

## Presenting Ordered Logit Results – Examples from 2004 NES

(1) Model 1: Continuous IV's

```
. ologit abortion partyid01 ideol01 commit
```

```
Iteration 0: log likelihood = -1007.4165
Iteration 1: log likelihood = -896.30963
Iteration 2: log likelihood = -894.47915
Iteration 3: log likelihood = -894.4704
```

```
Ordered logit estimates      Number of obs   =      781
                             LR chi2(3)             =    225.89
                             Prob > chi2            =    0.0000
Log likelihood = -894.4704   Pseudo R2       =    0.1121
```

abortion	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]
partyid01	.737295	.2427953	3.04	0.002	.261425 1.213165
ideol01	1.430813	.3857619	3.71	0.000	.6747331 2.186892
commit	2.597498	.2468506	10.52	0.000	2.11368 3.081317
-----					
					(Ancillary parameters)
_cut1	2.045856	.2054953			
_cut2	2.957662	.2189956			
_cut3	4.892597	.262507			

```
. fitstat
```

Measures of Fit for ologit of abortion

Log-Lik Intercept Only:	-1007.417	Log-Lik Full Model:	-894.470
D(775):	1788.941	LR(3):	225.892
		Prob > LR:	0.000
McFadden's R2:	0.112	McFadden's Adj R2:	0.106
Maximum Likelihood R2:	0.251	Cragg & Uhler's R2:	0.272
McKelvey and Zavoina's R2:	0.271		
Variance of y*:	4.513	Variance of error:	3.290
Count R2:	0.506	Adj Count R2:	0.163
AIC:	2.306	AIC*n:	1800.941
BIC:	-3373.005	BIC':	-205.911

```
. prchange
```

ologit: Changes in Predicted Probabilities for abortion

```
partyid01
      Avg|Chg|   always_a   allow_if   allow_in   never_al
Min->Max   .08679953  -.17359906  .00039734  .1161111  .05709061
  +1/2     .08676985  -.17326212  -.00027758  .11602579  .0575139
  -sd/2     .03130691  -.06251082  -.000103    .04224932  .0203645
MargEfct   .08760621  -.17492302  -.0002894   .11838514  .05682728

ideol01
      Avg|Chg|   always_a   allow_if   allow_in   never_al
Min->Max   .16598312  -.33196625  .00870745  .21442579  .10883299
  +1/2     .16406772  -.32765442  -.00048104  .21294545  .11518999
  -sd/2     .04169896  -.08326116  -.00013675  .05621484  .02718308
MargEfct   .17001074  -.33945985  -.00056162  .22974108  .1102804

commit
      Avg|Chg|   always_a   allow_if   allow_in   never_al
Min->Max   .27740399  -.55480798  .00667845  .32770571  .22042383
  +1/2     .27595704  -.55128956  -.00062454  .32445561  .22745846
  -sd/2     .09634329  -.1923807  -.00030588  .12850139  .06418521
MargEfct   .30863766  -.61625574  -.00101957  .41707217  .20020314

Pr (y|x)   always_a   allow_if   allow_in   never_al
           .38708282  .22408275  .30467653  .08415791

           partyid01   ideol01   commit
x=         .512164     .549296     .51661
sd(x)=     .357801     .245811     .315882
```

(2) Model 2: The effect of religious tradition on abortion attitude

```
. ologit abortion partyid01 ideol01 mlprot catholic blkprot jewish secular if denom<7
```

```
Iteration 0: log likelihood = -980.54028
Iteration 1: log likelihood = -878.45889
Iteration 2: log likelihood = -876.18757
Iteration 3: log likelihood = -876.1248
Iteration 4: log likelihood = -876.12397
Iteration 5: log likelihood = -876.12397
```

```
Ordered logit estimates          Number of obs =      756
                                LR chi2(7) =      208.83
                                Prob > chi2 =      0.0000
                                Pseudo R2 =      0.1065

Log likelihood = -876.12397
```

abortion	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
partyid01	.3050198	.2613954	1.17	0.243	-.2073058	.8173454
ideol01	2.141098	.3930528	5.45	0.000	1.370729	2.911467
mlprot	-1.399078	.2156448	-6.49	0.000	-1.821734	-.976422
catholic	-.7023665	.2072813	-3.39	0.001	-1.10863	-.2961027
blkprot	-.8472409	.2861574	-2.96	0.003	-1.408099	-.2863827
jewish	-4.106608	1.054806	-3.89	0.000	-6.17399	-2.039226
secular	-1.857373	.2231671	-8.32	0.000	-2.294772	-1.419973
-----						
_cut1	-.194632	.2605609	(Ancillary parameters)			
_cut2	.7400195	.2618333				
_cut3	2.640472	.2776901				

```
. prvalue, x(mlprot=0 catholic=0 blkprot=0 jewish=0 secular=0)
```

```
ologit: Predictions for abortion
```

```
Pr(y=always_a|x): 0.1774
Pr(y=allow_if|x): 0.1771
Pr(y=allow_in|x): 0.4315
Pr(y=never_al|x): 0.2140
```

```
partyid01 ideol01 mlprot catholic blkprot jewish secular
x= .51763669 .55180777 0 0 0 0 0
```

```
. prvalue, x(mlprot=1 catholic=0 blkprot=0 jewish=0 secular=0)
```

```
ologit: Predictions for abortion
```

```
Pr(y=always_a|x): 0.4663
Pr(y=allow_if|x): 0.2236
Pr(y=allow_in|x): 0.2471
Pr(y=never_al|x): 0.0630
```

```
partyid01 ideol01 mlprot catholic blkprot jewish secular
x= .51763669 .55180777 1 0 0 0 0
```

```
. prvalue, x(mlprot=0 catholic=1 blkprot=0 jewish=0 secular=0)
```

```
ologit: Predictions for abortion
```

```
Pr(y=always_a|x): 0.3033
Pr(y=allow_if|x): 0.2224
Pr(y=allow_in|x): 0.3554
Pr(y=never_al|x): 0.1188
```

```
partyid01 ideol01 mlprot catholic blkprot jewish secular
x= .51763669 .55180777 0 1 0 0 0
```

```
. prvalue, x(mlprot=0 catholic=0 blkprot=1 jewish=0 secular=0)
```

```
ologit: Predictions for abortion
```

```
Pr(y=always_a|x): 0.3348
Pr(y=allow_if|x): 0.2269
Pr(y=allow_in|x): 0.3339
Pr(y=never_al|x): 0.1045
```

```
partyid01  ideol01  mlprot  catholic  blkprot  jewish  secular
x= .51763669 .55180777      0      0      1      0      0
```

```
. prvalue, x(mlprot=0 catholic=0 blkprot=0 jewish=1 secular=0)
```

```
ologit: Predictions for abortion
```

```
Pr(y=always_a|x): 0.9291
Pr(y=allow_if|x): 0.0418
Pr(y=allow_in|x): 0.0246
Pr(y=never_al|x): 0.0045
```

```
partyid01  ideol01  mlprot  catholic  blkprot  jewish  secular
x= .51763669 .55180777      0      0      0      1      0
```

```
. prvalue, x(mlprot=0 catholic=0 blkprot=0 jewish=0 secular=1)
```

```
ologit: Predictions for abortion
```

```
Pr(y=always_a|x): 0.5801
Pr(y=allow_if|x): 0.1985
Pr(y=allow_in|x): 0.1806
Pr(y=never_al|x): 0.0408
```

```
partyid01  ideol01  mlprot  catholic  blkprot  jewish  secular
x= .51763669 .55180777      0      0      0      0      1
```

```
.
```

Table 1: The Impact of Party Identification, Ideological Identification, and Religious Commitment on Abortion Attitude

Independent Variables	Change in Predicted Probabilities <sup>a</sup>				
	Ordered Logit Estimates <sup>b</sup>	Always Allow	Only if Clear Need	Rape, Incest, Danger to Life of Mother	Never Allow
Party Identification	.74* (.24)	-.17	.0004	.12	.06
Ideological Identification	1.43** (.39)	-.33	.01	.21	.11
Religious Commitment	2.60** (.25)	-.55	.01	.33	.22

(N = 781)  
 $\chi^2$  (df=3) = 225.89  
Pseudo R<sup>2</sup> = .27

Source: 2004 American National Election Study

Note: Party identification, ideological identification, and issue attitudes all range from 0 for the most liberal/Democratic orientation to 1 for the most conservative/Republican orientation.

<sup>a</sup> Change in the predicted probabilities of holding each attitude for an increase from the minimum to the maximum value of each independent variable, while holding all other independent variables constant at their means.

<sup>b</sup> The top entries are ordered logit coefficients. Standard errors are in parentheses.

\*\*p<.001; \*p<.01 (two-tailed tests)

Table 3: Predicted Probabilities of Holding Each Attitude on Abortion by Religious Tradition

Religious Tradition	Always Allow	Only if Clear Need	Rape, Incest, Danger to Life of Mother	Never Allow
Evangelical Protestant	.18	.18	.43	.21
Mainline Protestant	.47	.22	.25	.06
Catholic	.30	.22	.36	.12
Black Protestant	.33	.23	.33	.10
Jewish	.93	.04	.02	.01
Secular	.58	.20	.18	.04

Source: Predicted from the ordered logit results presented in table 2, while holding all other variables in the model constant at their means.