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```
  14   Create ; LrelWam   = log(relWam) $
  15   Create ; LrelWaf   = log(relWaf) $
  16   Create ; LWyft   = log(Wyft) $
  17   Create ; LWypt   = log(Wypt) $
  18   Create ; LWam    = log(Wam)  $
  19   Create ; LWaf    = log(Waf)  $
  20   Create ; LWk     = log(defr) $
  21   Create ; LQ      = log(Q)    $
  22   Namelist ; Price = LWyft, LWypt, LWam, LWaf, LWk
       ; relPrice = LrelWyft, LrelWypt, LrelWam, LrelWaf
       ; Costshar = Cyft, Cypt, Cam, Caf
       ; Educate = Edyft, Edypt, Edam, Edaf
       ; Ind = Inda, Indc, Inde, Indf, Indh, Indi, Indp $
  23   Sure; LHS = Costshar
       ; Labels =
       ayft, byftyft, byftypt, byftam, byftaf, byftk, byftq,
       afpt, byptyft, byptypt, byptam, byptaf, byptk, byptq,
       aam,  bamyft,  bamypt,  bamam,  bamaf,  bamk,  bamq,
       aaf,  bafyft,  bafypt,  bafam,  bafaf,  bafk,  bafq
       ; RHS = one, Price, LQ
       ; Pattern =
       ayft, byftyft, byftypt, byftam, byftaf, byftk, byftq,
       afpt, byptyft, byptypt, byptam, byptaf, byptk, byptq,
       aam,  bamyft,  bamypt,  bamam,  bamaf,  bamk,  bamq,
       aaf,  bafyft,  bafypt,  bafam,  bafaf,  bafk,  bafq $
       Results begin on page   1 in output.
       Exit status for this model command is  0.0.
```

```
º  LIMDEP  Execution Trace.  This run: 07/03/98. Time now 15:46:03.
Page  2 º
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Line   Program Instruction

  24   Sure; LHS = Costshar
       ; Labels =
       ayft, byftyft, byftypt, byftam, byftaf, byftk, byftq,
       afpt, byptypt, byptam, byptaf, byptk, byptq,
       aam,  bamam,  bamaf,  bamk,  bamq,
       aaf,  bafaf,  bafk,  bafq
       ; RHS = one, Price, LQ
       ; Pattern =
       ayft, byftyft, byftypt, byftam, byftaf, byftk, byftq,
       afpt, byftypt, byptypt, byptam, byptaf, byptk, byptq,
       aam,  byftam,  byptam,  bamam,  bamaf,  bamk,  bamq,
       aaf,  byftaf,  byptaf,  bamaf,  bafaf,  bafk,  bafq $
       Results begin on page   3 in output.
       Exit status for this model command is  0.0.
  25   Sure;LHS = Costshar
       ;Labels =
       ayft,  byftyft,  byftypt, byftam,  byftaf,  byftq,
       aypt,  byptyft,  byptypt, byptam,  byptaf,  byptq,
       aam,   bamyft,   bamypt,  bamam,   bamaf,   bamq,
       aaf,   bafyft,   bafyft,  bafam,   bafaf,   bafq
```

```
      ;RHS = one, relPrice, LQ
      ;Pattern =
      ayft,  byftyft,  byftypt, byftam,  byftaf,  byftq,
      aypt,  byptyft,  byptypt, byptam,  byptaf,  byptq,
      aam,   bamyft,   bamypt,  bamam,   bamaf,   bamq,
      aaf,   bafyft,   bafyft,  bafam,   bafaf,   bafq $
      Error:   Models - singular Hessian during Newton iterations.
      Exit status for this model command is  2.0.
  26  Sure; LHS = Costshar
      ; Labels = ayft,  byftyft,  byftypt, byftam,  byftaf,  byftq,
      aypt,  byptypt, byptam,  byptaf,  byptq,
      aam,   bamam,   bamaf,   bamq,
      aaf,   bafaf,   bafq
      ; RHS = one, relPrice, LQ
      ; Pattern =
      ayft,  byftyft,  byftypt, byftam,  byftaf,  byftq,
      aypt,  byftypt,  byptypt, byptam,  byptaf,  byptq,
      aam,   byftam,   byptam,  bamam,   bamaf,   bamq,
      aaf,   byftaf,   byftaf,  bamaf,   bafaf,   bafq $
      Results begin on page   5 in output.
      Exit status for this model command is  0.0.
  27  Stop $
      Stop $
  28  quit
```

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BYFTYFT	0.3044598	0.84094E-01	3.620	0.00029
BYFTYPT	0.4910239E-01	0.33502E-01	1.466	0.14274
BYFTAM	-0.1078136	0.10315	-1.045	0.29592
BYFTAF	0.7075941E-01	0.11354	0.623	0.53315
BYFTK	0.1945292	0.57189E-01	3.402	0.00067
BYFTQ	-0.8288250E-01	0.14823E-01	-5.592	0.00000
AFPT	-0.4549499	0.16812	-2.706	0.00681
BYPTYFT	0.4487529	0.10545	4.256	0.00002
BYPTYPT	0.7557192E-01	0.42010E-01	1.799	0.07203
BYPTAM	-0.1360761	0.12934	-1.052	0.29278
BYPTAF	0.8927933E-01	0.14238	0.627	0.53061
BYPTK	0.1970053	0.71713E-01	2.747	0.00601
BYPTQ	-0.9972332E-01	0.18587E-01	-5.365	0.00000
AAM	0.1724439	0.16347	1.055	0.29148
BAMYFT	-0.3394721	0.10254	-3.311	0.00093
BAMYPT	0.5808945E-01	0.40850E-01	1.422	0.15502
BAMAM	0.4408722	0.12577	3.505	0.00046
BAMAF	-0.7076381E-01	0.13844	-0.511	0.60925
BAMK	-0.2065335	0.69732E-01	-2.962	0.00306
BAMQ	0.6594886E-01	0.18074E-01	3.649	0.00026
AAF	0.6275958	0.14914	4.208	0.00003
BAFYFT	-0.1613446	0.93549E-01	-1.725	0.08458
BAFYPT	0.9988294E-01	0.37268E-01	2.680	0.00736
BAFAM	0.1037941	0.11475	0.905	0.36570
BAFAF	-0.6435266E-01	0.12631	-0.509	0.61040
BAFK	0.8739944E-01	0.63619E-01	1.374	0.16951
BAFQ	-0.8703504E-01	0.16489E-01	-5.278	0.00000

Residual covariance matrix

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º Constrained MLE for Multivariate Regression Model
º
º First iter: 0 F= 249.9533 log|ä|= -16.15830 g'inv(H)g=   2.0497
º
º Last iter: 3 F= 514.8350 log|ä|= -21.25218 g'inv(H)g=   0.0000
º
º Number of observations used in estimation =   104
º
º Model: ONE   LWYFT LWYPT LWAM LWAF LWK   LQ
º
º CYFT   AYFT BYFTY BYFTY BYFTA BYFTA BYFTK BYFTQ
º
º CYPT   AFPT BYFTY BYPTY BYPTA BYPTA BYPTK BYPTQ
º
º CAM   AAM   BYFTA BYPTA BAMAM BAMAF BAMK BAMQ
º
º CAF   AAF   BYFTA BYPTA BAMAF BAFAF BAFK BAFQ
º
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                CYFT        CYPT         CAM         CAF
CYFT      0.5214E-02
CYPT      0.4886E-02  0.8302E-02
CAM      -0.1335E-02 -0.4788E-03  0.7861E-02
CAF      -0.1635E-03  0.1509E-02  0.3421E-02  0.6123E-02

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Residual covariance matrix

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