

6

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

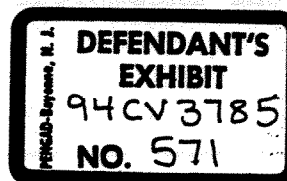
There were substantial problems with items 1) and 3). Many of the c.v.'s were obviously not up-to-date. Moreover, in one department no publications were listed on the c.v.'s. Supplemental c.v.'s corrected this problem for most, but not all, of the faculty in that unit. In other cases, no grants were 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;



- 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.

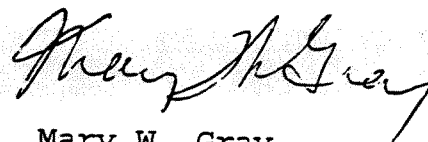
Clearly there are also omitted variables that might affect salary--teaching performance and service to the university and the profession to name just two. There is also the question of the quality of the publications as well as their number. However, in any regression model there are so-called error 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.



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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.

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DEPT67 DEPT72 DEPT77 DEPT81 DEPT85
 DEPT8570 DEPT9742 DEPT9742 DEPT976 VARI VARI
 VAR3 VAR4 VAR4 VAR5 VAR6 VAR6
 VAR8 PUB GRANT GRANT EXP EXP
 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.

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 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		0.770	0.000
EXP	1209.985	227.983	0.347		0.793	0.000

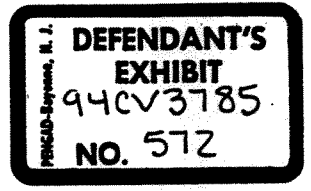
ANALYSIS OF VARIANCE

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

DURBIN-WATSON D STATISTIC 1.970
 FIRST ORDER AUTOCORRELATION .011

RESIDUALS HAVE BEEN SAVED



110611

>SAVE 'G:\SYSTEM\RD2.SYS'/DOUBLE RESID
 >L SALARY96 = CONSTANT+SEX+SERVICE+EXP+PUB
 >LMATE

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		

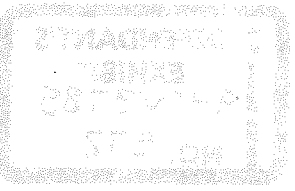
WARNING: CASE 16 HAS LARGE LEVERAGE (LEVERAGE = .087)
 WARNING: CASE 70 HAS LARGE LEVERAGE (LEVERAGE = .140)
 WARNING: CASE 89 IS AN OUTLIER (STUDENTIZED RESIDUAL = 2.765)
 WARNING: CASE 111 HAS LARGE LEVERAGE (LEVERAGE = .224)
 WARNING: CASE 111 IS AN OUTLIER (STUDENTIZED RESIDUAL = -3.304)
 WARNING: 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
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DATE TIME
 03/26/97 16:37:30
 03/26/97 16:37:30



>ESTIMATE

WED 3/26/97 4:38:05 PM G:\SYSTAT\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	0.927	0.804	0.423
SERVICE	1126.466	141.282	0.617	0.516	7.973	0.000
EXP	899.124	238.266	0.258	0.661	3.774	0.000
PUB	89.425	35.613	0.175	0.638	2.511	0.013
GRANT	6935.073	2135.656	0.189	0.913	3.247	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:\SYSTAT\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.

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	0.653	0.349	0.728
VAR3	6414.810	4260.541	0.103	0.663	1.506	0.134
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

5011

VAR8 -91.479 3902.366 -0.002 21 -0.023 0.981
 9573.477 4441.826 0.144 89 2.155 0.033
 2391.759 3639.808 0.049 544 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	.17591E+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

MEQ 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:\SYSTEM\RD6.SYS' /DOUBLE RESID
 >MODEL SALARY96 = CONSTANT+SERVICE+SEX+EXP+GRANT+OLDGRANT+VARI1+VAR2+
 >VAR3+VAR4+VAR5+VAR6+VAR7+VAR8
 >ESTIMATE

WED 3/26/97 4:21:54 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)
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

WARNING: CASE 18 HAS LARGE LEVERAGE (LEVERAGE = .163)
 WARNING: CASE 19 HAS LARGE LEVERAGE (LEVERAGE = .195)
 WARNING: CASE 20 HAS LARGE LEVERAGE (LEVERAGE = .170)
 WARNING: CASE 21 HAS LARGE LEVERAGE (LEVERAGE = .162)
 WARNING: CASE 22 HAS LARGE LEVERAGE (LEVERAGE = .188)
 WARNING: CASE 23 HAS LARGE LEVERAGE (LEVERAGE = .161)
 WARNING: CASE 24 HAS LARGE LEVERAGE (LEVERAGE = .159)
 WARNING: CASE 70 HAS LARGE LEVERAGE (LEVERAGE = .166)
 WARNING: CASE 135 HAS LARGE LEVERAGE (LEVERAGE = .156)
 WARNING: CASE 151 IS AN OUTLIER (STUDENTIZED RESIDUAL = 3.612)

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.

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 ADJUSTED SQUARED MULTIPLE R: .432 STANDARD ERROR OF ESTIMATE: 13391.362

1108

VARIABLE	COEFFICIENT	STD ERROR	STD COEF	TOLERANCE	T	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

1186

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	11.207	0.000
SEX	2957.480	2474.341	0.069	1.195	0.234
EXP	1138.060	221.690	0.326	0.786	0.000
GRANT	7681.392	2146.334	0.209	0.931	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:\SYSTEM\RD9.SYS' /DOUBLE RESID
 >MODEL SALARY96 = CONSTANT+SERVICE+SEX+EXP+GRANT+OLDGRANT
 >ESTIMATE

WED 3/26/97 4:25:56 PM G:\SYSTEM\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

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	2.168	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

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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		

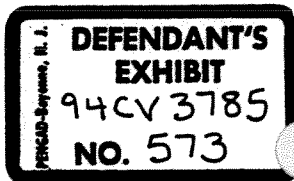
WARNING: CASE 3 IS AN OUTLIER (STUDENTIZED RESIDUAL = -2.750)
 WARNING: CASE 16 HAS LARGE LEVERAGE (LEVERAGE = .084)
 WARNING: CASE 70 HAS LARGE LEVERAGE (LEVERAGE = .144)
 WARNING: CASE 111 HAS LARGE LEVERAGE (LEVERAGE = .074)
 WARNING: CASE 151 IS AN OUTLIER (STUDENTIZED RESIDUAL = 3.388)
 WARNING: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



1069

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

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P111 76.713 39.033 0.155 .71 1.965 0.051
 C 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\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:\SYSTAT\MRD5.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:\SYSTAT\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

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5

V1	858.041	4955.926	0.014	37	0.173	0.863
V2	12077.399	5445.086	0.178	56	2.218	0.028
VARD	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:\SYSTEM\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:\SYSTEM\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

SOURCE	SUM-OF-SQUARES	DF	MEAN-SQUARE	F-RATIO	P
OLDGRANT	2931.505	3548	215	0.075	0.515
VARI	6463.839	7174	253	0.072	0.674
VAR2	3847.099	5029	389	0.063	0.625
VAR3	8885.128	5256	187	0.136	0.657
VAR4	4606.877	4517	656	0.090	0.546
VAR5	9080.470	4564	697	0.187	0.480
VAR6	839.114	4982	573	0.014	0.637
VAR7	13039.101	5438	563	0.192	0.664
VAR8	4306.567	4533	087	0.084	0.542

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+VARI1+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		

ANALYSIS OF VARIANCE						
VAR1	4808.085	6880.240	0.053	0.731	0.699	0.486
VAR2	3414.113	4995.900	0.056	0.732	0.683	0.496
VAR3	9141.005	5240.646	0.140	0.659	1.744	0.083
VAR4	4217.546	4487.523	0.082	0.552	0.940	0.349
VAR5	8151.117	4418.524	0.168	0.511	1.845	0.067
VAR6	751.393	4975.356	0.012	0.637	0.151	0.880
VAR7	12494.633	5391.894	0.184	0.674	2.317	0.022
VAR8	4078.354	4519.136	0.080	0.544	0.902	0.368

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
SERVICE	1321.878	136	213	0.732	0.751
EXP	1229.744	249	972	0.366	0.773
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:\SYSTEM\MRD9.SYS'/DOUBLE RESID
 >MODEL SALARY96 = CONSTANT+SERVICE+EXP+GRANT+OLDGRANT
 >ESTIMATE

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

DEP VAR: SALARY96 N: 142 MULTIPLE R: 0.641 SQUARED MULTIPLE R: 0.412
 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	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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1 SESSION .192994E+11 4 .482484E+10
RESIDUAL .275987E+11 137 .201450E+09

23.9 0.000

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

6
6
6

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 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)

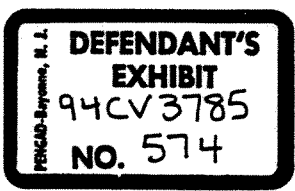
DURBIN-WATSON D STATISTIC 1.945
 FIRST ORDER AUTOCORRELATION .022

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



1069

TABLE	COEFFICIENT	STD ERROR	STD COEF	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:\SYSTEM\MRD3.SYS' /DOUBLE RESID
 >MODEL SALARY96 = CONSTANT+SERVICE+EXP+PUB+GRANT
 >ESTIMATE

WED 3/26/97 4:28:48 PM G:\SYSTEM\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	F	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

2069

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\MRD5.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:\SYSTEM\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:\SYSTEM\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

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		

ANALYSIS OF VARIANCE

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

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

>SAVE 'G:\SYSTAT\WRD7.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	215.128	0.746	0.657
EXP	1305.721	268	901.721	0.388	0.664
GRANT	8791.469	2602	0.47	0.238	0.856
VAR1	4808.085	6880	0.240	0.053	0.856
VAR2	3414.113	4995	0.900	0.056	0.632
VAR3	9141.005	5240	0.646	0.140	0.659
VAR4	4217.546	4487	0.523	0.082	0.552
VAR5	8151.117	4418	0.524	0.168	0.511
VAR6	751.393	4975	0.356	0.012	0.637
VAR7	12494.633	5391	0.894	0.184	0.674
VAR8	4078.354	4519	0.136	0.080	0.544

ANALYSIS OF VARIANCE

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		

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
GRANT	1321.878	136	249.972	0.732	0.000
	1229.744	249	2506.254	0.366	0.000
	7339.030	2506	0.199	0.929	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:\SYSTEM\MRD9.SYS\DOUBLE RESID
 >MODEL SALARY96 = CONSTANT+SERVICE+EXP+GRANT+OLDGRANT
 >ESTIMATE

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

DEP VAR: SALARY96 N: 142 MULTIPLE R: 0.641 SQUARED MULTIPLE R: 0.412
 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	0.614	0.358	0.721

ANALYSIS OF VARIANCE

SOURCE	SUM-OF-SQUARES	DF	MEAN-SQUARE	F-RATIO	P
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	ESTIMATE	RESIDUAL	LEVERAGE	K	STUDENT	
CASE	1	64145.067	-4108.067	0.017	0.000	-0.297
CASE	1	1822.175				
CASE	2	83190.971	-15413.971	0.010	0.003	-1.114
CASE	2	1358.288				
CASE	3	92079.060	-39154.060	0.018	0.036	-2.898
CASE	3	1848.277				
CASE	4	61028.401	-4032.401	0.031	0.001	-0.294
CASE	4	2434.160				
CASE	5	83131.229	-7982.229	0.009	0.001	-0.575
CASE	5	1294.040				
CASE	6	88449.105	14098.895	0.019	0.005	1.023
CASE	6	1904.365				
CASE	7	64777.839	-5449.839	0.027	0.001	-0.396
CASE	7	2295.802				
CASE	8	81861.502	13174.498	0.008	0.002	0.951
CASE	8	1253.668				
CASE	9	87000.152	24775.848	0.012	0.010	1.803
CASE	9	1530.435				
CASE	10	66286.535	24618.465	0.030	0.025	1.809
CASE	10	2429.164				
CASE	11	64145.067	-4189.067	0.017	0.000	-0.303
CASE	11	1822.175				
CASE	12	88150.395	-16519.395	0.012	0.004	-1.196
CASE	12	1508.381				
CASE	13	83250.713	904.287	0.011	0.000	0.065
CASE	13	1448.579				
CASE	14	72495.477	-11471.477	0.018	0.003	-0.832
CASE	14	1889.092				
CASE	15	69044.748	-3862.748	0.011	0.000	-0.278
CASE	15	1469.047				
CASE	16	85805.311	-9931.311	0.075	0.011	-0.741
CASE	16	3802.204				
CASE	17	65355.051	-6643.051	0.015	0.001	-0.480
CASE	17	1704.432				
CASE	18	61844.581	-10844.581	0.027	0.004	-0.789
CASE	18	2289.426				
CASE	19	85252.488	32208.512	0.016	0.022	2.363
CASE	19	1743.926				
CASE	20	54226.219	557.781	0.041	0.000	0.041
CASE	20	2816.301				
CASE	21	57975.658	-10878.658	0.031	0.005	-0.794
CASE	21	2456.860				
CASE	22	62178.643	-1396.643	0.029	0.000	-0.102
CASE	22	2381.238				
CASE	23	56646.189	-4641.189	0.032	0.001	-0.338
CASE	23	2484.419				

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	1683.200				

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	16657.361	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	66524.778	-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	1793.753				

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				