

[illegible]

```

24      Dstat ; Rhs = relPrice, LQ ; Output = 3 $
      Results begin on page 10 in output.
      Exit status for this model command is 0.0.
25      Sure; LHS = Costshar
      ; Labels = ay, byy, byam, byaf, byq,
      aam, bamam, bamaf, bamq,
      aaf, bafaf, bafq
      ; RHS = one, relPrice, LQ
      ; Pattern =
      ay, byy, byam, byaf, byq,
      aam, byam, bamam, bamaf, bamq,
      aaf, byaf, bamaf, bafaf, bafq $
      Results begin on page 13 in output.
      Exit status for this model command is 0.0.
26      Sure; LHS = Costshar
      ; Labels = ay, byy, byam, byaf, byq,
      aam, bamam, bamaf, bamq,
      aaf, bafaf, bafq,
      Da, Dc, De, Df, Dh, Di, Dp
      ; RHS = one, relPrice, LQ, Ind
      ; Pattern =
      ay, byy, byam, byaf, byq, Da, Dc, De, Df, Dh, Di, Dp,
      aam, byam, bamam, bamaf, bamq, Da, Dc, De, Df, Dh, Di, Dp,
      aaf, byaf, bamaf, bafaf, bafq, Da, Dc, De, Df, Dh, Di, Dp $
      Error: Models - Maximum iterations exceeded by Newton
iterations.
      Results begin on page 15 in output.
      Exit status for this model command is 1.0.
27      Sure; LHS = Costshar
      ; Labels = ay, byy, byam, byaf, byq,
      aam, bamam, bamaf, bamq,
      aaf, bafaf, bafq,
      Da, Dc, De, Df, Dh, Di, Dp,
      Ey, Eam, Eaf
      Error: Models - Maximum iterations exceeded by Newton
iterations.
      Results begin on page 17 in output.
      Exit status for this model command is 1.0.

```

28 stop

[illegible]

° LIMDEP Estimation Results Run log line 20

Page 10

```
0 Current sample contains      104 observations.
```

○

$\frac{1}{4}$

[illegible]

0 Constrained MLE for Multivariate Regression Model

○

```

0 First iter:  0 F= 201.6227 log|ä|= -12.39099 g'inv(H)g= 2.1774

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O

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° Last iter: 1 F= 479.9347 log|ä|= -17.74314 g'inv(H)g= 0.0000

```

O

^o Number of observations used in estimation = 104

○

^o Model: ONE LWY LWAM LWAF LWK LO

O

^o CY AY BYY BYAM BYAF BYK BYO

Q

° CAM AAM BAMY BAMAM BAMAf BAMK BAMO

○

$$^{\circ} \text{ CAF} \quad \text{AAF} \quad \text{BAFY} \quad \text{BAFAM} \quad \text{BAFAF} \quad \text{BAFK} \quad \text{BAFO}$$

O

$$\frac{1}{\sqrt{14}}$$

Variable	Coefficient	Standard Error	z=b/s.e.	P[³ Z ³ dz]	Mean of X
AY	0.2841908E-01	0.39291E-01	0.723	0.46950	
BYY	0.1962850E-01	0.12136E-01	1.617	0.10581	
BYAM	-0.1062825	0.18511E-01	-5.742	0.00000	
BYAF	0.5371649E-01	0.17165E-01	3.129	0.00175	
BYK	0.4522786E-03	0.14191E-01	0.032	0.97458	
BYQ	0.9224590E-02	0.37755E-02	2.443	0.01456	
AAM	-0.6416486	0.18885	-3.398	0.00068	
BAMY	0.6815152E-01	0.58331E-01	1.168	0.24266	
BAMAM	0.3538427E-01	0.88969E-01	0.398	0.69084	
BAMAF	-0.3709043E-01	0.82502E-01	-0.450	0.65302	
BAMK	-0.1948541	0.68208E-01	-2.857	0.00428	
BAMQ	0.1682615	0.18146E-01	9.272	0.00000	
AAF	2.705195	0.21072	12.838	0.00000	
BAFY	-0.1641074E-01	0.65088E-01	-0.252	0.80094	
BAFAM	0.5879834	0.99275E-01	5.923	0.00000	
BAFAF	-0.2397569	0.92058E-01	-2.604	0.00920	
BAFK	-0.1928631	0.76109E-01	-2.534	0.01128	
BAFO	-0.2564983	0.20248E-01	-12.668	0.00000	

Residual covariance matrix

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```

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^ LIMDEP Estimation Results                                Run log line    20

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

Covariance matrix

| | CY | CAM | CAF |
|-----|------------|------------|------------|
| CY | 0.3790E-03 | | |
| CAM | 0.3474E-03 | 0.8756E-02 | |
| CAF | 0.1340E-02 | 0.1421E-02 | 0.1090E-01 |

[illegible]

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0  LIMDEP Estimation Results                                Run log line    21

```

Page 3 0

```
0 Current sample contains 104 observations.
```

0

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

| Variable | Descriptive Statistics | | | | | |
|----------|------------------------|-----------|-------|-------|---------|---------|
| | Mean | Std. Dev. | Skew. | Kurt. | Minimum | Maximum |
| Cases | | | | | | |
| LWY | 1.8966 | 0.2149 | -0.5 | 2.7 | 1.3445 | 2.2794 |
| LWAM | 2.4163 | 0.2398 | -0.3 | 2.4 | 1.8465 | 2.8444 |
| LWAF | 2.3373 | 0.2302 | -0.2 | 2.5 | 1.7228 | 2.8346 |
| LWK | 4.2203 | 0.2208 | 0.0 | 2.0 | 3.7873 | 4.6643 |
| LQ | 9.8942 | 0.7069 | -0.4 | 1.9 | 8.5837 | 10.9884 |

[illegible]

```

° LIMDEP Estimation Results                                Run log line    21

```

Page 40

```

0 Current sample contains      104 observations.

```

○

$\frac{1}{4}$

Covariance matrix

| | LWY | LWAM | LWAF | LWK | LQ |
|------|------------|------------|------------|------------|--------|
| LWY | 0.4618E-01 | | | | |
| LWAM | 0.3313E-01 | 0.5752E-01 | | | |
| LWAF | 0.2890E-01 | 0.4729E-01 | 0.5301E-01 | | |
| LWK | 0.1921E-01 | 0.3449E-01 | 0.2852E-01 | 0.4876E-01 | |
| LQ | 0.2356E-02 | 0.5126E-01 | 0.1983E-01 | 0.9338E-01 | 0.4998 |

4

```

° LIMDEP Estimation Results                                Run log line   21

```

[illegible]

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

Correlation matrix

| | LWY | LWAM | LWAF | LWK | LQ |
|------|------------|--------|--------|--------|-------|
| LWY | 1.000 | | | | |
| LWAM | 0.6427 | 1.000 | | | |
| LWAF | 0.5841 | 0.8564 | 1.000 | | |
| LWK | 0.4049 | 0.6512 | 0.5609 | 1.000 | |
| LQ | 0.1550E-01 | 0.3023 | 0.1218 | 0.5982 | 1.000 |

Eiiiiiiiiiiiiiiiiiiiiii
iiiiiii»

◦ LIMDEP Estimation Results Run log line 22

[illegible][illegible]^o Constrained MLE for Multivariate Regression Model

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```

0 First iter:  0 F= 201.6227 log|ä| = -12.39099 g'inv(H)g= 2.1446

```

O

```

° Last iter: 3 F= 463.1418 log|ä| = -17.42020 g'inv(H)g= 0.0000

```

O

^o Number of observations used in estimation = 104

○

^o Model: ONE LWY LWAM LWAF LWK LQ

O

$${}^0 \text{ CY} \quad \text{AY} \quad \text{BYY} \quad \text{BYAM} \quad \text{BYAF} \quad \text{BYK} \quad \text{BYQ}$$

O

$$^{\circ} \text{ CAM} \quad \text{AAM} \quad \text{BYAM} \quad \text{BAMAM} \quad \text{BAMAF} \quad \text{BAMK} \quad \text{BAMQ}$$

○

⁰ CAF AAF BYAF BAMAF BAFAF BAFK BAFQ

O

$$\frac{E}{\tau^{1/4}}$$

| Variable | Coefficient | Standard Error | z=b/s.e. | P[³ Z ³ ðz] | Mean of X |
|----------|----------------|----------------|----------|------------------------------------|-----------|
| AY | 0.1084909E-01 | 0.38990E-01 | 0.278 | 0.78082 | |
| AAM | -0.6374297 | 0.20384 | -3.127 | 0.00177 | |
| AAF | 2.490007 | 0.21314 | 11.683 | 0.00000 | |
| BYY | 0.2411660E-01 | 0.90815E-02 | 2.656 | 0.00792 | |
| BYAM | -0.1353681 | 0.14786E-01 | -9.155 | 0.00000 | |
| BYAF | 0.7726954E-01 | 0.14091E-01 | 5.484 | 0.00000 | |
| BYK | 0.2234884E-02 | 0.14337E-01 | 0.156 | 0.87613 | |
| BYQ | 0.1091894E-01 | 0.37468E-02 | 2.914 | 0.00357 | |
| BAMAM | -0.9567232E-01 | 0.75227E-01 | -1.272 | 0.20345 | |
| BAMAF | 0.2581559 | 0.63076E-01 | 4.093 | 0.00004 | |
| BAMK | -0.2025353 | 0.75168E-01 | -2.694 | 0.00705 | |
| BAMQ | 0.1723836 | 0.19117E-01 | 9.017 | 0.00000 | |
| BAFAF | -0.8831930E-02 | 0.72067E-01 | -0.123 | 0.90246 | |

Residual covariance matrix

```
E#####  
f»  
° Constrained MLE for Multivariate Regression Model  
°  
° First iter:   0 F=   201.6227 log|ä|= -12.39099 g'inv(H)g=    2.1168  
°  
° Last   iter:   1 F=   462.6810 log|ä|= -17.41134 g'inv(H)g=    0.0000  
°  
° Number of observations used in estimation =    104  
°  
° Model:      ONE     LRELW LRELW LRELW LQ  
°  
° CY          AY      BYY     BYAM  BYAF  BYQ  
°  
° CAM         AAM     BAMY    BAMAM BAMAf BAMQ  
°  
° CAF         AAF     BAFY    BAFAM BAFAF BAFQ  
°  
E#####  
f¼
```

| Variable | Coefficient | Standard Error | z=b/s.e. | P[³ Z ³ dz] | Mean of X |
|----------|----------------|----------------|----------|------------------------------------|-----------|
| AY | -0.4452846E-01 | 0.30449E-01 | -1.462 | 0.14363 | |
| BYY | 0.2982495E-01 | 0.12002E-01 | 2.485 | 0.01295 | |
| BYAM | -0.1090697 | 0.19165E-01 | -5.691 | 0.00000 | |
| BYAF | 0.5717510E-01 | 0.17752E-01 | 3.221 | 0.00128 | |
| BYO | 0.5285778E-02 | 0.36317E-02 | 1.455 | 0.14554 | |

Residual covariance matrix

Covariance matrix

[illegible]

```

E#####
#####»
° LIMDEP Estimation Results                                Run log line    24
Page 11 °
° Current sample contains          104 observations.
°

```


Residual covariance matrix

| Variable | Coefficient | Standard Error | z=b/s.e. | P[³ Z ³ dz] | Mean of X |
|----------|-------------|----------------|----------|------------------------------------|-----------|
| AY | -0.1440373 | 0.59876E-01 | -2.406 | 0.01615 | |

