1.3605	1.6435		I	*	
98	1.6119	.81828	.79365		I	*	
99	1.7780	.64507	1.1329		I	*	
100	.92306	.72505	.19801		I*		
101	2.0339	.63820	1.3957		I	*	
102	2.0389	1.1924	.84654		I	*	
103	.57536	1.7243	-1.1490	*	I		
104	1.0575	1.3511	-.29357		* I		
105	.77564	.70127	0.74368E-01		*		
106	0.82943E-01	1.0452	-.96226	*	I		
107	2.7348	1.2643	1.4706		I	*	

108	2.8487	1.9384	.91028		I	*
109	.43516	1.2442	-.80903	*	I	
110	0.50682E-01	.45309	-.40241		* I	
111	.29554	.65159	-.35605		* I	
112	-0.71749E-01	.61435	-.68610	*	I	
113	.89811	.53059	.36751		I *	
114	2.7850	.46786	2.3171		I	*
115	2.2531	1.7209	.53225		I *	
116	2.0863	.73707	1.3492		I	*
117	1.4720	1.5006	-0.28637E-01		*	
118	-1.1791	.69284	-1.8719	*	I	
119	.84831	.53435	.31396		I *	
120	.77908	1.1846	-.40552		* I	
121	1.7455	2.4473	-.70184	*	I	
122	1.1532	1.1165	0.36652E-01		*	
123	-.44629	1.3774	-1.8237	*	I	
124	.38913	.55472	-.16559		* I	
125	.75609	1.0775	-.32137		* I	
126	.26760	1.1907	-.92306	*	I	

DURBIN-WATSON = 1.3655 VON NEUMANN RATIO = 1.3764 RHO = .13676
 RESIDUAL SUM = 13.412 RESIDUAL VARIANCE = .88605
 SUM OF ABSOLUTE ERRORS= 95.322
 R-SQUARE BETWEEN OBSERVED AND PREDICTED = .3627
 RUNS TEST: 48 RUNS, 60 POS, 0 ZERO, 66 NEG NORMAL STATISTIC = -2.8432

Equation (7) 1st-stage GLS income tax, Z's only

_POOL INCTAX TOTLAG3 LINC3 POP65 POP65SQ POP65CU &
 VOTERS VOTERSSQ VOTERSCU TURNOVER &
 CATHDOM ETHFRAC OPEN MILIT / NC = 21 SAME LIST

REQUIRED MEMORY IS PAR= 156 CURRENT PAR= 7801
 POOLED CROSS-SECTION TIME-SERIES ESTIMATION
 21 CROSS-SECTIONS AND 6 TIME-PERIODS
 126 TOTAL OBSERVATIONS
 DEPENDENT VARIABLE = INCTAX
 ...WARNING...TOO FEW DEGREES OF FREEDOM, DN OPTION USED

MODEL ASSUMPTIONS:
 SAME ESTIMATED RHO FOR EACH CROSS-SECTION
 DIAGONAL PHI MATRIX

OLS COEFFICIENTS
 .44369 -1.1634 -1.6752 .12679 -0.29041E-02
 561.17 -848.61 420.50 .53765 -12.788
 6.1479 0.17365E-01 -1.1378 -99.352
 THE DN OPTION IS IN EFFECT

RHO VECTOR
 .36711 .32036 .27300 .32405 1.0988
 .72192 1.1612 .78690 1.1380 .79221
 .46251 .89895 .97808 .60082 .71091

1.1522 .53999 -.24010 .90324 -1.0725
 .86179

SAME ESTIMATED RHO FOR ALL CROSS-SECTIONS = .88601

VARIANCES (DIAGONAL OF PHI MATRIX)

.94973 .37139 .83770 .86123 6.4451
 1.1745 .43984 .51148 1.1004 .95085
 .77560 1.2817 2.9148 2.3410 2.2684
 .51749 .80361 2.8752 0.90762E-01 .68707
 .37569

BUSE [1973] R-SQUARE = .3503 BUSE RAW-MOMENT R-SQUARE = .9044
 VARIANCE OF THE ESTIMATE-SIGMA**2 = .89631
 STANDARD ERROR OF THE ESTIMATE-SIGMA = .94674
 SUM OF SQUARED ERRORS-SSE= 112.93
 MEAN OF DEPENDENT VARIABLE = 11.606
 LOG OF THE LIKELIHOOD FUNCTION = -183.133

MODEL SELECTION TESTS - SEE JUDGE ET AL. (1985,P.242)

AKAIKE (1969) FINAL PREDICTION ERROR - FPE = .99590
 (FPE IS ALSO KNOWN AS AMEMIYA PREDICTION CRITERION - PC)
 AKAIKE (1973) INFORMATION CRITERION - LOG AIC = .11275
 SCHWARZ (1978) CRITERION - LOG SC = .42789

MODEL SELECTION TESTS - SEE RAMANATHAN (1992,P.167)

CRAVEN-WAHBA (1979)
 GENERALIZED CROSS VALIDATION - GCV = 1.1344
 HANNAN AND QUINN (1979) CRITERION = 1.2722
 RICE (1984) CRITERION = 1.1524
 SHIBATA (1981) CRITERION = 1.0955
 SCHWARZ (1978) CRITERION - SC = 1.5340
 AKAIKE (1974) INFORMATION CRITERION - AIC = 1.1194

ANALYSIS OF VARIANCE - FROM MEAN

	SS	DF	MS	F
REGRESSION	60.901	13.	4.6847	5.227
ERROR	112.93	126.	.89631	P-VALUE
TOTAL	173.84	125.	1.3907	0.000

ANALYSIS OF VARIANCE - FROM ZERO

	SS	DF	MS	F
REGRESSION	1068.6	14.	76.332	85.163
ERROR	112.93	126.	.89631	P-VALUE
TOTAL	1181.6	126.	9.3776	0.000

ASYMPTOTIC

VARIABLE NAME	ESTIMATED COEFFICIENT	STANDARD ERROR	T-RATIO	PARTIAL P-VALUE	STANDARDIZED CORR.	ELASTICITY AT MEANS
TOTLAG3	0.50317E-01	0.5423E-01	.9278	.354	.087	.0760
LINC3	3.6843	1.104	3.338	.001	.301	2.9530
POP65	8.7183	7.845	1.111	.266	.104	9.9864
POP65SQ	-.66219	.6141	-1.078	.281	-.101	-10.3257
POP65CU	0.16385E-01	0.1585E-01	1.033	.301	.097	3.5547

VOTERS	46.409	71.78	.6465	.518	.061	1.0139	3.0721
VOTERSSQ	-45.787	106.1	-.4314	.666	-.041	-1.4279	-2.3785
VOTERSCU	15.855	51.47	.3080	.758	.029	.5460	.6574
TURNOVER	0.40533E-01	0.9845E-01	.4117	.681	.039	.0123	.0088
CATHDOM	-7.0286	1.710	-4.111	0.000	-.362	-.3040	-.0952
ETHFRAC	2.3528	1.950	1.206	.228	.113	.0969	.0463
OPEN	0.34037E-01	0.1081E-01	3.149	.002	.285	.1876	.1833
MILIT	-.19511	.1805	-1.081	.280	-.102	-.0499	-.0448
CONSTANT	-78.788	37.46	-2.103	.035	-.195	-.0000	-6.7888

OBS. NO.	OBSERVED VALUE	PREDICTED VALUE	CALCULATED RESIDUAL
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1	5.9377	5.2835	.65417	I	*
2	2.3730	1.6237	.74927	I	*
3	2.1385	1.4933	.64518	I	*
4	1.5267	1.9695	-.44279	*	I
5	.11949	1.8453	-1.7258	*	I
6	1.0364	1.6505	-.61407	*	I
7	7.1213	6.7869	.33442	I	*
8	2.3579	1.9981	.35976	I	*
9	1.9348	2.1954	-.26057	*	I
10	.68439	2.1008	-1.4165	*	I
11	1.5872	2.2676	-.68040	*	I
12	1.4757	2.0726	-.59691	*	I
13	7.5280	5.5353	1.9927	I	*
14	2.9542	2.8103	.14394	I	*
15	2.1513	1.9194	.23192	I	*
16	.43400	1.4447	-1.0107	*	I
17	1.2392	1.7370	-.49779	*	I
18	1.8179	1.3874	.43050	I	*
19	5.3759	6.1602	-.78431	*	I
20	2.3022	1.9589	.34333	I	*
21	1.4657	2.4222	-.95650	*	I
22	3.1289	2.1636	.96525	I	*
23	3.2032	2.1037	1.0994	I	*
24	.48386	2.0292	-1.5454	*	I
25	4.2773	2.1619	2.1154	I	*
26	1.2288	.67784	.55096	I	*
27	1.2136	.61421	.59935	I	*
28	1.7733	.54014	1.2332	I	*
29	1.1897	.66871	.52096	I	*
30	1.6808	.63436	1.0464	I	*
31	6.4859	4.5617	1.9242	I	*
32	2.1850	1.9837	.20139	I	*
33	3.2304	1.5710	1.6595	I	*
34	1.2870	1.0607	.22627	I	*
35	2.5434	1.3779	1.1654	I	*
36	.79446	1.6965	-.90203	*	I
37	3.6494	5.2826	-1.6332	*	I
38	1.5757	1.4128	.16293	I	*
39	1.1253	1.7821	-.65678	*	I
40	.38858	1.1460	-.75746	*	I
41	1.4206	1.4239	-0.33083E-02	*	I
42	1.6884	1.5771	.11124	I	*
43	7.2611	7.0561	.20504	I	*

44	1.1279	2.4194	-1.2914	*	I		
45	1.7102	2.0837	-.37347		* I		
46	2.1856	1.8339	.35168		I *		
47	.92542	2.2460	-1.3206	*	I		
48	1.8086	1.8342	-0.25659E-01		*		
49	1.6531	3.1687	-1.5155	*	I		
50	.94026	1.2021	-.26186		* I		
51	1.0678	1.1636	-0.95786E-01		* I		
52	.28786	1.3573	-1.0695	*	I		
53	.53607	1.1581	-.62202		* I		
54	.25333	.66234	-.40901		* I		
55	4.8976	3.7296	1.1680		I		*
56	2.0552	1.2471	.80807		I		*
57	2.4291	1.4620	.96718		I		*
58	2.3526	1.3365	1.0161		I		*
59	-.16751	1.2133	-1.3808	*	I		
60	.88957	1.9830	-1.0934	*	I		
61	3.3063	3.6941	-.38781		* I		
62	3.5266	1.4956	2.0311		I		*
63	2.0306	1.0948	.93574		I		*
64	1.6345	.83529	.79920		I		*
65	2.2602	1.1998	1.0604		I		*
66	1.8391	1.4932	.34594		I *		
67	2.4409	3.2482	-.80728	*	I		
68	1.3155	1.8077	-.49216	*	I		
69	.76996	1.1222	-.35229	*	I		
70	1.0097	1.0077	0.19866E-02		*		
71	1.4346	1.8376	-.40301		* I		
72	-.39278	.89990	-1.2927	*	I		
73	3.2481	3.6074	-.35930		* I		
74	0.19500E-01	1.2057	-1.1862	*	I		
75	-.16887	.97165	-1.1405	*	I		
76	.94343	.81881	.12462		I *		
77	1.7781	.95740	.82068		I		*
78	-.27782	1.0641	-1.3419	*	I		
79	5.9517	3.6000	2.3517		I		*
80	1.9795	1.1863	.79316		I		*
81	1.0645	1.2444	-.17991		* I		
82	.90780	.79334	.11446		I *		
83	-0.58203E-01	1.1472	-1.2054	*	I		
84	1.2651	1.0945	.17055		I *		
85	4.1191	3.6548	.46424		I *		
86	.22917	1.1798	-.95060	*	I		
87	.12658	.83643	-.70985	*	I		
88	2.0741	1.1771	.89699		I		*
89	-.42027	1.3583	-1.7786	*	I		
90	.70224	.80537	-.10313		* I		
91	1.8434	2.8371	-.99374	*	I		
92	1.8433	1.8315	0.11746E-01		*		
93	.79235	.77398	0.18375E-01		*		
94	.72954	.24745	.48209		I		*
95	3.0204	1.0963	1.9241		I		*
96	1.7484	1.7434	0.49266E-02		*		
97	2.3172	3.1014	-.78428	*	I		

98	1.7075	1.3983	.30919	I *	
99	1.1456	1.0374	.10819	I*	
100	2.3454	.41858	1.9268	I	*
101	1.6794	1.2899	.38953	I *	
102	1.1623	1.7455	-.58327	* I	
103	5.5455	3.2702	2.2753	I	*
104	1.2984	1.2885	0.99109E-02	*	
105	1.0198	1.3326	-.31282	* I	
106	2.3792	.95880	1.4203	I	*
107	0.99866E-01	.85146	-.75159	* I	
108	.71984	1.1411	-.42124	* I	
109	16.837	16.823	0.13833E-01	*	
110	4.5708	4.2661	.30471	I *	
111	5.1842	5.0206	.16365	I*	
112	2.6423	4.1166	-1.4743	* I	
113	4.1128	4.2586	-.14582	* I	
114	4.1128	3.5445	.56827	I *	
115	6.1531	5.8109	.34216	I *	
116	1.1508	1.5308	-.38005	* I	
117	.83203	1.5539	-.72184	* I	
118	1.0366	1.9445	-.90788	* I	
119	1.7554	1.9782	-.22275	* I	
120	.67882	2.2391	-1.5603	* I	
121	8.0336	7.4614	.57217	I *	
122	2.5950	1.8993	.69562	I *	
123	.74047	1.6325	-.89205	* I	
124	2.5005	2.4014	0.99096E-01	I*	
125	.92154	2.4515	-1.5299	* I	
126	1.7977	2.6706	-.87291	* I	

DURBIN-WATSON = 1.2743 VON NEUMANN RATIO = 1.2845 RHO = .17290
 RESIDUAL SUM = -2.6550 RESIDUAL VARIANCE = .89631
 SUM OF ABSOLUTE ERRORS= 95.723
 R-SQUARE BETWEEN OBSERVED AND PREDICTED = .8102
 RUNS TEST: 41 RUNS, 65 POS, 0 ZERO, 61 NEG NORMAL STATISTIC = -4.1073

Equation (8) 1st-stage GLS corporate income tax, Z's only

_POOL CORPTAX TOTLAG3 LINC3 POP65 POP65SQ POP65CU &
 VOTERS VOTERSSQ VOTERSCU TURNOVER &
 CATHDOM ETHFRAC OPEN MILIT / NC = 21 SAME LIST

REQUIRED MEMORY IS PAR= 156 CURRENT PAR= 7801
 POOLED CROSS-SECTION TIME-SERIES ESTIMATION
 21 CROSS-SECTIONS AND 6 TIME-PERIODS
 126 TOTAL OBSERVATIONS
 DEPENDENT VARIABLE = CORPTAX
 ...WARNING..TOO FEW DEGREES OF FREEDOM, DN OPTION USED

MODEL ASSUMPTIONS:
 SAME ESTIMATED RHO FOR EACH CROSS-SECTION
 DIAGONAL PHI MATRIX

OLS COEFFICIENTS

-.11801	2.5239	-4.4239	.34123	-0.85215E-02
95.415	-105.16	36.542	.35387	-1.2386
-1.1287	0.74911E-02	-0.61586E-01	-28.449	

THE DN OPTION IS IN EFFECT

RHO VECTOR

1.3048	1.1832	.54426	.70670	.21753
.92501	.82785	1.2393	.69415	.81670
.68464	.60673	.98104	.17473	.39627
.94815	.79610	.22977	.71903	.66752
.27886				

SAME ESTIMATED RHO FOR ALL CROSS-SECTIONS = .63086

VARIANCES (DIAGONAL OF PHI MATRIX)

.18494	.21543	.22321	.30791	.78063
.27876	.10478	.31338	.15426	.41948
.37982	1.4289	.11153	.72829	3.4234
.13345	.20729	.35197	0.38861E-01	.44187
.16212				

BUSE [1973] R-SQUARE = .2067 BUSE RAW-MOMENT R-SQUARE = .8697
 VARIANCE OF THE ESTIMATE-SIGMA**2 = .92157
 STANDARD ERROR OF THE ESTIMATE-SIGMA = .95999
 SUM OF SQUARED ERRORS-SSE= 116.12
 MEAN OF DEPENDENT VARIABLE = 2.6707
 LOG OF THE LIKELIHOOD FUNCTION = -101.010

MODEL SELECTION TESTS - SEE JUDGE ET AL. (1985,P.242)

AKAIKE (1969) FINAL PREDICTION ERROR - FPE = 1.0240
 (FPE IS ALSO KNOWN AS AMEMIYA PREDICTION CRITERION - PC)
 AKAIKE (1973) INFORMATION CRITERION - LOG AIC = .14055
 SCHWARZ (1978) CRITERION - LOG SC = .45569

MODEL SELECTION TESTS - SEE RAMANATHAN (1992,P.167)

CRAVEN-WAHBA (1979)
 GENERALIZED CROSS VALIDATION - GCV = 1.1664
 HANNAN AND QUINN (1979) CRITERION = 1.3081
 RICE (1984) CRITERION = 1.1849
 SHIBATA (1981) CRITERION = 1.1264
 SCHWARZ (1978) CRITERION - SC = 1.5773
 AKAIKE (1974) INFORMATION CRITERION - AIC = 1.1509

ANALYSIS OF VARIANCE - FROM MEAN

	SS	DF	MS	F
REGRESSION	30.253	13.	2.3272	2.525
ERROR	116.12	126.	.92157	P-VALUE
TOTAL	146.37	125.	1.1710	.004

ANALYSIS OF VARIANCE - FROM ZERO

	SS	DF	MS	F
REGRESSION	774.79	14.	55.342	60.052
ERROR	116.12	126.	.92157	P-VALUE
TOTAL	890.91	126.	7.0707	0.000

VARIABLE NAME	ESTIMATED COEFFICIENT	ASYMPTOTIC		P-VALUE	PARTIAL CORR.	STANDARDIZED COEFFICIENT	ELASTICITY AT MEANS
		STANDARD ERROR	T-RATIO -----				
TOTLAG3	-0.91912E-02	0.2388E-01	-.3849	.700	-.036	-.0428	-.0603
LINC3	.93050	.4655	1.999	.046	.186	.2202	3.2409
POP65	-.81812	3.592	-.2277	.820	-.022	-1.3591	-4.0723
POP65SQ	0.51155E-01	.2731	.1873	.851	.018	2.2509	3.4663
POP65CU	-0.12003E-02	0.6851E-02	-.1752	.861	-.017	-1.0760	-1.1315
VOTERS	65.079	39.58	1.644	.100	.154	5.9117	18.7199
VOTERSSQ	-86.928	58.72	-1.480	.139	-.139	-11.2717	-19.6229
VOTERSCU	38.756	28.44	1.363	.173	.128	5.5495	6.9828
TURNOVER	.12450	0.5119E-01	2.432	.015	.224	.1566	.1169
CATHDOM	-.60236	.5025	-1.199	.231	-.113	-.1083	-.0354
ETHFRAC	-.29573	.6232	-.4745	.635	-.045	-.0506	-.0253
OPEN	0.39357E-02	0.3876E-02	1.015	.310	.096	.0902	.0921
MILIT	-0.62593E-01	0.7240E-01	-.8645	.387	-.081	-.0666	-.0625
CONSTANT	-17.803	17.96	-.9913	.322	-.093	-.0000	-6.6659
OBS. NO.	OBSERVED VALUE	PREDICTED VALUE	CALCULATED RESIDUAL				
1	6.2787	6.1614	.11738			I*	
2	1.8710	2.6847	-.81363		*	I	
3	2.1799	2.1827	-0.28948E-02			*	
4	3.6849	2.6391	1.0459			I	*
5	4.8926	2.9387	1.9539			I	*
6	3.3984	2.4308	.96760			I	*
7	2.4407	3.7375	-1.2968		*	I	
8	.75182	1.4374	-.68559			*	I
9	1.3548	2.1017	-.74694			*	I
10	1.1373	2.2016	-1.0642		*	I	
11	1.5036	1.9430	-.43944			*	I
12	.99244	1.8988	-.90634		*	I	
13	4.2699	3.9572	.31273			I	*
14	1.9680	2.7495	-.78154		*	I	
15	2.9817	1.9944	.98727			I	*
16	2.5156	1.9046	.61097			I	*
17	.72885	1.5440	-.81512		*	I	
18	2.6437	1.5012	1.1425			I	*
19	5.3694	4.1610	1.2084			I	*
20	.62627	2.2329	-1.6066		*	I	
21	1.8427	2.0955	-.25274			*I	
22	2.0770	2.1337	-0.56684E-01			*	
23	.61366	1.7703	-1.1566		*	I	
24	2.0924	1.9184	.17392			I*	
25	1.2821	2.4812	-1.1991		*	I	
26	.42890	1.0195	-.59064			*	I
27	2.3541	.94265	1.4114			I	*
28	.45331	.98478	-.53147			*	I
29	.21866	1.0610	-.84237		*	I	
30	1.2344	.97137	.26303			I*	
31	2.2043	3.4850	-1.2807		*	I	
32	1.2381	1.8612	-.62301			*	I
33	.79668	1.9007	-1.1040		*	I	

34	1.1892	1.8892	-.70004	*	I				
35	1.9031	2.1265	-.22346		*I				
36	1.1879	1.6936	-.50570	*	I				
37	4.9378	4.7497	.18812		I*				
38	2.5655	2.4332	.13223		I*				
39	2.3364	2.4372	-.10084		*I				
40	3.1054	2.6312	.47419		I	*			
41	1.4214	2.6487	-1.2273	*	I				
42	1.0888	2.4785	-1.3897	*	I				
43	2.7720	3.2587	-.48671		I	*			
44	1.1402	1.6912	-.55105		I	*			
45	1.7888	1.7435	0.45267E-01		*				
46	1.0934	1.5375	-.44408		I	*			
47	.72934	1.7307	-1.0014	*	I				
48	.26165	1.4932	-1.2315	*	I				
49	2.0940	3.2740	-1.1800	*	I				
50	1.0217	2.1599	-1.1382	*	I				
51	1.5912	1.5700	0.21225E-01		*				
52	1.8074	1.9006	-0.93207E-01		*				
53	2.3037	1.5991	.70460		I	*			
54	3.0306	1.3481	1.6825		I			*	
55	1.7970	2.8704	-1.0735	*	I				
56	1.1174	1.8571	-.73965	*	I				
57	.48863	1.8149	-1.3263	*	I				
58	.71908	1.5920	-.87296	*	I				
59	1.9469	1.6375	.30946		I	*			
60	2.5865	1.4734	1.1131		I			*	
61	2.7194	3.4554	-.73601	*	I				
62	2.5432	1.8439	.69933		I	*			
63	3.0044	1.6425	1.3619		I			*	
64	2.2162	1.5718	.64446		I	*			
65	2.7517	1.3039	1.4478		I			*	
66	2.0407	1.1802	.86048		I	*			
67	3.4662	2.1179	1.3483		I			*	
68	1.6156	1.0972	.51837		I	*			
69	2.1136	.91913	1.1944		I			*	
70	2.9839	.79556	2.1884		I				*
71	1.1826	.93792	.24472		I*				
72	.43072	.82015	-.38943	*	I				
73	7.1559	7.0089	.14696		I*				
74	3.1649	3.1674	-0.24616E-02		*				
75	3.7053	2.8099	.89546		I	*			
76	4.5677	2.8766	1.6911		I			*	
77	3.2699	2.9680	.30186		I	*			
78	3.6477	2.9032	.74443		I	*			
79	2.5639	2.9840	-.42005	*	I				
80	.69251	1.2618	-.56931	*	I				
81	1.1775	1.2261	-0.48572E-01		*				
82	2.0188	1.1205	.89828		I	*			
83	.64235	1.3200	-.67766	*	I				
84	3.1297	1.2342	1.8955		I			*	
85	2.1890	1.1658	1.0232		I	*			
86	2.2737	.58139	1.6923		I			*	
87	1.2261	.52871	.69739		I	*			

88	-.88961	.55867	-1.4483	*	I				
89	1.0175	.53707	.48039		I	*			
90	.67018	.40840	.26178		I*				
91	5.4373	5.1152	.32207		I	*			
92	5.0779	2.9337	2.1442		I			*	
93	3.8075	2.0721	1.7354		I			*	
94	1.0444	1.3882	-.34375		*	I			
95	2.7498	1.7698	.97998		I		*		
96	2.2327	1.7681	.46456		I	*			
97	2.1132	3.5577	-1.4445	*	I				
98	1.0713	1.6937	-.62243		*	I			
99	1.8204	1.7359	0.84559E-01		*				
100	3.0787	1.1042	1.9746		I			*	
101	2.4974	1.6429	.85451		I	*			
102	.40769	1.0603	-.65259		*	I			
103	1.7525	3.3497	-1.5972	*	I				
104	1.3226	1.6180	-.29544		*	I			
105	2.0930	1.5670	.52602		I	*			
106	1.6821	1.5198	.16236		I*				
107	.28152	1.3240	-1.0425	*	I				
108	2.6253	1.6058	1.0196		I		*		
109	7.4782	8.3544	-.87617	*	I				
110	3.4057	3.5793	-.17358		*I				
111	4.0090	3.9823	0.26678E-01		*				
112	4.1962	3.4091	.78708		I	*			
113	3.6733	3.6284	0.44903E-01		*				
114	3.1419	2.7990	.34281		I	*			
115	3.3616	2.6547	.70697		I	*			
116	3.0285	1.2341	1.7944		I			*	
117	2.6384	1.1158	1.5226		I			*	
118	2.2555	1.0795	1.1761		I		*		
119	.99975	1.1648	-.16509		*I				
120	1.1540	1.4056	-.25159		*I				
121	5.8197	4.7028	1.1169		I		*		
122	.48385	2.1427	-1.6588	*	I				
123	1.6770	1.8442	-.16724		*I				
124	3.0009	1.9876	1.0133		I	*			
125	1.2711	2.2193	-.94818	*	I				
126	2.7919	2.5937	.19826		I*				

DURBIN-WATSON = 1.1272 VON NEUMANN RATIO = 1.1362 RHO = .32287
 RESIDUAL SUM = 9.4875 RESIDUAL VARIANCE = .92157
 SUM OF ABSOLUTE ERRORS= 100.71
 R-SQUARE BETWEEN OBSERVED AND PREDICTED = .5700
 RUNS TEST: 43 RUNS, 65 POS, 0 ZERO, 61 NEG NORMAL STATISTIC = -3.7492

Equation (9) 1st-stage GLS property tax, Z's only

_POOL PROPTAX TOTLAG3 LINC3 POP65 POP65SQ POP65CU &
 VOTERS VOTERSSQ VOTERSCU TURNOVER &
 CATHDOM ETHFRAC OPEN MILIT / NC = 21 SAME LIST

REQUIRED MEMORY IS PAR= 156 CURRENT PAR= 7801

POOLED CROSS-SECTION TIME-SERIES ESTIMATION
 21 CROSS-SECTIONS AND 6 TIME-PERIODS
 126 TOTAL OBSERVATIONS
 DEPENDENT VARIABLE = PROPTAX
 ...WARNING...TOO FEW DEGREES OF FREEDOM, DN OPTION USED

MODEL ASSUMPTIONS:
 SAME ESTIMATED RHO FOR EACH CROSS-SECTION
 DIAGONAL PHI MATRIX

OLS COEFFICIENTS
 -0.32814E-01 .94190 -.23925 0.11374E-01 -0.81444E-04
 47.198 -53.557 18.270 0.55393E-01 -1.3925
 1.5796 -0.39417E-02 0.29171E-01 -17.849
 THE DN OPTION IS IN EFFECT

RHO VECTOR
 1.1542 .56863 .85933 .63620 .75617
 .87278 .83993 1.2523 .57860 .65911
 -0.90000E-01 .76612 .82093 .74327 .97692
 1.0023 .67850 .50049 .28422 .80337
 .85286

SAME ESTIMATED RHO FOR ALL CROSS-SECTIONS = .79843

VARIANCES (DIAGONAL OF PHI MATRIX)
 0.29336E-01 0.27261E-01 0.34978E-01 0.75252E-01 0.85240E-01
 .19023 0.48217E-01 0.46916E-01 .10397 .13782
 .23102 0.78480E-01 0.12308E-01 0.56538E-01 0.63573E-01
 0.13844E-01 0.95833E-01 .22457 0.49041E-01 .90809
 0.69752E-02

BUSE [1973] R-SQUARE = .7073 BUSE RAW-MOMENT R-SQUARE = .9321
 VARIANCE OF THE ESTIMATE-SIGMA**2 = .87166
 STANDARD ERROR OF THE ESTIMATE-SIGMA = .93363
 SUM OF SQUARED ERRORS-SSE= 109.83
 MEAN OF DEPENDENT VARIABLE = 1.8851
 LOG OF THE LIKELIHOOD FUNCTION = -7.50278

MODEL SELECTION TESTS - SEE JUDGE ET AL. (1985,P.242)
 AKAIKE (1969) FINAL PREDICTION ERROR - FPE = .96851
 (FPE IS ALSO KNOWN AS AMEMIYA PREDICTION CRITERION - PC)
 AKAIKE (1973) INFORMATION CRITERION - LOG AIC = 0.84866E-01
 SCHWARZ (1978) CRITERION - LOG SC = .40001

MODEL SELECTION TESTS - SEE RAMANATHAN (1992,P.167)
 CRAVEN-WAHBA (1979)
 GENERALIZED CROSS VALIDATION - GCV = 1.1032
 HANNAN AND QUINN (1979) CRITERION = 1.2373
 RICE (1984) CRITERION = 1.1207
 SHIBATA (1981) CRITERION = 1.0654
 SCHWARZ (1978) CRITERION - SC = 1.4918
 AKAIKE (1974) INFORMATION CRITERION - AIC = 1.0886

ANALYSIS OF VARIANCE - FROM MEAN

	SS	DF	MS	F
REGRESSION	265.37	13.	20.413	23.419
ERROR	109.83	126.	.87166	P-VALUE
TOTAL	375.20	125.	3.0016	0.000

ANALYSIS OF VARIANCE - FROM ZERO

	SS	DF	MS	F
REGRESSION	1507.9	14.	107.71	123.564
ERROR	109.83	126.	.87166	P-VALUE
TOTAL	1617.7	126.	12.839	0.000

ASYMPTOTIC

VARIABLE NAME	ESTIMATED COEFFICIENT	STANDARD ERROR	T-RATIO	P-VALUE	PARTIAL CORR.	STANDARDIZED COEFFICIENT	ELASTICITY AT MEANS
TOTLAG3	-0.88450E-02	0.1148E-01	-.7707	.441	-.073	-.0532	-.0822
LINC3	.39817	.2431	1.638	.101	.153	.1218	1.9648
POP65	5.1601	1.860	2.775	.006	.254	11.0802	36.3893
POP65SQ	-.38908	.1463	-2.659	.008	-.244	-22.1289	-37.3514
POP65CU	0.95512E-02	0.3796E-02	2.516	.012	.231	11.0673	12.7572
VOTERS	43.868	24.74	1.773	.076	.165	5.1508	17.8778
VOTERSSQ	-61.626	34.82	-1.770	.077	-.165	-10.3286	-19.7090
VOTERSCU	27.800	16.10	1.726	.084	.161	5.1452	7.0963
TURNOVER	-0.14695E-01	0.2270E-01	-.6474	.517	-.061	-.0239	-.0195
CATHDOM	-1.5171	.3483	-4.356	0.000	-.381	-.3526	-.1265
ETHFRAC	1.6689	.3632	4.596	0.000	.398	.3695	.2024
OPEN	-0.70607E-02	0.2274E-02	-3.104	.002	-.281	-.2091	-.2341
MILIT	-.10698	0.3274E-01	-3.268	.001	-.295	-.1471	-.1512
CONSTANT	-33.286	10.00	-3.328	.001	-.300	-.0000	-17.6577

OBS. NO.	OBSERVED VALUE	PREDICTED VALUE	CALCULATED RESIDUAL			
1	7.9445	7.7824	.16211			I*
2	2.4846	3.6442	-1.1596		*	I
3	3.7921	3.0323	.75976			I *
4	5.1952	3.9206	1.2746			I *
5	3.3305	3.4055	-0.74964E-01			*
6	2.9802	2.9936	-0.13397E-01			*
7	4.3759	4.3527	0.23211E-01			*
8	1.0410	1.1174	-0.76386E-01			*
9	1.1978	1.2706	-0.72745E-01			*
10	1.1612	1.2997	-.13852			*I
11	1.6697	1.5055	.16416			I*
12	-.61914	1.8871	-2.5063	*		I
13	3.2193	3.7151	-.49579			* I
14	.16880	.18847	-0.19675E-01			*
15	.89455	1.0666	-.17205			*I
16	2.4986	1.2435	1.2551			I *
17	1.2179	1.6418	-.42388			* I
18	1.2179	2.2791	-1.0612		*	I
19	6.4089	6.6993	-.29042			* I
20	2.6924	3.1917	-.49935			* I
21	2.6203	2.2541	.36623			I *
22	2.1835	2.8985	-.71504		*	I
23	4.9975	2.9141	2.0834			I *

24	2.9530	2.4821	.47093	I	*		
25	5.2793	3.1703	2.1090	I			*
26	.63714	.74111	-.10397	*I			
27	1.3341	1.0279	.30622	I	*		
28	2.2860	1.4545	.83145	I		*	
29	.18416	1.1515	-.96736	I	*		
30	1.2231	1.2709	-0.47819E-01	*			
31	.96630	3.3400	-2.3737	I		*	
32	.55278	.55141	0.13648E-02	*			
33	1.0575	.92253	.13501	I*			
34	1.1274	1.3429	-.21553	*I			
35	-0.54681E-01	1.1171	-1.1718	I	*		
36	.79255	.56306	.22950	I*			
37	4.0033	3.4829	.52040	I	*		
38	1.8412	2.0083	-.16715	*I			
39	3.3995	1.6105	1.7889	I			*
40	2.7468	1.4444	1.3023	I		*	
41	2.3383	1.4838	.85454	I		*	
42	2.2204	1.2994	.92097	I		*	
43	3.4468	4.0073	-.56049	I	*		
44	1.1078	1.3599	-.25211	*I			
45	1.0061	1.5452	-.53903	I	*		
46	1.1167	1.8347	-.71797	I	*		
47	.79355	2.0268	-1.2333	I	*		
48	.91308	2.4215	-1.5084	I	*		
49	3.1743	2.7167	.45766	I	*		
50	-.17780	.54501	-.72282	I	*		
51	-.33481	.56877	-.90359	I	*		
52	.89150	.94554	-0.54048E-01	*			
53	2.6287	1.1502	1.4785	I		*	
54	.29965	1.0218	-.72214	I	*		
55	3.3409	1.2601	2.0809	I			*
56	-.38995	.70444	-1.0944	I	*		
57	.81444	.36877	.44567	I	*		
58	1.3532	.63705	.71612	I	*		
59	.73448	.78613	-0.51657E-01	*			
60	.61566	.64937	-0.33713E-01	*			
61	1.3028	1.2082	0.94561E-01	I*			
62	.35293	.54769	-.19476	*I			
63	.35696	.52146	-.16450	*I			
64	.26115	.26445	-0.32960E-02	*			
65	.85596	.34637	.50960	I	*		
66	2.9705	.33940	2.6311	I			*
67	4.4274	3.8050	.62235	I	*		
68	2.8030	2.3712	.43179	I	*		
69	3.0692	2.7043	.36494	I	*		
70	3.6924	2.5014	1.1910	I		*	
71	1.1392	1.4488	-.30962	*I			
72	3.1791	1.7586	1.4205	I		*	
73	8.0322	8.4545	-.42232	*I			
74	3.1398	2.3181	.82167	I	*		
75	3.1405	2.3034	.83702	I	*		
76	4.2948	3.3288	.96603	I	*		
77	2.6025	3.4598	-.85734	I	*		

78	4.4765	3.6577	.81878		I	*
79	6.7355	5.7143	1.0213		I	*
80	2.5493	2.0101	.53929		I	*
81	1.4732	2.3649	-.89171		I	*
82	1.5980	2.5592	-.96115		I	*
83	1.9084	2.2015	-.29309		I	*
84	.45303	2.1499	-1.6969	*	I	
85	2.0059	3.0917	-1.0858	*	I	
86	.51289	1.1044	-.59149		I	*
87	1.0362	1.3486	-.31247		I	*
88	2.1870	1.3890	.79800		I	*
89	.73767	1.1002	-.36258		I	*
90	.68171	1.8742	-1.1925	*	I	
91	2.2515	2.5764	-.32485		I	*
92	1.2637	1.1231	.14062		I	*
93	1.7065	2.0630	-.35650		I	*
94	1.0279	1.5263	-.49842		I	*
95	2.9827	1.8510	1.1317		I	*
96	1.4219	2.2885	-.86661	*	I	
97	2.1783	4.0560	-1.8777	*	I	
98	.43854	.81426	-.37572		I	*
99	.79988	1.0536	-.25374		I	*
100	2.7318	1.5407	1.1911		I	*
101	1.3330	1.2948	0.38206E-01		I	*
102	1.4755	.65206	.82347		I	*
103	.63526	1.8986	-1.2633	*	I	
104	.36039	.74900	-.38861		I	*
105	1.5086	1.1916	.31702		I	*
106	2.8189	.94912	1.8698		I	*
107	.39580	.92784	-.53205		I	*
108	-.14109	.37293	-.51402		I	*
109	5.9270	7.1947	-1.2677	*	I	
110	2.6616	2.1668	.49487		I	*
111	3.4755	2.3334	1.1421		I	*
112	2.8454	2.2254	.62000		I	*
113	.67864	2.2549	-1.5763	*	I	
114	2.5724	2.1372	.43513		I	*
115	2.6916	1.1878	1.5038		I	*
116	1.4678	.42454	1.0432		I	*
117	.87890	.39050	.48840		I	*
118	1.1242	.51960	.60464		I	*
119	-.97852	.54002	-1.5185	*	I	
120	1.3795	.42527	.95420		I	*
121	22.781	21.966	.81468		I	*
122	5.3517	6.7242	-1.3725	*	I	
123	6.6891	6.5604	.12868		I	*
124	8.7478	8.5779	.16993		I	*
125	8.1278	7.8654	.26240		I	*
126	8.0332	8.3910	-.35783	*	I	

DURBIN-WATSON = 1.4519 VON NEUMANN RATIO = 1.4636 RHO = .02393
 RESIDUAL SUM = 4.1358 RESIDUAL VARIANCE = .87166
 SUM OF ABSOLUTE ERRORS= 91.824
 R-SQUARE BETWEEN OBSERVED AND PREDICTED = .8784

RUNS TEST: 51 RUNS, 60 POS, 0 ZERO, 66 NEG NORMAL STATISTIC = -2.3053

Equation (10) 1st-stage GLS consumption tax, Z's only

_POOL CONSTAX TOTLAG3 LINC3 POP65 POP65SQ POP65CU &
VOTERS VOTERSSQ VOTERSCU TURNOVER &
CATHDOM ETHFRAC OPEN MILIT / NC = 21 SAME LIST

REQUIRED MEMORY IS PAR= 156 CURRENT PAR= 7801
POOLED CROSS-SECTION TIME-SERIES ESTIMATION
21 CROSS-SECTIONS AND 6 TIME-PERIODS
126 TOTAL OBSERVATIONS
DEPENDENT VARIABLE = CONSTAX
...WARNING...TOO FEW DEGREES OF FREEDOM, DN OPTION USED

MODEL ASSUMPTIONS:
SAME ESTIMATED RHO FOR EACH CROSS-SECTION
DIAGONAL PHI MATRIX

OLS COEFFICIENTS
.10465 -3.9251 -1.0932 .13850 -0.39453E-02
57.141 -14.168 -20.808 -.19766 -2.1239
-2.6287 0.42228E-01 .13564 17.835
THE DN OPTION IS IN EFFECT

RHO VECTOR
.77691 .55452 .99860 .82755 .89817
.78736 .99931 .91840 .76191 .78358
.63320 1.0067 1.0290 .69273 .81473
.79431 .73708 .63455 .79106 .68466
-.58597

SAME ESTIMATED RHO FOR ALL CROSS-SECTIONS = .87479

VARIANCES (DIAGONAL OF PHI MATRIX)
.42639 .39912 0.88178E-01 .57006 .93720
.96910 .27158 .45688 1.8106 1.7600
.50270 1.8424 .41496 1.6923 2.3857
1.1919 1.1360 .28492 .17909 .42633
.15853

BUSE [1973] R-SQUARE = .5038 BUSE RAW-MOMENT R-SQUARE = .9318
VARIANCE OF THE ESTIMATE-SIGMA**2 = .92789
STANDARD ERROR OF THE ESTIMATE-SIGMA = .96327
SUM OF SQUARED ERRORS-SSE= 116.91
MEAN OF DEPENDENT VARIABLE = 10.669
LOG OF THE LIKELIHOOD FUNCTION = -157.150

MODEL SELECTION TESTS - SEE JUDGE ET AL. (1985,P.242)
AKAIKE (1969) FINAL PREDICTION ERROR - FPE = 1.0310
(FPE IS ALSO KNOWN AS AMEMIYA PREDICTION CRITERION - PC)
AKAIKE (1973) INFORMATION CRITERION - LOG AIC = .14738
SCHWARZ (1978) CRITERION - LOG SC = .46252

MODEL SELECTION TESTS - SEE RAMANATHAN (1992,P.167)

CRAVEN-WAHBA (1979)

GENERALIZED CROSS VALIDATION - GCV =	1.1744
HANNAN AND QUINN (1979) CRITERION =	1.3171
RICE (1984) CRITERION =	1.1930
SHIBATA (1981) CRITERION =	1.1341
SCHWARZ (1978) CRITERION - SC =	1.5881
AKAIKE (1974) INFORMATION CRITERION - AIC =	1.1588

ANALYSIS OF VARIANCE - FROM MEAN

	SS	DF	MS	F
REGRESSION	118.71	13.	9.1315	9.841
ERROR	116.91	126.	.92789	P-VALUE
TOTAL	235.62	125.	1.8850	0.000

ANALYSIS OF VARIANCE - FROM ZERO

	SS	DF	MS	F
REGRESSION	1597.3	14.	114.10	122.963
ERROR	116.91	126.	.92789	P-VALUE
TOTAL	1714.3	126.	13.605	0.000

ASYMPTOTIC

VARIABLE NAME	ESTIMATED COEFFICIENT	STANDARD ERROR	T-RATIO	P-VALUE	PARTIAL CORR.	STANDARDIZED COEFFICIENT	ELASTICITY AT MEANS
TOTLAG3	0.46724E-01	0.4313E-01	1.083	.279	.102	.0737	.0768
LINC3	-1.2998	.9850	-1.320	.187	-.124	-.1043	-1.1332
POP65	3.6470	5.268	.6922	.489	.065	2.0539	4.5443
POP65SQ	-.26013	.3941	-.6601	.509	-.062	-3.8802	-4.4124
POP65CU	0.67631E-02	0.9705E-02	.6969	.486	.066	2.0553	1.5961
VOTERS	-.20270	75.29	-0.2692E-02	.998	0.000	-.0062	-.0146
VOTERSSQ	45.307	108.0	.4196	.675	.040	1.9915	2.5602
VOTERSCU	-38.445	50.88	-.7556	.450	-.071	-1.8662	-1.7340
TURNOVER	0.17988E-01	0.7383E-01	.2436	.808	.023	.0077	.0042
CATHDOM	1.4099	1.350	1.044	.296	.098	.0860	.0208
ETHFRAC	-3.8870	1.501	-2.589	.010	-.238	-.2257	-.0833
OPEN	0.10371E-01	0.7609E-02	1.363	.173	.128	.0806	.0607
MILIT	-0.57534E-01	.1432	-.4017	.688	-.038	-.0207	-.0144
CONSTANT	-5.6345	30.47	-.1849	.853	-.017	-.0000	-.5281

OBS. NO.	OBSERVED VALUE	PREDICTED VALUE	CALCULATED RESIDUAL		
1	5.8616	5.0407	.82084	I	*
2	2.0814	1.4709	.61047	I	*
3	2.0452	2.4068	-.36161	* I	
4	.20371	1.6475	-1.4438	* I	
5	.23787	1.0170	-.77913	* I	
6	1.4628	1.8074	-.34460	* I	
7	9.7396	9.0030	.73665	I	*
8	2.6753	2.6967	-0.21413E-01	*	
9	3.4390	1.8462	1.5929	I	*
10	1.7950	2.0589	-.26386	* I	
11	1.7038	2.9981	-1.2943	* I	
12	1.0606	2.1504	-1.0898	* I	
13	17.262	17.073	.18866	I*	

14	6.2121	5.2086	1.0035		I	*
15	3.2322	5.0699	-1.8377	*	I	
16	4.2632	4.9193	-.65607		* I	
17	5.2440	4.9326	.31132		I *	
18	5.2399	4.7411	.49877		I *	
19	5.0309	3.7765	1.2544		I	*
20	2.7040	.94810	1.7559		I	*
21	1.1713	1.8802	-.70896		* I	
22	1.7821	1.2845	.49757		I *	
23	1.2690	1.1996	0.69396E-01		* I	
24	1.0040	1.2854	-.28139		* I	
25	7.7972	5.6939	2.1034		I	*
26	2.4179	1.9281	.48976		I *	
27	2.6129	1.3484	1.2646		I	*
28	2.0617	1.5692	.49249		I *	
29	.95770	1.6876	-.72991		* I	
30	2.2164	1.3581	.85826		I *	
31	6.1618	4.6262	1.5357		I	*
32	1.7448	2.1618	-.41706		* I	
33	2.2514	1.2702	.98124		I	*
34	2.3722	1.3071	1.0651		I	*
35	2.4472	1.1475	1.2998		I	*
36	.94651	1.8481	-.90158		* I	
37	11.379	10.052	1.3271		I	*
38	3.1134	2.0350	1.0785		I	*
39	3.5380	2.3953	1.1427		I	*
40	2.6507	2.3889	.26174		I *	
41	1.3937	2.1430	-.74925		* I	
42	2.8445	3.1148	-.27028		* I	
43	6.9385	8.1225	-1.1840		* I	
44	1.8671	1.9194	-0.52340E-01		* I	
45	1.2697	1.7759	-.50615		* I	
46	1.5285	2.4701	-.94153		* I	
47	2.5086	2.3838	.12479		I *	
48	2.8454	1.9616	.88374		I	*
49	3.8238	3.8485	-0.24649E-01		* I	
50	2.1401	1.0535	1.0866		I	*
51	2.9903	1.0982	1.8921		I	*
52	2.1082	1.1309	.97731		I	*
53	2.3499	1.2231	1.1267		I	*
54	1.4657	1.2842	.18151		I *	
55	5.2881	4.3488	.93926		I	*
56	2.7611	.94522	1.8158		I	*
57	1.8201	1.1826	.63750		I	*
58	1.0485	1.2622	-.21378		* I	
59	0.24853E-02	.90745	-.90496		* I	
60	.56750	.93730	-.36979		* I	
61	5.1250	7.7256	-2.6005	*	I	
62	1.9309	2.1543	-.22340		* I	
63	2.3454	2.1280	.21738		I *	
64	2.4637	2.3122	.15144		I *	
65	2.7089	2.4923	.21661		I *	
66	2.1520	2.9264	-.77437		* I	
67	1.2564	3.0748	-1.8184	*	I	

68	.38363	1.0717	-.68802	*	I	
69	.16263	.72340	-.56078	*	I	
70	.25929	.74488	-.48559	*	I	
71	.52542	1.5854	-1.0600	*	I	
72	.45732	.88622	-.42890	*	I	
73	7.8521	7.8478	0.42989E-02		*	
74	1.6100	2.8753	-1.2653	*	I	
75	2.5977	2.6096	-0.11915E-01		*	
76	3.1877	1.9329	1.2548		I	*
77	1.4667	2.4223	-.95558	*	I	
78	2.0584	2.2308	-.17237		*I	
79	2.6443	3.0488	-.40457	*	I	
80	1.2214	.79417	.42727		I	*
81	1.0351	.62608	.40906		I	*
82	3.5537	1.1352	2.4184		I	*
83	1.3634	1.2144	.14906		I*	
84	.97720	1.0662	-0.88985E-01		*	
85	5.0941	3.6742	1.4199		I	*
86	1.2906	1.0495	.24110		I*	
87	2.0060	.83364	1.1723		I	*
88	1.3999	.99123	.40872		I	*
89	-.52293	1.1667	-1.6897	*	I	
90	1.7613	1.0099	.75138		I	*
91	5.2366	5.1453	0.91329E-01		*	
92	2.5440	1.6785	.86558		I	*
93	2.6656	1.6408	1.0249		I	*
94	2.8021	1.4573	1.3449		I	*
95	-.13101	1.2806	-1.4116	*	I	
96	2.4677	1.2078	1.2599		I	*
97	2.2456	4.0947	-1.8491	*	I	
98	1.5749	1.6000	-0.25145E-01		*	
99	2.9848	1.5332	1.4516		I	*
100	2.0224	1.0489	.97353		I	*
101	.80991	1.2877	-.47779		*I	
102	.67732	1.8122	-1.1349	*	I	
103	9.8755	10.289	-.41305		*I	
104	3.9572	4.1007	-.14354		*I	
105	4.3017	4.4506	-.14893		*I	
106	3.9180	3.3899	.52804		I	*
107	3.4803	2.8010	.67923		I	*
108	1.3048	2.9470	-1.6421	*	I	
109	6.5486	6.9508	-.40224		*I	
110	1.4797	1.5983	-.11863		*I	
111	1.6657	2.0555	-.38976		*I	
112	1.6657	1.3274	.33828		I	*
113	.64961	1.0530	-.40339		*I	
114	2.3183	.92349	1.3948		I	*
115	7.0492	7.6860	-.63676	*	I	
116	3.2460	1.8988	1.3472		I	*
117	3.1334	2.0078	1.1256		I	*
118	1.7284	2.1758	-.44735	*	I	
119	2.4424	1.7671	.67532		I	*
120	3.1604	2.4033	.75706		I	*
121	5.3298	6.5677	-1.2379	*	I	

122	1.6788	1.3234	.35539		I *
123	1.3397	2.0583	-.71856	*	I
124	.97869	1.3174	-.33871	*	I
125	.92523	1.7406	-.81539	*	I
126	1.9015	2.7163	-.81477	*	I

DURBIN-WATSON = 1.2761 VON NEUMANN RATIO = 1.2864 RHO = .18857
 RESIDUAL SUM = 13.215 RESIDUAL VARIANCE = .92789
 SUM OF ABSOLUTE ERRORS= 99.506
 R-SQUARE BETWEEN OBSERVED AND PREDICTED = .8475
 RUNS TEST: 42 RUNS, 65 POS, 0 ZERO, 61 NEG NORMAL STATISTIC = -3.9282

_STAT / ALL

NAME	N	MEAN	ST. DEV	VARIANCE	MINIMUM	MAXIMUM
COUNTRY	126	11.000	6.0795	36.960	1.0000	21.000
YEARCNT	126	1986.5	5.1439	26.460	1979.0	1994.0
HEALTH	126	6.5948	1.6190	2.6213	2.9200	11.070
PENS	126	8.0461	2.8663	8.2158	2.6700	15.180
UNEM	126	1.4976	1.2027	1.4464	.00000	5.3300
WELF	126	2.4251	1.5530	2.4118	.35000	7.4500
TOT	126	18.519	5.9669	35.604	7.9300	32.870
TOTLAG3	126	17.529	5.7955	33.588	6.8400	32.810
INCOME	126	12015.	2985.3	0.89122E+07	4840.0	18762.
INCOME3	126	11396.	2934.9	0.86137E+07	4472.0	17864.
INCOME10	126	9873.4	2742.8	0.75229E+07	3078.0	16038.
GROWTH3	126	0.55310E-01	0.47383E-01	0.22451E-02	-0.51000E-01	.24300
VOTERS	126	.76823	.11314	0.12801E-01	.44000	.92400
TURNOVER	126	2.5079	1.5662	2.4528	.00000	7.6700
POP	126	36797.	55506.	0.30809E+10	3107.0	0.26447E+06
POPGROW3	126	0.17349E-01	0.18381E-01	0.33788E-03	-0.50000E-02	.15900
KAPW3	126	30142.	11125.	0.12376E+09	7442.0	75279.
PLKAPW03	126	0.26428E-01	0.89498E-02	0.80100E-04	0.11500E-01	0.58500E-01
INV	126	3333.2	1263.6	0.15968E+07	1027.0	7305.0
INV1	126	3142.4	1257.8	0.15821E+07	922.00	6970.0
INV10	126	1800.0	952.24	0.90676E+06	295.00	4794.0
SCHOOL10	126	1031.3	169.31	28667.	328.00	1343.0
UNIV10	126	77.310	46.983	2207.4	19.000	304.00
YR197880	126	.16667	.37417	.14000	.00000	1.0000
YR198183	126	.16667	.37417	.14000	.00000	1.0000
YR198486	126	.16667	.37417	.14000	.00000	1.0000
YR198789	126	.16667	.37417	.14000	.00000	1.0000
YR199092	126	.16667	.37417	.14000	.00000	1.0000
AUSSIES	126	0.47619E-01	.21381	0.45714E-01	.00000	1.0000
AUSTRIA	126	0.47619E-01	.21381	0.45714E-01	.00000	1.0000
BELGIUM	126	0.47619E-01	.21381	0.45714E-01	.00000	1.0000
CANADA	126	0.47619E-01	.21381	0.45714E-01	.00000	1.0000
DENMARK	126	0.47619E-01	.21381	0.45714E-01	.00000	1.0000
FINLAND	126	0.47619E-01	.21381	0.45714E-01	.00000	1.0000
FRANCE	126	0.47619E-01	.21381	0.45714E-01	.00000	1.0000
GERMANY	126	0.47619E-01	.21381	0.45714E-01	.00000	1.0000
POSTWALL	126	0.13228E-01	.10667	0.11380E-01	.00000	1.0000
GREECE	126	0.47619E-01	.21381	0.45714E-01	.00000	1.0000
IRELAND	126	0.47619E-01	.21381	0.45714E-01	.00000	1.0000
ITALY	126	0.47619E-01	.21381	0.45714E-01	.00000	1.0000

JAPAN	126	0.47619E-01	.21381	0.45714E-01	.00000	1.0000
NETHER	126	0.47619E-01	.21381	0.45714E-01	.00000	1.0000
NZ	126	0.47619E-01	.21381	0.45714E-01	.00000	1.0000
NORWAY	126	0.47619E-01	.21381	0.45714E-01	.00000	1.0000
PORTUGAL	126	0.47619E-01	.21381	0.45714E-01	.00000	1.0000
SPAIN	126	0.47619E-01	.21381	0.45714E-01	.00000	1.0000
SWEDEN	126	0.47619E-01	.21381	0.45714E-01	.00000	1.0000
SWITZER	126	0.47619E-01	.21381	0.45714E-01	.00000	1.0000
UK	126	0.47619E-01	.21381	0.45714E-01	.00000	1.0000
US	126	0.47619E-01	.21381	0.45714E-01	.00000	1.0000
CATH	126	.44143	.40152	.16122	.00000	1.0000
PROT	126	.44810	.39873	.15898	.00000	1.0000
CORPTISM	126	1.4762	1.5986	2.5554	.00000	4.0000
MILIT	126	2.6648	1.3248	1.7552	.00000	6.7700
HEALTHL3	126	6.4362	1.7028	2.8994	2.4300	11.070
PENSL3	126	7.6626	2.7047	7.3156	2.0400	13.390
UNEML3	126	1.3905	1.1281	1.2726	.00000	5.3300
WELFL3	126	2.1818	1.4722	2.1673	.11000	7.4500
TOTL3	126	17.529	5.7955	33.588	6.8400	32.810
INFLOECD	126	6.3517	2.3274	5.4169	4.4300	10.730
UNEMOECD	126	7.0433	.88103	.77622	5.3700	7.8300
ETHFRAC	126	.22857	.21332	0.45507E-01	0.10000E-01	.75000
OPEN	126	62.494	28.539	814.47	16.700	148.40
POP014	126	20.663	3.0602	9.3646	15.300	30.700
POP514	126	14.104	2.1348	4.5573	10.500	20.400
POP65	126	13.294	2.0692	4.2814	8.8000	17.800
BACKWARD	126	.43049	.30351	0.92121E-01	.00000	1.4330
INCTAX	126	11.606	5.1787	26.819	2.8600	27.330
CORPTAX	126	2.6707	1.2455	1.5513	1.0600	7.5000
PROPTAX	126	1.8851	.96362	.92856	.44000	4.8000
CONSTAX	126	10.669	3.6742	13.500	3.3000	17.270
PGROWTH3	126	0.60127E-01	0.62102E-01	0.38566E-02	-0.65000E-01	.62400
PHEALTH	126	6.5963	1.6127	2.6008	2.8200	13.000
PPENS	126	7.8985	2.6139	6.8326	2.9700	14.910
PWELF	126	1.4829	.92177	.84965	.00000	6.2700
PUNEM	126	2.3824	1.4554	2.1183	.00000	6.5700
PTOT	126	18.354	5.7437	32.990	7.7300	33.630
PINCTAX	126	11.400	4.5176	20.409	1.7600	24.490
PCORPTAX	126	2.6323	1.0434	1.0887	.00000	7.1800
PPROPTAX	126	1.8791	.83580	.69856	.00000	3.9600
PCONSTAX	126	11.134	5.6170	31.551	2.9000	58.330
EMPRATE	126	.64107	0.84106E-01	0.70738E-02	.47200	.81600
UNEMRATE	126	0.74897E-01	0.41861E-01	0.17524E-02	0.30000E-02	.22800
GDPPWKR	126	37803.	7067.3	0.49947E+08	19748.	55547.
NETRR	126	33.962	15.366	236.12	1.0000	79.400
NETRESW	126	18.210	10.636	113.13	.20000	48.500
COORD	126	1.9728	.63721	.40604	1.0000	3.0000
EPL	126	2.1941	1.2654	1.6014	.17300	4.6580
EPL3	126	2.1782	1.3212	1.7455	.17300	4.6580
PUBEMPSH	126	.18052	0.59631E-01	0.35559E-02	0.81000E-01	.33000
PRODREG	126	4.5264	.98307	.96643	1.7200	5.9800
ALMP	126	.65930	.58013	.33655	.00000	2.7730
NOALMPDT	126	.15873	.36688	.13460	.00000	1.0000
LINC	126	9.3574	.28620	0.81908E-01	8.4847	9.8396

LINC3	126	9.3020	.29481	0.86916E-01	8.4056	9.7905
LNKAPW3	126	10.243	.39314	.15456	8.9149	11.229
POP514SQ	126	203.44	63.944	4088.8	110.25	416.16
POP65SQ	126	180.97	54.806	3003.7	77.440	316.84
POP65CU	126	2517.8	1116.6	0.12467E+07	681.47	5639.8
AGDEMAND	126	-.69167	2.9473	8.6864	-3.3400	5.3600
MISERY	126	13.395	1.9235	3.6999	11.160	16.100
VOTERSSQ	126	.60288	.16150	0.26083E-01	.19360	.85378
VOTERSCU	126	.48119	.17835	0.31808E-01	0.85184E-01	.78889
CATHDOM	126	.15714	.22399	0.50171E-01	.00000	.50000
PORT1991	126	0.79365E-02	0.89087E-01	0.79365E-02	.00000	1.0000
PENSR1	126	.59628	.17348	0.30097E-01	.30341	1.0450
PENSR2	126	.47455	.14401	0.20739E-01	.23150	.84541
HEALTHSQ	126	46.091	22.549	508.45	8.5264	122.54
PENSSQ	126	72.890	48.090	2312.7	7.1289	230.43
WELFSQ	126	8.2737	10.076	101.52	.12250	55.503
UNEMSQ	126	3.6778	5.5299	30.579	.00000	28.409
TOTSQ	126	378.26	235.02	55233.	62.885	1080.4
TOTCUBED	126	8376.7	7601.3	0.57780E+08	498.68	35514.
PHEALSQ	126	46.091	22.669	513.90	7.9524	169.00
PPENSSQ	126	69.165	43.034	1851.9	8.8209	222.31
PWELFSQ	126	3.0420	4.1652	17.349	.00000	39.313
PUNEMSQ	126	7.7772	8.3757	70.153	.00000	43.165
PTOTSQ	126	369.60	222.32	49426.	59.753	1131.0
PTOTCU	126	8033.6	7052.2	0.49733E+08	461.89	38035.
PINCTAX2	126	150.20	113.14	12802.	3.0976	599.76
PINCTAX3	126	2202.6	2521.2	0.63563E+07	5.4518	14688.
PCORPTX2	126	8.0091	6.9144	47.808	.00000	51.552
PCORPTX3	126	27.951	42.392	1797.1	.00000	370.15
PPROPTX2	126	4.2241	3.5874	12.870	.00000	15.682
PPROPTX3	126	10.842	13.258	175.77	.00000	62.099
PCONSTX2	126	155.26	307.31	94439.	8.4100	3402.4
PCONSTX3	126	3293.9	17687.	0.31283E+09	24.389	0.19846E+06
YR199395	126	.16667	.37417	.14000	.00000	1.0000
SWFIN90S	126	0.23810E-01	.13939	0.19429E-01	.00000	1.0000
LNEMPRAT	126	-.45325	.13246	0.17547E-01	-.75078	-.20334
LNGDPWKR	126	10.521	.19852	0.39409E-01	9.8908	10.925
NETRESW2	126	443.82	471.73	0.22253E+06	0.40000E-01	2352.3

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