_____

```
1 . import delimited "C:\Users\erlan\Documents\Data\Example Code\SetDecision - 5 ROWS -
  > Copy - Copy.csv"
  (encoding automatically selected: ISO-8859-1)
  (16 vars, 2,720 obs)

2 . import delimited "C:\Users\erlan\Documents\Data\Example Code\SetDecision - 5 ROWS -
  > Copy - Copy.csv", clear
  (encoding automatically selected: ISO-8859-1)
  (16 vars, 2,720 obs)

3 . do "C:\Users\erlan\AppData\Local\Temp\STD5150_000000.tmp"

4 . cmset id set alternative
  note: case identifier _caseid generated from id and set.
  note: panel by alternatives identifier _panelaltid generated from id and
        alternative.

                    Panel data: Panels id and time set
              Case ID variable: _caseid
          Alternatives variable: alternative
  Panel by alternatives variable: _panelaltid (strongly balanced)
                 Time variable: set, 1 to 4
                         Delta: 1 unit

  Note: Data have been xtset.

5 . global zlist land cost labor loan

6 . global ylist choice

7 . global alternative alternative

8 . global xlist gender fex edu lsz fin

9 . generate lncost = -1*cost

10. global lnnormalden "lncost"

11. tabulate $ylist
```

choice	Freq.	Percent	Cum.
0	2,176	80.00	80.00
1	544	20.00	100.00
Total	2,720	100.00	

```
12. summarize $id $alternative $ylist $xlist
```

Variable	Obs	Mean	Std. dev.	Min	Max
alternative	2,720	3	1.414474	1	5
choice	2,720	.2	.4000735	0	1
gender	2,720	.5147059	.4998756	0	1
fex	2,720	2.882353	1.071609	1	4
edu	2,720	1.441176	.8641842	0	4
lsz	2,720	2.176471	1.063503	1	4
fin	2,720	2.426471	1.246591	1	5

13. cmclogit choice land lncost labor loan, casevars(gender fex edu lsz fin)
    note: data were **cmset** as panel data, and the default *vcetype* for panel data is
        vce(cluster id); see **cmclogit**.

```
Iteration 0:   log pseudolikelihood = -772.86785
Iteration 1:   log pseudolikelihood = -765.89501
Iteration 2:   log pseudolikelihood = -765.83239
Iteration 3:   log pseudolikelihood = -765.83238
```

Conditional logit choice model	Number of obs	=	2,720
Case ID variable: _caseid	Number of cases	=	544

Alternatives variable: alternative	Alts per case: min =	5
	avg =	5.0
	max =	5

	Wald chi2(**24**)	=	60.84
Log pseudolikelihood = **-765.83238**	Prob > chi2	=	0.0000

(Std. err. adjusted for **136** clusters in **id**)

choice	Coefficient	Robust std. err.	z	P>|z|	[95% conf. interval]	
alternative						
land	-.3770141	.0983273	-3.83	0.000	-.5697321	-.1842961
lncost	.0005383	.0001536	3.50	0.000	.0002372	.0008394
labor	-.2550021	.125301	-2.04	0.042	-.5005876	-.0094167
loan	-.405123	.1712472	-2.37	0.018	-.7407614	-.0694846
1	(base alternative)					
2						
gender	-.178738	.153527	-1.16	0.244	-.4796454	.1221695
fex	-.0732261	.0702019	-1.04	0.297	-.2108192	.0643671
edu	-.0382892	.0755691	-0.51	0.612	-.1864018	.1098235
lsz	-.031707	.0757011	-0.42	0.675	-.1800783	.1166643
fin	.0518826	.0653554	0.79	0.427	-.0762117	.1799769
_cons	.5292059	.3033982	1.74	0.081	-.0654437	1.123856
3						
gender	-.168799	.3588703	-0.47	0.638	-.872172	.5345739
fex	.0131587	.1847385	0.07	0.943	-.3489221	.3752395
edu	-.2361011	.1893056	-1.25	0.212	-.6071333	.1349312
lsz	-.3698712	.1633636	-2.26	0.024	-.690058	-.0496844
fin	.058609	.1305515	0.45	0.653	-.1972672	.3144852
_cons	.7861179	.6255776	1.26	0.209	-.4399916	2.012227
4						
gender	.4116216	.390481	1.05	0.292	-.353707	1.17695
fex	.163872	.1902267	0.86	0.389	-.2089654	.5367095
edu	-.1842857	.2486082	-0.74	0.459	-.6715489	.3029775
lsz	-.1129985	.1908953	-0.59	0.554	-.4871465	.2611495
fin	-.0422614	.1901564	-0.22	0.824	-.414961	.3304383
_cons	-.5100994	.904267	-0.56	0.573	-2.28243	1.262231
5						
gender	-.6535967	.3786344	-1.73	0.084	-1.395707	.0885132
fex	.1453526	.1567829	0.93	0.354	-.1619362	.4526414
edu	-.0673313	.2448551	-0.27	0.783	-.5472385	.412576
lsz	-.0286673	.1696197	-0.17	0.866	-.3611159	.3037813
fin	.1753223	.1608202	1.09	0.276	-.1398795	.4905242
_cons	-1.539919	.7987457	-1.93	0.054	-3.105432	.0255937

```
14. margins, at(gender=0 1)
    variable 1 not found in list of covariates
    r(322);

    end of do-file

    r(322);

15. margins, at(gender=(0 1))

    Predictive margins                                    Number of obs = 2,720
    Model VCE: Robust

    Expression: Pr(alternative|1 selected), predict()

    1._at: gender = 0

    2._at: gender = 1
```

	Margin	Delta-method std. err.	z	P>|z|	[95% conf. interval]
_outcome#_at						
1 1	.1786681	.0246421	7.25	0.000	.1303705	.2269657
1 2	.2293364	.0220236	10.41	0.000	.186171	.2725019
2 1	.2193294	.0273269	8.03	0.000	.1657696	.2728892
2 2	.2376883	.0257579	9.23	0.000	.1872037	.2881729
3 1	.082568	.0182941	4.51	0.000	.0467123	.1184237
3 2	.0900577	.019228	4.68	0.000	.0523715	.127744
4 1	.0749161	.0204833	3.66	0.000	.0347695	.1150627
4 2	.1430047	.0291162	4.91	0.000	.085938	.2000714
5 1	.4445184	.0564598	7.87	0.000	.3338591	.5551776
5 2	.2999128	.0488817	6.14	0.000	.2041064	.3957193

```
16. estat ic, n(2720)

    Akaike's information criterion and Bayesian information criterion
```

Model	N	ll(null)	ll(model)	df	AIC	BIC
.	2,720	.	-765.8324	28	1587.665	1753.1

```
17.
18. margins, at(gender=(0 1)) contrast(at(r) nowald) over(set)

    Contrasts of predictive margins                       Number of obs = 2,720
    Model VCE: Robust

    Expression: Pr(alternative|1 selected), predict()
    Over:        set

    1._at: 1.set
              gender = 0
    1._at: 2.set
              gender = 0
    1._at: 3.set
              gender = 0
    1._at: 4.set
              gender = 0
    2._at: 1.set
              gender = 1
    2._at: 2.set
              gender = 1
    2._at: 3.set
              gender = 1
    2._at: 4.set
              gender = 1
```

	Contrast	Delta-method std. err.	[95% conf. interval]	
_at@_outcome#set				
(2 vs 1) 1 1	.0642717	.0409734	-.0160347	.1445781
(2 vs 1) 1 2	.0382762	.0234434	-.0076721	.0842245
(2 vs 1) 1 3	.0492073	.0435908	-.036229	.1346436
(2 vs 1) 1 4	.0509182	.0341466	-.0160079	.1178443
(2 vs 1) 2 1	.0190385	.0406866	-.0607057	.0987827
(2 vs 1) 2 2	.0328401	.0599188	-.0845986	.1502787
(2 vs 1) 2 3	.0031109	.0243611	-.0446361	.0508578
(2 vs 1) 2 4	.0184461	.0353712	-.0508801	.0877723
(2 vs 1) 3 1	.0061843	.0228405	-.0385823	.0509508
(2 vs 1) 3 2	.0038826	.0147617	-.0250498	.032815
(2 vs 1) 3 3	.0017057	.0211695	-.0397857	.043197
(2 vs 1) 3 4	.0181862	.0488281	-.077515	.1138875
(2 vs 1) 4 1	.0521891	.0286928	-.0040478	.1084259
(2 vs 1) 4 2	.0519605	.0307984	-.0084033	.1123243
(2 vs 1) 4 3	.1131584	.0582285	-.0009674	.2272842
(2 vs 1) 4 4	.0550465	.0289803	-.0017538	.1118468
(2 vs 1) 5 1	-.1416835	.080116	-.298708	.0153409
(2 vs 1) 5 2	-.1269593	.0769431	-.2777651	.0238465
(2 vs 1) 5 3	-.1671822	.0812236	-.3263776	-.0079868
(2 vs 1) 5 4	-.142597	.080686	-.3007388	.0155447