

Committee Name:
Joint Committee on Finance – Budget Hearings (JCF_BH)

Appointments

99hr_JCF_BH_Appoint_pt00

Clearinghouse Rules

99hr_JCF_BH_CRule_99-

Committee Hearings

99hr_JCF_BH_CH_pt00

Committee Reports

99hr_JCF_BH_CR_pt00

Executive Sessions

99hr_JCF_BH_ES_pt00

Hearing Records

99hr_ab0000

99hr_sb0000

Misc.

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Record of Committee Proceedings

99hr_JCF_BH_RCP_pt00

Higher Ed.

EXPERT'S REPORT

Duello v. University of Wisconsin

I was asked to examine the salaries of Ph.D. faculty in the University of Wisconsin medical school. The material I used in my study was

- 1) c.v.'s of the faculty
- 2) a spreadsheet of faculty salaries prepared by the plaintiff
- 3) information supplied by the university's attorney regarding what portions of faculty salaries of administrators were designated as administrative stipends.

Data

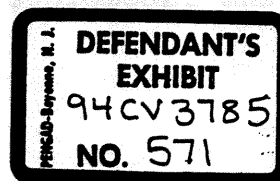
There were substantial problems with items 1) and 3). Many of the c.v.'s were obviously not up-to-date. Moreover, in one department no publications were listed on the c.v.'s. Supplemental c.v.'s corrected this problem for most, but not all, of the faculty in that unit. In other cases, no grants were listed although it would appear that at least at some time the faculty involved must have had grants.

The university attorney indicated that for some of the faculty with administrative positions they were unable to determine what portion of their salary was an administrative stipend. It is not clear in any case whether these stipends would disappear if the faculty ceased performing the administrative duties. Apparently in the past this was not always the case, and obviously it would be difficult to withdraw a stipend if no one knew how much it was.

Methodology

As it is clear that in a complex employment situation such as university faculty present, many factors, some quantifiable and others not, affect salaries. Thus I chose to model the faculty salaries with a multiple regression model. The predictor, or independent, variables I included were

- 1) sex (0 for women, 1 for men);
- 2) service, i.e., years on the University of Wisconsin faculty, as indicated on plaintiff's spreadsheet and the c.v.'s;
- 3) experience, i.e., year of post Ph.D. professional experience before joining the Wisconsin faculty, as determined from the c.v.'s;
- 4) department, where departments were grouped into nine clusters;



1064

- 5) whether or not the faculty member currently had a grant, as determined from the c.v.'s;
- 6) whether the faculty had grants in the past, as determined from the c.v.s'
- 7) publications in research journals, as determined from the c.v.'s.

Salary for the current year, less administrative stipend where relevant, was the response, or dependent, variable.

I feel fairly confident about the accuracy of the first four variables, less so about the others, for the reasons cited above. Nonetheless, I feel the overall procedure has given me a reasonably accurate picture of the salary situation because I got fairly consistent results whether or not I used the variables for which the data was questionable in some cases.

One would expect that experience, service, and productivity would be the indicators of faculty salary. Indeed, experience and service were measured quite accurately and proved very influential in all models. Productivity cannot be measured directly, nor with great accuracy. However, in this situation, grants and publications are at least an indicator. The incompleteness of the information causes some problems, as does the incomparability of the publication data. The typical publication patterns in the fields in the medical school are quite varied; in some disciplines typically there are many jointly authored papers, often relatively short, representing the production of a large lab whereas in others there are far fewer papers, with few authors, but generally longer. This problem is alleviated by using many regression models whose results are quite consistent.

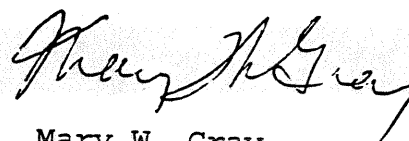
Clearly there are also omitted variables that might affect salary--teaching performance and service to the university and the profession to name just two. There is also the question of the quality of the publications as well as their number. However, in any regression model there are so-called error terms, which absorb the effect of omitted variables. The validity of the model (as an indication of sex differences) is not undercut so long as the effect of the omitted terms is random with respect to men and women. Thus, omission of teaching is a problem only if one sex is decidedly better at teaching, and similarly not being able to account for the quality of publications causes difficulty only if the quality of the papers of one sex is decidedly better than the quality of the papers of the other.

Even the inclusion of all of the variables left considerable variation in salary unexplained; the variability of the salaries of this group of faculty is quite remarkable. Some of this may be due to the incomplete information on administrative stipends.

Sixteen different models were used, with service, experience and sex included in every model and various combinations of the other variables used in the various models.

Influence of sex on salaries

In every model, no matter which of the variables were used, the regression coefficient of the sex variable was positive, indicating that for men and women similarly qualified on the other variables, men were paid more. The amounts ranged from \$1220.94 to \$3577.78, with a median of \$2598.53.



Mary W. Gray
Department of Mathematics
and Statistics
American University
Washington DC 20016-8050

email: mgray@american.edu
fax: 202-885-3155
phone: 202-885-3171

ADDENDUM TO EXPERT'S REPORT

Duello v. University of Wisconsin

Data

I updated the data base according to supplemental material supplied to me. There are still some faculty c.v.'s that do not appear to be up-to-date. I have no new information on what portion of the salaries of some faculty may be administrative stipends, so there may still be missing information on this topic.

Methodology

The same basic method and variables were used with the updated data base except that I only used nine different models for the entire set of faculty. Sex, service, and experience were in all of the models. In addition, I ran nine models based on male faculty alone, using the same variables otherwise.

Influence of sex on salaries

The results were not substantially different based on the new information. In every model including all of the faculty, the regression coefficient of the sex variable was positive, indicating that for men and women similarly qualified on the other variables, men were paid more. The amounts ranged from \$773.21 to \$2957.48.

phone: 202-885-3171
fax: 202-885-3155
e-mail: mgray@american.edu

Mary W. Gray
Department of Mathematics
and Statistics
American University
Washington DC 20016-8050

DEPT67 DEPT72 DEPT77 DEPT81 DEPT85
 DEPT9570 DEPT9742 DEPT976 VAR1 VAR2
 VAR3 VAR4 VAR5 VAR6 VAR7
 VAR8 PUB GRANT EXP OLDGRANT
 ADMIN

>SAVE 'G:\SYSTEM\RD1.SYS'\DOUBLE RESID
 >MODEL SALARY96 = CONSTANT+SEX+SERVICE+EXP
 >ESTIMATE

WED 3/26/97 4:36:47 PM G:\SYSTEM\2MARCH97.SYS
 8 CASES DELETED DUE TO MISSING DATA.

DEP VAR: SALARY96 N: 182 MULTIPLE R: 0.630 SQUARED MULTIPLE R: 0.397
 ADJUSTED SQUARED MULTIPLE R: .387 STANDARD ERROR OF ESTIMATE: 13912.396

VARIABLE	COEFFICIENT	STD ERROR	STD COEF TOLERANCE	T	P (2 TAIL)
CONSTANT	51169.295	3182.050	0.000	16.081	0.000
SEX	1787.197	2532.683	0.042	0.706	0.481
SERVICE	1269.727	121.133	0.695	10.482	0.000
EXP	1209.985	227.983	0.347	5.307	0.000

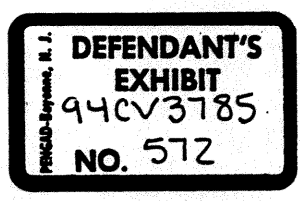
ANALYSIS OF VARIANCE

SOURCE	SUM-OF-SQUARES	DF	MEAN-SQUARE	F-RATIO	P
REGRESSION	.226879E+11	3	.756263E+10	39.072	0.000
RESIDUAL	.344527E+11	178	.193555E+09		

WARNING: CASE 3 IS AN OUTLIER (STUDENTIZED RESIDUAL = -2.898)
 (LEVERAGE = .075)
 WARNING: CASE 16 HAS LARGE LEVERAGE
 (LEVERAGE = .126)
 WARNING: CASE 70 HAS LARGE LEVERAGE
 (LEVERAGE = .072)
 WARNING: CASE 135 HAS LARGE LEVERAGE
 (LEVERAGE = .072)
 WARNING: CASE 151 IS AN OUTLIER (STUDENTIZED RESIDUAL = 3.619)
 (LEVERAGE = .082)
 WARNING: CASE 184 HAS LARGE LEVERAGE
 (LEVERAGE = .082)

DURBIN-WATSON D STATISTIC 1.970
 FIRST ORDER AUTOCORRELATION .011

RESIDUALS HAVE BEEN SAVED



10611

>S
>L SALARY96 = CONSTANT+SEX+SERVICE+EXP+PUB
>ESTIMATE

WED 3/26/97 4:37:30 PM G:\SYSTEM\2MARCH97.SYS
8 CASES DELETED DUE TO MISSING DATA.

DEP VAR: SALARY96 N: 182 MULTIPLE R: 0.652 SQUARED MULTIPLE R: 0.425
ADJUSTED SQUARED MULTIPLE R: .412 STANDARD ERROR OF ESTIMATE: 13628.454

VARIABLE	COEFFICIENT	STD ERROR	STD COEF	TOLERANCE	T	P (2 TAIL)
CONSTANT	52132.912	3134.593	0.000		16.631	0.000
SEX	773.205	2505.268	0.018	0.948	0.309	0.758
SERVICE	1040.051	142.445	0.569	0.535	7.301	0.000
EXP	919.800	244.519	0.264	0.661	3.762	0.000
PUB	105.519	36.205	0.206	0.651	2.915	0.004

ANALYSIS OF VARIANCE

SOURCE	SUM-OF-SQUARES	DF	MEAN-SQUARE	F-RATIO	P
REGRESSION	.242656E+11	4	.606639E+10	32.662	0.000
RESIDUAL	.328751E+11	177	.185735E+09		

WARNING: CASE 16 HAS LARGE LEVERAGE (LEVERAGE = .087)
 WARNING: CASE 70 HAS LARGE LEVERAGE (LEVERAGE = .140)
 WARNING: CASE 89 IS AN OUTLIER (STUDENTIZED RESIDUAL = 2.765)
 WARNING: CASE 111 HAS LARGE LEVERAGE (LEVERAGE = .224)
 WARNING: CASE 111 IS AN OUTLIER (STUDENTIZED RESIDUAL = -3.304)
 WARNING: CASE 135 HAS LARGE LEVERAGE (LEVERAGE = .080)
 WARNING: CASE 151 IS AN OUTLIER (STUDENTIZED RESIDUAL = 3.475)
 WARNING: CASE 161 HAS LARGE LEVERAGE (LEVERAGE = .102)
 WARNING: CASE 184 HAS LARGE LEVERAGE (LEVERAGE = .160)

DURBIN-WATSON D STATISTIC 1.917
FIRST ORDER AUTOCORRELATION .038

RESIDUALS HAVE BEEN SAVED

>SAVE 'G:\SYSTEM\RD3.SYS' /DOUBLE RESID
>MODEL SALARY96 = CONSTANT+SEX+SERVICE+EXP+PUB+GRANT

1102

>ESTIMATE

WED 3/26/97 4:38:05 PM G:\SYSTEMAT\2MARCH97.SYS
8 CASES DELETED DUE TO MISSING DATA.

DEP VAR: SALARY96 N: 182 MULTIPLE R: 0.676 SQUARED MULTIPLE R: 0.457
ADJUSTED SQUARED MULTIPLE R: .442 STANDARD ERROR OF ESTIMATE: 13275.217

VARIABLE	COEFFICIENT	STD ERROR	STD COEF	TOLERANCE	T	P (2 TAIL)
CONSTANT	46529.179	3507.259	0.000		13.267	0.000
SEX	1984.443	2468.675	0.046		0.804	0.423
SERVICE	1126.466	141.282	0.617		0.516	0.000
EXP	899.124	238.266	0.258		0.661	0.000
PUB	89.425	35.613	0.175		0.638	0.013
GRANT	6935.073	2135.656	0.189		0.913	0.001

ANALYSIS OF VARIANCE

SOURCE	SUM-OF-SQUARES	DF	MEAN-SQUARE	F-RATIO	P
REGRESSION	.261239E+11	5	.522478E+10	29.647	0.000
RESIDUAL	.310167E+11	176	.176231E+09		

WARNING: CASE 16 HAS LARGE LEVERAGE (LEVERAGE = .088)

WARNING: CASE 70 HAS LARGE LEVERAGE (LEVERAGE = .142)

WARNING: CASE 111 HAS LARGE LEVERAGE (LEVERAGE = .242)

WARNING: CASE 111 IS AN OUTLIER (STUDENTIZED RESIDUAL = -2.906)

WARNING: CASE 151 IS AN OUTLIER (STUDENTIZED RESIDUAL = 3.490)

WARNING: CASE 161 HAS LARGE LEVERAGE (LEVERAGE = .104)

WARNING: CASE 184 HAS LARGE LEVERAGE (LEVERAGE = .161)

DURBIN-WATSON D STATISTIC 1.862
FIRST ORDER AUTOCORRELATION .065

RESIDUALS HAVE BEEN SAVED

>SAVE 'G:\SYSTEMAT\RD4.SYS' /DOUBLE RESID
>MODEL SALARY96 = CONSTANT+SEX+SERVICE+EXP+PUB+GRANT+OLDGRANT
>ESTIMATE

30611

DEP VAR: SALARY96 N: 182 MULTIPLE R: 0.677 SQUARED MULTIPLE R: 0.459
 ADJUSTED SQUARED MULTIPLE R: .440 STANDARD ERROR OF ESTIMATE: 13290.989

VARIABLE	COEFFICIENT	STD ERROR	STD COEF	TOLERANCE	T	P (2 TAIL)
CONSTANT	46228.900	3533.397	0.000		13.083	0.000
SEX	1917.168	2473.179	0.045	0.925	0.775	0.439
SERVICE	1106.624	143.819	0.606	0.499	7.695	0.000
EXP	890.542	238.814	0.255	0.659	3.729	0.000
PUB	90.514	35.684	0.177	0.637	2.537	0.012
GRANT	5437.736	2901.824	0.148	0.496	1.874	0.063
OLDGRANT	2239.685	2934.436	0.058	0.535	0.763	0.446

ANALYSIS OF VARIANCE

SOURCE	SUM-OF-SQUARES	DF	MEAN-SQUARE	F-RATIO	P
REGRESSION	.262268E+11	6	.437113E+10	24.745	0.000
RESIDUAL	.309138E+11	175	.176650E+09		

WARNING: CASE 70 HAS LARGE LEVERAGE (LEVERAGE = .142)
 WARNING: CASE 111 HAS LARGE LEVERAGE (LEVERAGE = .249)
 WARNING: CASE 111 IS AN OUTLIER (STUDENTIZED RESIDUAL = -2.835)
 WARNING: CASE 151 IS AN OUTLIER (STUDENTIZED RESIDUAL = 3.468)
 WARNING: CASE 161 HAS LARGE LEVERAGE (LEVERAGE = .104)
 WARNING: CASE 184 HAS LARGE LEVERAGE (LEVERAGE = .162)

DURBIN-WATSON D STATISTIC 1.854
 FIRST ORDER AUTOCORRELATION .069

RESIDUALS HAVE BEEN SAVED

>SAVE 'G:\SYSTEM\RD5.SYS'/DOUBLE RESID
 >MODEL SALARY96 = CONSTANT+SEX+SERVICE+EXP+PUB+GRANT+OLDGRANT+VAR1+
 >VAR2+VAR3+VAR4+VAR5+VAR6+VAR7+VAR8
 >ESTIMATE

WED 3/26/97 4:39:25 PM G:\SYSTEM\2MARCH97.SYS
 8 CASES DELETED DUE TO MISSING DATA.

11
 8
 7

DEP VAR: SALARY96 N: 182 MULTIPLE R: 0.698 SQUARED MULTIPLE R: 0.487
 ADJUSTED SQUARED MULTIPLE R: .444 STANDARD ERROR OF ESTIMATE: 13251.069

VARIABLE	COEFFICIENT	STD ERROR	STD COEF	TOLERANCE	T	P (2 TAIL)
CONSTANT	41788.281	4432.397	0.000		9.428	0.000
SEX	1922.562	2503.720	0.045	0.898	0.768	0.444
SERVICE	1117.474	150.045	0.612	0.455	7.448	0.000
EXP	967.549	252.325	0.277	0.587	3.835	0.000
PUB	77.363	36.825	0.151	0.595	2.101	0.037
GRANT	6001.360	2982.899	0.163	0.466	2.012	0.046
OLDGRANT	3370.095	3105.684	0.087	0.474	1.085	0.279
VAR1	2009.478	6099.035	0.022	0.701	0.329	0.742
VAR2	1456.667	4176.445	0.024	0.701	0.329	0.742
VAR3	6414.810	4260.541	0.103	0.663	0.349	0.728
VAR4	2037.541	3884.947	0.038	0.579	0.524	0.601
VAR5	6885.938	3783.131	0.142	0.503	1.820	0.071
VAR6	-91.479	3902.366	-0.002	0.621	-0.023	0.981
VAR7	9573.477	4441.826	0.144	0.689	2.155	0.033
VAR8	2391.759	3639.808	0.049	0.544	0.657	0.512

ANALYSIS OF VARIANCE

SOURCE	SUM-OF-SQUARES	DF	MEAN-SQUARE	F-RATIO	P
REGRESSION	.278170E+11	14	.198693E+10	11.316	0.000
RESIDUAL	.293237E+11	167	.175591E+09		

WARNING: CASE	18 HAS LARGE LEVERAGE	(LEVERAGE =	.164)
WARNING: CASE	19 HAS LARGE LEVERAGE	(LEVERAGE =	.202)
WARNING: CASE	20 HAS LARGE LEVERAGE	(LEVERAGE =	.172)
WARNING: CASE	21 HAS LARGE LEVERAGE	(LEVERAGE =	.166)
WARNING: CASE	22 HAS LARGE LEVERAGE	(LEVERAGE =	.188)
WARNING: CASE	23 HAS LARGE LEVERAGE	(LEVERAGE =	.162)
WARNING: CASE	24 HAS LARGE LEVERAGE	(LEVERAGE =	.164)
WARNING: CASE	70 HAS LARGE LEVERAGE	(LEVERAGE =	.190)
WARNING: CASE	111 HAS LARGE LEVERAGE	(LEVERAGE =	.273)
WARNING: CASE	111 IS AN OUTLIER (STUDENTIZED RESIDUAL =	-2.920)	
WARNING: CASE	135 HAS LARGE LEVERAGE	(LEVERAGE =	.169)
WARNING: CASE	151 IS AN OUTLIER (STUDENTIZED RESIDUAL =	3.524)	
WARNING: CASE	184 HAS LARGE LEVERAGE	(LEVERAGE =	.179)

DURBIN-WATSON D STATISTIC 1.985
 FIRST ORDER AUTOCORRELATION .004

50611

5
 -91.479 3902.366 -0.002 0.21 -0.023 0.981
 9573.477 4441.826 0.144 0.89 2.155 0.033
 VAR8 2391.759 3639.808 0.049 0.544 0.657 0.512

ANALYSIS OF VARIANCE

SOURCE	SUM-OF-SQUARES	DF	MEAN-SQUARE	F-RATIO	P
REGRESSION	.278170E+11	14	.198693E+10	11.316	0.000
RESIDUAL	.293237E+11	167	.175591E+09		
WARNING: CASE	18 HAS LARGE LEVERAGE			(LEVERAGE =	.164)
WARNING: CASE	19 HAS LARGE LEVERAGE			(LEVERAGE =	.202)
WARNING: CASE	20 HAS LARGE LEVERAGE			(LEVERAGE =	.172)
WARNING: CASE	21 HAS LARGE LEVERAGE			(LEVERAGE =	.166)
WARNING: CASE	22 HAS LARGE LEVERAGE			(LEVERAGE =	.188)
WARNING: CASE	23 HAS LARGE LEVERAGE			(LEVERAGE =	.162)
WARNING: CASE	24 HAS LARGE LEVERAGE			(LEVERAGE =	.164)
WARNING: CASE	70 HAS LARGE LEVERAGE			(LEVERAGE =	.190)
WARNING: CASE	111 HAS LARGE LEVERAGE			(LEVERAGE =	.273)
WARNING: CASE	111 IS AN OUTLIER (STUDENTIZED RESIDUAL =				-2.920)
WARNING: CASE	135 HAS LARGE LEVERAGE			(LEVERAGE =	.169)
WARNING: CASE	151 IS AN OUTLIER (STUDENTIZED RESIDUAL =				3.524)
WARNING: CASE	184 HAS LARGE LEVERAGE			(LEVERAGE =	.179)

DURBIN-WATSON D STATISTIC 1.985
 FIRST ORDER AUTOCORRELATION .004

RESIDUALS HAVE BEEN SAVED

>MODEL SALARY96 = CONSTANT+SERVICE+SEX+EXP+GRANT+OLDGRANT+VAR1+VAR2+
 >VAR3+VAR4+VAR5+VAR6+VAR7+VAR8
 >ESTIMATE

WED 3/26/97 4:21:21 PM G:\SYSTEM\2MARCH97.SYS
 8 CASES DELETED DUE TO MISSING DATA.

DEP VAR: SALARY96 N: 182 MULTIPLE R: 0.688 SQUARED MULTIPLE R: 0.473
 ADJUSTED SQUARED MULTIPLE R: .432 STANDARD ERROR OF ESTIMATE: 13385.014
 VARIABLE COEFFICIENT STD ERROR STD COEF TOLERANCE T P(2 TAIL)

>SAVE 'G:\SYSTAT\RD6.SYS'/DOUBLE RESID
 >MODEL SALARY96 = CONSTANT+SERVICE+SEX+EXP+GRANT+OLDGRANT+VARI+VAR2+
 >VAR3+VAR4+VAR5+VAR6+VAR7+VAR8
 >ESTIMATE

WED 3/26/97 4:21:54 PM G:\SYSTAT\2MARCH97.SYS
 8 CASES DELETED DUE TO MISSING DATA.

DEP VAR: SALARY96 N: 182 MULTIPLE R: 0.688 SQUARED MULTIPLE R: 0.473
 ADJUSTED SQUARED MULTIPLE R: .432 STANDARD ERROR OF ESTIMATE: 13385.014

VARIABLE	COEFFICIENT	STD ERROR	STD COEF	TOLERANCE	F	P(2 TAIL)
CONSTANT	39999.620	4393.826	0.000		9.104	0.000
SERVICE	1294.167	125.513	0.708	0.664	10.311	0.000
SEX	2620.596	2506.659	0.061	0.914	1.045	0.297
EXP	1188.451	231.690	0.341	0.710	5.129	0.000
GRANT	6587.539	2999.840	0.179	0.470	2.196	0.029
OLDGRANT	3379.234	3137.074	0.088	0.474	1.077	0.283
VARI	3922.913	6091.604	0.043	0.717	0.644	0.520

SOURCE	SUM-OF-SQUARES	DF	MEAN-SQUARE	F-RATIO	P
REGRESSION	.270420E+11	13	.208015E+10	11.611	0.000
RESIDUAL	.300986E+11	168	.179159E+09		

ANALYSIS OF VARIANCE

SOURCE	SUM-OF-SQUARES	DF	MEAN-SQUARE	F-RATIO	P
REGRESSION	.270420E+11	13	.208015E+10	11.611	0.000
RESIDUAL	.300986E+11	168	.179159E+09		

DURBIN-WATSON D STATISTIC 2.055
 FIRST ORDER AUTOCORRELATION -.031

RESIDUALS HAVE BEEN SAVED

>SAVE 'G:\SYSTEM\RD7.SYS' /DOUBLE RESID
 >MODEL SALARY96 = CONSTANT+SERVICE+SEX+EXP+GRANT+VAR1+VAR2+VAR3+VAR4+
 >VAR5+VAR6+VAR7+VAR8
 >ESTIMATE

WED 3/26/97 4:24:02 PM G:\SYSTEM\2MARCH97.SYS
 8 CASES DELETED DUE TO MISSING DATA.

DEP VAR: SALARY96 N: 182 MULTIPLE R: 0.685 SQUARED MULTIPLE R: 0.470
 ADJUSTED SQUARED MULTIPLE R: .432 STANDARD ERROR OF ESTIMATE: 13391.362

1108

VARIABLE	COEFFICIENT	STD ERROR	STD COEF	TOLERANCE	F	P (2 TAIL)
CONSTANT	40949.344	4306.501	0.000		9.509	0.000
SERVICE	1316.894	123.786	0.721	0.683	10.638	0.000
SEX	2799.301	2502.349	0.065	0.918	1.119	0.265
EXP	1186.335	231.792	0.340	0.711	5.118	0.000
GRANT	8756.407	2224.809	0.238	0.856	3.936	0.000
VAR1	2302.242	5905.682	0.025	0.764	0.390	0.697
VAR2	781.386	4199.780	0.013	0.660	0.186	0.853
VAR3	7451.742	4276.129	0.119	0.672	1.743	0.083
VAR4	2784.235	3872.313	0.052	0.595	0.719	0.473
VAR5	6684.613	3708.993	0.138	0.535	1.802	0.073
VAR6	-363.330	3941.533	-0.007	0.621	-0.092	0.927
VAR7	9895.968	4452.151	0.149	0.700	2.223	0.028
VAR8	3040.658	3649.128	0.063	0.552	0.833	0.406

ANALYSIS OF VARIANCE

SOURCE	SUM-OF-SQUARES	DF	MEAN-SQUARE	F-RATIO	P
REGRESSION	.268341E+11	12	.223617E+10	12.470	0.000
RESIDUAL	.303065E+11	169	.179329E+09		

WARNING: CASE 18 HAS LARGE LEVERAGE (LEVERAGE = .147)
 WARNING: CASE 19 HAS LARGE LEVERAGE (LEVERAGE = .185)
 WARNING: CASE 20 HAS LARGE LEVERAGE (LEVERAGE = .169)
 WARNING: CASE 21 HAS LARGE LEVERAGE (LEVERAGE = .147)
 WARNING: CASE 22 HAS LARGE LEVERAGE (LEVERAGE = .172)
 WARNING: CASE 23 HAS LARGE LEVERAGE (LEVERAGE = .147)
 WARNING: CASE 24 HAS LARGE LEVERAGE (LEVERAGE = .147)
 WARNING: CASE 70 HAS LARGE LEVERAGE (LEVERAGE = .165)
 WARNING: CASE 135 HAS LARGE LEVERAGE (LEVERAGE = .155)
 WARNING: CASE 151 IS AN OUTLIER (STUDENTIZED RESIDUAL = 3.630)

DURBIN-WATSON D STATISTIC 2.059
 FIRST ORDER AUTOCORRELATION -.033
 RESIDUALS HAVE BEEN SAVED

>SAVE 'G:\SYSTAT\RD8.SYS'\DOUBLE RESID
 >MODEL SALARY96 = CONSTANT+SERVICE+SEX+EXP+GRANT
 >ESTIMATE
 WED 3/26/97 4:25:25 PM G:\SYSTAT\2MARCH97.SYS

11806

8 CASES DELETED DUE TO MISSING DATA.

DEP VAR: SALARY96 N: 182 MULTIPLE R: 0.662 SQUARED MULTIPLE R: 0.438
 ADJUSTED SQUARED MULTIPLE R: .425 STANDARD ERROR OF ESTIMATE: 13472.697

VARIABLE	COEFFICIENT	STD ERROR	STD COEF	TOLERANCE	T	P (2 TAIL)
CONSTANT	45125.308	3513.917	0.000		12.842	0.000
SERVICE	1326.640	118.378	0.726	0.756	11.207	0.000
SEX	2957.480	2474.341	0.069	0.950	1.195	0.234
EXP	1138.060	221.690	0.326	0.786	5.134	0.000
GRANT	7681.392	2146.334	0.209	0.931	3.579	0.000

ANALYSIS OF VARIANCE

SOURCE	SUM-OF-SQUARES	DF	MEAN-SQUARE	F-RATIO	P
REGRESSION	.250127E+11	4	.625318E+10	34.450	0.000
RESIDUAL	.321279E+11	177	.181514E+09		

WARNING: CASE 3 IS AN OUTLIER (STUDENTIZED RESIDUAL = -2.716)
 WARNING: CASE 70 HAS LARGE LEVERAGE (LEVERAGE = .127)
 WARNING: CASE 151 IS AN OUTLIER (STUDENTIZED RESIDUAL = 3.614)
 WARNING: CASE 184 HAS LARGE LEVERAGE (LEVERAGE = .082).

DURBIN-WATSON D STATISTIC 1.918
 FIRST ORDER AUTOCORRELATION .037
 RESIDUALS HAVE BEEN SAVED

>SAVE 'G:\SYSTAT\RD9.SYS'/DOUBLE RESID
 >MODEL SALARY96 = CONSTANT+SERVICE+SEX+EXP+GRANT+OLDGRANT
 >ESTIMATE

WED 3/26/97 4:25:56 PM G:\SYSTAT\2MARCH97.SYS
 8 CASES DELETED DUE TO MISSING DATA.

DEP VAR: SALARY96 N: 182 MULTIPLE R: 0.663 SQUARED MULTIPLE R: 0.439
 ADJUSTED SQUARED MULTIPLE R: .423 STANDARD ERROR OF ESTIMATE: 13494.615

110901

VARIABLE	COEFFICIENT	STD ERROR	STD COEF	TOLERANCE	T	P (2 TAIL)
CONSTANT	44850.120	3544.826	0.000		12.652	0.000
SERVICE	1311.551	120.806	0.718	0.729	10.857	0.000
SEX	2909.428	2479.460	0.068	0.949	1.173	0.242
EXP	1133.143	222.179	0.325	0.785	5.100	0.000
GRANT	6391.009	2921.468	0.174	0.504	2.188	0.030
OLDGRANT	1941.919	2977.008	0.050	0.535	0.652	0.515

ANALYSIS OF VARIANCE

SOURCE	SUM-OF-SQUARES	DF	MEAN-SQUARE	F-RATIO	P
REGRESSION	.250902E+11	5	.501804E+10	27.556	0.000
RESIDUAL	.320504E+11	176	.182105E+09		

WARNING: CASE 3 IS AN OUTLIER (STUDENTIZED RESIDUAL = -2.662)
 WARNING: CASE 70 HAS LARGE LEVERAGE (LEVERAGE = .127)
 WARNING: CASE 151 IS AN OUTLIER (STUDENTIZED RESIDUAL = 3.595)

DURBIN-WATSON D STATISTIC 1.911
 FIRST ORDER AUTOCORRELATION .041

RESIDUALS HAVE BEEN SAVED

>use men.sys

11 8011

DEP VAR: SALARY96 N: 142 MULTIPLE R: 0.612 SQUARED MULTIPLE R: 0.374
ADJUSTED SQUARED MULTIPLE R: .365 STANDARD ERROR OF ESTIMATE: 14528.805

VARIABLE	COEFFICIENT	STD ERROR	STD COEF	TOLERANCE	T	P (2 TAIL)
CONSTANT	52741.390	3263.692	0.000		16.160	0.000
SERVICE	1247.068	137.393	0.690		9.077	0.000
EXP	1293.094	255.729	0.385		5.056	0.000

ANALYSIS OF VARIANCE

SOURCE	SUM-OF-SQUARES	DF	MEAN-SQUARE	F-RATIO	P
REGRESSION	.175570E+11	2	.877851E+10	41.587	0.000
RESIDUAL	.293410E+11	139	.211086E+09		

WARNING: CASE 3 IS AN OUTLIER (STUDENTIZED RESIDUAL = -2.750)
 WARNING: CASE 16 HAS LARGE LEVERAGE (LEVERAGE = .084)
 WARNING: CASE 70 HAS LARGE LEVERAGE (LEVERAGE = .144)
 WARNING: CASE 111 HAS LARGE LEVERAGE (LEVERAGE = .074)
 WARNING: CASE 151 IS AN OUTLIER (STUDENTIZED RESIDUAL = 3.388)
 WARNING: CASE 184 HAS LARGE LEVERAGE (LEVERAGE = .092)

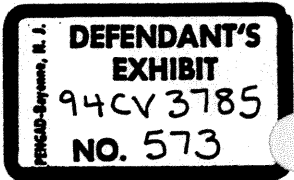
DURBIN-WATSON D STATISTIC 1.945
FIRST ORDER AUTOCORRELATION .022

RESIDUALS HAVE BEEN SAVED

>SAVE 'G:\SYSTAT\MRD2.SYS' /DOUBLE RESID
>MODEL SALARY96 = CONSTANT+SERVICE+EXP+PUB
>ESTIMATE

WED 3/26/97 4:27:58 PM G:\SYSTAT\MEN.SYS
48 CASES DELETED DUE TO MISSING DATA.

DEP VAR: SALARY96 N: 142 MULTIPLE R: 0.630 SQUARED MULTIPLE R: 0.397
ADJUSTED SQUARED MULTIPLE R: .384 STANDARD ERROR OF ESTIMATE: 14317.301



VARIABLE	COEFFICIENT	STD ERROR	STD COEF TOLERANCE	T	P(2 TAIL)
CONSTANT	52930.279	3217.260	0.000	16.452	0.000
SERVICE	1044.497	162.232	0.578	6.438	0.000
EXP	1025.529	278.286	0.305	3.685	0.000
PUB	89.751	39.598	0.182	2.267	0.025

ANALYSIS OF VARIANCE

SOURCE	SUM-OF-SQUARES	DF	MEAN-SQUARE	F-RATIO	P
REGRESSION	.186101E+11	3	.620335E+10	30.262	0.000
RESIDUAL	.282879E+11	138	.204985E+09		

WARNING: CASE 16 HAS LARGE LEVERAGE (LEVERAGE = .099)
 WARNING: CASE 70 HAS LARGE LEVERAGE (LEVERAGE = .162)
 WARNING: CASE 111 HAS LARGE LEVERAGE (LEVERAGE = .241)
 WARNING: CASE 111 IS AN OUTLIER (STUDENTIZED RESIDUAL = -2.954)
 WARNING: CASE 151 IS AN OUTLIER (STUDENTIZED RESIDUAL = 3.275)
 WARNING: CASE 161 HAS LARGE LEVERAGE (LEVERAGE = .110)
 WARNING: CASE 184 HAS LARGE LEVERAGE (LEVERAGE = .172)

DURBIN-WATSON D STATISTIC 1.907
 FIRST ORDER AUTOCORRELATION .040
 RESIDUALS HAVE BEEN SAVED

>SAVE 'G:\SYSTAT\MRD3.SYS'/DOUBLE RESID
 >MODEL SALARY96 = CONSTANT+SERVICE+EXP+PUB+GRANT
 >ESTIMATE

WED 3/26/97 4:28:48 PM G:\SYSTAT\MEN.SYS
 48 CASES DELETED DUE TO MISSING DATA.

DEP VAR: SALARY96 N: 142 MULTIPLE R: 0.654 SQUARED MULTIPLE R: 0.427
 ADJUSTED SQUARED MULTIPLE R: .410 STANDARD ERROR OF ESTIMATE: 14003.912

VARIABLE	COEFFICIENT	STD ERROR	STD COEF TOLERANCE	T	P(2 TAIL)
CONSTANT	48342.725	3578.713	0.000	13.508	0.000
SERVICE	1142.519	162.805	0.632	7.018	0.000
EXP	1006.308	272.289	0.299	3.696	0.000

602

PUR 76.713 39.033 0.155 0.71 1.965 0.051
 G 6729.370 2499.978 0.182 15 2.692 0.008

ANALYSIS OF VARIANCE

SOURCE	SUM-OF-SQUARES	DF	MEAN-SQUARE	F-RATIO	P
REGRESSION	.200310E+11	4	.500775E+10	25.535	0.000
RESIDUAL	.268670E+11	137	.196110E+09		

WARNING: CASE 16 HAS LARGE LEVERAGE (LEVERAGE = .101)
 WARNING: CASE 70 HAS LARGE LEVERAGE (LEVERAGE = .163)
 WARNING: CASE 111 HAS LARGE LEVERAGE (LEVERAGE = .257)
 WARNING: CASE 111 IS AN OUTLIER (STUDENTIZED RESIDUAL = -2.639)
 WARNING: CASE 151 IS AN OUTLIER (STUDENTIZED RESIDUAL = 3.277)
 WARNING: CASE 161 HAS LARGE LEVERAGE (LEVERAGE = .115)
 WARNING: CASE 184 HAS LARGE LEVERAGE (LEVERAGE = .172)

DURBIN-WATSON D STATISTIC 1.855
 FIRST ORDER AUTOCORRELATION .063
 RESIDUALS HAVE BEEN SAVED

>SAVE 'G:\SYSTAT\WRD4.SYS'/DOUBLE RESID
 >MODEL SALARY96 = CONSTANT+SERVICE+EXP+PUB+GRANT+OLDGRANT
 >ESTIMATE

WED 3/26/97 4:29:15 PM G:\SYSTAT\MEN.SYS
 48 CASES DELETED DUE TO MISSING DATA.

DEP VAR: SALARY96 N: 142 MULTIPLE R: 0.654 SQUARED MULTIPLE R: 0.428
 ADJUSTED SQUARED MULTIPLE R: .407 STANDARD ERROR OF ESTIMATE: 14043.526

VARIABLE	COEFFICIENT	STD ERROR	STD COEF	TOLERANCE	T	P(2 TAIL)
CONSTANT	48050.308	3640.669	0.000		13.198	0.000
SERVICE	1128.202	165.994	0.624	0.498	6.797	0.000
EXP	996.426	273.841	0.296	0.634	3.639	0.000
PUB	77.812	39.211	0.157	0.669	1.984	0.049
GRANT	5789.630	3186.754	0.157	0.566	1.817	0.071
OLDGRANT	1546.434	3237.311	0.040	0.612	0.478	0.634

3 of 6

ANALYSIS OF VARIANCE

SOURCE	SUM-OF-SQUARES	DF	MEAN-SQUARE	F-RATIO	P
REGRESSION	.200760E+11	5	.401520E+10	20.359	0.000
RESIDUAL	.268220E+11	136	.197221E+09		

WARNING: CASE 70 HAS LARGE LEVERAGE (LEVERAGE = .163)
 WARNING: CASE 111 HAS LARGE LEVERAGE (LEVERAGE = .266)
 WARNING: CASE 151 IS AN OUTLIER (STUDENTIZED RESIDUAL = 3.256)
 WARNING: CASE 161 HAS LARGE LEVERAGE (LEVERAGE = .115)
 WARNING: CASE 184 HAS LARGE LEVERAGE (LEVERAGE = .174)

DURBIN-WATSON D STATISTIC 1.841
 FIRST ORDER AUTOCORRELATION .070
 RESIDUALS HAVE BEEN SAVED

>SAVE 'G:\SYSTEM\WRD5.SYS'\DOUBLE RESID
 >MODEL SALARY96 = CONSTANT+SERVICE+EXP+PUB+GRANT+OLDGRANT+VAR1+VAR2+
 >VAR3+VAR4+VAR5+VAR6+VAR7+VAR8
 >ESTIMATE

WED 3/26/97 4:30:00 PM G:\SYSTEM\MEN.SYS
 48 CASES DELETED DUE TO MISSING DATA.

DEP VAR: SALARY96 N: 142 MULTIPLE R: 0.679 SQUARED MULTIPLE R: 0.461
 ADJUSTED SQUARED MULTIPLE R: .407 STANDARD ERROR OF ESTIMATE: 14046.559

VARIABLE	COEFFICIENT	STD ERROR	STD COEF	TOLERANCE	T	P (2 TAIL)
CONSTANT	41277.371	5108.367	0.000		8.080	0.000
SERVICE	1174.329	177.302	0.650	0.437	6.623	0.000
EXP	1105.354	296.689	0.329	0.541	3.726	0.000
PUB	63.134	40.823	0.128	0.617	1.547	0.124
GRANT	6555.043	3322.672	0.177	0.521	1.973	0.051
OLDGRANT	3029.630	3529.798	0.078	0.515	0.858	0.392
VAR1	4651.501	7231.448	0.051	0.657	0.643	0.521
VAR2	3905.794	5002.621	0.064	0.625	0.781	0.436
VAR3	7714.200	5282.601	0.118	0.644	1.460	0.147
VAR4	3453.676	4554.932	0.067	0.531	0.758	0.450
VAR5	8404.954	4561.234	0.173	0.476	1.843	0.068

6 of 5

VARIABLE	SUM-OF-SQUARES	DF	MEAN-SQUARE	F-RATIO	P
V1	858.041	4955.926	0.014	37	0.173
V2	12077.399	5445.086	0.178	56	2.218
VAR8	3360.008	4550.183	0.066	0.533	0.738
					0.462

ANALYSIS OF VARIANCE

SOURCE	SUM-OF-SQUARES	DF	MEAN-SQUARE	F-RATIO	P
REGRESSION	.2164299E+11	13	.166484E+10	8.438	0.000
RESIDUAL	.252551E+11	128	.197306E+09		

WARNING: CASE 19 HAS LARGE LEVERAGE (LEVERAGE = .247)
 WARNING: CASE 20 HAS LARGE LEVERAGE (LEVERAGE = .201)
 WARNING: CASE 24 HAS LARGE LEVERAGE (LEVERAGE = .197)
 WARNING: CASE 70 HAS LARGE LEVERAGE (LEVERAGE = .222)
 WARNING: CASE 111 HAS LARGE LEVERAGE (LEVERAGE = .294)
 WARNING: CASE 111 IS AN OUTLIER (STUDENTIZED RESIDUAL = -2.710)
 WARNING: CASE 151 IS AN OUTLIER (STUDENTIZED RESIDUAL = 3.327)
 WARNING: CASE 184 HAS LARGE LEVERAGE (LEVERAGE = .196)

DURBIN-WATSON D STATISTIC 1.992
 FIRST ORDER AUTOCORRELATION -.005

RESIDUALS HAVE BEEN SAVED

>SAVE 'G:\SYSTAT\MRD6.SYS' /DOUBLE RESID
 >MODEL SALARY96 = CONSTANT+SERVICE+EXP+GRANT+OLDGRANT+VAR1+VAR2+VAR3+
 >VAR4+VAR5+VAR6+VAR7+VAR8
 >ESTIMATE

WED 3/26/97 4:30:27 PM G:\SYSTAT\MEN.SYS
 48 CASES DELETED DUE TO MISSING DATA.

DEP VAR: SALARY96 N: 142 MULTIPLE R: 0.672 SQUARED MULTIPLE R: 0.451
 ADJUSTED SQUARED MULTIPLE R: .400 STANDARD ERROR OF ESTIMATE: 14122.128

VARIABLE	COEFFICIENT	STD ERROR	STD COEF	TOLERANCE	T	P (2 TAIL)
CONSTANT	40004.060	5068.703	0.000		7.892	0.000
SERVICE	1328.862	147.251	0.735	0.640	9.024	0.000
EXP	1302.805	269.253	0.387	0.663	4.839	0.000
GRANT	7087.815	3322.544	0.192	0.527	2.133	0.035

58

	OLDGRANT								
VAR1	2931.505	3548.215	0.075	0.515	0.826	0.410			
VAR2	6463.839	7174.253	0.072	0.674	0.901	0.369			
VAR3	3847.099	5029.389	0.063	0.625	0.765	0.446			
VAR4	8885.128	5256.187	0.136	0.657	1.690	0.093			
VAR5	4606.877	4517.656	0.090	0.546	1.020	0.310			
VAR6	9080.470	4564.697	0.187	0.480	1.989	0.049			
VAR7	839.114	4982.573	0.014	0.637	0.168	0.867			
VAR8	13039.101	5438.563	0.192	0.664	2.398	0.018			
VAR8	4306.567	4533.087	0.084	0.542	0.950	0.344			

ANALYSIS OF VARIANCE

SOURCE	SUM-OF-SQUARES	DF	MEAN-SQUARE	F-RATIO	P
REGRESSION	.211710E+11	12	.176425E+10	8.846	0.000
RESIDUAL	.257270E+11	129	.199434E+09		

WARNING: CASE 19 HAS LARGE LEVERAGE (LEVERAGE = .240)
 WARNING: CASE 20 HAS LARGE LEVERAGE (LEVERAGE = .200)
 WARNING: CASE 24 HAS LARGE LEVERAGE (LEVERAGE = .190)
 WARNING: CASE 70 HAS LARGE LEVERAGE (LEVERAGE = .190)
 WARNING: CASE 151 IS AN OUTLIER (STUDENTIZED RESIDUAL = 3.391)

DURBIN-WATSON D STATISTIC 2.045
 FIRST ORDER AUTOCORRELATION -.031
 RESIDUALS HAVE BEEN SAVED

>SAVE 'G:\SYSTAT\MRD7.SYS'/DOUBLE RESID
 >MODEL SALARY96 = CONSTANT+SERVICE+EXP+GRANT+VAR1+VAR2+VAR3+VAR4+VAR5+
 >VAR6+VAR7+VAR8
 >ESTIMATE

WED 3/26/97 4:30:54 PM G:\SYSTAT\MEN.SYS
 48 CASES DELETED DUE TO MISSING DATA.

DEP VAR: SALARY96 N: 142 MULTIPLE R: 0.670 SQUARED MULTIPLE R: 0.449
 ADJUSTED SQUARED MULTIPLE R: .402 STANDARD ERROR OF ESTIMATE: 14104.877

VARIABLE	COEFFICIENT	STD ERROR	STD COEF TOLERANCE	T	P (2 TAIL)
CONSTANT	41104.021	4884.753	0.000	8.415	0.000

SOURCE	SUM-OF-SQUARES	DF	MEAN-SQUARE	F-RATIO	P
REGRESSION	.210348E+11	11	.191226E+10	9.612	0.000
RESIDUAL	.258632E+11	130	.198948E+09		

SOURCE	SUM-OF-SQUARES	DF	MEAN-SQUARE	F-RATIO	P
WARNING: CASE	19 HAS LARGE LEVERAGE				
WARNING: CASE	20 HAS LARGE LEVERAGE				
WARNING: CASE	70 HAS LARGE LEVERAGE				
WARNING: CASE	151 IS AN OUTLIER (STUDENTIZED RESIDUAL = 3.412)				

SOURCE	SUM-OF-SQUARES	DF	MEAN-SQUARE	F-RATIO	P
REGRESSION	.210348E+11	11	.191226E+10	9.612	0.000
RESIDUAL	.258632E+11	130	.198948E+09		

ANALYSIS OF VARIANCE

DURBIN-WATSON D STATISTIC 2.064
 FIRST ORDER AUTOCORRELATION -.040
 RESIDUALS HAVE BEEN SAVED

>SAVE 'G:\SYSTEM\MRD8.SYS'/DOUBLE RESID
 >MODEL SALARY96 = CONSTANT+SERVICE+EXP+GRANT
 >ESTIMATE

WED 3/26/97 4:31:41 PM G:\SYSTEM\MEN.SYS
 48 CASES DELETED DUE TO MISSING DATA.

DEP VAR: SALARY96 N: 142 MULTIPLE R: 0.641 SQUARED MULTIPLE R: 0.411
 ADJUSTED SQUARED MULTIPLE R: .398 STANDARD ERROR OF ESTIMATE: 14148.407

VARIABLE	COEFFICIENT	STD ERROR	STD COEF TOLERANCE	T	P (2 TAIL)
CONSTANT	47768.142	3603.554	0.000	13.256	0.000

AVG1 47768.142
 AVG2 3603.554
 AVG3 0.000
 AVG4 13.256
 AVG5 0.000
 AVG6
 AVG7
 AVG8
 AVG9
 AVG10
 AVG11
 AVG12
 AVG13
 AVG14
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 AVG49
 AVG50

609

SERVICE	1321.878	136.213	0.732	0.751	9.705	0.000
EXP	1229.744	249.972	0.366	0.773	4.920	0.000
GRANT	7339.030	2506.254	0.199	0.929	2.928	0.004

ANALYSIS OF VARIANCE

SOURCE	SUM-OF-SQUARES	DF	MEAN-SQUARE	F-RATIO	P
REGRESSION	.192735E+11	3	.642451E+10	32.094	0.000
RESIDUAL	.276245E+11	138	.200177E+09		

WARNING: CASE 70 HAS LARGE LEVERAGE (LEVERAGE = .144)
 WARNING: CASE 151 IS AN OUTLIER (STUDENTIZED RESIDUAL = 3.376)
 WARNING: CASE 184 HAS LARGE LEVERAGE (LEVERAGE = .092)

DURBIN-WATSON D STATISTIC 1.891
 FIRST ORDER AUTOCORRELATION .046
 RESIDUALS HAVE BEEN SAVED

>SAVE 'G:\SYSTAT\MRD9.SYS'/DOUBLE RESID
 >MODEL SALARY96 = CONSTANT+SERVICE+EXP+GRANT+OLDGRANT
 >ESTIMATE

WED 3/26/97 4:32:13 PM G:\SYSTAT\MEN.SYS
 48 CASES DELETED DUE TO MISSING DATA.

DEP VAR: SALARY96 N: 142 MULTIPLE R: 0.641 SQUARED MULTIPLE R: 0.412
 ADJUSTED SQUARED MULTIPLE R: .394 STANDARD ERROR OF ESTIMATE: 14193.309

VARIABLE	COEFFICIENT	STD ERROR	STD COEF	TOLERANCE	T	P(2 TAIL)
CONSTANT	47540.751	3670.336	0.000		12.953	0.000
SERVICE	1312.993	138.880	0.727		9.454	0.000
EXP	1224.690	251.162	0.364		4.876	0.000
GRANT	6634.872	3191.844	0.179		2.079	0.040
OLDGRANT	1169.627	3266.206	0.030		0.358	0.721

ANALYSIS OF VARIANCE

SOURCE	SUM-OF-SQUARES	DF	MEAN-SQUARE	F-RATIO	P
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6 of 8

48 CASES DELETED DUE TO MISSING DATA.

DEP VAR: SALARY96 N: 142 MULTIPLE R: 0.612 SQUARED MULTIPLE R: 0.374
ADJUSTED SQUARED MULTIPLE R: .365 STANDARD ERROR OF ESTIMATE: 14528.805

VARIABLE	COEFFICIENT	STD ERROR	STD COEF	TOLEANCE	T	P (2 TAIL)
CONSTANT	52741.390	3263.692	0.000		16.160	0.000
SERVICE	1247.068	137.393	0.690		9.077	0.000
EXP	1293.094	255.729	0.385		5.056	0.000

ANALYSIS OF VARIANCE

SOURCE	SUM-OF-SQUARES	DF	MEAN-SQUARE	F-RATIO	P
REGRESSION	.175570E+11	2	.877851E+10	41.587	0.000
RESIDUAL	.293410E+11	139	.211086E+09		

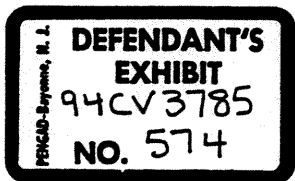
WARNING: CASE 3 IS AN OUTLIER (STUDENTIZED RESIDUAL = -2.750)
 WARNING: CASE 16 HAS LARGE LEVERAGE (LEVERAGE = .084)
 WARNING: CASE 70 HAS LARGE LEVERAGE (LEVERAGE = .144)
 WARNING: CASE 111 HAS LARGE LEVERAGE (LEVERAGE = .074)
 WARNING: CASE 151 IS AN OUTLIER (STUDENTIZED RESIDUAL = 3.388)
 WARNING: CASE 184 HAS LARGE LEVERAGE (LEVERAGE = .092)

DURBIN-WATSON D STATISTIC 1.945
FIRST ORDER AUTOCORRELATION .022
RESIDUALS HAVE BEEN SAVED

>SAVE 'G:\SYSTEM\MRD2.SYS' /DOUBLE RESID
>MODEL SALARY96 = CONSTANT+SERVICE+EXP+PUB
>ESTIMATE

WED 3/26/97 4:27:58 PM G:\SYSTEM\MEN.SYS
48 CASES DELETED DUE TO MISSING DATA.

DEP VAR: SALARY96 N: 142 MULTIPLE R: 0.630 SQUARED MULTIPLE R: 0.397
ADJUSTED SQUARED MULTIPLE R: .384 STANDARD ERROR OF ESTIMATE: 14317.301



1069

T	TABLE	COEFFICIENT	STD ERROR	STD COEF	TOI	NCE	T	P (2 TAIL)
	CONSTANT	52930.279	3217.260	0.000			16.452	0.000
	SERVICE	1044.497	162.232	0.578	0.542		6.438	0.000
	EXP	1025.529	278.286	0.305	0.638		3.685	0.000
	PUB	89.751	39.598	0.182	0.681		2.267	0.025

ANALYSIS OF VARIANCE

SOURCE	SUM-OF-SQUARES	DF	MEAN-SQUARE	F-RATIO	P
REGRESSION	.186101E+11	3	.620335E+10	30.262	0.000
RESIDUAL	.282879E+11	138	.204985E+09		

WARNING: CASE 16 HAS LARGE LEVERAGE (LEVERAGE = .099)
 WARNING: CASE 70 HAS LARGE LEVERAGE (LEVERAGE = .162)
 WARNING: CASE 111 HAS LARGE LEVERAGE (LEVERAGE = .241)
 WARNING: CASE 111 IS AN OUTLIER (STUDENTIZED RESIDUAL = -2.954)
 WARNING: CASE 151 IS AN OUTLIER (STUDENTIZED RESIDUAL = 3.275)
 WARNING: CASE 161 HAS LARGE LEVERAGE (LEVERAGE = .110)
 WARNING: CASE 184 HAS LARGE LEVERAGE (LEVERAGE = .172)

DURBIN-WATSON D STATISTIC 1.907
 FIRST ORDER AUTOCORRELATION .040

RESIDUALS HAVE BEEN SAVED

>SAVE 'G:\SYSTAT\MRD3.SYS' /DOUBLE RESID
 >MODEL SALARY96 = CONSTANT+SERVICE+EXP+PUB+GRANT
 >ESTIMATE

WED 3/26/97 4:28:48 PM G:\SYSTAT\MEN.SYS
 48 CASES DELETED DUE TO MISSING DATA.

DEP VAR: SALARY96 N: 142 MULTIPLE R: 0.654 SQUARED MULTIPLE R: 0.427
 ADJUSTED SQUARED MULTIPLE R: .410 STANDARD ERROR OF ESTIMATE: 14003.912

VARIABLE	COEFFICIENT	STD ERROR	STD COEF	TOLERANCE	T	P (2 TAIL)
CONSTANT	48342.725	3578.713	0.000		13.508	0.000
SERVICE	1142.519	162.805	0.632	0.515	7.018	0.000
EXP	1006.308	272.289	0.299	0.638	3.696	0.000

PUB 76.713 39.033 0.155 0.671 1.965 0.051
 GRANT 6729.370 2499.978 0.182 0.915 2.692 0.008

ANALYSIS OF VARIANCE

SOURCE	SUM-OF-SQUARES	DF	MEAN-SQUARE	F-RATIO	P
REGRESSION	.200310E+11	4	.500775E+10	25.535	0.000
RESIDUAL	.268670E+11	137	.196110E+09		

WARNING: CASE 16 HAS LARGE LEVERAGE (LEVERAGE = .101)
 WARNING: CASE 70 HAS LARGE LEVERAGE (LEVERAGE = .163)
 WARNING: CASE 111 HAS LARGE LEVERAGE (LEVERAGE = .257)
 WARNING: CASE 111 IS AN OUTLIER (STUDENTIZED RESIDUAL = -2.639)
 WARNING: CASE 151 IS AN OUTLIER (STUDENTIZED RESIDUAL = 3.277)
 WARNING: CASE 161 HAS LARGE LEVERAGE (LEVERAGE = .115)
 WARNING: CASE 184 HAS LARGE LEVERAGE (LEVERAGE = .172)

DURBIN-WATSON D STATISTIC 1.855
 FIRST ORDER AUTOCORRELATION .063
 RESIDUALS HAVE BEEN SAVED

>SAVE 'G:\SYSTAT\MRD4.SYS'/DOUBLE RESID
 >MODEL SALARY96 = CONSTANT+SERVICE+EXP+PUB+GRANT+OLDGRANT
 >ESTIMATE

WED 3/26/97 4:29:15 PM G:\SYSTAT\MEN.SYS
 48 CASES DELETED DUE TO MISSING DATA.

DEP VAR: SALARY96 N: 142 MULTIPLE R: 0.654 SQUARED MULTIPLE R: 0.428
 ADJUSTED SQUARED MULTIPLE R: .407 STANDARD ERROR OF ESTIMATE: 14043.526

VARIABLE	COEFFICIENT	STD ERROR	STD COEF	TOLERANCE	T	P (2 TAIL)
CONSTANT	48050.308	3640.669	0.000	.	13.198	0.000
SERVICE	1128.202	165.994	0.624	0.498	6.797	0.000
EXP	996.426	273.841	0.296	0.634	3.639	0.000
PUB	77.812	39.211	0.157	0.669	1.984	0.049
GRANT	5789.630	3186.754	0.157	0.566	1.817	0.071
OLDGRANT	1546.434	3237.311	0.040	0.612	0.478	0.634

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ANALYSIS OF VARIANCE

SOURCE	SUM-OF-SQUARES	DF	MEAN-SQUARE	F-RATIO	P
REGRESSION	.200760E+11	5	.401520E+10	20.359	0.000
RESIDUAL	.268220E+11	136	.197221E+09		

WARNING: CASE 70 HAS LARGE LEVERAGE (LEVERAGE = .163)
 WARNING: CASE 111 HAS LARGE LEVERAGE (LEVERAGE = .266)
 WARNING: CASE 151 IS AN OUTLIER (STUDENTIZED RESIDUAL = 3.256)
 WARNING: CASE 161 HAS LARGE LEVERAGE (LEVERAGE = .115)
 WARNING: CASE 184 HAS LARGE LEVERAGE (LEVERAGE = .174)

DURBIN-WATSON D STATISTIC 1.841
 FIRST ORDER AUTOCORRELATION .070
 RESIDUALS HAVE BEEN SAVED

>SAVE 'G:\SYSTEM\WRD5.SYS' /DOUBLE RESID
 >MODEL SALARY96 = CONSTANT+SERVICE+EXP+PUB+GRANT+OLDGRANT+VARI1+VAR2+
 >VAR3+VAR4+VAR5+VAR6+VAR7+VAR8
 >ESTIMATE

WED 3/26/97 4:30:00 PM G:\SYSTEM\MEN.SYS
 48 CASES DELETED DUE TO MISSING DATA.

DEP VAR: SALARY96 N: 142 MULTIPLE R: 0.679 SQUARED MULTIPLE R: 0.461
 ADJUSTED SQUARED MULTIPLE R: .407 STANDARD ERROR OF ESTIMATE: 14046.559

VARIABLE	COEFFICIENT	STD ERROR	STD COEF	TOLERANCE	T	P (2 TAIL)
CONSTANT	41277.371	5108.367	0.000		8.080	0.000
SERVICE	1174.329	177.302	0.650	0.437	6.623	0.000
EXP	1105.354	296.689	0.329	0.541	3.726	0.000
PUB	63.134	40.823	0.128	0.617	1.547	0.124
GRANT	6555.043	3322.672	0.177	0.521	1.973	0.051
OLDGRANT	3029.630	3529.798	0.078	0.515	0.858	0.392
VARI1	4651.501	7231.448	0.051	0.657	0.643	0.521
VAR2	3905.794	5002.621	0.064	0.625	0.781	0.436
VAR3	7714.200	5282.601	0.118	0.644	1.460	0.147
VAR4	3453.676	4554.932	0.067	0.531	0.758	0.450
VAR5	8404.954	4561.234	0.173	0.476	1.843	0.068

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VAR6 858.041 4955.926 0.014 0.637 0.173 0.863
 VAR7 12077.399 5445.086 0.178 0.656 2.218 0.028
 VAR8 3360.008 4550.183 0.066 0.533 0.738 0.462

ANALYSIS OF VARIANCE

SOURCE	SUM-OF-SQUARES	DF	MEAN-SQUARE	F-RATIO	P
REGRESSION	.216429E+11	13	.166484E+10	8.438	0.000
RESIDUAL	.252551E+11	128	.197306E+09		

WARNING: CASE 19 HAS LARGE LEVERAGE (LEVERAGE = .247)
 WARNING: CASE 20 HAS LARGE LEVERAGE (LEVERAGE = .201)
 WARNING: CASE 24 HAS LARGE LEVERAGE (LEVERAGE = .197)
 WARNING: CASE 70 HAS LARGE LEVERAGE (LEVERAGE = .222)
 WARNING: CASE 111 HAS LARGE LEVERAGE (LEVERAGE = .294)
 WARNING: CASE 111 IS AN OUTLIER (STUDENTIZED RESIDUAL = -2.710)
 WARNING: CASE 151 IS AN OUTLIER (STUDENTIZED RESIDUAL = 3.327)
 WARNING: CASE 184 HAS LARGE LEVERAGE (LEVERAGE = .196)

DURBIN-WATSON D STATISTIC 1.992
 FIRST ORDER AUTOCORRELATION -.005

RESIDUALS HAVE BEEN SAVED

>SAVE 'G:\SYSTAT\MRD6.SYS' /DOUBLE RESID
 >MODEL SALARY96 = CONSTANT+SERVICE+EXP+GRANT+OLDGRANT+VAR1+VAR2+VAR3+
 >VAR4+VAR5+VAR6+VAR7+VAR8
 >ESTIMATE

WED 3/26/97 4:30:27 PM G:\SYSTAT\MEN.SYS
 48 CASES DELETED DUE TO MISSING DATA.

DEP VAR: SALARY96 N: 142 MULTIPLE R: 0.672 SQUARED MULTIPLE R: 0.451
 ADJUSTED SQUARED MULTIPLE R: .400 STANDARD ERROR OF ESTIMATE: 14122.128

VARIABLE	COEFFICIENT	STD ERROR	STD COEF TOLERANCE	T	P (2 TAIL)
CONSTANT	40004.060	5068.703	0.000	7.892	0.000
SERVICE	1328.862	147.251	0.735	9.024	0.000
EXP	1302.805	269.253	0.387	4.839	0.000
GRANT	7087.815	3322.544	0.192	2.133	0.035

	GRANT								
	2931.505	3548.215	0.075	515	0.826	0.410			
VAR2	6463.839	7174.253	0.072	674	0.901	0.369			
VAR3	3847.099	5029.389	0.063	0.625	0.765	0.446			
VAR4	8885.128	5256.187	0.136	0.657	1.690	0.093			
VAR5	4606.877	4517.656	0.090	0.546	1.020	0.310			
VAR6	9080.470	4564.697	0.187	0.480	1.989	0.049			
VAR7	839.114	4982.573	0.014	0.637	0.168	0.867			
VAR8	13039.101	5438.563	0.192	0.664	2.398	0.018			
	4306.567	4533.087	0.084	0.542	0.950	0.344			

ANALYSIS OF VARIANCE

SOURCE	SUM-OF-SQUARES	DF	MEAN-SQUARE	F-RATIO	P
REGRESSION	.211710E+11	12	.176425E+10	8.846	0.000
RESIDUAL	.257270E+11	129	.199434E+09		

WARNING: CASE 19 HAS LARGE LEVERAGE (LEVERAGE = .240)
 WARNING: CASE 20 HAS LARGE LEVERAGE (LEVERAGE = .200)
 WARNING: CASE 24 HAS LARGE LEVERAGE (LEVERAGE = .190)
 WARNING: CASE 70 HAS LARGE LEVERAGE (LEVERAGE = .190)
 WARNING: CASE 151 IS AN OUTLIER (STUDENTIZED RESIDUAL = 3.391)

DURBIN-WATSON D STATISTIC 2.045
 FIRST ORDER AUTOCORRELATION -.031

RESIDUALS HAVE BEEN SAVED

>SAVE 'G:\SYSTAT\MRD7.SYS' /DOUBLE RESID
 >MODEL SALARY96 = CONSTANT+SERVICE+EXP+GRANT+VAR1+VAR2+VAR3+VAR4+VAR5+
 >VAR6+VAR7+VAR8
 >ESTIMATE

WED 3/26/97 4:30:54 PM G:\SYSTAT\MEN.SYS
 48 CASES DELETED DUE TO MISSING DATA.

DEP VAR: SALARY96 N: 142 MULTIPLE R: 0.670 SQUARED MULTIPLE R: 0.449
 ADJUSTED SQUARED MULTIPLE R: .402 STANDARD ERROR OF ESTIMATE: 14104.877
 VARIABLE COEFFICIENT STD ERROR STD COEF TOLERANCE T P (2 TAIL)
 CONSTANT 41104.021 4884.753 0.000 8.415 0.000

SOURCE	SUM-OF-SQUARES	DF	MEAN-SQUARE	F-RATIO	P
SERVICE	1348.128	145	215	0.746	0.657
EXP	1305.721	268	901	0.388	0.664
GRANT	8791.469	2602	0.47	0.238	0.856
VAR1	4808.085	6880	240	0.053	0.731
VAR2	3414.113	4995	900	0.056	0.632
VAR3	9141.005	5240	646	0.140	0.659
VAR4	4217.546	4487	523	0.082	0.552
VAR5	8151.117	4418	524	0.168	0.511
VAR6	751.393	4975	356	0.012	0.637
VAR7	12494.633	5391	894	0.184	0.674
VAR8	4078.354	4519	136	0.080	0.544

ANALYSIS OF VARIANCE

REGRESSION .210348E+11 11 .191226E+10 9.612 0.000
 RESIDUAL .258632E+11 130 .198948E+09

WARNING: CASE 19 HAS LARGE LEVERAGE (LEVERAGE = .224)
 WARNING: CASE 20 HAS LARGE LEVERAGE (LEVERAGE = .198)
 WARNING: CASE 70 HAS LARGE LEVERAGE (LEVERAGE = .190)
 WARNING: CASE 151 IS AN OUTLIER (STUDENTIZED RESIDUAL = 3.412)

DURBIN-WATSON D STATISTIC 2.064
 FIRST ORDER AUTOCORRELATION -.040
 RESIDUALS HAVE BEEN SAVED

>SAVE 'G:\SYSTAT\MRD8.SYS' /DOUBLE RESID
 >MODEL SALARY96 = CONSTANT+SERVICE+EXP+GRANT
 >ESTIMATE

WED 3/26/97 4:31:41 PM G:\SYSTAT\MEN.SYS
 48 CASES DELETED DUE TO MISSING DATA.

DEP VAR: SALARY96 N: 142 MULTIPLE R: 0.641 SQUARED MULTIPLE R: 0.411
 ADJUSTED SQUARED MULTIPLE R: .398 STANDARD ERROR OF ESTIMATE: 14148.407

VARIABLE	COEFFICIENT	STD ERROR	STD COEF TOLERANCE	T	P(2 TAIL)
CONSTANT	47768.142	3603.554	0.000	13.256	0.000

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SOURCE	SUM-OF-SQUARES	DF	MEAN-SQUARE	F-RATIO	P
VIC	1321.878	1	1321.878	0.732	0.000
GRANT	1229.744	249	4.920	0.366	0.000
	7339.030	2506	2.928	0.199	0.004

ANALYSIS OF VARIANCE

SOURCE	SUM-OF-SQUARES	DF	MEAN-SQUARE	F-RATIO	P
REGRESSION	.192735E+11	3	6.42451E+10	32.094	0.000
RESIDUAL	.276245E+11	138	2.00177E+09		

WARNING: CASE 70 HAS LARGE LEVERAGE (LEVERAGE = .144)
 WARNING: CASE 151 IS AN OUTLIER (STUDENTIZED RESIDUAL = 3.376)
 WARNING: CASE 184 HAS LARGE LEVERAGE (LEVERAGE = .092)

DURBIN-WATSON D STATISTIC 1.891
 FIRST ORDER AUTOCORRELATION .046
 RESIDUALS HAVE BEEN SAVED

>SAVE 'G:\SYSTAT\MRD9.SYS'/DOUBLE RESID
 >MODEL SALARY96 = CONSTANT+SERVICE+EXP+GRANT+OLDGRANT
 >ESTIMATE

WED 3/26/97 4:32:13 PM G:\SYSTAT\MEN.SYS
 48 CASES DELETED DUE TO MISSING DATA.

DEP VAR: SALARY96 N: 142 MULTIPLE R: 0.641 SQUARED MULTIPLE R: 0.412
 ADJUSTED SQUARED MULTIPLE R: .394 STANDARD ERROR OF ESTIMATE: 14193.309

VARIABLE	COEFFICIENT	STD ERROR	STD COEF	TOLERANCE	F	P (2 TAIL)
CONSTANT	47540.751	3670.336	0.000		12.953	0.000
SERVICE	1312.993	138.880	0.727	0.727	9.454	0.000
EXP	1224.690	251.162	0.364	0.770	4.876	0.000
GRANT	6634.872	3191.844	0.179	0.576	2.079	0.040
OLDGRANT	1169.627	3266.206	0.030	0.614	0.358	0.721

ANALYSIS OF VARIANCE

SOURCE	SUM-OF-SQUARES	DF	MEAN-SQUARE	F-RATIO	P
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Model Summary Statistics
 R Squared = 0.412
 Adjusted R Squared = 0.394
 Standard Error of Estimate = 14193.309
 Total Sum of Squares = 27624500000
 Regression Sum of Squares = 19273500000
 Residual Sum of Squares = 27624500000
 Durbin-Watson Statistic = 1.891
 First Order Autocorrelation = 0.046

REGRESSION .192994E+11 4 .482484E+10 23.951 0.000
RESIDUAL .275987E+11 137 .201450E+09

WARNING: CASE 70 HAS LARGE LEVERAGE (LEVERAGE = .144)
WARNING: CASE 151 IS AN OUTLIER (STUDENTIZED RESIDUAL = 3.358)

DURBIN-WATSON D STATISTIC 1.881
FIRST ORDER AUTOCORRELATION .051

RESIDUALS HAVE BEEN SAVED

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ID	RESIDUAL	LEVERAGE	STUDENTIZED RESIDUAL
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CASE	ESTIMATE	RESIDUAL	LEVERAGE	K	STUDENT
CASE 1	64145.067	-4108.067	0.017	0.000	-0.297
CASE 2	1822.175	-15413.971	0.010	0.003	-1.114
CASE 3	83190.971	-39154.060	0.018	0.036	-2.898
CASE 4	1358.288	-4032.401	0.031	0.001	-0.294
CASE 5	92079.060	-7982.229	0.009	0.001	-0.575
CASE 6	1848.277	14098.895	0.019	0.005	1.023
CASE 7	61028.401	-5449.839	0.027	0.001	-0.396
CASE 8	2434.160	13174.498	0.008	0.002	0.951
CASE 9	83131.229	24775.848	0.012	0.010	1.803
CASE 10	1294.040	24618.465	0.030	0.025	1.809
CASE 11	88449.105	-4189.067	0.017	0.000	-0.303
CASE 12	1904.365	-16519.395	0.012	0.004	-1.196
CASE 13	64777.839	904.287	0.011	0.000	0.065
CASE 14	2295.802	-11471.477	0.018	0.003	-0.832
CASE 15	81861.502	-3862.748	0.011	0.000	-0.278
CASE 16	1253.668	1469.047	0.075	0.011	-0.741
CASE 17	87000.152	3802.204	0.015	0.001	-0.480
CASE 18	1530.435	1704.432	0.027	0.004	-0.789
CASE 19	66286.535	-10844.581	0.016	0.022	2.363
CASE 20	2429.164	2289.426	0.041	0.000	0.041
CASE 21	64145.067	32208.512	0.031	0.005	-0.794
CASE 22	1822.175	1743.926	0.029	0.000	-0.102
CASE 23	88150.395	557.781	0.032	0.001	-0.338
CASE 24	1508.381	-4641.189			

DEFENDANT'S EXHIBIT
 94CV3785
 NO. 575

CASE	24	61844.581	-687.581	0.027	0.000	-0.050
CASE	24	2289.426				
CASE	25	82772.777	-17383.777	0.012	0.005	-1.259
CASE	25	1547.802				
CASE	26	67595.795	14863.205	0.016	0.005	1.077
CASE	26	1738.735				
CASE	27	80074.305	-1588.305	0.029	0.000	-0.116
CASE	27	2369.781				
CASE	28	67138.067	-14109.067	0.027	0.007	-1.028
CASE	28	2301.200				
CASE	29	69104.490	6575.510	0.011	0.001	0.474
CASE	29	1454.691				
CASE	30	107196.299	-7869.299	0.047	0.004	-0.578
CASE	30	3006.209				
CASE	31	85969.393	110.607	0.019	0.000	0.008
CASE	31	1921.644				
CASE	32	75512.867	-7351.867	0.008	0.001	-0.529
CASE	32	1223.764				
CASE	33	82414.324	-20890.324	0.032	0.019	-1.532
CASE	33	2471.002				
CASE	34	69223.974	-9298.974	0.012	0.001	-0.671
CASE	34	1510.385				
CASE	35	62755.855	-4870.855	0.018	0.001	-0.352
CASE	35	1878.943				
CASE	36	96127.209	17015.791	0.032	0.013	1.245
CASE	36	2491.996				
CASE	37	76304.658	-6535.658	0.017	0.001	-0.473
CASE	37	1802.201				
CASE	38	63965.840	-12251.840	0.017	0.003	-0.888
CASE	38	1802.136				
CASE	39	73785.412	-11869.412	0.027	0.005	-0.864
CASE	39	2272.031				
CASE	40	67536.053	-7560.053	0.018	0.001	-0.547
CASE	40	1844.314				
CASE	41	70015.765	30604.235	0.018	0.022	2.244
CASE	41	1842.090				
CASE	42	71703.686	-832.686	0.009	0.000	-0.060
CASE	42	1343.617				
CASE	43	77833.561	19555.439	0.036	0.019	1.436
CASE	43	2655.793				
CASE	44	86940.410	3130.590	0.011	0.000	0.226
CASE	44	1469.419				
CASE	45	79620.758	11257.242	0.016	0.003	0.815
CASE	45	1753.040				
CASE	46	66385.810	-17735.810	0.015	0.006	-1.287
CASE	46	1730.340				
CASE	47	65235.567	-550.567	0.015	0.000	-0.040
CASE	47	1712.096				

CASE	48	66744.263	-10949.263	0.015	0.002	-0.792
CASE	48	1714.872				
CASE	49	78231.547	33603.453	0.011	0.017	2.463
CASE	49	1465.933				
CASE	50	60276.144	-9776.144	0.022	0.003	-0.710
CASE	50	2076.813				
CASE	51	66958.841	-16281.841	0.033	0.012	-1.191
CASE	51	2514.493				
CASE	52	74183.398	26155.602	0.008	0.007	1.901
CASE	52	1230.009				
CASE	53	82160.212	-9347.212	0.017	0.002	-0.677
CASE	53	1798.037				
CASE	54	74756.429	10980.571	0.027	0.004	0.799
CASE	54	2271.295				
CASE	55	77873.095	5766.905	0.008	0.000	0.415
CASE	55	1215.186				
CASE	56	64957.066	1714.934	0.030	0.000	0.125
CASE	56	2390.145				
CASE	57	64204.809	14106.191	0.018	0.005	1.023
CASE	57	1873.656				
CASE	58	76304.658	6261.342	0.017	0.001	0.453
CASE	58	1802.201				
CASE	59	83429.939	-17485.939	0.017	0.007	-1.270
CASE	59	1832.171				
CASE	60	82772.777	8746.223	0.012	0.001	0.632
CASE	60	1547.802				
CASE	61	69164.232	-7674.232	0.011	0.001	-0.554
CASE	61	1468.734				
CASE	62	95768.756	-2267.756	0.022	0.000	-0.164
CASE	62	2046.384				
CASE	63	65235.567	-8428.567	0.015	0.001	-0.609
CASE	63	1712.096				
CASE	64	76782.594	5419.406	0.008	0.000	0.390
CASE	64	1205.704				
CASE	65	65928.082	-8008.082	0.027	0.002	-0.582
CASE	65	2289.211				
CASE	66	83250.713	-19377.713	0.011	0.005	-1.404
CASE	66	1448.579				
CASE	67	70095.715	8624.285	0.029	0.003	0.628
CASE	67	2387.636				
CASE	68	82653.292	2760.708	0.017	0.000	0.200
CASE	68	1816.673				
CASE	69	85252.488	17667.512	0.016	0.007	1.282
CASE	69	1743.926				
CASE	70	95664.416	23384.584	0.126	0.117	1.810
CASE	70	4944.667				
CASE	71	71942.655	16099.345	0.015	0.005	1.167
CASE	71	1683.799				

CASE	72	72853.929	-6122.929	0.009	0.000	-0.441
CASE	72	1284.150				
CASE	73	84460.698	21639.302	0.010	0.006	1.570
CASE	73	1407.608				
CASE	74	84520.440	-8684.440	0.012	0.001	-0.627
CASE	74	1496.331				
CASE	75	67894.505	3710.495	0.012	0.000	0.268
CASE	75	1541.796				
CASE	76	77932.837	-7108.837	0.007	0.000	-0.512
CASE	76	1175.225				
CASE	77	88329.621	2584.379	0.015	0.000	0.187
CASE	77	1684.329				
CASE	78	88269.879	-8901.879	0.013	0.001	-0.643
CASE	78	1602.088				
CASE	79	83624.309	-2226.309	0.037	0.000	-0.163
CASE	79	2663.131				
CASE	80	64324.293	-4274.293	0.021	0.001	-0.310
CASE	80	2034.749				
CASE	81	83131.229	726.771	0.009	0.000	0.052
CASE	81	1294.040				
CASE	82	90988.559	-25007.559	0.022	0.018	-1.829
CASE	82	2046.661				
CASE	83	76005.947	-9705.947	0.037	0.005	-0.710
CASE	83	2658.518				
CASE	84	97217.710	-13260.710	0.027	0.007	-0.966
CASE	84	2293.323				
CASE	85	84400.956	8534.044	0.009	0.001	0.615
CASE	85	1344.152				
CASE	86	94678.256	8341.744	0.023	0.002	0.605
CASE	86	2102.497				
CASE	87	76603.368	-3316.368	0.008	0.000	-0.239
CASE	87	1226.312				
CASE	88	62178.643	-5112.643	0.029	0.001	-0.372
CASE	88	2381.238				
CASE	89	90092.428	30907.572	0.032	0.042	2.285
CASE	89	2497.079				
CASE	90	79815.128	10295.872	0.036	0.005	0.753
CASE	90	2635.893				
CASE	91	97337.194		0.032		
CASE	91	2471.423				
CASE	92	77475.109	661.891	0.027	0.000	0.048
CASE	92	2273.575				
CASE	93	85849.909	4994.091	0.014	0.000	0.361
CASE	93	1659.477				
CASE	94	67834.763	-1393.763	0.012	0.000	-0.101
CASE	94	1529.801				
CASE	95	81921.244	3201.756	0.009	0.000	0.231
CASE	95	1318.286				

E	96	101026.890	-18163.890	0.035	0.016	-1.332
CASE	96	2595.706				
CASE	97	65056.341	4943.659	0.019	0.001	0.358
CASE	97	1895.590				
CASE	98	88329.621	14436.379	0.015	0.004	1.046
CASE	98	1684.329				
CASE	99	96007.725	10880.275	0.027	0.004	0.792
CASE	99	2281.187				
CASE	100	73152.639	16667.361	0.012	0.004	1.207
CASE	100	1527.293				
CASE	101	75393.383	-3231.383	0.008	0.000	-0.233
CASE	101	1206.816				
CASE	102	68706.504	-806.504	0.027	0.000	-0.059
CASE	102	2273.557				
CASE	103	73033.155	16966.845	0.009	0.004	1.227
CASE	103	1345.402				
CASE	104	95947.983	-25135.983	0.025	0.021	-1.842
CASE	104	2196.643				
CASE	105	66624.778	-2674.778	0.014	0.000	-0.193
CASE	105	1620.629				
CASE	106	62875.340	-4915.340	0.019	0.001	-0.356
CASE	106	1911.401				
CASE	107	77773.819	8037.181	0.034	0.003	0.587
CASE	107	2555.710				
CASE	108	69343.459	9484.541	0.014	0.002	0.686
CASE	108	1666.887				
CASE	109	60968.659	-3526.659	0.030	0.001	-0.257
CASE	109	2423.517				
CASE	110	82040.728	18474.272	0.012	0.005	1.339
CASE	110	1522.942				
CASE	111	111976.497	-22673.497	0.063	0.048	-1.693
CASE	111	3504.273				
CASE	112	68073.732	2497.268	0.015	0.000	0.180
CASE	112	1727.957				
CASE	113	67018.583	-10339.583	0.030	0.004	-0.754
CASE	113	2428.428				
CASE	114	87000.152	18231.848	0.012	0.005	1.321
CASE	114	1530.435				
CASE	115	62298.128	-5430.128	0.029	0.001	-0.395
CASE	115	2387.277				
CASE	116	63965.840	-12439.840	0.017	0.003	-0.901
CASE	116	1802.136				
CASE	117	72375.993	-5796.993	0.025	0.001	-0.421
CASE	117	2207.434				
CASE	118	69797.005	-1482.005	0.025	0.000	-0.108
CASE	118	2209.021				
CASE	119	85909.651	-18710.651	0.016	0.008	-1.359
CASE	119	1703.763				

CASE	120	70588.796	-10408.796	0.040	0.006	-0.763
CASE	120	2796.577				
CASE	121	71703.686	-3198.686	0.009	0.000	-0.230
CASE	121	1343.617				
CASE	122	71464.718	-621.718	0.011	0.000	-0.045
CASE	122	1451.057				
CASE	123	69916.489	-1999.489	0.026	0.000	-0.145
CASE	123	2226.904				
CASE	124	75393.383	-2314.383	0.008	0.000	-0.167
CASE	124	1206.816				
CASE	125	74517.461	-9028.461	0.034	0.004	-0.659
CASE	125	2567.743				
CASE	126	73585.977	-8305.977	0.028	0.003	-0.605
CASE	126	2345.307				
CASE	127	66505.294	6735.706	0.014	0.001	0.486
CASE	127	1626.100				
CASE	128	88389.363	10612.637	0.016	0.002	0.768
CASE	128	1786.133				
CASE	129	81443.307	-13256.307	0.014	0.003	-0.959
CASE	129	1653.210				
CASE	130	93528.013	-12197.013	0.025	0.005	-0.887
CASE	130	2206.451				
CASE	131	63567.854	12611.146	0.028	0.006	0.919
CASE	131	2345.718				
CASE	132	98367.952	-4779.952	0.027	0.001	-0.347
CASE	132	2279.882				
CASE	133	70493.701	7906.299	0.011	0.001	0.570
CASE	133	1447.365				
CASE	134	61545.871	-1208.871	0.020	0.000	-0.088
CASE	134	1979.171				
CASE	135	99852.258	-8183.258	0.072	0.007	-0.609
CASE	135	3729.976				
CASE	136	60276.144	-1116.144	0.022	0.000	-0.081
CASE	136	2076.813				
CASE	137	90630.107	-7798.107	0.014	0.001	-0.563
CASE	137	1663.039				
CASE	138	85730.425	9074.575	0.011	0.001	0.655
CASE	138	1465.306				
CASE	139	68073.732	9402.268	0.015	0.002	0.680
CASE	139	1727.957				
CASE	140	65474.536	3134.464	0.017	0.000	0.227
CASE	140	1791.930				
CASE	141	81224.548	21206.452	0.029	0.018	1.553
CASE	141	2382.202				
CASE	142	90869.075	21332.925	0.017	0.011	1.553
CASE	142	1839.113				
CASE	143	82040.728	17636.272	0.012	0.005	1.278
CASE	143	1572.947				

CASE	144	84580.182	14709.818	0.013	0.004	1.065
CASE	144	1606.138				
CASE	145	93289.045		0.018		
CASE	145	1885.172				
CASE	146	62417.612	4456.388	0.031	0.001	0.325
CASE	146	2461.706				
CASE	147	62696.113	-6315.113	0.019	0.001	-0.457
CASE	147	1895.642				
CASE	148	72734.445	23805.555	0.010	0.008	1.729
CASE	148	1398.859				
CASE	149	61665.355	-2659.355	0.022	0.000	-0.193
CASE	149	2048.847				
CASE	150	69104.490	-17570.490	0.011	0.004	-1.272
CASE	150	1454.691				
CASE	151	82235.098	47564.902	0.047	0.151	3.619
CASE	151	3013.604				
CASE	152	77514.642	12433.358	0.020	0.004	0.902
CASE	152	1947.665				
CASE	153	83190.971	-16546.971	0.010	0.003	-1.197
CASE	153	1358.288				
CASE	154	87059.894	-1819.894	0.013	0.000	-0.131
CASE	154	1615.023				
CASE	155	79381.790	28012.210	0.008	0.009	2.040
CASE	155	1269.560				
CASE	156	62298.128	-3834.128	0.029	0.001	-0.279
CASE	156	2387.277				
CASE	157					
CASE	157					
CASE	158	70135.249	-9832.249	0.013	0.002	-0.710
CASE	158	1603.284				
CASE	159	75966.414	-4868.414	0.028	0.001	-0.354
CASE	159	2338.500				
CASE	160	71225.750	25304.250	0.019	0.017	1.849
CASE	160	1932.427				
CASE	161	90928.817	20641.183	0.019	0.011	1.504
CASE	161	1934.959				
CASE	162	104656.845	-15921.845	0.040	0.014	-1.169
CASE	162	2784.632				
CASE	163	80830.743	19944.257	0.014	0.007	1.448
CASE	163	1626.123				
CASE	164	94080.835		0.027		
CASE	164	2289.848				
CASE	165	75811.577	-5926.577	0.016	0.001	-0.428
CASE	165	1747.447				
CASE	166	86661.908	-29911.908	0.043	0.054	-2.222
CASE	166	2890.342				
CASE	167	92258.286	-4008.286	0.023	0.001	-0.291
CASE	167	2124.606				

CASE	168	89022.136	-250.136	0.041	0.000	-0.018
CASE	168	2821.099				
CASE	169	86761.184	-21831.184	0.011	0.007	-1.584
CASE	169	1451.978				
CASE	170	74696.687	4703.313	0.028	0.001	0.342
CASE	170	2322.256				
CASE	171	83684.051	-19784.051	0.032	0.017	-1.450
CASE	171	2487.472				
CASE	172	81742.018	-17442.018	0.008	0.003	-1.261
CASE	172	1219.991				
CASE	173	67496.519	6758.481	0.028	0.002	0.492
CASE	173	2341.575				
CASE	174	83764.002	23002.998	0.032	0.023	1.689
CASE	174	2484.832				
CASE	175	67197.809	-5217.809	0.026	0.001	-0.379
CASE	175	2262.563				
CASE	176	70135.249	-18898.249	0.013	0.006	-1.371
CASE	176	1603.284				
CASE	177	84580.182	-454.182	0.013	0.000	-0.033
CASE	177	1606.138				
CASE	178	71918.265	1255.735	0.037	0.000	0.092
CASE	178	2670.170				
CASE	179	91322.621	10707.379	0.043	0.007	0.786
CASE	179	2896.638				
CASE	180	93528.013	-14002.013	0.025	0.007	-1.019
CASE	180	2206.451				
CASE	181	64085.325	-2273.325	0.017	0.000	-0.164
CASE	181	1792.508				
CASE	182	67496.519	-10941.519	0.028	0.005	-0.797
CASE	182	2341.575				
CASE	183	73585.977	-15741.977	0.028	0.010	-1.149
CASE	183	2345.307				
CASE	184	84475.842	-3250.842	0.082	0.001	-0.243
CASE	184	3978.391				
CASE	185	79023.338	-17430.338	0.010	0.004	-1.261
CASE	185	1382.233				
CASE	186	63388.628	15182.372	0.029	0.009	1.108
CASE	186	2360.320				
CASE	187					
CASE	187					
CASE	188					
CASE	188					
CASE	189					
CASE	189					
CASE	190					
CASE	190					

CASE	ESTIMATE	RESIDUAL	LEVERAGE	OK	STUDENT
CASE 1	-65162.186	-5125.186	0.018	0.001	-0.379
CASE 2	1818.781	-11614.201	0.019	0.003	-0.860
CASE 3	79391.201	1862.835	0.033	0.044	-2.598
CASE 4	87199.154	2466.082	0.031	0.001	-0.283
CASE 5	60801.737	2385.749	0.011	0.000	-0.443
CASE 6	81170.295	1435.120	0.021	0.004	0.912
CASE 7	90243.309	1964.449	0.027	0.001	-0.395
CASE 8	64645.793	2249.403	0.009	0.002	1.044
CASE 9	2249.403	80868.878	0.012	0.009	1.894
CASE 10	1274.433	86310.044	0.031	0.020	1.776
CASE 11	1517.783	67222.040	0.019	0.001	-0.424
CASE 12	2401.138	65689.781	0.025	0.004	-0.883
CASE 13	1862.011	83521.941	0.013	0.000	0.194
CASE 14	2169.164	81516.317	0.022	0.002	-0.664
CASE 15	1538.745	69988.533	0.013	0.000	-0.162
CASE 16	69988.533	2040.677	0.087	0.004	-0.429
CASE 17	2040.677	67378.849	0.016	0.000	-0.388
CASE 18	1548.425	81478.081	0.004	0.000	-0.429
CASE 19	81478.081	4009.622	0.028	0.004	-0.871
CASE 20	4009.622	63971.602	0.028	0.001	-0.273
CASE 21	63971.602	1735.810	0.001	0.001	-0.273
CASE 22	1735.810	2262.677	0.034	0.028	2.020
CASE 23	2262.677	90539.135	0.041	0.000	0.063
CASE 24	90539.135	2516.808	0.031	0.004	-0.773
CASE 25	2516.808	53946.169	0.033	0.001	-0.273
CASE 26	53946.169	2760.496	0.001	0.001	-0.375
CASE 27	2760.496	57473.666	0.004	0.001	-0.273
CASE 28	57473.666	2412.872	0.004	0.001	-0.273
CASE 29	2412.872	64450.304	0.001	0.001	-0.375
CASE 30	64450.304	2459.414	0.001	0.001	-0.375
CASE 31	2459.414	57051.999	0.001	0.001	-0.375
CASE 32	57051.999	-5046.999	0.001	0.001	-0.375
CASE 33	2437.693				

CASE	24	66728.663	-5571.663	0.042	0.002	-0.417
CASE	24	2799.636				
CASE	25	79182.559	-13793.559	0.021	0.004	-1.023
CASE	25	1953.546				
CASE	26	67982.909	14476.091	0.016	0.004	1.071
CASE	26	1708.419				
CASE	27	80412.231	-1926.231	0.029	0.000	-0.143
CASE	27	2324.309				
CASE	28	65098.911	-12069.911	0.030	0.005	-0.899
CASE	28	2360.316				
CASE	29	70981.232	4698.768	0.013	0.000	0.346
CASE	29	1563.738				
CASE	30	108302.874	-8975.874	0.047	0.005	-0.674
CASE	30	2969.230				
CASE	31	83007.499	3072.501	0.025	0.000	0.228
CASE	31	2139.230				
CASE	32	74929.989	-6768.989	0.008	0.000	-0.498
CASE	32	1215.356				
CASE	33	77089.303	-15565.303	0.050	0.014	-1.173
CASE	33	3032.716				
CASE	34	68056.160	-8131.160	0.013	0.001	-0.599
CASE	34	1532.856				
CASE	35	61665.730	-3780.730	0.019	0.000	-0.279
CASE	35	1878.216				
CASE	36	89428.562	23714.438	0.061	0.042	1.807
CASE	36	3352.865				
CASE	37	75113.551	-5344.551	0.018	0.001	-0.395
CASE	37	1812.106				
CASE	38	64590.394	-12876.394	0.017	0.003	-0.953
CASE	38	1778.314				
CASE	39	73010.805	-11094.805	0.027	0.004	-0.825
CASE	39	2241.473				
CASE	40	66596.428	-6620.428	0.018	0.001	-0.489
CASE	40	1835.213				
CASE	41	72249.449	28370.551	0.021	0.019	2.124
CASE	41	1960.503				
CASE	42	69277.376	1593.624	0.013	0.000	0.117
CASE	42	1557.375				
CASE	43	75451.252	21937.748	0.040	0.023	1.651
CASE	43	2726.979				
CASE	44	80808.316	9262.684	0.035	0.003	0.691
CASE	44	2549.262				
CASE	45	78756.917	12121.083	0.016	0.003	0.896
CASE	45	1742.653				
CASE	46	66324.475	-17674.475	0.015	0.005	-1.310
CASE	46	1695.156				
CASE	47	65208.368	-523.368	0.015	0.000	-0.039
CASE	47	1677.180				

CASE	72	72081.789	-5350.789	0.009	0.000	-0.393
CASE	72	1285.537				
CASE	73	83596.827	22503.173	0.011	0.006	1.668
CASE	73	1410.378				
CASE	74	83083.963	-7247.963	0.013	0.001	-0.534
CASE	74	1546.437				
CASE	75	68373.126	3231.874	0.012	0.000	0.238
CASE	75	1519.231				
CASE	76	79513.087	-8689.087	0.009	0.001	-0.639
CASE	76	1272.531				
CASE	77	92851.824	-1937.824	0.028	0.000	-0.144
CASE	77	2264.921				
CASE	78	93786.765	-14418.765	0.033	0.008	-1.076
CASE	78	2458.878				
CASE	79	82862.984	-1464.984	0.037	0.000	-0.109
CASE	79	2621.824				
CASE	80	64045.671	-3995.671	0.021	0.000	-0.296
CASE	80	1995.513				
CASE	81	84652.428	-794.428	0.010	0.000	-0.058
CASE	81	1370.878				
CASE	82	90001.989	-24020.989	0.022	0.014	-1.794
CASE	82	2033.266				
CASE	83	79893.773	-13593.773	0.046	0.010	-1.021
CASE	83	2926.023				
CASE	84	98443.874	-14486.874	0.028	0.007	-1.079
CASE	84	2285.573				
CASE	85	84004.172	8930.828	0.009	0.001	0.657
CASE	85	1323.738				
CASE	86	90665.737	12354.263	0.033	0.006	0.921
CASE	86	2477.360				
CASE	87	74976.172	-1689.172	0.009	0.000	-0.124
CASE	87	1324.686				
CASE	88	61917.844	-4851.844	0.029	0.001	-0.360
CASE	88	2334.355				
CASE	89	84927.128	36072.872	0.049	0.076	2.765
CASE	89	3020.667				
CASE	90	77632.448	12478.552	0.039	0.007	0.934
CASE	90	2688.508				
CASE	91	95729.840		0.033		
CASE	91	2483.004				
CASE	92	76312.533	1824.467	0.028	0.000	0.135
CASE	92	2262.613				
CASE	93	83400.112	7443.888	0.018	0.001	0.550
CASE	93	1830.063				
CASE	94	66353.530	87.470	0.013	0.000	0.006
CASE	94	1582.415				
CASE	95	80567.053	4555.947	0.010	0.000	0.335
CASE	95	1772.426				

CASE	96	98081.895	-15218.895	0.040	0.011	-1.141
CASE	96	2736.148				
CASE	97	64214.500	5785.500	0.019	0.001	0.428
CASE	97	1879.234				
CASE	98	90108.326	12657.674	0.017	0.003	0.936
CASE	98	1759.205				
CASE	99	95097.133	11790.867	0.027	0.004	0.877
CASE	99	2256.365				
CASE	100	69306.431	20513.569	0.021	0.010	1.527
CASE	100	1994.976				
CASE	101	76799.870	-4637.870	0.009	0.000	-0.341
CASE	101	1276.890				
CASE	102	70749.946	-2849.946	0.029	0.000	-0.212
CASE	102	2334.909				
CASE	103	73814.292	16185.708	0.010	0.003	1.195
CASE	103	1344.920				
CASE	104	95609.997	-24797.997	0.025	0.017	-1.855
CASE	104	2154.933				
CASE	105	66488.921	-2538.921	0.014	0.000	-0.187
CASE	105	1588.237				
CASE	106	63383.500	-5423.500	0.019	0.001	-0.401
CASE	106	1880.491				
CASE	107	78918.652	6892.348	0.035	0.002	0.514
CASE	107	2534.178				
CASE	108	69668.411	9159.589	0.014	0.001	0.676
CASE	108	1636.669				
CASE	109	60575.967	-3133.967	0.030	0.000	-0.233
CASE	109	2377.875				
CASE	110	83234.496	17280.504	0.013	0.004	1.279
CASE	110	1547.066				
CASE	111	127900.736	-38597.736	0.224	0.597	-3.304
CASE	111	6452.656				
CASE	112	68417.322	2153.678	0.016	0.000	0.159
CASE	112	1696.791				
CASE	113	65913.601	-9234.601	0.031	0.003	-0.687
CASE	113	2408.888				
CASE	114	84516.218	20715.782	0.016	0.008	1.538
CASE	114	1724.516				
CASE	115	60892.116	-4024.116	0.031	0.001	-0.299
CASE	115	2387.795				
CASE	116	62480.011	-10954.011	0.018	0.002	-0.810
CASE	116	1837.493				
CASE	117	69959.070	-3380.070	0.029	0.000	-0.251
CASE	117	2315.943				
CASE	118	68474.707	-159.707	0.026	0.000	-0.012
CASE	118	2210.986				
CASE	119	83098.287	-15899.287	0.021	0.006	-1.181
CASE	119	1995.921				

CASE	120	69291.384	-9111.384	0.041	0.004	-0.682
CASE	120	2775.434				
CASE	121	71493.279	-2988.279	0.009	0.000	-0.220
CASE	121	1318.173				
CASE	122	71012.274	-169.274	0.011	0.000	-0.012
CASE	122	1429.894				
CASE	123	69137.286	-1220.286	0.026	0.000	-0.090
CASE	123	2197.776				
CASE	124	73212.219	-133.219	0.011	0.000	-0.010
CASE	124	1399.157				
CASE	125	72546.520	-7057.520	0.037	0.002	-0.526
CASE	125	2604.657				
CASE	126	74888.598	-9608.598	0.029	0.003	-0.715
CASE	126	2340.511				
CASE	127	67514.649	5726.351	0.014	0.001	0.422
CASE	127	1630.126				
CASE	128	88645.789	10356.211	0.017	0.002	0.765
CASE	128	1751.890				
CASE	129	80027.121	-11840.121	0.015	0.002	-0.875
CASE	129	1690.795				
CASE	130	91237.937	-9906.937	0.028	0.003	-0.737
CASE	130	2299.812				
CASE	131	66363.972	9815.028	0.033	0.004	0.732
CASE	131	2490.079				
CASE	132	96394.405	-2806.405	0.029	0.000	-0.208
CASE	132	2333.749				
CASE	133	69412.768	8987.232	0.012	0.001	0.662
CASE	133	1465.531				
CASE	134	61484.564	-1147.564	0.020	0.000	-0.085
CASE	134	1938.891				
CASE	135	96287.344	-4618.344	0.080	0.002	-0.352
CASE	135	3853.147				
CASE	136	60761.071	-1601.071	0.022	0.000	-0.118
CASE	136	2041.219				
CASE	137	95189.556	-12357.556	0.027	0.005	-0.919
CASE	137	2258.607				
CASE	138	85269.993	9535.007	0.011	0.001	0.703
CASE	138	1444.068				
CASE	139	68839.398	8636.602	0.016	0.001	0.638
CASE	139	1712.956				
CASE	140	64423.143	4185.857	0.017	0.000	0.309
CASE	140	1792.043				
CASE	141	84271.835	18159.165	0.035	0.013	1.360
CASE	141	2557.108				
CASE	142	94087.773	18114.227	0.024	0.009	1.349
CASE	142	2113.130				
CASE	143	80596.517	19080.483	0.013	0.005	1.413
CASE	143	1572.002				

CASE	144	83520.772	15769.228	0.014	0.004	1.166
CASE	144	1614.802				
CASE	145	91812.125		0.020		
CASE	145	1914.963				
CASE	146	62926.444	3947.556	0.031	0.001	0.294
CASE	146	2417.776				
CASE	147	61967.555	-5586.555	0.019	0.001	-0.413
CASE	147	1873.703				
CASE	148	74584.785	21955.215	0.012	0.007	1.629
CASE	148	1510.235				
CASE	149	61725.066	-2719.066	0.022	0.000	-0.201
CASE	149	2007.136				
CASE	150	67077.023	-15543.023	0.014	0.004	-1.149
CASE	150	1585.735				
CASE	151	85064.564	44735.436	0.052	0.125	3.475
CASE	151	3107.632				
CASE	152	78249.253	11698.747	0.020	0.003	0.866
CASE	152	1924.492				
CASE	153	80340.874	-13696.874	0.015	0.003	-1.013
CASE	153	1651.271				
CASE	154	83053.682	2186.318	0.024	0.000	0.162
CASE	154	2095.800				
CASE	155	81969.083	25424.917	0.013	0.009	1.891
CASE	155	1527.981				
CASE	156	61525.231	-3061.231	0.030	0.000	-0.227
CASE	156	2353.542				
CASE	157					
CASE	157					
CASE	158	68691.261	-8388.261	0.015	0.001	-0.619
CASE	158	1646.856				
CASE	159	74052.843	-2954.843	0.031	0.000	-0.220
CASE	159	2383.007				
CASE	160	73802.364	22727.636	0.024	0.014	1.697
CASE	160	2089.252				
CASE	161	102333.000	9237.000	0.102	0.012	0.714
CASE	161	4347.829				
CASE	162	103057.197	-14322.197	0.042	0.010	-1.074
CASE	162	2782.470				
CASE	163	80520.870	20254.130	0.014	0.006	1.502
CASE	163	1596.479				
CASE	164	89252.188		0.042		
CASE	164	2788.625				
CASE	165	74476.053	-4591.053	0.017	0.000	-0.339
CASE	165	1772.055				
CASE	166	84616.222	-27866.222	0.046	0.042	-2.114
CASE	166	2917.056				
CASE	167	93046.904	-4796.904	0.024	0.001	-0.355
CASE	167	7000.760				

CASE 168	91400.490	-2628.490	0.045	0.000	-0.197
CASE 168	2881.489				
CASE 169	84140.733	-19210.733	0.015	0.006	-1.425
CASE 169	1682.693				
CASE 170	76072.848	3327.152	0.029	0.000	0.247
CASE 170	2323.347				
CASE 171	80661.814	-16761.814	0.038	0.012	-1.256
CASE 171	2648.174				
CASE 172	78517.993	-14217.993	0.014	0.003	-1.051
CASE 172	1628.472				
CASE 173	68352.878	5902.122	0.029	0.001	0.438
CASE 173	2312.528				
CASE 174	85402.265	21364.735	0.034	0.018	1.602
CASE 174	2498.179				
CASE 175	65324.682	-3344.682	0.029	0.000	-0.248
CASE 175	2307.687				
CASE 176	71962.356	-20725.356	0.015	0.007	-1.538
CASE 176	1691.056				
CASE 177	85314.598	-1188.598	0.014	0.000	-0.088
CASE 177	1593.409				
CASE 178	73722.780	-548.780	0.039	0.000	-0.041
CASE 178	2687.954				
CASE 179	89200.898	12829.102	0.046	0.009	0.964
CASE 179	2929.417				
CASE 180	89655.150	-10129.150	0.035	0.004	-0.756
CASE 180	2537.223				
CASE 181	63986.743	-2174.743	0.017	0.000	-0.160
CASE 181	1756.250				
CASE 182	70885.338	-14330.338	0.036	0.008	-1.071
CASE 182	2571.657				
CASE 183	74466.521	-16622.521	0.029	0.009	-1.240
CASE 183	2317.221				
CASE 184	95618.059	-14393.059	0.160	0.051	-1.154
CASE 184	5459.270				
CASE 185	79875.828	-18282.828	0.010	0.004	-1.352
CASE 185	1385.255				
CASE 186	63576.278	14994.722	0.029	0.007	1.117
CASE 186	2313.044				
CASE 187					
CASE 187					
CASE 188					
CASE 188					
CASE 189					
CASE 189					
CASE 190					
CASE 190					

CASE	ESTIMATE	RESIDUAL	LEVERAGE	COOK	STUDENT
CASE 1	67539.115	-7502.115	0.021	0.001	-0.570
CASE 2	1916.898				
CASE 2	76338.502	-8561.502	0.024	0.002	-0.652
CASE 3	2043.612				
CASE 3	84670.885	-31745.885	0.036	0.037	-2.471
CASE 3	2525.189				
CASE 4	55209.018	1786.982	0.047	0.000	0.138
CASE 4	2892.544				
CASE 5	77720.808	-2571.808	0.017	0.000	-0.195
CASE 5	1755.735				
CASE 6	93826.958	8721.042	0.028	0.002	0.665
CASE 6	2208.961				
CASE 7	66011.546	-6683.546	0.028	0.001	-0.510
CASE 7	2231.101				
CASE 8	84155.390	10880.610	0.015	0.002	0.825
CASE 8	1601.682				
CASE 9	89872.269	21903.731	0.019	0.009	1.675
CASE 9	1840.972				
CASE 10	68941.628	21963.372	0.033	0.016	1.691
CASE 10	2398.100				
CASE 11	61051.166	-1095.166	0.030	0.000	-0.084
CASE 11	2308.720				
CASE 12	80568.530	-8937.530	0.030	0.002	-0.683
CASE 12	2300.373				
CASE 13	85199.990	-1044.990	0.020	0.000	-0.079
CASE 13	1879.740				
CASE 14	72215.773	-11191.773	0.025	0.003	-0.853
CASE 14	2102.788				
CASE 15	70021.578	-4839.578	0.017	0.000	-0.367
CASE 15	1713.844				
CASE 16	83268.656	-7394.656	0.088	0.005	-0.582
CASE 16	3944.428				
CASE 17	66649.741	-7937.741	0.020	0.001	-0.603
CASE 17	1881.237				
CASE 18	65480.153	-14480.153	0.032	0.007	-1.109
CASE 18	2362.370				
CASE 19	92292.562	25168.438	0.036	0.023	1.946
CASE 19	2503.892				
CASE 20	49640.088	5143.912	0.051	0.001	0.397
CASE 20	2998.143				
CASE 21	60174.341	-13077.341	0.035	0.006	-1.003
CASE 21	2493.139				
CASE 22	65230.346	-4448.346	0.033	0.001	-0.340
CASE 22	2407.682				
CASE 23	59446.508	-7441.508	0.035	0.002	-0.570
CASE 23	2486.371				

CASE	24	68878.299	-7721.299	0.045	0.003	-0.594
CASE	24	2806.268				
CASE	25	82218.731	-16829.731	0.026	0.007	-1.287
CASE	25	2120.207				
CASE	26	69912.160	12546.840	0.018	0.003	0.953
CASE	26	1767.011				
CASE	27	82439.222	-3953.222	0.031	0.000	-0.302
CASE	27	2348.538				
CASE	28	59574.279	-6545.279	0.046	0.002	-0.504
CASE	28	2860.157				
CASE	29	66264.869	9415.131	0.025	0.002	0.717
CASE	29	2104.671				
CASE	30	105245.481	-5918.481	0.052	0.002	-0.457
CASE	30	3041.660				
CASE	31	80395.050	5684.950	0.028	0.001	0.433
CASE	31	2233.692				
CASE	32	70962.015	-2801.015	0.016	0.000	-0.212
CASE	32	1701.365				
CASE	33	79692.155	-18168.155	0.053	0.019	-1.410
CASE	33	3060.923				
CASE	34	70971.879	-11046.879	0.017	0.002	-0.839
CASE	34	1742.309				
CASE	35	57144.969	740.031	0.030	0.000	0.056
CASE	35	2298.984				
CASE	36	87797.126	25345.874	0.062	0.043	1.988
CASE	36	3304.378				
CASE	37	77294.243	-7525.243	0.020	0.001	-0.572
CASE	37	1888.566				
CASE	38	66678.240	-14964.240	0.019	0.004	-1.139
CASE	38	1847.696				
CASE	39	75066.888	-13150.888	0.029	0.005	-1.006
CASE	39	2273.332				
CASE	40	68611.719	-8635.719	0.020	0.001	-0.656
CASE	40	1892.309				
CASE	41	73767.180	26852.820	0.022	0.016	2.064
CASE	41	1966.052				
CASE	42	65436.420	5434.580	0.021	0.001	0.413
CASE	42	1923.639				
CASE	43	71436.905	25952.095	0.049	0.034	2.022
CASE	43	2929.873				
CASE	44	78149.183	11921.817	0.039	0.006	0.916
CASE	44	2614.724				
CASE	45	75567.546	15310.454	0.022	0.005	1.167
CASE	45	1961.149				
CASE	46	61451.988	-12801.988	0.028	0.005	-0.978
CASE	46	2231.137				
CASE	47	67447.006	-2762.006	0.018	0.000	-0.209
CASE	47	1773.206				

CASE	48	62637.190	-6842.190	0.025	0.001	-0.521
CASE	48	2085.562				
CASE	49	88790.862	23044.138	0.059	0.034	1.801
CASE	49	3236.580				
CASE	50	55208.805	-4708.805	0.034	0.001	-0.360
CASE	50	2441.348				
CASE	51	66811.000	-16134.000	0.034	0.009	-1.238
CASE	51	2441.554				
CASE	52	78868.328	21470.672	0.014	0.006	1.637
CASE	52	1584.245				
CASE	53	90121.045	-17308.045	0.037	0.011	-1.332
CASE	53	2563.576				
CASE	54	78007.666	7729.334	0.030	0.002	0.590
CASE	54	2309.852				
CASE	55	82240.165	1399.835	0.013	0.000	0.106
CASE	55	1524.150				
CASE	56	68839.769	-2167.769	0.035	0.000	-0.166
CASE	56	2471.153				
CASE	57	70628.054	7682.946	0.033	0.002	0.587
CASE	57	2404.214				
CASE	58	77830.792	4735.208	0.019	0.000	0.359
CASE	58	1844.975				
CASE	59	82792.214	-16848.214	0.030	0.009	-1.291
CASE	59	2301.209				
CASE	60	80023.177	11495.823	0.027	0.004	0.877
CASE	60	2184.146				
CASE	61	70923.387	-9433.387	0.016	0.001	-0.715
CASE	61	1676.526				
CASE	62	105798.210	-12297.210	0.061	0.010	-0.956
CASE	62	3291.090				
CASE	63	66373.907	-9566.907	0.019	0.002	-0.727
CASE	63	1848.402				
CASE	64	80007.228	2194.772	0.012	0.000	0.166
CASE	64	1456.645				
CASE	65	66504.478	-8584.478	0.028	0.002	-0.655
CASE	65	2231.192				
CASE	66	79069.741	-15196.741	0.017	0.004	-1.156
CASE	66	1753.058				
CASE	67	71963.325	6756.675	0.032	0.001	0.516
CASE	67	2364.301				
CASE	68	90795.963	-5381.963	0.048	0.001	-0.415
CASE	68	2920.660				
CASE	69	85675.119	17244.881	0.024	0.007	1.318
CASE	69	2047.308				
CASE	70	92663.894	26385.106	0.142	0.127	2.168
CASE	70	4996.642				
CASE	71	76053.034	11988.966	0.020	0.003	0.912
CASE	71	1891.769				

CASE	72	74742.348	-8011.348	0.013	0.001	-0.606
CASE	72	1496.440				
CASE	73	87082.788	19017.212	0.017	0.006	1.450
CASE	73	1743.500				
CASE	74	79838.507	-4002.507	0.019	0.000	-0.304
CASE	74	1807.756				
CASE	75	70870.020	734.980	0.016	0.000	0.056
CASE	75	1667.694				
CASE	76	82020.383	-11196.383	0.012	0.001	-0.848
CASE	76	1460.360				
CASE	77	95786.747	-4872.747	0.032	0.001	-0.372
CASE	77	2384.169				
CASE	78	89518.580	-10150.580	0.042	0.005	-0.780
CASE	78	2732.094				
CASE	79	84704.824	-3306.824	0.039	0.000	-0.253
CASE	79	2616.095				
CASE	80	66969.193	-6919.193	0.026	0.001	-0.527
CASE	80	2142.162				
CASE	81	80671.830	3186.170	0.019	0.000	0.242
CASE	81	1812.677				
CASE	82	94112.541	-28131.541	0.031	0.025	-2.176
CASE	82	2350.532				
CASE	83	73783.130	-7483.130	0.066	0.004	-0.582
CASE	83	3415.349				
CASE	84	102241.207	-18284.207	0.036	0.012	-1.407
CASE	84	2514.762				
CASE	85	80367.497	12567.503	0.017	0.003	0.954
CASE	85	1707.874				
CASE	86	95159.331	7860.669	0.044	0.003	0.604
CASE	86	2781.761				
CASE	87	77804.978	-4517.978	0.014	0.000	-0.342
CASE	87	1556.880				
CASE	88	56149.075	916.925	0.047	0.000	0.071
CASE	88	2885.537				
CASE	89	87930.239	33069.761	0.054	0.062	2.603
CASE	89	3084.289				
CASE	90	72601.856	17509.144	0.053	0.017	1.358
CASE	90	3042.724				
CASE	91	93256.920		0.036		
CASE	91	2535.703				
CASE	92	78349.300	-212.300	0.030	0.000	-0.016
CASE	92	2291.481				
CASE	93	80476.915	10367.085	0.023	0.002	0.789
CASE	93	1997.029				
CASE	94	69033.030	-2592.030	0.017	0.000	-0.196
CASE	94	1748.368				
CASE	95	84025.033	1097.967	0.017	0.000	-0.083
CASE	95	1709.140				

CASE 96	95734.508	-12871.508	0.043	0.007	-0.991
CASE 96	2761.521				
CASE 97	66228.430	3771.570	0.021	0.000	0.286
CASE 97	1932.734				
CASE 98	86526.625	16239.375	0.024	0.006	1.240
CASE 98	2037.898				
CASE 99	92350.237	14537.763	0.031	0.007	1.114
CASE 99	2355.047				
CASE 100	66082.388	23737.612	0.027	0.015	1.825
CASE 100	2182.208				
CASE 101	72295.829	-133.829	0.020	0.000	-0.010
CASE 101	1863.021				
CASE 102	65235.601	2664.399	0.046	0.000	0.205
CASE 102	2838.405				
CASE 103	69651.825	20348.175	0.019	0.008	1.554
CASE 103	1832.853				
CASE 104	92659.445	-21847.445	0.030	0.014	-1.679
CASE 104	2287.298				
CASE 105	62093.082	1856.918	0.024	0.000	0.141
CASE 105	2055.707				
CASE 106	58851.602	-891.602	0.030	0.000	-0.068
CASE 106	2302.825				
CASE 107	81185.084	4625.916	0.037	0.001	0.354
CASE 107	2565.267				
CASE 108	65654.013	13173.987	0.023	0.004	1.004
CASE 108	2017.400				
CASE 109	54892.251	2549.749	0.048	0.000	0.196
CASE 109	2903.194				
CASE 110	79601.416	20913.584	0.020	0.009	1.598
CASE 110	1876.881				
CASE 111	122207.219	-32904.219	0.242	0.430	-2.906
CASE 111	6525.373				
CASE 112	71283.771	-712.771	0.020	0.000	-0.054
CASE 112	1873.762				
CASE 113	60013.844	-3334.844	0.050	0.001	-0.257
CASE 113	2967.610				
CASE 114	88352.045	16879.955	0.024	0.007	1.289
CASE 114	2053.564				
CASE 115	62465.733	-5597.733	0.032	0.001	-0.428
CASE 115	2375.851				
CASE 116	64889.741	-13363.741	0.021	0.004	-1.018
CASE 116	1937.602				
CASE 117	71939.939	-5360.939	0.031	0.001	-0.409
CASE 117	2336.935				
CASE 118	70111.216	-1796.216	0.028	0.000	-0.137
CASE 118	2211.857				
CASE 119	80346.558	-13147.558	0.026	0.004	-1.003
CASE 119	2222.222				