**WTA Space – Ovines – in Euro**

|-> \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

# WTA Space - Ovines

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

CALC;RAN(12345)$

Error: 1: Unrecognized command. (Missing ; ?)

|-> GMXLOGIT

;lhs=choice

;choices=alt1,alt2,alt3

;gamma=[1]

;tau=[0]

;pds=4

;fcn=bcost(\*n),bcl(n),bss(n),bsos(n),bsq(u)

;Draws=10

;Halton

;maxit=200

;parameters

;Model:

U(alt1)=bcl\*cl+bss\*ss+bsos\*sos+bcost\*cost/

U(alt2)=bcl\*cl+bss\*ss+bsos\*sos+bcost\*cost/

U(alt3)=bsq\*sq $

Normal exit: 5 iterations. Status=0, F= 271.7672

-----------------------------------------------------------------------------

Start values obtained using MNL model

Dependent variable Choice

Log likelihood function -271.76724

Estimation based on N = 324, K = 5

Inf.Cr.AIC = 553.5 AIC/N = 1.708

Model estimated: May 29, 2018, 16:23:10

R2=1-LogL/LogL\* Log-L fncn R-sqrd R2Adj

Constants only -347.1816 .2172 .2062

Response data are given as ind. choices

Number of obs.= 324, skipped 0 obs

--------+--------------------------------------------------------------------

| Standard Prob. 95% Confidence

CHOICE| Coefficient Error z |z|>Z\* Interval

--------+--------------------------------------------------------------------

BCOST| .24479\*\*\* .02960 8.27 .0000 .18677 .30282

BCL| -.45315\*\*\* .08966 -5.05 .0000 -.62889 -.27742

BSS| -.22360\*\* .11124 -2.01 .0444 -.44162 -.00558

BSOS| -.31091\*\*\* .10558 -2.94 .0032 -.51783 -.10398

BSQ| .98196\*\*\* .22201 4.42 .0000 .54683 1.41710

--------+--------------------------------------------------------------------

Note: \*\*\*, \*\*, \* ==> Significance at 1%, 5%, 10% level.

-----------------------------------------------------------------------------

Normal exit: 35 iterations. Status=0, F= 246.9043

-----------------------------------------------------------------------------

Generalized Mixed (RP) Logit Model

Dependent variable CHOICE

Log likelihood function -246.90427

Restricted log likelihood -355.95038

Chi squared [ 10 d.f.] 218.09223

Significance level .00000

McFadden Pseudo R-squared .3063520

Estimation based on N = 324, K = 10

Inf.Cr.AIC = 513.8 AIC/N = 1.586

Model estimated: May 29, 2018, 16:23:16

R2=1-LogL/LogL\* Log-L fncn R-sqrd R2Adj

No coefficients -355.9504 .3064 .2955

Constants only -347.1816 .2888 .2777

At start values -355.9504 .3064 .2955

Response data are given as ind. choices

Replications for simulated probs. = 10

Halton sequences used for simulations

RPL model with panel has 81 groups

Fixed number of obsrvs./group= 4

BHHH estimator used for asymp. variance

Number of obs.= 324, skipped 0 obs

--------+--------------------------------------------------------------------

| Standard Prob. 95% Confidence

CHOICE| Coefficient Error z |z|>Z\* Interval

--------+--------------------------------------------------------------------

|Random parameters in utility functions

BCOST| 1.0 .....(Fixed Parameter).....

BCL| -2.28904\*\*\* .45253 -5.06 .0000 -3.17598 -1.40211

BSS| -1.19542\*\* .52591 -2.27 .0230 -2.22618 -.16466

BSOS| -.90447\* .46897 -1.93 .0538 -1.82365 .01470

BSQ| 4.93202\*\*\* .71955 6.85 .0000 3.52173 6.34230

|Distns. of RPs. Std.Devs or limits of triangular

CsBCOST| 0.0 .....(Fixed Parameter).....

NsBCL| 1.51779\*\*\* .55078 2.76 .0059 .43827 2.59730

NsBSS| 1.00678 .69100 1.46 .1451 -.34756 2.36111

NsBSOS| 4.01372\*\*\* .54679 7.34 .0000 2.94204 5.08541

UsBSQ| 5.05525\*\*\* 1.39113 3.63 .0003 2.32869 7.78181

|Variance parameter tau in GMX scale parameter

TauScale| 0.0 .....(Fixed Parameter).....

|Weighting parameter gamma in GMX model

GammaMXL| 0.0 .....(Fixed Parameter).....

|Coefficient on BCOST in preference space form

Beta0WTP| .41430\*\*\* .07620 5.44 .0000 .26496 .56365

S\_b0\_WTP| .04974 .07983 .62 .5332 -.10673 .20620

| Sample Mean Sample Std.Dev.

Sigma(i)| 1.0\*\*\* .2342D-06 \*\*\*\*\*\*\*\* .0000 .10000D+01 .10000D+01

--------+--------------------------------------------------------------------

Note: nnnnn.D-xx or D+xx => multiply by 10 to -xx or +xx.

Note: \*\*\*, \*\*, \* ==> Significance at 1%, 5%, 10% level.

Fixed parameter ... is constrained to equal the value or

had a nonpositive st.error because of an earlier problem.

-----------------------------------------------------------------------------

**WTA Space – Ovines – in Euro (inc. covariates)**

|-> \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

# WTA Space - Ovines (inc. covariates)

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

CALC;RAN(12345)$

Error: 1: Unrecognized command. (Missing ; ?)

|-> GMXLOGIT

;lhs=choice

;choices=alt1,alt2,alt3

;gamma=[1]

;tau=[0]

;pds=4

;fcn=bcost(\*n|#10100000),bcl(n|#00000000),bss(n|#10000001),bsos(n|#01000000),bsq(u)

;GMX=amed,benefit1,benefit3,age1,age3,edu1,edu3,tin1

;Draws=1000

;Halton

;maxit=200

;parameters

;Model:

U(alt1)=bcl\*cl+bss\*ss+bsos\*sos+bcost\*cost/

U(alt2)=bcl\*cl+bss\*ss+bsos\*sos+bcost\*cost/

U(alt3)=bsq\*sq $

Normal exit: 5 iterations. Status=0, F= 271.7672

-----------------------------------------------------------------------------

Start values obtained using MNL model

Dependent variable Choice

Log likelihood function -271.76724

Estimation based on N = 324, K = 5

Inf.Cr.AIC = 553.5 AIC/N = 1.708

Model estimated: May 24, 2018, 11:01:04

R2=1-LogL/LogL\* Log-L fncn R-sqrd R2Adj

Constants only -347.1816 .2172 .1897

Response data are given as ind. choices

Number of obs.= 324, skipped 0 obs

--------+--------------------------------------------------------------------

| Standard Prob. 95% Confidence

CHOICE| Coefficient Error z |z|>Z\* Interval

--------+--------------------------------------------------------------------

BCOST| .24479\*\*\* .02960 8.27 .0000 .18677 .30282

BCL| -.45315\*\*\* .08966 -5.05 .0000 -.62889 -.27742

BSS| -.22360\*\* .11124 -2.01 .0444 -.44162 -.00558

BSOS| -.31091\*\*\* .10558 -2.94 .0032 -.51783 -.10398

BSQ| .98196\*\*\* .22201 4.42 .0000 .54683 1.41710

--------+--------------------------------------------------------------------

Note: \*\*\*, \*\*, \* ==> Significance at 1%, 5%, 10% level.

-----------------------------------------------------------------------------

Normal exit: 54 iterations. Status=0, F= 209.8942

-----------------------------------------------------------------------------

Generalized Mixed (RP) Logit Model

Dependent variable CHOICE

Log likelihood function -209.89418

Restricted log likelihood -355.95038

Chi squared [ 23 d.f.] 292.11240

Significance level .00000

McFadden Pseudo R-squared .4103274

Estimation based on N = 324, K = 23

Inf.Cr.AIC = 465.8 AIC/N = 1.438

Model estimated: May 24, 2018, 11:19:18

R2=1-LogL/LogL\* Log-L fncn R-sqrd R2Adj

No coefficients -355.9504 .4103 .3886

Constants only -347.1816 .3954 .3732

At start values -355.9504 .4103 .3886

Response data are given as ind. choices

Replications for simulated probs. =1000

Halton sequences used for simulations

RPL model with panel has 81 groups

Fixed number of obsrvs./group= 4

BHHH estimator used for asymp. variance

Number of obs.= 324, skipped 0 obs

--------+--------------------------------------------------------------------

| Standard Prob. 95% Confidence

CHOICE| Coefficient Error z |z|>Z\* Interval

--------+--------------------------------------------------------------------

|Random parameters in utility functions

BCOST| 1.0 .....(Fixed Parameter).....

BCL| -3.17064\*\*\* .91001 -3.48 .0005 -4.95422 -1.38705

BSS| -.31700 1.17566 -.27 .7874 -2.62125 1.98726

BSOS| 6.02963\* 3.45597 1.74 .0810 -.74394 12.80320

BSQ| -1.33719 3.36159 -.40 .6908 -7.92579 5.25141

|Heterogeneity in mean, Parameter:Variable

BCOS:AME| .36312 .48803 .74 .4568 -.59340 1.31964

BCOS:BEN| 0.0 .....(Fixed Parameter).....

BCO0:BEN| 1.86317 1.22340 1.52 .1278 -.53465 4.26098

BCOS:AGE| 0.0 .....(Fixed Parameter).....

BCO0:AGE| 0.0 .....(Fixed Parameter).....

BCOS:EDU| 0.0 .....(Fixed Parameter).....

BCO0:EDU| 0.0 .....(Fixed Parameter).....

BCOS:TIN| 0.0 .....(Fixed Parameter).....

BCL:AME| 0.0 .....(Fixed Parameter).....

BCL:BEN| 0.0 .....(Fixed Parameter).....

BCL0:BEN| 0.0 .....(Fixed Parameter).....

BCL:AGE| 0.0 .....(Fixed Parameter).....

BCL0:AGE| 0.0 .....(Fixed Parameter).....

BCL:EDU| 0.0 .....(Fixed Parameter).....

BCL0:EDU| 0.0 .....(Fixed Parameter).....

BCL:TIN| 0.0 .....(Fixed Parameter).....

BSS:AME| -2.05269 1.52090 -1.35 .1771 -5.03359 .92822

BSS:BEN| 0.0 .....(Fixed Parameter).....

BSS0:BEN| 0.0 .....(Fixed Parameter).....

BSS:AGE| 0.0 .....(Fixed Parameter).....

BSS0:AGE| 0.0 .....(Fixed Parameter).....

BSS:EDU| 0.0 .....(Fixed Parameter).....

BSS0:EDU| 0.0 .....(Fixed Parameter).....

BSS:TIN| -1.89139 1.28894 -1.47 .1423 -4.41767 .63488

BSOS:AME| 0.0 .....(Fixed Parameter).....

BSOS:BEN| -9.01737\*\*\* 3.48898 -2.58 .0098 -15.85564 -2.17910

BSO0:BEN| 0.0 .....(Fixed Parameter).....

BSOS:AGE| 0.0 .....(Fixed Parameter).....

BSO0:AGE| 0.0 .....(Fixed Parameter).....

BSOS:EDU| 0.0 .....(Fixed Parameter).....

BSO0:EDU| 0.0 .....(Fixed Parameter).....

BSOS:TIN| 0.0 .....(Fixed Parameter).....

BSQ:AME| 6.69270 4.21956 1.59 .1127 -1.57749 14.96289

BSQ:BEN| 4.89064 3.03259 1.61 .1068 -1.05312 10.83440

BSQ0:BEN| 12.3798 8.39703 1.47 .1404 -4.0780 28.8377

BSQ:AGE| 1.22978 4.01406 .31 .7593 -6.63764 9.09720

BSQ0:AGE| .83844 1.87244 .45 .6543 -2.83148 4.50837

BSQ:EDU| 1.46358 1.97815 .74 .4594 -2.41353 5.34069

BSQ0:EDU| 1.93744 2.53215 .77 .4442 -3.02548 6.90037

BSQ:TIN| -1.39581 1.85855 -.75 .4526 -5.03850 2.24688

|Distns. of RPs. Std.Devs or limits of triangular

CsBCOST| 0.0 .....(Fixed Parameter).....

NsBCL| 1.98498\* 1.02583 1.94 .0530 -.02560 3.99557

NsBSS| .14241 9.93575 .01 .9886 -19.33130 19.61612

NsBSOS| 3.67988\*\*\* 1.13383 3.25 .0012 1.45762 5.90214

UsBSQ| 5.41257\*\* 2.24520 2.41 .0159 1.01205 9.81309

|Variance parameter tau in GMX scale parameter

TauScale| 0.0 .....(Fixed Parameter).....

|Weighting parameter gamma in GMX model

GammaMXL| 0.0 .....(Fixed Parameter).....

|Coefficient on BCOST in preference space form

Beta0WTP| .41842\*\*\* .12440 3.36 .0008 .17459 .66224

S\_b0\_WTP| .17161 .11637 1.47 .1403 -.05646 .39969

| Sample Mean Sample Std.Dev.

Sigma(i)| 1.0\*\*\* .2174D-05 \*\*\*\*\*\*\*\* .0000 .10000D+01 .10000D+01

--------+--------------------------------------------------------------------

Note: nnnnn.D-xx or D+xx => multiply by 10 to -xx or +xx.

Note: \*\*\*, \*\*, \* ==> Significance at 1%, 5%, 10% level.

Fixed parameter ... is constrained to equal the value or

had a nonpositive st.error because of an earlier problem.

-----------------------------------------------------------------------------

Parameter Matrix for Heterogeneity in Means.



**WTA Space – bovines**

|-> \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

# WTA Space - Bovines

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

CALC;RAN(12345)$

Error: 1: Unrecognized command. (Missing ; ?)

|-> GMXLOGIT

;lhs=choice

;choices=alt1,alt2,alt3

;gamma=[1]

;tau=[0]

;pds=4

;fcn=bcost(\*n),bcl(n),bss(n),bsos(n),bsq(u)

;Draws=100

;Halton

;maxit=200

;parameters

;Model:

U(alt1)=bcl\*cl+bss\*ss+bsos\*sos+bcost\*cost/

U(alt2)=bcl\*cl+bss\*ss+bsos\*sos+bcost\*cost/

U(alt3)=bsq\*sq $

Normal exit: 5 iterations. Status=0, F= 405.2521

-----------------------------------------------------------------------------

Start values obtained using MNL model

Dependent variable Choice

Log likelihood function -405.25213

Estimation based on N = 464, K = 5

Inf.Cr.AIC = 820.5 AIC/N = 1.768

Model estimated: May 24, 2018, 11:56:05

R2=1-LogL/LogL\* Log-L fncn R-sqrd R2Adj

Constants only -501.9318 .1926 .1847

Response data are given as ind. choices

Number of obs.= 464, skipped 0 obs

--------+--------------------------------------------------------------------

| Standard Prob. 95% Confidence

CHOICE| Coefficient Error z |z|>Z\* Interval

--------+--------------------------------------------------------------------

BCOST| .01303\*\*\* .00117 11.17 .0000 .01074 .01531

BCL| -.27863\*\*\* .06715 -4.15 .0000 -.41025 -.14701

BSS| .05960 .07859 .76 .4482 -.09443 .21364

BSOS| -.42579\*\*\* .07900 -5.39 .0000 -.58063 -.27096

BSQ| 1.08903\*\*\* .17651 6.17 .0000 .74308 1.43499

--------+--------------------------------------------------------------------

Note: \*\*\*, \*\*, \* ==> Significance at 1%, 5%, 10% level.

-----------------------------------------------------------------------------

Normal exit: 78 iterations. Status=0, F= 353.9023

-----------------------------------------------------------------------------

Generalized Mixed (RP) Logit Model

Dependent variable CHOICE

Log likelihood function -353.90225

Restricted log likelihood -509.75610

Chi squared [ 10 d.f.] 311.70770

Significance level .00000

McFadden Pseudo R-squared .3057420

Estimation based on N = 464, K = 10

Inf.Cr.AIC = 727.8 AIC/N = 1.569

Model estimated: May 24, 2018, 12:00:06

R2=1-LogL/LogL\* Log-L fncn R-sqrd R2Adj

No coefficients -509.7561 .3057 .2982

Constants only -501.9318 .2949 .2872

At start values -509.7564 .3057 .2982

Response data are given as ind. choices

Replications for simulated probs. = 100

Halton sequences used for simulations

RPL model with panel has 116 groups

Fixed number of obsrvs./group= 4

BHHH estimator used for asymp. variance

Number of obs.= 464, skipped 0 obs

--------+--------------------------------------------------------------------

| Standard Prob. 95% Confidence

CHOICE| Coefficient Error z |z|>Z\* Interval

--------+--------------------------------------------------------------------

|Random parameters in utility functions

BCOST| 1.0 .....(Fixed Parameter).....

BCL| -34.9261\*\*\* 4.34390 -8.04 .0000 -43.4400 -26.4122

BSS| -4.83840 4.33776 -1.12 .2647 -13.34026 3.66346

BSOS| -8.01373 6.53646 -1.23 .2202 -20.82496 4.79751

BSQ| 94.5224\*\*\* 8.14333 11.61 .0000 78.5618 110.4830

|Distns. of RPs. Std.Devs or limits of triangular

CsBCOST| 0.0 .....(Fixed Parameter).....

NsBCL| 31.2558\*\*\* 5.40010 5.79 .0000 20.6718 41.8398

NsBSS| 43.0687\*\*\* 4.18943 10.28 .0000 34.8575 51.2798

NsBSOS| 74.5082\*\*\* 7.96966 9.35 .0000 58.8879 90.1284

UsBSQ| 112.859\*\*\* 14.70981 7.67 .0000 84.029 141.690

|Variance parameter tau in GMX scale parameter

TauScale| 0.0 .....(Fixed Parameter).....

|Weighting parameter gamma in GMX model

GammaMXL| 0.0 .....(Fixed Parameter).....

|Coefficient on BCOST in preference space form

Beta0WTP| .13965\*\* .05574 2.51 .0122 .03041 .24890

S\_b0\_WTP| .09957\*\* .04380 2.27 .0230 .01372 .18542

| Sample Mean Sample Std.Dev.

Sigma(i)| 1.0\*\*\* .1010D-05 \*\*\*\*\*\*\*\* .0000 .10000D+01 .10000D+01

--------+--------------------------------------------------------------------

Note: nnnnn.D-xx or D+xx => multiply by 10 to -xx or +xx.

Note: \*\*\*, \*\*, \* ==> Significance at 1%, 5%, 10% level.

Fixed parameter ... is constrained to equal the value or

had a nonpositive st.error because of an earlier problem.

-----------------------------------------------------------------------------

.

**WTA Space – bovines (inc. covariates)**

|-> \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

# WTA Space - Bovines (inc. covariates)

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

CALC;RAN(12345)$

Error: 1: Unrecognized command. (Missing ; ?)

|-> GMXLOGIT >

;checkdata

;lhs=choice

;choices=alt1,alt2,alt3

;gamma=[1]

;tau=[0]

;pds=4

;fcn=bcost(\*n|#10000000),bcl(n|#10000000),bss(n|#10000000),bsos(n|#00000000),bsq(u)

;GMX=amed,benefit1,benefit3,age1,age3,edu1,edu3,tin1

;Draws=100

;Halton

;maxit=200

;correlation

;parameters

;Model:

U(alt1)=bcl\*cl+bss\*ss+bsos\*sos+bcost\*cost/

U(alt2)=bcl\*cl+bss\*ss+bsos\*sos+bcost\*cost/

U(alt3)=bsq\*sq $

+----------------------------------------------------------+

| Inspecting the data set before estimation. |

| These errors mark observations which will be skipped. |

| Row Individual = 1st row then group number of data block |

+----------------------------------------------------------+

No bad observations were found in the sample

Normal exit: 5 iterations. Status=0, F= 405.2521

-----------------------------------------------------------------------------

Start values obtained using MNL model

Dependent variable Choice

Log likelihood function -405.25213

Estimation based on N = 464, K = 5

Inf.Cr.AIC = 820.5 AIC/N = 1.768

Model estimated: May 24, 2018, 12:33:51

R2=1-LogL/LogL\* Log-L fncn R-sqrd R2Adj

Constants only -501.9318 .1926 .1693

Response data are given as ind. choices

Number of obs.= 464, skipped 0 obs

--------+--------------------------------------------------------------------

| Standard Prob. 95% Confidence

CHOICE| Coefficient Error z |z|>Z\* Interval

--------+--------------------------------------------------------------------

BCOST| .01303\*\*\* .00117 11.17 .0000 .01074 .01531

BCL| -.27863\*\*\* .06715 -4.15 .0000 -.41025 -.14701

BSS| .05960 .07859 .76 .4482 -.09443 .21364

BSOS| -.42579\*\*\* .07900 -5.39 .0000 -.58063 -.27096

BSQ| 1.08903\*\*\* .17651 6.17 .0000 .74308 1.43499

--------+--------------------------------------------------------------------

Note: \*\*\*, \*\*, \* ==> Significance at 1%, 5%, 10% level.

-----------------------------------------------------------------------------

Normal exit: 140 iterations. Status=0, F= 328.9613

-----------------------------------------------------------------------------

Generalized Mixed (RP) Logit Model

Dependent variable CHOICE

Log likelihood function -328.96130

Restricted log likelihood -509.75610

Chi squared [ 27 d.f.] 361.58961

Significance level .00000

McFadden Pseudo R-squared .3546692

Estimation based on N = 464, K = 27

Inf.Cr.AIC = 711.9 AIC/N = 1.534

Model estimated: May 24, 2018, 12:41:07

R2=1-LogL/LogL\* Log-L fncn R-sqrd R2Adj

No coefficients -509.7561 .3547 .3353

Constants only -501.9318 .3446 .3250

At start values -509.7561 .3547 .3353

Response data are given as ind. choices

Replications for simulated probs. = 100

Halton sequences used for simulations

RPL model with panel has 116 groups

Fixed number of obsrvs./group= 4

BHHH estimator used for asymp. variance

Number of obs.= 464, skipped 0 obs

--------+--------------------------------------------------------------------

| Standard Prob. 95% Confidence

CHOICE| Coefficient Error z |z|>Z\* Interval

--------+--------------------------------------------------------------------

|Random parameters in utility functions

BCOST| 1.0 .....(Fixed Parameter).....

BCL| -39.8988\*\*\* 8.07680 -4.94 .0000 -55.7290 -24.0686

BSS| .61906 11.72055 .05 .9579 -22.35280 23.59092

BSOS| -26.6488\*\* 11.22326 -2.37 .0176 -48.6460 -4.6516

BSQ| 16.0266 42.03713 .38 .7030 -66.3646 98.4179

|Heterogeneity in mean, Parameter:Variable

BCOS:AME| .20507 .28618 .72 .4736 -.35584 .76598

BCOS:BEN| 0.0 .....(Fixed Parameter).....

BCO0:BEN| 0.0 .....(Fixed Parameter).....

BCOS:AGE| 0.0 .....(Fixed Parameter).....

BCO0:AGE| 0.0 .....(Fixed Parameter).....

BCOS:EDU| 0.0 .....(Fixed Parameter).....

BCO0:EDU| 0.0 .....(Fixed Parameter).....

BCOS:TIN| 0.0 .....(Fixed Parameter).....

BCL:AME| 15.5615 12.67048 1.23 .2194 -9.2722 40.3952

BCL:BEN| 0.0 .....(Fixed Parameter).....

BCL0:BEN| 0.0 .....(Fixed Parameter).....

BCL:AGE| 0.0 .....(Fixed Parameter).....

BCL0:AGE| 0.0 .....(Fixed Parameter).....

BCL:EDU| 0.0 .....(Fixed Parameter).....

BCL0:EDU| 0.0 .....(Fixed Parameter).....

BCL:TIN| 0.0 .....(Fixed Parameter).....

BSS:AME| -41.7652\*\* 19.33319 -2.16 .0308 -79.6575 -3.8728

BSS:BEN| 0.0 .....(Fixed Parameter).....

BSS0:BEN| 0.0 .....(Fixed Parameter).....

BSS:AGE| 0.0 .....(Fixed Parameter).....

BSS0:AGE| 0.0 .....(Fixed Parameter).....

BSS:EDU| 0.0 .....(Fixed Parameter).....

BSS0:EDU| 0.0 .....(Fixed Parameter).....

BSS:TIN| 0.0 .....(Fixed Parameter).....

BSOS:AME| 0.0 .....(Fixed Parameter).....

BSOS:BEN| 0.0 .....(Fixed Parameter).....

BSO0:BEN| 0.0 .....(Fixed Parameter).....

BSOS:AGE| 0.0 .....(Fixed Parameter).....

BSO0:AGE| 0.0 .....(Fixed Parameter).....

BSOS:EDU| 0.0 .....(Fixed Parameter).....

BSO0:EDU| 0.0 .....(Fixed Parameter).....

BSOS:TIN| 0.0 .....(Fixed Parameter).....

BSQ:AME| 100.065\* 52.50698 1.91 .0567 -2.846 202.977

BSQ:BEN| 84.0229\*\* 40.26816 2.09 .0369 5.0988 162.9471

BSQ0:BEN| 11.4346 61.62882 .19 .8528 -109.3557 132.2249

BSQ:AGE| 67.3743\*\* 32.36668 2.08 .0374 3.9368 130.8118

BSQ0:AGE| 1.76397 24.39741 .07 .9424 -46.05408 49.58202

BSQ:EDU| -17.1199 23.25576 -.74 .4616 -62.7003 28.4606

BSQ0:EDU| 74.4935 82.97835 .90 .3693 -88.1411 237.1280

BSQ:TIN| -18.5143 23.88208 -.78 .4382 -65.3223 28.2937

|Diagonal values in Cholesky matrix, L.

CsBCOST| 0.0 .....(Fixed Parameter).....

NsBCL| 5.84281 10.02518 .58 .5600 -13.80618 25.49180

NsBSS| 23.3806 44.49669 .53 .5993 -63.8313 110.5925

NsBSOS| 81.7072\*\*\* 13.83085 5.91 .0000 54.5992 108.8152

UsBSQ| 66.1421 48.52841 1.36 .1729 -28.9718 161.2561

|Below diagonal values in L matrix. V = L\*Lt

BCL:BCO| 0.0 .....(Fixed Parameter).....

BSS:BCO| 0.0 .....(Fixed Parameter).....

BSS:BCL| -48.0378\*\* 20.30264 -2.37 .0180 -87.8302 -8.2454

BSOS:BCO| 0.0 .....(Fixed Parameter).....

BSOS:BCL| 16.9714 26.15641 .65 .5164 -34.2942 68.2371

BSOS:BSS| 14.3763 53.16965 .27 .7869 -89.8343 118.5869

BSQ:BCO| 0.0 .....(Fixed Parameter).....

BSQ:BCL| 64.0070\*\* 29.51147 2.17 .0301 6.1656 121.8484

BSQ:BSS| 15.7942 52.68670 .30 .7643 -87.4698 119.0582

BSQ:BSO| -12.8294 18.09671 -.71 .4784 -48.2983 22.6395

|Variance parameter tau in GMX scale parameter

TauScale| 0.0 .....(Fixed Parameter).....

|Weighting parameter gamma in GMX model

GammaMXL| 0.0 .....(Fixed Parameter).....

|Coefficient on BCOST in preference space form

Beta0WTP| .02821\*\*\* .00797 3.54 .0004 .01258 .04384

S\_b0\_WTP| .00990 .00741 1.34 .1813 -.00462 .02442

| Sample Mean Sample Std.Dev.

Sigma(i)| 1.0\*\*\* .1010D-05 \*\*\*\*\*\*\*\* .0000 .10000D+01 .10000D+01

|Standard deviations of parameter distributions

sdBCOST| 0.0 .....(Fixed Parameter).....

sdBCL| 5.84281 10.02518 .58 .5600 -13.80618 25.49180

sdBSS| 53.4255\*\*\* 11.11817 4.81 .0000 31.6343 75.2167

sdBSOS| 84.6804\*\*\* 16.88306 5.02 .0000 51.5902 117.7706

sdBSQ| 94.2641\*\* 46.29857 2.04 .0417 3.5206 185.0077

--------+--------------------------------------------------------------------

Note: nnnnn.D-xx or D+xx => multiply by 10 to -xx or +xx.

Note: \*\*\*, \*\*, \* ==> Significance at 1%, 5%, 10% level.

Fixed parameter ... is constrained to equal the value or

had a nonpositive st.error because of an earlier problem.

|-> \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

# WTA Space - Bovines (inc. covariates)

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

CALC;RAN(12345)$

Error: 1: Unrecognized command. (Missing ; ?)

|-> GMXLOGIT >

;checkdata

;lhs=choice

;choices=alt1,alt2,alt3

;gamma=[1]

;tau=[0]

;pds=4

;fcn=bcost(\*t|#10000000),bcl(t|#10000000),bss(t|#10000000),bsos(t|#00000000),bsq(t)

;GMX=amed,benefit1,benefit3,age1,age3,edu1,edu3,tin1

;Draws=100

;Halton

;maxit=200

;correlation

;parameters

;Model:

U(alt1)=bcl\*cl+bss\*ss+bsos\*sos+bcost\*cost/

U(alt2)=bcl\*cl+bss\*ss+bsos\*sos+bcost\*cost/

U(alt3)=bsq\*sq $

+----------------------------------------------------------+

| Inspecting the data set before estimation. |

| These errors mark observations which will be skipped. |

| Row Individual = 1st row then group number of data block |

+----------------------------------------------------------+

No bad observations were found in the sample

Normal exit: 5 iterations. Status=0, F= 405.2521

-----------------------------------------------------------------------------

Start values obtained using MNL model

Dependent variable Choice

Log likelihood function -405.25213

Estimation based on N = 464, K = 5

Inf.Cr.AIC = 820.5 AIC/N = 1.768

Model estimated: May 24, 2018, 13:14:08

R2=1-LogL/LogL\* Log-L fncn R-sqrd R2Adj

Constants only -501.9318 .1926 .1693

Response data are given as ind. choices

Number of obs.= 464, skipped 0 obs

--------+--------------------------------------------------------------------

| Standard Prob. 95% Confidence

CHOICE| Coefficient Error z |z|>Z\* Interval

--------+--------------------------------------------------------------------

BCOST| .01303\*\*\* .00117 11.17 .0000 .01074 .01531

BCL| -.27863\*\*\* .06715 -4.15 .0000 -.41025 -.14701

BSS| .05960 .07859 .76 .4482 -.09443 .21364

BSOS| -.42579\*\*\* .07900 -5.39 .0000 -.58063 -.27096

BSQ| 1.08903\*\*\* .17651 6.17 .0000 .74308 1.43499

--------+--------------------------------------------------------------------

Note: \*\*\*, \*\*, \* ==> Significance at 1%, 5%, 10% level.

-----------------------------------------------------------------------------

Normal exit: 168 iterations. Status=0, F= 328.2437

-----------------------------------------------------------------------------

Generalized Mixed (RP) Logit Model

Dependent variable CHOICE

Log likelihood function -328.24368

Restricted log likelihood -509.75610

Chi squared [ 27 d.f.] 363.02485

Significance level .00000

McFadden Pseudo R-squared .3560770

Estimation based on N = 464, K = 27

Inf.Cr.AIC = 710.5 AIC/N = 1.531

Model estimated: May 24, 2018, 13:21:39

R2=1-LogL/LogL\* Log-L fncn R-sqrd R2Adj

No coefficients -509.7561 .3561 .3368

Constants only -501.9318 .3460 .3264

At start values -509.7561 .3561 .3368

Response data are given as ind. choices

Replications for simulated probs. = 100

Halton sequences used for simulations

RPL model with panel has 116 groups

Fixed number of obsrvs./group= 4

BHHH estimator used for asymp. variance

Number of obs.= 464, skipped 0 obs

--------+--------------------------------------------------------------------

| Standard Prob. 95% Confidence

CHOICE| Coefficient Error z |z|>Z\* Interval

--------+--------------------------------------------------------------------

|Random parameters in utility functions

BCOST| 1.0 .....(Fixed Parameter).....

BCL| -38.1426\*\*\* 7.76550 -4.91 .0000 -53.3627 -22.9225

BSS| 7.37935 11.30924 .65 .5141 -14.78636 29.54505

BSOS| -31.2242\*\*\* 10.65514 -2.93 .0034 -52.1079 -10.3405

BSQ| 39.3641 34.72099 1.13 .2569 -28.6878 107.4160

|Heterogeneity in mean, Parameter:Variable

BCOS:AME| .23857 .30735 .78 .4376 -.36383 .84097

BCOS:BEN| 0.0 .....(Fixed Parameter).....

BCO0:BEN| 0.0 .....(Fixed Parameter).....

BCOS:AGE| 0.0 .....(Fixed Parameter).....

BCO0:AGE| 0.0 .....(Fixed Parameter).....

BCOS:EDU| 0.0 .....(Fixed Parameter).....

BCO0:EDU| 0.0 .....(Fixed Parameter).....

BCOS:TIN| 0.0 .....(Fixed Parameter).....

BCL:AME| 21.9324\* 12.01824 1.82 .0680 -1.6229 45.4877

BCL:BEN| 0.0 .....(Fixed Parameter).....

BCL0:BEN| 0.0 .....(Fixed Parameter).....

BCL:AGE| 0.0 .....(Fixed Parameter).....

BCL0:AGE| 0.0 .....(Fixed Parameter).....

BCL:EDU| 0.0 .....(Fixed Parameter).....

BCL0:EDU| 0.0 .....(Fixed Parameter).....

BCL:TIN| 0.0 .....(Fixed Parameter).....

BSS:AME| -40.3757\*\* 18.97721 -2.13 .0334 -77.5703 -3.1810

BSS:BEN| 0.0 .....(Fixed Parameter).....

BSS0:BEN| 0.0 .....(Fixed Parameter).....

BSS:AGE| 0.0 .....(Fixed Parameter).....

BSS0:AGE| 0.0 .....(Fixed Parameter).....

BSS:EDU| 0.0 .....(Fixed Parameter).....

BSS0:EDU| 0.0 .....(Fixed Parameter).....

BSS:TIN| 0.0 .....(Fixed Parameter).....

BSOS:AME| 0.0 .....(Fixed Parameter).....

BSOS:BEN| 0.0 .....(Fixed Parameter).....

BSO0:BEN| 0.0 .....(Fixed Parameter).....

BSOS:AGE| 0.0 .....(Fixed Parameter).....

BSO0:AGE| 0.0 .....(Fixed Parameter).....

BSOS:EDU| 0.0 .....(Fixed Parameter).....

BSO0:EDU| 0.0 .....(Fixed Parameter).....

BSOS:TIN| 0.0 .....(Fixed Parameter).....

BSQ:AME| 97.8167\* 54.38447 1.80 .0721 -8.7749 204.4083

BSQ:BEN| 55.5838\* 32.98186 1.69 .0919 -9.0594 120.2271

BSQ0:BEN| -22.0634 63.24638 -.35 .7272 -146.0240 101.8973

BSQ:AGE| 66.6272\* 39.83581 1.67 .0944 -11.4496 144.7040

BSQ0:AGE| 2.23767 24.35825 .09 .9268 -45.50363 49.97897

BSQ:EDU| -16.7447 28.99448 -.58 .5636 -73.5729 40.0834

BSQ0:EDU| 84.0597 69.45995 1.21 .2262 -52.0793 220.1987

BSQ:TIN| -21.8472 25.27694 -.86 .3874 -71.3891 27.6947

|Diagonal values in Cholesky matrix, L.

CsBCOST| 0.0 .....(Fixed Parameter).....

TsBCL| 20.7673 21.53950 .96 .3350 -21.4493 62.9839

TsBSS| 16.8188 41.56867 .40 .6858 -64.6543 98.2919

TsBSOS| 30.1841 58.14064 .52 .6037 -83.7695 144.1377

TsBSQ| 93.5156 75.37789 1.24 .2147 -54.2223 241.2536

|Below diagonal values in L matrix. V = L\*Lt

BCL:BCO| 0.0 .....(Fixed Parameter).....

BSS:BCO| 0.0 .....(Fixed Parameter).....

BSS:BCL| -123.739\*\*\* 26.46447 -4.68 .0000 -175.609 -71.870

BSOS:BCO| 0.0 .....(Fixed Parameter).....

BSOS:BCL| 3.96257 56.35882 .07 .9439 -106.49868 114.42382

BSOS:BSS| -182.035\*\*\* 31.85345 -5.71 .0000 -244.466 -119.603

BSQ:BCO| 0.0 .....(Fixed Parameter).....

BSQ:BCL| 113.202\*\* 49.69127 2.28 .0227 15.809 210.595

BSQ:BSS| -5.61961 51.45888 -.11 .9130 -106.47716 95.23795

BSQ:BSO| 112.085\* 62.63698 1.79 .0735 -10.681 234.851

|Variance parameter tau in GMX scale parameter

TauScale| 0.0 .....(Fixed Parameter).....

|Weighting parameter gamma in GMX model

GammaMXL| 0.0 .....(Fixed Parameter).....

|Coefficient on BCOST in preference space form

Beta0WTP| .03553\*\*\* .01123 3.16 .0016 .01351 .05755

S\_b0\_WTP| .04198\*\* .02138 1.96 .0496 .00007 .08388

| Sample Mean Sample Std.Dev.

Sigma(i)| 1.0\*\*\* .1010D-05 \*\*\*\*\*\*\*\* .0000 .10000D+01 .10000D+01

|Standard deviations of parameter distributions

sdBCOST| 0.0 .....(Fixed Parameter).....

sdBCL| 20.7673 21.53950 .96 .3350 -21.4493 62.9839

sdBSS| 124.877\*\*\* 27.85396 4.48 .0000 70.284 179.470

sdBSOS| 184.563\*\*\* 33.04251 5.59 .0000 119.801 249.325

sdBSQ| 184.809\*\* 82.04947 2.25 .0243 23.995 345.623

--------+--------------------------------------------------------------------

Note: nnnnn.D-xx or D+xx => multiply by 10 to -xx or +xx.

Note: \*\*\*, \*\*, \* ==> Significance at 1%, 5%, 10% level.

Fixed parameter ... is constrained to equal the value or

had a nonpositive st.error because of an earlier problem.

-----------------------------------------------------------------------------