```
      name:  <unnamed>
       log:  /Users/Owsiak/Dropbox/CM Territorial Issues (Mitchell and Owsiak)/ISA 2024/Environment and Security/Replicat
> ion Files/Replication Log.smcl
  log type:  smcl
 opened on:  18 Mar 2025, 14:50:00

 1 . do "/var/folders/lk/7gdbhd5s7v76_gcvd9s7v2mc0000gn/T//SD27739.000000"

 2 . *Replication file for: Owsiak, Andrew P., and Sara McLaughlin Mitchell. 2025. Conflict Management as an Insular Strateg
  > y? Comparing Dyadic Learning of Dispute Resolution Strategies across Geopolitical Issues. Environment and Security.
 3 .
 4 .
 5 . *Main text
 6 .
 7 . *Table 1. Peaceful conflict management. Adapted from Owsiak and Mitchell (2019). Text only.
 8 .
 9 . *Table 2. Summary of Owsiak and Mitchell (2019). Text only.
10 .
11 . *Table 3. Issue rivals, contentious issues, and conflict management.
12 . use "cm_as_an_insular_strategy.dta", replace

13 .
14 . tab ir_three_code if ir_obs==1

      0=Not |
    IR/1=IR, |
        not |
 multi/2=IR |
  and multi |      Freq.     Percent        Cum.
------------+-----------------------------------
          0 |        119       61.03       61.03
          1 |         48       24.62       85.64
          2 |         28       14.36      100.00
------------+-----------------------------------
      Total |        195      100.00

15 .
16 . tab region if ir_three_code==0 & ir_obs==1

     region |      Freq.     Percent        Cum.
------------+-----------------------------------
          1 |         53       44.54       44.54
          2 |         60       50.42       94.96
          4 |          6        5.04      100.00
------------+-----------------------------------
      Total |        119      100.00

17 . tab region if ir_three_code==1 & ir_obs==1

     region |      Freq.     Percent        Cum.
------------+-----------------------------------
          1 |         15       31.25       31.25
          2 |         17       35.42       66.67
          4 |         16       33.33      100.00
------------+-----------------------------------
      Total |         48      100.00

18 . tab region if ir_three_code==2 & ir_obs==1

     region |      Freq.     Percent        Cum.
------------+-----------------------------------
          1 |         20       71.43       71.43
          2 |          7       25.00       96.43
          4 |          1        3.57      100.00
```

```
------------+-----------------------------------
      Total |         28      100.00
```

```
19 . tab region if ir_obs==1

     region |      Freq.     Percent        Cum.
------------+-----------------------------------
          1 |         88       45.13       45.13
          2 |         84       43.08       88.21
          4 |         23       11.79      100.00
------------+-----------------------------------
      Total |        195      100.00
```

```
20 .
21 . tab terriss if ir_three_code==0 & ir_obs==1 & max_mariss==0 & max_riveriss==0

    terriss |      Freq.     Percent        Cum.
------------+-----------------------------------
          1 |         49      100.00      100.00
------------+-----------------------------------
      Total |         49      100.00
```

```
22 . tab terriss if ir_three_code==1 & ir_obs==1 & max_mariss==0 & max_riveriss==0

    terriss |      Freq.     Percent        Cum.
------------+-----------------------------------
          1 |         21      100.00      100.00
------------+-----------------------------------
      Total |         21      100.00
```

```
23 . tab terriss if ir_three_code==2 & ir_obs==1 & max_mariss==0 & max_riveriss==0
no observations
```

```
24 . tab terriss if ir_obs==1 & max_mariss==0 & max_riveriss==0

    terriss |      Freq.     Percent        Cum.
------------+-----------------------------------
          1 |         70      100.00      100.00
------------+-----------------------------------
      Total |         70      100.00
```

```
25 .
26 . tab riveriss if ir_three_code==0 & ir_obs==1 & max_mariss==0 & max_terriss==0

   riveriss |      Freq.     Percent        Cum.
------------+-----------------------------------
          1 |          3      100.00      100.00
------------+-----------------------------------
      Total |          3      100.00
```

```
27 . tab riveriss if ir_three_code==1 & ir_obs==1 & max_mariss==0 & max_terriss==0

   riveriss |      Freq.     Percent        Cum.
------------+-----------------------------------
          1 |          8      100.00      100.00
------------+-----------------------------------
      Total |          8      100.00
```

```
28 . tab riveriss if ir_three_code==2 & ir_obs==1 & max_mariss==0 & max_terriss==0
no observations
```

```
29 . tab riveriss if ir_obs==1 & max_mariss==0 & max_terriss==0

   riveriss |      Freq.     Percent        Cum.
------------+-----------------------------------
```

```
          1 |         11      100.00      100.00
------------+-----------------------------------
      Total |         11      100.00

30 .
31 . tab mariss if ir_three_code==0 & ir_obs==1 & max_riveriss==0 & max_terriss==0

     mariss |      Freq.     Percent        Cum.
------------+-----------------------------------
          1 |         60      100.00      100.00
------------+-----------------------------------
      Total |         60      100.00

32 . tab mariss if ir_three_code==1 & ir_obs==1 & max_riveriss==0 & max_terriss==0

     mariss |      Freq.     Percent        Cum.
------------+-----------------------------------
          1 |         19      100.00      100.00
------------+-----------------------------------
      Total |         19      100.00

33 . tab mariss if ir_three_code==2 & ir_obs==1 & max_riveriss==0 & max_terriss==0
no observations

34 . tab mariss if ir_obs==1 & max_riveriss==0 & max_terriss==0

     mariss |      Freq.     Percent        Cum.
------------+-----------------------------------
          1 |         79      100.00      100.00
------------+-----------------------------------
      Total |         79      100.00

35 .
36 . tab ir2_terr_riv if ir_three_code==0 & ir_obs==1

ir2_terr_ri |
          v |      Freq.     Percent        Cum.
------------+-----------------------------------
          1 |          1      100.00      100.00
------------+-----------------------------------
      Total |          1      100.00

37 . tab ir2_terr_riv if ir_three_code==1 & ir_obs==1
no observations

38 . tab ir2_terr_riv if ir_three_code==2 & ir_obs==1

ir2_terr_ri |
          v |      Freq.     Percent        Cum.
------------+-----------------------------------
          1 |          3      100.00      100.00
------------+-----------------------------------
      Total |          3      100.00

39 . tab ir2_terr_riv if ir_obs==1

ir2_terr_ri |
          v |      Freq.     Percent        Cum.
------------+-----------------------------------
          1 |          4      100.00      100.00
------------+-----------------------------------
      Total |          4      100.00

40 .
41 . tab ir2_terr_mar if ir_three_code==0 & ir_obs==1
```

```
   ir2_terr_ma |
             r |      Freq.     Percent        Cum.
---------------+-----------------------------------
             1 |          5      100.00      100.00
---------------+-----------------------------------
         Total |          5      100.00
```

```
42 . tab ir2_terr_mar if ir_three_code==1 & ir_obs==1
no observations
```

```
43 . tab ir2_terr_mar if ir_three_code==2 & ir_obs==1

   ir2_terr_ma |
             r |      Freq.     Percent        Cum.
---------------+-----------------------------------
             1 |         20      100.00      100.00
---------------+-----------------------------------
         Total |         20      100.00
```

```
44 . tab ir2_terr_mar if ir_obs==1

   ir2_terr_ma |
             r |      Freq.     Percent        Cum.
---------------+-----------------------------------
             1 |         25      100.00      100.00
---------------+-----------------------------------
         Total |         25      100.00
```

```
45 .
46 . tab ir2_riv_mar if ir_three_code==0 & ir_obs==1
no observations

47 . tab ir2_riv_mar if ir_three_code==1 & ir_obs==1
no observations

48 . tab ir2_riv_mar if ir_three_code==2 & ir_obs==1

  ir2_riv_mar |      Freq.     Percent        Cum.
--------------+-----------------------------------
             1 |          4      100.00      100.00
--------------+-----------------------------------
         Total |          4      100.00

49 . tab ir2_riv_mar if ir_obs==1

  ir2_riv_mar |      Freq.     Percent        Cum.
--------------+-----------------------------------
             1 |          4      100.00      100.00
--------------+-----------------------------------
         Total |          4      100.00

50 .
51 . tab ir2_terr_riv_mar if ir_three_code==0 & ir_obs==1

   ir2_terr_ri |
       v_mar |      Freq.     Percent        Cum.
-------------+-----------------------------------
             1 |          1      100.00      100.00
-------------+-----------------------------------
         Total |          1      100.00

52 . tab ir2_terr_riv_mar if ir_three_code==1 & ir_obs==1
no observations
```

```
53 . tab ir2_terr_riv_mar if ir_three_code==2 & ir_obs==1

   ir2_terr_ri |
         v_mar |      Freq.     Percent        Cum.
---------------+-----------------------------------
             1 |          1      100.00      100.00
---------------+-----------------------------------
         Total |          1      100.00

54 . tab ir2_terr_riv_mar if ir_obs==1

   ir2_terr_ri |
         v_mar |      Freq.     Percent        Cum.
---------------+-----------------------------------
             1 |          2      100.00      100.00
---------------+-----------------------------------
         Total |          2      100.00

55 .
56 . tab cmtype if ir_three_code==0

       1=bilat |
   neg/2=multi |
   neg/3=3nonb |
   /4=3b/5=oth |
             er |
   peaceful/6= |
           MID |      Freq.     Percent        Cum.
---------------+-----------------------------------
             1 |        423       60.78       60.78
             2 |         61        8.76       69.54
             3 |         71       10.20       79.74
             4 |         31        4.45       84.20
             5 |          8        1.15       85.34
             6 |        102       14.66      100.00
---------------+-----------------------------------
         Total |        696      100.00

57 . tab cmtype if ir_three_code==1

       1=bilat |
   neg/2=multi |
   neg/3=3nonb |
   /4=3b/5=oth |
             er |
   peaceful/6= |
           MID |      Freq.     Percent        Cum.
---------------+-----------------------------------
             1 |        234       49.58       49.58
             2 |         39        8.26       57.84
             3 |         79       16.74       74.58
             4 |         20        4.24       78.81
             5 |         10        2.12       80.93
             6 |         90       19.07      100.00
---------------+-----------------------------------
         Total |        472      100.00

58 . tab cmtype if ir_three_code==2

       1=bilat |
   neg/2=multi |
   neg/3=3nonb |
   /4=3b/5=oth |
             er |
   peaceful/6= |
```

MID	Freq.	Percent	Cum.
1	522	58.32	58.32
2	24	2.68	61.01
3	167	18.66	79.66
4	22	2.46	82.12
5	26	2.91	85.03
6	134	14.97	100.00
Total	895	100.00	

```
59 . tab cmtype
```

1=bilat neg/2=multi neg/3=3nonb /4=3b/5=oth er peaceful/6= MID	Freq.	Percent	Cum.
1	1,179	57.15	57.15
2	124	6.01	63.16
3	317	15.37	78.53
4	73	3.54	82.06
5	44	2.13	84.20
6	326	15.80	100.00
Total	2,063	100.00	

```
60 .
61 . sum intercession_month if ir_three_code==0, d
```

Time (in months) since last cm attempt in issue-rivalry (caution with mm==00)

Percentiles		Smallest		
1%	1	1		
5%	1	1		
10%	2	1	Obs	571
25%	4	1	Sum of wgt.	571
50%	14		Mean	51.18564
		Largest	Std. dev.	113.9771
75%	44	771		
90%	120	773	Variance	12990.77
95%	248	916	Skewness	4.613428
99%	654	967	Kurtosis	28.0784

```
62 . sum intercession_month if ir_three_code==1, d
```

Time (in months) since last cm attempt in issue-rivalry (caution with mm==00)

Percentiles		Smallest		
1%	1	1		
5%	1	1		
10%	2	1	Obs	422
25%	6	1	Sum of wgt.	422
50%	14		Mean	42.8981
		Largest	Std. dev.	83.67013
75%	36	482		
90%	106	532	Variance	7000.69
95%	181	664	Skewness	4.209968

```
   99%          463            669       Kurtosis        24.7498
```

```
63 . sum intercession_month if ir_three_code==2, d

          Time (in months) since last cm attempt in
             issue-rivalry (caution with mm==00)
-------------------------------------------------------------
      Percentiles      Smallest
 1%            1              0
 5%            1              0
10%            1              0       Obs                 859
25%            4              1       Sum of wgt.         859

50%           10                      Mean            29.3539
                        Largest       Std. dev.       71.40497
75%           26            600
90%           60            623       Variance        5098.669
95%          114            971       Skewness        7.799844
99%          288            971       Kurtosis        85.9052
```

```
64 . sum intercession_month , d

          Time (in months) since last cm attempt in
             issue-rivalry (caution with mm==00)
-------------------------------------------------------------
      Percentiles      Smallest
 1%            1              0
 5%            1              0
10%            2              0       Obs               1,852
25%            4              1       Sum of wgt.       1,852

50%           12                      Mean            39.17117
                        Largest       Std. dev.       89.71339
75%         32.5            916
90%           87            967       Variance        8048.493
95%          170            971       Skewness        5.638044
99%          482            971       Kurtosis        43.68796
```

```
65 .
66 . *Table 4. Constructing the familiarity vartiables in a multi-issue rivalry's territorial claim(s). Text only.
67 .
68 . *Table 5. Effect of past conflict management on the use of conflict management strategies. Summary of results from Tabl
   > es A3-A6 (below). Text only.
69 .
70 . *Table 6. Effect of past successful conflict management on the use of conflict management strategies. Summary of result
   > s from Tables A3-A6 (below). Text only.
71 .
72 . *Table 7. Summary of findings on learning in the management of contentious issues. Summary of results from Tables 5-6.
   > Text/counts only.
73 .
74 .
75 . *Appendix
76 . use "cm_as_an_insular_strategy.dta", replace

77 .
78 . *Table A1 (online appendix)
79 . summ terrbilat terr3nonb terr3b terrmultineg if ir_three==2 & year<2002

    Variable |        Obs        Mean    Std. dev.       Min        Max
-------------+---------------------------------------------------------
   terrbilat |        895    .3452514     .475716          0          1
   terr3nonb |        895    .0994413     .299421          0          1
      terr3b |        895    .0156425    .1241571          0          1
 terrmultineg |        895    .0145251    .1197087          0          1
```

```
80 . summ rivbilat riv3nonb riv3b rivmultineg if ir_three==2 & year<2002
```

Variable	Obs	Mean	Std. dev.	Min	Max
rivbilat	895	.0804469	.2721359	0	1
riv3nonb	895	.0268156	.1616346	0	1
riv3b	895	.0022346	.0472455	0	1
rivmultineg	895	.0011173	.0334263	0	1

```
81 . summ marbilat mar3nonb mar3b marmultineg if ir_three==2 & year<2002
```

Variable	Obs	Mean	Std. dev.	Min	Max
marbilat	895	.1575419	.3645146	0	1
mar3nonb	895	.0603352	.23824	0	1
mar3b	895	.0067039	.0816481	0	1
marmultineg	895	.0111732	.1051699	0	1

```
82 . summ l_ratio_terrbilat_peacefulcm l_ratio_terr3nonb_peacefulcm l_ratio_terr3b_peacefulcm l_ratio_terrmn_peacefulcm if i
> r_three==2 & year<2002
```

Variable	Obs	Mean	Std. dev.	Min	Max
l_ratio_te..	895	.4699384	.3451473	0	1
l_ratio_te..	895	.1116021	.1490977	0	.8333333
l_ratio_te..	895	.0159467	.0439297	0	.3333333
l_ratio_te..	895	.0268871	.1270606	0	1

```
83 . summ l_ratio_rivbilat_peacefulcm l_ratio_riv3nonb_peacefulcm l_ratio_riv3b_peacefulcm l_ratio_rivmn_peacefulcm if ir_th
> ree==2 & year<2002
```

Variable	Obs	Mean	Std. dev.	Min	Max
l_ratio_ri..	895	.062628	.1401615	0	1
l_ratio_ri..	895	.0314992	.0981622	0	1
l_ratio_ri..	895	.0008872	.0083387	0	.1111111
l_ratio_ri..	895	.0003168	.0029922	0	.0322581

```
84 . summ l_ratio_marbilat_peacefulcm l_ratio_mar3nonb_peacefulcm l_ratio_mar3b_peacefulcm l_ratio_marmn_peacefulcm if ir_th
> ree==2 & year<2002
```

Variable	Obs	Mean	Std. dev.	Min	Max
l_ratio_ma..	895	.1266544	.188489	0	1
l_ratio_ma..	895	.0412244	.0851938	0	.5263158
l_ratio_ma..	895	.0030529	.0112368	0	.0769231
l_ratio_ma..	895	.018314	.0558962	0	.6666667

```
85 . summ l_ratio_sterrbilat_terrbilat l_ratio_sterr3nonb_terr3nonb l_ratio_sterr3b_terr3b l_ratio_sterrmn_terrmn if ir_thre
> e==2 & year<2002
```

Variable	Obs	Mean	Std. dev.	Min	Max
l_ratio_st~t	895	.3950534	.3224938	0	1
l_ra~rr3nonb	895	.2353336	.3496183	0	1
l_ratio~rr3b	895	.1698324	.3756954	0	1
l_ratio_st~n	895	.0266773	.1045474	0	1

```
86 . summ l_ratio_srivbilat_rivbilat l_ratio_sriv3nonb_riv3nonb l_ratio_sriv3b_riv3b l_ratio_srivmn_rivmn if ir_three==2 & y
> ear<2002
```

Variable	Obs	Mean	Std. dev.	Min	Max
l_ratio_sr~t	895	.1424402	.295381	0	1
l_rat~v3nonb	895	.0849676	.2397629	0	1

```
   l_ratio_~v3b |        895    .0145251    .1197087          0          1
   l_ratio_sr~n |        895    .0111732    .1051699          0          1

87 . summ l_ratio_smarbilat_marbilat l_ratio_smar3nonb_mar3nonb l_ratio_smar3b_mar3b l_ratio_smarmn_marmn if ir_three==2 & y
   > ear<2002

    Variable |        Obs        Mean    Std. dev.       Min        Max
-------------+---------------------------------------------------------
   l_ratio_sm~t |        895    .3256484    .3959952          0          1
   l_ra~ar3nonb |        895    .1591507    .3266896          0          1
   l_ratio~ar3b |        895    .0815642     .270772          0          1
   l_ratio_sm~n |        895    .1575419    .3622058          0          1

88 . summ icowsal recmidwt chal_cinc_share jtdem duration duration2 duration3 if ir_three==2 & year<2002

    Variable |        Obs        Mean    Std. dev.       Min        Max
-------------+---------------------------------------------------------
     icowsal |        894    7.576063    1.912805          0         12
    recmidwt |        893    .4678611    .7994306          0        4.2
chal_cinc_~e |        895    .4211045      .31471   .0002345   .9979128
       jtdem |        861    .3867596    .4872909          0          1
    duration |        893     39.8925    40.95951          1        161
-------------+---------------------------------------------------------
   duration2 |        893    3267.214    5726.856          1      25921
   duration3 |        893    351969.2    827917.3          1    4173281

89 .
90 . *Table A2 (online appendix; table reports left column of each crosstabulation for space reasons)
91 . tab  ir_three_code terrbilat, row  chi2 gamma

+-------------------+
| Key               |
|-------------------|
|   frequency       |
| row percentage    |
+-------------------+

    0=Not |
  IR/1=IR, |
      not | Bilateral neg in terr
multi/2=IR |        claims
 and multi |         0          1 |     Total
-----------+----------------------+----------
         0 |       426        270 |       696
           |     61.21      38.79 |    100.00
-----------+----------------------+----------
         1 |       329        143 |       472
           |     69.70      30.30 |    100.00
-----------+----------------------+----------
         2 |       586        309 |       895
           |     65.47      34.53 |    100.00
-----------+----------------------+----------
     Total |     1,341        722 |     2,063
           |     65.00      35.00 |    100.00

          Pearson chi2(2) =   9.0803   Pr = 0.011
                    gamma =  -0.0586  ASE = 0.039

92 . tab  ir_three_code rivbilat, row  chi2 gamma

+-------------------+
| Key               |
|-------------------|
|   frequency       |
| row percentage    |
```

0=Not IR/1=IR, not multi/2=IR and multi	Bilateral neg in riv claims 0	1	Total
0	**678** **97.41**	**18** **2.59**	**696** **100.00**
1	**438** **92.80**	**34** **7.20**	**472** **100.00**
2	**823** **91.96**	**72** **8.04**	**895** **100.00**
Total	**1,939** **93.99**	**124** **6.01**	**2,063** **100.00**

Pearson chi2(**2**) = **22.1905** Pr = **0.000**
gamma = **0.3422** ASE = **0.069**

```
93 . tab  ir_three_code marbilat, row  chi2 gamma
```

Key
frequency *row percentage*

0=Not IR/1=IR, not multi/2=IR and multi	Bilateral neg in mar claims 0	1	Total
0	**561** **80.60**	**135** **19.40**	**696** **100.00**
1	**415** **87.92**	**57** **12.08**	**472** **100.00**
2	**754** **84.25**	**141** **15.75**	**895** **100.00**
Total	**1,730** **83.86**	**333** **16.14**	**2,063** **100.00**

Pearson chi2(**2**) = **11.3098** Pr = **0.004**
gamma = **-0.0842** ASE = **0.051**

```
94 .
95 . tab  ir_three_code terrmulti, row  chi2 gamma
```

Key
frequency *row percentage*

0=Not IR/1=IR,

not multi/2=IR and multi	Multilateral neg in terr claims 0	1	Total
0	**689**	**7**	**696**
	98.99	**1.01**	**100.00**
1	**460**	**12**	**472**
	97.46	**2.54**	**100.00**
2	**882**	**13**	**895**
	98.55	**1.45**	**100.00**
Total	**2,031**	**32**	**2,063**
	98.45	**1.55**	**100.00**

Pearson chi2(**2**) = **4.4496** Pr = **0.108**
gamma = **0.0747** ASE = **0.129**

```
96 . tab  ir_three_code rivmulti, row  chi2 gamma
```

Key
frequency *row percentage*

0=Not IR/1=IR, not multi/2=IR and multi	Multilateral neg in riv claims 0	1	Total
0	**695**	**1**	**696**
	99.86	**0.14**	**100.00**
1	**464**	**8**	**472**
	98.31	**1.69**	**100.00**
2	**894**	**1**	**895**
	99.89	**0.11**	**100.00**
Total	**2,053**	**10**	**2,063**
	99.52	**0.48**	**100.00**

Pearson chi2(**2**) = **18.5899** Pr = **0.000**
gamma = **-0.1176** ASE = **0.118**

```
97 . tab  ir_three_code marmulti, row  chi2 gamma
```

Key
frequency *row percentage*

0=Not IR/1=IR, not multi/2=IR and multi	Multilateral neg in mar claims 0	1	Total
0	**643**	**53**	**696**

	92.39	**7.61**	**100.00**
1	**453**	**19**	**472**
	95.97	**4.03**	**100.00**
2	**885**	**10**	**895**
	98.88	**1.12**	**100.00**
Total	**1,981**	**82**	**2,063**
	96.03	**3.97**	**100.00**

Pearson chi2(**2**) = **43.3124** Pr = **0.000**
gamma = **-0.5820** ASE = **0.068**

```
98 .
99 . tab  ir_three_code terrmid, row  chi2 gamma
```

Key
frequency *row percentage*

0=Not IR/1=IR, not multi/2=IR and multi	MID in terr claims 0	1	Total
0	**649**	**47**	**696**
	93.25	**6.75**	**100.00**
1	**397**	**75**	**472**
	84.11	**15.89**	**100.00**
2	**812**	**83**	**895**
	90.73	**9.27**	**100.00**
Total	**1,858**	**205**	**2,063**
	90.06	**9.94**	**100.00**

Pearson chi2(**2**) = **27.0138** Pr = **0.000**
gamma = **0.0702** ASE = **0.055**

```
100 . tab  ir_three_code rivmid, row  chi2 gamma
```

Key
frequency *row percentage*

0=Not IR/1=IR, not multi/2=IR and multi	MID in riv claims 0	1	Total
0	**695**	**1**	**696**
	99.86	**0.14**	**100.00**
1	**467**	**5**	**472**
	98.94	**1.06**	**100.00**

2	**882**	**13**	**895**
	98.55	**1.45**	**100.00**
Total	**2,044**	**19**	**2,063**
	99.08	**0.92**	**100.00**

Pearson chi2(**2**) = **7.4785** Pr = **0.024**
gamma = **0.5268** ASE = **0.151**

```
101 . tab  ir_three_code marmid, row  chi2 gamma
```

Key
frequency *row percentage*

0=Not IR/1=IR, not multi/2=IR and multi	MID in mar claims 0	1	Total
0	**642**	**54**	**696**
	92.24	**7.76**	**100.00**
1	**462**	**10**	**472**
	97.88	**2.12**	**100.00**
2	**857**	**38**	**895**
	95.75	**4.25**	**100.00**
Total	**1,961**	**102**	**2,063**
	95.06	**4.94**	**100.00**

Pearson chi2(**2**) = **20.6772** Pr = **0.000**
gamma = **−0.2452** ASE = **0.089**

```
102 .
103 . tab  ir_three_code terr3nonb, row  chi2 gamma
```

Key
frequency *row percentage*

0=Not IR/1=IR, not multi/2=IR and multi	Non-binding 3rd party cm in terr claims 0	1	Total
0	**652**	**44**	**696**
	93.68	**6.32**	**100.00**
1	**426**	**46**	**472**
	90.25	**9.75**	**100.00**
2	**806**	**89**	**895**
	90.06	**9.94**	**100.00**

Total	1,884	179	2,063
	91.32	8.68	100.00

Pearson chi2(2) = 7.3661 Pr = 0.025
gamma = 0.1595 ASE = 0.063

```
104 . tab  ir_three_code riv3nonb, row  chi2 gamma
```

Key
frequency *row percentage*

0=Not IR/1=IR, not multi/2=IR and multi	Non-binding 3rd party cm in river claims 0	1	Total
0	693	3	696
	99.57	0.43	100.00
1	453	19	472
	95.97	4.03	100.00
2	871	24	895
	97.32	2.68	100.00
Total	2,017	46	2,063
	97.77	2.23	100.00

Pearson chi2(2) = 18.1485 Pr = 0.000
gamma = 0.3293 ASE = 0.095

```
105 . tab  ir_three_code mar3nonb, row  chi2 gamma
```

Key
frequency *row percentage*

0=Not IR/1=IR, not multi/2=IR and multi	Non-binding 3rd party cm in maritime claims 0	1	Total
0	672	24	696
	96.55	3.45	100.00
1	458	14	472
	97.03	2.97	100.00
2	841	54	895
	93.97	6.03	100.00
Total	1,971	92	2,063
	95.54	4.46	100.00

Pearson chi2(2) = 9.3455 Pr = 0.009
gamma = 0.2424 ASE = 0.092

```
106 .
107 . tab  ir_three_code terr3b, row  chi2 gamma
```

Key
frequency *row percentage*

0=Not IR/1=IR, not multi/2=IR and multi	Binding 3rd party cm in terr claims 0	1	Total
0	**676** **97.13**	**20** **2.87**	**696** **100.00**
1	**464** **98.31**	**8** **1.69**	**472** **100.00**
2	**881** **98.44**	**14** **1.56**	**895** **100.00**
Total	**2,021** **97.96**	**42** **2.04**	**2,063** **100.00**

Pearson chi2(**2**) = **3.7221** Pr = **0.156**
gamma = **−0.2274** ASE = **0.128**

```
108 . tab  ir_three_code riv3b, row  chi2  gamma
```

Key
frequency *row percentage*

0=Not IR/1=IR, not multi/2=IR and multi	Binding 3rd party cm in river claims 0	1	Total
0	**696** **100.00**	**0** **0.00**	**696** **100.00**
1	**467** **98.94**	**5** **1.06**	**472** **100.00**
2	**893** **99.78**	**2** **0.22**	**895** **100.00**
Total	**2,056** **99.66**	**7** **0.34**	**2,063** **100.00**

Pearson chi2(**2**) = **9.9608** Pr = **0.007**
gamma = **0.1306** ASE = **0.166**

```
109 . tab  ir_three_code mar3b, row  chi2 gamma
```

Key
frequency *row percentage*

0=Not IR/1=IR, not multi/2=IR and multi	Binding 3rd party cm in maritime claims		Total
	0	1	
0	**685** **98.42**	**11** **1.58**	**696** **100.00**
1	**465** **98.52**	**7** **1.48**	**472** **100.00**
2	**889** **99.33**	**6** **0.67**	**895** **100.00**
Total	**2,039** **98.84**	**24** **1.16**	**2,063** **100.00**

Pearson chi2(**2**) = **3.3642** Pr = **0.186**
gamma = **−0.2872** ASE = **0.150**

```
110 .
111 . *Table A3 (online appendix)
112 . firthlogit terrbilat l_ratio_terrbilat_peacefulcm l_ratio_rivbilat_peacefulcm l_ratio_marbilat_peacefulcm icowsal recmi
    > dwt chal_cinc_share jtdem duration duration2 duration3 if ir_three==2 & year<2002

    initial:       penalized log likelihood = -511.82458
    rescale:       penalized log likelihood = -511.82458
    Iteration 0:   penalized log likelihood = -511.82458
    Iteration 1:   penalized log likelihood = -393.13936  (not concave)
    Iteration 2:   penalized log likelihood = -388.31711
    Iteration 3:   penalized log likelihood = -386.11068
    Iteration 4:   penalized log likelihood = -385.88867
    Iteration 5:   penalized log likelihood = -385.88862
    Iteration 6:   penalized log likelihood = -385.88862

                                                    Number of obs =    858
                                                    Wald chi2(10) = 161.63
    Penalized log likelihood = -385.88862           Prob > chi2   = 0.0000
```

terrbilat	Coefficient	Std. err.	z	P>|z|	[95% conf.	interval]
l_ratio_terrbilat_peacefulcm	**2.419943**	**.3218313**	**7.52**	**0.000**	**1.789165**	**3.050721**
l_ratio_rivbilat_peacefulcm	**−2.831658**	**.9575224**	**−2.96**	**0.003**	**−4.708367**	**−.9549482**
l_ratio_marbilat_peacefulcm	**−2.754857**	**.70551**	**−3.90**	**0.000**	**−4.137631**	**−1.372083**
icowsal	**−.2257236**	**.0464247**	**−4.86**	**0.000**	**−.3167143**	**−.1347329**
recmidwt	**−.4177854**	**.115072**	**−3.63**	**0.000**	**−.6433224**	**−.1922485**
chal_cinc_share	**−.3365159**	**.2888785**	**−1.16**	**0.244**	**−.9027073**	**.2296755**
jtdem	**.4101317**	**.2040861**	**2.01**	**0.044**	**.0101304**	**.810133**
duration	**.0381171**	**.0161434**	**2.36**	**0.018**	**.0064766**	**.0697576**
duration2	**−.0006333**	**.0002763**	**−2.29**	**0.022**	**−.0011749**	**−.0000917**
duration3	**3.32e−06**	**1.24e−06**	**2.69**	**0.007**	**8.98e−07**	**5.75e−06**
_cons	**−.2734044**	**.4345924**	**−0.63**	**0.529**	**−1.12519**	**.5783811**

```
113 .
114 . estimates store t1m1
```

```
115 .
116 . firthlogit terrbilat l_ratio_sterrbilat_terrbilat l_ratio_srivbilat_rivbilat l_ratio_smarbilat_marbilat icowsal recmidw
    > t chal_cinc_share jtdem duration duration2 duration3 if ir_three==2 & year<2002

    initial:       penalized log likelihood = -510.29305
    rescale:       penalized log likelihood = -510.29305
    Iteration 0:   penalized log likelihood = -510.29305
    Iteration 1:   penalized log likelihood = -446.26319
    Iteration 2:   penalized log likelihood = -443.80155
    Iteration 3:   penalized log likelihood = -443.78063
    Iteration 4:   penalized log likelihood = -443.78063

                                                  Number of obs =    858
                                                  Wald chi2(10) =  97.59
    Penalized log likelihood = -443.78063         Prob > chi2   = 0.0000

    ------------------------------------------------------------------------------
                 terrbilat | Coefficient  Std. err.      z    P>|z|     [95% conf. interval]
    ---------------------------------------------------------------------------
    l_ratio_sterrbilat_terrbilat |   .1318998   .2618596     0.50   0.614    -.3813357    .6451352
      l_ratio_srivbilat_rivbilat |  -1.733959   .3573112    -4.85   0.000    -2.434276   -1.033642
      l_ratio_smarbilat_marbilat |  -1.021212   .2414234    -4.23   0.000    -1.494393   -.5480311
                         icowsal |   -.177124   .0415236    -4.27   0.000    -.2585087   -.0957394
                        recmidwt |  -.4690994   .1110109    -4.23   0.000    -.6866768    -.251522
                chal_cinc_share |  -.7221317   .2819909    -2.56   0.010    -1.274824   -.1694398
                           jtdem |  -.0706797   .1882894    -0.38   0.707    -.4397201    .2983607
                        duration |   .0591302   .0145677     4.06   0.000      .030578    .0876824
                       duration2 |  -.0008901   .0002516    -3.54   0.000    -.0013832   -.0003969
                       duration3 |   3.93e-06   1.13e-06     3.47   0.001     1.71e-06    6.15e-06
                           _cons |   .8194845   .3715704     2.21   0.027     .0912199    1.547749
    ------------------------------------------------------------------------------

117 .
118 . estimates store t1m2

119 .
120 . firthlogit rivbilat l_ratio_terrbilat_peacefulcm l_ratio_rivbilat_peacefulcm l_ratio_marbilat_peacefulcm icowsal recmid
    > wt chal_cinc_share jtdem duration duration2 duration3 if ir_three==2 & year<2002

    initial:       penalized log likelihood = -208.55436
    rescale:       penalized log likelihood = -208.55436
    Iteration 0:   penalized log likelihood = -208.55436
    Iteration 1:   penalized log likelihood = -188.99612  (not concave)
    Iteration 2:   penalized log likelihood = -152.12336  (not concave)
    Iteration 3:   penalized log likelihood = -149.53897
    Iteration 4:   penalized log likelihood = -148.22488
    Iteration 5:   penalized log likelihood = -147.60601
    Iteration 6:   penalized log likelihood = -147.56888
    Iteration 7:   penalized log likelihood = -147.56848
    Iteration 8:   penalized log likelihood = -147.56848

                                                  Number of obs =    858
                                                  Wald chi2(10) =  81.97
    Penalized log likelihood = -147.56848         Prob > chi2   = 0.0000

    ------------------------------------------------------------------------------
                  rivbilat | Coefficient  Std. err.      z    P>|z|     [95% conf. interval]
    ---------------------------------------------------------------------------
    l_ratio_terrbilat_peacefulcm |    .989904   .5248371     1.89   0.059    -.0387577    2.018566
     l_ratio_rivbilat_peacefulcm |   6.008844   .8875462     6.77   0.000     4.269286    7.748403
     l_ratio_marbilat_peacefulcm |   1.398363   .8203098     1.70   0.088    -.2094148    3.006141
                         icowsal |   .0132142   .0713448     0.19   0.853    -.1266189    .1530474
                        recmidwt |  -.6551716   .3277218    -2.00   0.046    -1.297495   -.0128488
                chal_cinc_share |  -.0695862   .4442575    -0.16   0.876     -.940315    .8011425
                           jtdem |   .1483824    .334742     0.44   0.658       -.5077    .8044647
    ------------------------------------------------------------------------------
```

duration	-.0167884	.0302	-0.56	0.578	-.0759793	.0424024
duration2	-.0005949	.0006897	-0.86	0.388	-.0019467	.0007569
duration3	3.94e-06	3.43e-06	1.15	0.252	-2.79e-06	.0000107
_cons	-2.839151	.757149	-3.75	0.000	-4.323135	-1.355166

```
121 .
122 . estimates store t1m3

123 .
124 . firthlogit rivbilat l_ratio_sterrbilat_terrbilat l_ratio_srivbilat_rivbilat l_ratio_smarbilat_marbilat icowsal recmidwt
    >  chal_cinc_share jtdem duration duration2 duration3 if ir_three==2 & year<2002

    initial:       penalized log likelihood = -207.02283
    rescale:       penalized log likelihood = -207.02283
    Iteration 0:   penalized log likelihood = -207.02283
    Iteration 1:   penalized log likelihood =  -186.9375  (not concave)
    Iteration 2:   penalized log likelihood = -151.15758  (not concave)
    Iteration 3:   penalized log likelihood = -145.47153
    Iteration 4:   penalized log likelihood = -144.59477
    Iteration 5:   penalized log likelihood = -142.94403
    Iteration 6:   penalized log likelihood = -142.78329
    Iteration 7:   penalized log likelihood = -142.77576
    Iteration 8:   penalized log likelihood = -142.77542
    Iteration 9:   penalized log likelihood = -142.77542

                                                  Number of obs =    858
                                                  Wald chi2(10) =  87.32
    Penalized log likelihood = -142.77542         Prob > chi2   = 0.0000
```

rivbilat	Coefficient	Std. err.	z	P>|z|	[95% conf.	interval]
l_ratio_sterrbilat_terrbilat	.1756058	.4649869	0.38	0.706	-.7357518	1.086963
l_ratio_srivbilat_rivbilat	2.933483	.3698198	7.93	0.000	2.20865	3.658317
l_ratio_smarbilat_marbilat	-.4944002	.4133575	-1.20	0.232	-1.304566	.3157655
icowsal	-.0837678	.0723156	-1.16	0.247	-.2255039	.0579683
recmidwt	-.824501	.3443349	-2.39	0.017	-1.499385	-.149617
chal_cinc_share	-.2812199	.4677147	-0.60	0.548	-1.197924	.6354841
jtdem	.5693699	.3273629	1.74	0.082	-.0722495	1.210989
duration	.0039657	.0295968	0.13	0.893	-.0540431	.0619745
duration2	-.0008388	.0006603	-1.27	0.204	-.002133	.0004554
duration3	4.69e-06	3.28e-06	1.43	0.153	-1.74e-06	.0000111
_cons	-1.814203	.6577056	-2.76	0.006	-3.103282	-.5251235

```
125 .
126 . estimates store t1m4

127 .
128 . firthlogit marbilat l_ratio_terrbilat_peacefulcm l_ratio_rivbilat_peacefulcm l_ratio_marbilat_peacefulcm icowsal recmid
    > wt chal_cinc_share jtdem duration duration2 duration3 if ir_three==2 & year<2002

    initial:       penalized log likelihood = -336.58462
    rescale:       penalized log likelihood = -336.58462
    Iteration 0:   penalized log likelihood = -336.58462
    Iteration 1:   penalized log likelihood = -261.98311  (not concave)
    Iteration 2:   penalized log likelihood = -250.40422  (not concave)
    Iteration 3:   penalized log likelihood = -249.18031
    Iteration 4:   penalized log likelihood = -247.40785
    Iteration 5:   penalized log likelihood = -247.35905
    Iteration 6:   penalized log likelihood = -247.31786
    Iteration 7:   penalized log likelihood = -247.31782
    Iteration 8:   penalized log likelihood = -247.31782
```

```
                                                Number of obs =    858
                                                Wald chi2(10) = 111.63
Penalized log likelihood = -247.31782           Prob > chi2   = 0.0000
```

marbilat	Coefficient	Std. err.	z	P>|z|	[95% conf.	interval]
l_ratio_terrbilat_peacefulcm	-1.875529	.439109	-4.27	0.000	-2.736166	-1.014891
l_ratio_rivbilat_peacefulcm	-1.617526	.8655155	-1.87	0.062	-3.313905	.0788538
l_ratio_marbilat_peacefulcm	3.167185	.576928	5.49	0.000	2.036427	4.297943
icowsal	.1453657	.060278	2.41	0.016	.0272229	.2635085
recmidwt	-.321844	.1581636	-2.03	0.042	-.631839	-.011849
chal_cinc_share	.6583064	.4272771	1.54	0.123	-.1791414	1.495754
jtdem	.6538645	.2373757	2.75	0.006	.1886167	1.119112
duration	.0539725	.0278933	1.93	0.053	-.0006974	.1086424
duration2	-.0004567	.0006423	-0.71	0.477	-.0017157	.0008022
duration3	-7.28e-07	4.16e-06	-0.18	0.861	-8.87e-06	7.42e-06
_cons	-3.553594	.6557944	-5.42	0.000	-4.838928	-2.268261

```
129 .
130 . estimates store t1m5

131 .
132 . firthlogit marbilat l_ratio_sterrbilat_terrbilat l_ratio_srivbilat_rivbilat l_ratio_smarbilat_marbilat icowsal recmidwt
    >  chal_cinc_share jtdem duration duration2 duration3 if ir_three==2 & year<2002

initial:       penalized log likelihood = -335.05309
rescale:       penalized log likelihood = -335.05309
Iteration 0:   penalized log likelihood = -335.05309
Iteration 1:   penalized log likelihood = -277.76028  (not concave)
Iteration 2:   penalized log likelihood = -269.72826
Iteration 3:   penalized log likelihood =  -267.9305
Iteration 4:   penalized log likelihood = -267.79722
Iteration 5:   penalized log likelihood = -267.79103
Iteration 6:   penalized log likelihood = -267.79102

                                                Number of obs =    858
                                                Wald chi2(10) =  98.81
Penalized log likelihood = -267.79102           Prob > chi2   = 0.0000
```

marbilat	Coefficient	Std. err.	z	P>|z|	[95% conf.	interval]
l_ratio_sterrbilat_terrbilat	-.5528103	.3712325	-1.49	0.136	-1.280413	.174792
l_ratio_srivbilat_rivbilat	-.3946459	.3783751	-1.04	0.297	-1.136247	.3469557
l_ratio_smarbilat_marbilat	1.707803	.2904827	5.88	0.000	1.138467	2.277138
icowsal	.1253061	.0586915	2.13	0.033	.0102728	.2403394
recmidwt	-.1454334	.1461614	-1.00	0.320	-.4319044	.1410376
chal_cinc_share	1.059636	.3725117	2.84	0.004	.3295261	1.789745
jtdem	.8822608	.239874	3.68	0.000	.4121164	1.352405
duration	.0290616	.0214867	1.35	0.176	-.0130516	.0711747
duration2	-.0003105	.0004282	-0.73	0.468	-.0011497	.0005288
duration3	-2.09e-07	2.35e-06	-0.09	0.929	-4.82e-06	4.40e-06
_cons	-4.078092	.6080354	-6.71	0.000	-5.269819	-2.886364

```
133 .
134 . estimates store t1m6

135 .
136 . *Table A4 (online appendix)
137 . firthlogit terr3nonb l_ratio_terr3nonb_peacefulcm l_ratio_riv3nonb_peacefulcm l_ratio_mar3nonb_peacefulcm icowsal recmi
    > dwt chal_cinc_share jtdem duration duration2 duration3 if ir_three==2 & year<2002
```

```
initial:       penalized log likelihood = -217.56126
rescale:       penalized log likelihood = -217.56126
Iteration 0:   penalized log likelihood = -217.56126
Iteration 1:   penalized log likelihood = -191.74128  (not concave)
Iteration 2:   penalized log likelihood = -169.22825  (not concave)
Iteration 3:   penalized log likelihood = -167.62829
Iteration 4:   penalized log likelihood = -166.39395
Iteration 5:   penalized log likelihood = -166.34211
Iteration 6:   penalized log likelihood = -166.34205
Iteration 7:   penalized log likelihood = -166.34205

                                                Number of obs =    858
                                                Wald chi2(10) =  80.97
Penalized log likelihood = -166.34205           Prob > chi2   = 0.0000
```

terr3nonb	Coefficient	Std. err.	z	P>|z|	[95% conf.	interval]
l_ratio_terr3nonb_peacefulcm	4.11462	.9254691	4.45	0.000	2.300733	5.928506
l_ratio_riv3nonb_peacefulcm	-2.585608	3.253535	-0.79	0.427	-8.962419	3.791203
l_ratio_mar3nonb_peacefulcm	-.4081679	2.42422	-0.17	0.866	-5.159552	4.343217
icowsal	-.006095	.0728469	-0.08	0.933	-.1488724	.1366824
recmidwt	.3670851	.1403035	2.62	0.009	.0920952	.6420749
chal_cinc_share	.4232028	.5588635	0.76	0.449	-.6721495	1.518555
jtdem	-1.294335	.3785507	-3.42	0.001	-2.036281	-.5523894
duration	-.0446776	.0265719	-1.68	0.093	-.0967577	.0074024
duration2	.000804	.0004383	1.83	0.067	-.000055	.001663
duration3	-2.71e-06	1.91e-06	-1.42	0.155	-6.44e-06	1.03e-06
_cons	-2.921618	.6871083	-4.25	0.000	-4.268326	-1.574911

```
138 .
139 . estimates store t2m1

140 .
141 . firthlogit terr3nonb l_ratio_sterr3nonb_terr3nonb l_ratio_sriv3nonb_riv3nonb l_ratio_smar3nonb_mar3nonb icowsal recmidw
    > t chal_cinc_share jtdem duration duration2 duration3 if ir_three==2 & year<2002

initial:       penalized log likelihood = -214.36127
rescale:       penalized log likelihood = -214.36127
Iteration 0:   penalized log likelihood = -214.36127
Iteration 1:   penalized log likelihood = -193.73608  (not concave)
Iteration 2:   penalized log likelihood = -175.05217  (not concave)
Iteration 3:   penalized log likelihood = -174.61017  (not concave)
Iteration 4:   penalized log likelihood = -173.48103
Iteration 5:   penalized log likelihood = -173.17969
Iteration 6:   penalized log likelihood = -173.16927
Iteration 7:   penalized log likelihood = -173.16927

                                                Number of obs =    858
                                                Wald chi2(10) =  71.45
Penalized log likelihood = -173.16927           Prob > chi2   = 0.0000
```

terr3nonb	Coefficient	Std. err.	z	P>|z|	[95% conf.	interval]
l_ratio_sterr3nonb_terr3nonb	.3185514	.4214656	0.76	0.450	-.507506	1.144609
l_ratio_sriv3nonb_riv3nonb	-1.002114	.8343424	-1.20	0.230	-2.637395	.6331669
l_ratio_smar3nonb_mar3nonb	.2202987	.3819185	0.58	0.564	-.5282477	.9688451
icowsal	-.0101833	.0695409	-0.15	0.884	-.1464811	.1261144
recmidwt	.3243936	.1423822	2.28	0.023	.0453297	.6034575
chal_cinc_share	.3936597	.52064	0.76	0.450	-.626776	1.414095
jtdem	-1.13176	.3645553	-3.10	0.002	-1.846275	-.4172449
duration	-.0377011	.0261934	-1.44	0.150	-.0890392	.013637
duration2	.0007684	.0004291	1.79	0.073	-.0000727	.0016094

```
                  duration3 |  -2.78e-06   1.84e-06    -1.51   0.131    -6.38e-06    8.26e-07
                      _cons |  -2.600939   .6380336    -4.08   0.000    -3.851462   -1.350416
------------------------------------------------------------------------------------------------

142 .
143 . estimates store t2m2

144 .
145 . firthlogit riv3nonb l_ratio_terr3nonb_peacefulcm l_ratio_riv3nonb_peacefulcm l_ratio_mar3nonb_peacefulcm icowsal recmid
    > wt chal_cinc_share jtdem duration duration2 duration3 if ir_three==2 & year<2002

    initial:       penalized log likelihood = -78.573653
    rescale:       penalized log likelihood = -78.573653
    Iteration 0:   penalized log likelihood = -78.573653
    Iteration 1:   penalized log likelihood = -68.758181
    Iteration 2:   penalized log likelihood = -60.446468  (not concave)
    Iteration 3:   penalized log likelihood = -59.831725
    Iteration 4:   penalized log likelihood = -58.848838  (not concave)
    Iteration 5:   penalized log likelihood = -58.265531
    Iteration 6:   penalized log likelihood = -58.025341  (not concave)
    Iteration 7:   penalized log likelihood = -58.003404
    Iteration 8:   penalized log likelihood = -57.956697
    Iteration 9:   penalized log likelihood = -57.949252
    Iteration 10:  penalized log likelihood = -57.949239
    Iteration 11:  penalized log likelihood = -57.949239  (backed up)

                                                  Number of obs =    858
                                                  Wald chi2(10) =  21.59
    Penalized log likelihood = -57.949239         Prob > chi2   = 0.0174

------------------------------------------------------------------------------------------------
                  riv3nonb |  Coefficient  Std. err.      z    P>|z|     [95% conf. interval]
-------------------------------------------------------------------------------------------------
l_ratio_terr3nonb_peacefulcm |  -3.744916   3.632278    -1.03   0.303    -10.86405    3.374217
 l_ratio_riv3nonb_peacefulcm |   2.741679   1.143235     2.40   0.016     .5009805    4.982378
 l_ratio_mar3nonb_peacefulcm |  -9.793369    11.1286    -0.88   0.379    -31.60502    12.01828
                    icowsal |   .1018878   .1151574     0.88   0.376    -.1238166    .3275921
                   recmidwt |  -.029155   .3495409    -0.08   0.934    -.7142426    .6559327
              chal_cinc_share |  -1.942583   .8000943    -2.43   0.015    -3.510739   -.3744274
                      jtdem |  -.6116748   .5071368    -1.21   0.228    -1.605645     .382295
                   duration |   .0872929   .0615282     1.42   0.156       -.0333    .2078859
                  duration2 |  -.0029677   .0016544    -1.79   0.073    -.0062104    .0002749
                  duration3 |   .0000159   8.21e-06     1.94   0.052    -1.70e-07     .000032
                      _cons |  -3.142498   1.097451    -2.86   0.004    -5.293462   -.9915337
-------------------------------------------------------------------------------------------------

146 .
147 . estimates store t2m3

148 .
149 . firthlogit riv3nonb l_ratio_sterr3nonb_terr3nonb l_ratio_sriv3nonb_riv3nonb l_ratio_smar3nonb_mar3nonb icowsal recmidwt
    >  chal_cinc_share jtdem duration duration2 duration3 if ir_three==2 & year<2002

    initial:       penalized log likelihood = -75.373663
    rescale:       penalized log likelihood = -75.373663
    Iteration 0:   penalized log likelihood = -75.373663
    Iteration 1:   penalized log likelihood = -61.752782
    Iteration 2:   penalized log likelihood = -57.181228  (not concave)
    Iteration 3:   penalized log likelihood = -56.751563
    Iteration 4:   penalized log likelihood =  -55.88213  (not concave)
    Iteration 5:   penalized log likelihood = -55.698681  (not concave)
    Iteration 6:   penalized log likelihood = -55.684922
    Iteration 7:   penalized log likelihood = -55.614555
    Iteration 8:   penalized log likelihood = -55.596752
    Iteration 9:   penalized log likelihood = -55.591231
```

```
Iteration 10:  penalized log likelihood = -55.590933
Iteration 11:  penalized log likelihood = -55.590933

                                                Number of obs =    858
                                                Wald chi2(10) =  24.18
Penalized log likelihood = -55.590933           Prob > chi2   = 0.0071
```

riv3nonb	Coefficient	Std. err.	z	P>|z|	[95% conf.	interval]
l_ratio_sterr3nonb_terr3nonb	-.7622222	1.533139	-0.50	0.619	-3.767119	2.242674
l_ratio_sriv3nonb_riv3nonb	1.568702	.5415014	2.90	0.004	.507379	2.630025
l_ratio_smar3nonb_mar3nonb	-2.380625	3.332136	-0.71	0.475	-8.911492	4.150243
icowsal	.0490552	.1137639	0.43	0.666	-.1739179	.2720283
recmidwt	-.0092315	.3423231	-0.03	0.978	-.6801725	.6617094
chal_cinc_share	-2.031511	.855824	-2.37	0.018	-3.708895	-.3541267
jtdem	-.4330205	.4973781	-0.87	0.384	-1.407864	.5418228
duration	.070536	.0564266	1.25	0.211	-.0400581	.1811301
duration2	-.0024648	.0014959	-1.65	0.099	-.0053967	.000467
duration3	.0000132	7.55e-06	1.75	0.081	-1.61e-06	.000028
_cons	-2.953919	1.119347	-2.64	0.008	-5.147799	-.7600391

```
150 .
151 . estimates store t2m4

152 .
153 . firthlogit mar3nonb l_ratio_terr3nonb_peacefulcm l_ratio_riv3nonb_peacefulcm l_ratio_mar3nonb_peacefulcm icowsal recmid
    > wt chal_cinc_share jtdem duration duration2 duration3 if ir_three==2 & year<2002

initial:       penalized log likelihood = -158.52555
rescale:       penalized log likelihood = -158.52555
Iteration 0:   penalized log likelihood = -158.52555
Iteration 1:   penalized log likelihood = -106.47395  (not concave)
Iteration 2:   penalized log likelihood =  -100.8382
Iteration 3:   penalized log likelihood = -95.021907
Iteration 4:   penalized log likelihood = -91.411535
Iteration 5:   penalized log likelihood = -91.123549
Iteration 6:   penalized log likelihood =  -91.09228
Iteration 7:   penalized log likelihood = -91.092242
Iteration 8:   penalized log likelihood = -91.092242

                                                Number of obs =    858
                                                Wald chi2(10) =  87.06
Penalized log likelihood = -91.092242           Prob > chi2   = 0.0000
```

mar3nonb	Coefficient	Std. err.	z	P>|z|	[95% conf.	interval]
l_ratio_terr3nonb_peacefulcm	3.152569	1.442873	2.18	0.029	.3245897	5.980549
l_ratio_riv3nonb_peacefulcm	1.289637	1.532517	0.84	0.400	-1.714042	4.293316
l_ratio_mar3nonb_peacefulcm	12.79395	2.125811	6.02	0.000	8.627434	16.96046
icowsal	.3500596	.1131356	3.09	0.002	.1283179	.5718012
recmidwt	.2736251	.2004747	1.36	0.172	-.1192981	.6665484
chal_cinc_share	.1894565	.7708534	0.25	0.806	-1.321389	1.700301
jtdem	-.7730919	.4292965	-1.80	0.072	-1.614498	.0683137
duration	-.0588716	.038606	-1.52	0.127	-.134538	.0167949
duration2	.000978	.0007491	1.31	0.192	-.0004902	.0024461
duration3	-5.51e-06	3.78e-06	-1.46	0.145	-.0000129	1.90e-06
_cons	-6.032953	1.217316	-4.96	0.000	-8.418848	-3.647058

```
154 .
155 . estimates store t2m5
```

```
156 .
157 . firthlogit mar3nonb l_ratio_sterr3nonb_terr3nonb l_ratio_sriv3nonb_riv3nonb l_ratio_smar3nonb_mar3nonb icowsal recmidwt
    >  chal_cinc_share jtdem duration duration2 duration3 if ir_three==2 & year<2002

    initial:       penalized log likelihood = -155.32556
    rescale:       penalized log likelihood = -155.32556
    Iteration 0:   penalized log likelihood = -155.32556
    Iteration 1:   penalized log likelihood = -137.04586  (not concave)
    Iteration 2:   penalized log likelihood = -94.419726  (not concave)
    Iteration 3:   penalized log likelihood = -92.172793
    Iteration 4:   penalized log likelihood = -91.065505
    Iteration 5:   penalized log likelihood = -90.003917  (not concave)
    Iteration 6:   penalized log likelihood =  -89.99252  (not concave)
    Iteration 7:   penalized log likelihood = -89.961225
    Iteration 8:   penalized log likelihood = -89.732134
    Iteration 9:   penalized log likelihood = -89.729682
    Iteration 10:  penalized log likelihood = -89.729682

                                                  Number of obs =    858
                                                  Wald chi2(10) =  84.80
    Penalized log likelihood = -89.729682         Prob > chi2   = 0.0000

    ------------------------------------------------------------------------------
                   mar3nonb | Coefficient  Std. err.      z    P>|z|     [95% conf. interval]
    ------------------------+-----------------------------------------------------
    l_ratio_sterr3nonb_terr3nonb |   2.028338     .67983     2.98   0.003     .6958959     3.36078
      l_ratio_sriv3nonb_riv3nonb |   2.892123   .6067551     4.77   0.000     1.702905    4.081341
      l_ratio_smar3nonb_mar3nonb |   2.458549   .5673694     4.33   0.000     1.346526    3.570573
                         icowsal |   .5331473     .11479     4.64   0.000     .3081631    .7581315
                       recmidwt |   .2097954   .1850731     1.13   0.257    -.1529412    .5725319
                  chal_cinc_share |   .0648328   .7362572     0.09   0.930    -1.378205     1.50787
                           jtdem |   .2085622   .4086148     0.51   0.610     -.592308    1.009432
                        duration |   .0418028   .0366203     1.14   0.254    -.0299716    .1135772
                       duration2 |  -.0013356   .0007087    -1.88   0.059    -.0027245    .0000533
                       duration3 |   6.09e-06   3.42e-06     1.78   0.075    -6.09e-07    .0000128
                           _cons |  -8.817623   1.313509    -6.71   0.000    -11.39205   -6.243192
    ------------------------------------------------------------------------------

158 .
159 . estimates store t2m6

160 .
161 . *Table A5 (online appendix)
162 . firthlogit terr3b l_ratio_terr3b_peacefulcm l_ratio_riv3b_peacefulcm l_ratio_mar3b_peacefulcm icowsal recmidwt chal_cin
    > c_share jtdem duration duration2 duration3 if ir_three==2 & year<2002

    initial:       penalized log likelihood =  -49.07587
    rescale:       penalized log likelihood =  -49.07587
    Iteration 0:   penalized log likelihood =  -49.07587
    Iteration 1:   penalized log likelihood =  -44.51605  (not concave)
    Iteration 2:   penalized log likelihood = -36.608331  (not concave)
    Iteration 3:   penalized log likelihood = -34.996813  (not concave)
    Iteration 4:   penalized log likelihood = -34.225915  (not concave)
    Iteration 5:   penalized log likelihood = -33.522467
    Iteration 6:   penalized log likelihood =  -32.76416  (not concave)
    Iteration 7:   penalized log likelihood = -32.722864
    Iteration 8:   penalized log likelihood = -32.677196
    Iteration 9:   penalized log likelihood = -32.676966
    Iteration 10:  penalized log likelihood = -32.676966

                                                  Number of obs =    858
                                                  Wald chi2(10) =  25.52
    Penalized log likelihood = -32.676966         Prob > chi2   = 0.0044

    ------------------------------------------------------------------------------
                   terr3b |
```

terr3b	Coefficient	Std. err.	z	P>|z|	[95% conf.	interval]
l_ratio_terr3b_peacefulcm	5.912754	5.659506	1.04	0.296	-5.179673	17.00518
l_ratio_riv3b_peacefulcm	29.04964	14.8604	1.95	0.051	-.0762002	58.17549
l_ratio_mar3b_peacefulcm	36.16037	21.68937	1.67	0.095	-6.350016	78.67075
icowsal	-.4442761	.1479291	-3.00	0.003	-.7342118	-.1543404
recmidwt	-.8645493	.5108344	-1.69	0.091	-1.865766	.1366678
chal_cinc_share	.342456	1.086874	0.32	0.753	-1.787777	2.472689
jtdem	-1.124573	.689758	-1.63	0.103	-2.476474	.2273279
duration	.0341414	.0553231	0.62	0.537	-.0742898	.1425727
duration2	-.0000572	.0009833	-0.06	0.954	-.0019844	.0018701
duration3	-6.61e-07	4.64e-06	-0.14	0.887	-9.76e-06	8.44e-06
_cons	-1.883094	1.139828	-1.65	0.099	-4.117115	.3509278

```
163 .
164 . estimates store t3m1

165 .
166 . firthlogit terr3b l_ratio_sterr3b_terr3b l_ratio_sriv3b_riv3b l_ratio_smar3b_mar3b icowsal recmidwt chal_cinc_share jtd
    > em duration duration2 duration3 if ir_three==2 & year<2002

    initial:       penalized log likelihood = -40.962631
    rescale:       penalized log likelihood = -40.962631
    Iteration 0:   penalized log likelihood = -40.962631
    Iteration 1:   penalized log likelihood = -29.977945  (not concave)
    Iteration 2:   penalized log likelihood = -24.908099  (not concave)
    Iteration 3:   penalized log likelihood = -24.300583  (not concave)
    Iteration 4:   penalized log likelihood = -23.781665  (not concave)
    Iteration 5:   penalized log likelihood = -23.261625  (not concave)
    Iteration 6:   penalized log likelihood = -23.036407  (not concave)
    Iteration 7:   penalized log likelihood = -22.917534  (not concave)
    Iteration 8:   penalized log likelihood = -22.774187  (not concave)
    Iteration 9:   penalized log likelihood =  -22.69828
    Iteration 10:  penalized log likelihood = -22.635589
    Iteration 11:  penalized log likelihood = -22.599582  (not concave)
    Iteration 12:  penalized log likelihood = -22.599405
    Iteration 13:  penalized log likelihood = -22.589773
    Iteration 14:  penalized log likelihood = -22.589649
    Iteration 15:  penalized log likelihood = -22.589628
    Iteration 16:  penalized log likelihood = -22.589628

                                                  Number of obs =    858
                                                  Wald chi2(10) =  28.48
    Penalized log likelihood = -22.589628         Prob > chi2   = 0.0015
```

terr3b	Coefficient	Std. err.	z	P>|z|	[95% conf.	interval]
l_ratio_sterr3b_terr3b	1.245934	.7074078	1.76	0.078	-.1405602	2.632427
l_ratio_sriv3b_riv3b	3.420305	1.251814	2.73	0.006	.9667943	5.873816
l_ratio_smar3b_mar3b	1.441709	.9116346	1.58	0.114	-.3450624	3.22848
icowsal	-.4076109	.1510242	-2.70	0.007	-.7036128	-.1116089
recmidwt	-.8758598	.488213	-1.79	0.073	-1.83274	.0810201
chal_cinc_share	.0608566	1.16533	0.05	0.958	-2.223148	2.344861
jtdem	-1.391321	.8413046	-1.65	0.098	-3.040247	.2576062
duration	.0369134	.0596061	0.62	0.536	-.0799124	.1537392
duration2	-.000221	.0010458	-0.21	0.833	-.0022707	.0018286
duration3	4.39e-07	4.83e-06	0.09	0.928	-9.03e-06	9.91e-06
_cons	-2.178643	1.223081	-1.78	0.075	-4.575839	.2185519

```
167 .
168 . estimates store t3m2
```

```
169 .
170 . firthlogit riv3b l_ratio_terr3b_peacefulcm l_ratio_riv3b_peacefulcm l_ratio_mar3b_peacefulcm icowsal recmidwt chal_cinc
    > _share jtdem duration duration2 duration3 if ir_three==2 & year<2002

    initial:       penalized log likelihood =  .24217235
    rescale:       penalized log likelihood =  .24217235
    Iteration 0:   penalized log likelihood =  .24217235  (not concave)
    Iteration 1:   penalized log likelihood =  5.2959236  (not concave)
    Iteration 2:   penalized log likelihood =  5.4318894  (not concave)
    Iteration 3:   penalized log likelihood =  6.2743666  (not concave)
    Iteration 4:   penalized log likelihood =  6.3978669  (not concave)
    Iteration 5:   penalized log likelihood =  6.7335834  (not concave)
    Iteration 6:   penalized log likelihood =  6.7878088  (not concave)
    Iteration 7:   penalized log likelihood =  7.0917713  (not concave)
    Iteration 8:   penalized log likelihood =  7.2185808  (not concave)
    Iteration 9:   penalized log likelihood =  7.2223493  (not concave)
    Iteration 10:  penalized log likelihood =  7.3534338
    Iteration 11:  penalized log likelihood =   7.468389  (not concave)
    Iteration 12:  penalized log likelihood =  7.7070794  (not concave)
    Iteration 13:  penalized log likelihood =  7.8726113  (not concave)
    Iteration 14:  penalized log likelihood =  7.9999431  (not concave)
    Iteration 15:  penalized log likelihood =  8.0580815  (not concave)
    Iteration 16:  penalized log likelihood =  8.3079808  (not concave)
    Iteration 17:  penalized log likelihood =   8.350778  (not concave)
    Iteration 18:  penalized log likelihood =   8.413493  (not concave)
    Iteration 19:  penalized log likelihood =  8.4244067  (not concave)
    Iteration 20:  penalized log likelihood =  8.4750968  (not concave)
    Iteration 21:  penalized log likelihood =   8.508892  (not concave)
    Iteration 22:  penalized log likelihood =  8.5642404  (not concave)
    Iteration 23:  penalized log likelihood =  8.6083709  (not concave)
    Iteration 24:  penalized log likelihood =  8.6382044
    Iteration 25:  penalized log likelihood =  8.7690672
    Iteration 26:  penalized log likelihood =  8.8195877  (not concave)
    Iteration 27:  penalized log likelihood =  8.8440548  (not concave)
    Iteration 28:  penalized log likelihood =  8.8763343  (not concave)
    Iteration 29:  penalized log likelihood =  8.9002095  (not concave)
    Iteration 30:  penalized log likelihood =  8.9102459
    Iteration 31:  penalized log likelihood =   8.924219  (not concave)
    Iteration 32:  penalized log likelihood =  8.9270109
    Iteration 33:  penalized log likelihood =  8.9793673  (not concave)
    Iteration 34:  penalized log likelihood =  8.9865794  (not concave)
    Iteration 35:  penalized log likelihood =   8.989126
    Iteration 36:  penalized log likelihood =   9.015932
    Iteration 37:  penalized log likelihood =  9.0545928
    Iteration 38:  penalized log likelihood =   9.073539
    Iteration 39:  penalized log likelihood =  9.0922125  (not concave)
    Iteration 40:  penalized log likelihood =  9.0927692  (not concave)
    Iteration 41:  penalized log likelihood =   9.093287  (not concave)
    Iteration 42:  penalized log likelihood =  9.0942861  (not concave)
    Iteration 43:  penalized log likelihood =  9.0946915
    Iteration 44:  penalized log likelihood =  9.1145578  (not concave)
    Iteration 45:  penalized log likelihood =  9.1166061  (not concave)
    Iteration 46:  penalized log likelihood =  9.1171044
    Iteration 47:  penalized log likelihood =  9.1313615
    Iteration 48:  penalized log likelihood =  9.1354795  (not concave)
    Iteration 49:  penalized log likelihood =  9.1355301
    Iteration 50:  penalized log likelihood =   9.139553
    Iteration 51:  penalized log likelihood =  9.1403047
    Iteration 52:  penalized log likelihood =  9.1403058
    Iteration 53:  penalized log likelihood =  9.1403058

                                                    Number of obs =    858
                                                    Wald chi2(10) =   4.97
    Penalized log likelihood = 9.1403058            Prob > chi2   = 0.8930
```

riv3b	Coefficient	Std. err.	z	P>|z|	[95% conf.	interval]
l_ratio_terr3b_peacefulcm	11.10366	8.460095	1.31	0.189	-5.477825	27.68514
l_ratio_riv3b_peacefulcm	14.51619	24.52393	0.59	0.554	-33.54982	62.58221
l_ratio_mar3b_peacefulcm	-29.44891	50.60799	-0.58	0.561	-128.6388	69.74094
icowsal	-.0885034	.5431001	-0.16	0.871	-1.15296	.9759533
recmidwt	.2616948	.7908959	0.33	0.741	-1.288433	1.811822
chal_cinc_share	.1471555	2.460244	0.06	0.952	-4.674833	4.969144
jtdem	1.823676	1.785034	1.02	0.307	-1.674927	5.322278
duration	-.0872647	.1248082	-0.70	0.484	-.3318844	.1573549
duration2	.0012787	.0022687	0.56	0.573	-.003168	.0057254
duration3	-4.79e-06	.0000101	-0.47	0.637	-.0000247	.0000151
_cons	-4.84861	4.283593	-1.13	0.258	-13.2443	3.547078

```
171 .
172 . estimates store t3m3

173 .
174 . firthlogit riv3b l_ratio_sterr3b_terr3b l_ratio_sriv3b_riv3b l_ratio_smar3b_mar3b icowsal recmidwt chal_cinc_share jtde
    > m duration duration2 duration3 if ir_three==2 & year<2002

    initial:       penalized log likelihood =  8.3554121
    rescale:       penalized log likelihood =  8.3554121
    Iteration 0:   penalized log likelihood =  8.3554121  (not concave)
    Iteration 1:   penalized log likelihood =  12.965732  (not concave)
    Iteration 2:   penalized log likelihood =  13.434506  (not concave)
    Iteration 3:   penalized log likelihood =  14.292803  (not concave)
    Iteration 4:   penalized log likelihood =  14.828862  (not concave)
    Iteration 5:   penalized log likelihood =  14.963341  (not concave)
    Iteration 6:   penalized log likelihood =   15.47159  (not concave)
    Iteration 7:   penalized log likelihood =  15.739755  (not concave)
    Iteration 8:   penalized log likelihood =  15.968548  (not concave)
    Iteration 9:   penalized log likelihood =   16.00548  (not concave)
    Iteration 10:  penalized log likelihood =  16.106929
    Iteration 11:  penalized log likelihood =  16.214596  (not concave)
    Iteration 12:  penalized log likelihood =  16.232488  (not concave)
    Iteration 13:  penalized log likelihood =  16.241219
    Iteration 14:  penalized log likelihood =  16.296545  (not concave)
    Iteration 15:  penalized log likelihood =  16.312892  (not concave)
    Iteration 16:  penalized log likelihood =  16.316938
    Iteration 17:  penalized log likelihood =  16.407667  (not concave)
    Iteration 18:  penalized log likelihood =  16.416553
    Iteration 19:  penalized log likelihood =  16.422567
    Iteration 20:  penalized log likelihood =  16.423919
    Iteration 21:  penalized log likelihood =  16.423924
    Iteration 22:  penalized log likelihood =  16.423924

                                                  Number of obs =    858
                                                  Wald chi2(10) =   2.73
    Penalized log likelihood = 16.423924          Prob > chi2   = 0.9872
```

riv3b	Coefficient	Std. err.	z	P>|z|	[95% conf.	interval]
l_ratio_sterr3b_terr3b	.9937245	2.756961	0.36	0.719	-4.409819	6.397268
l_ratio_sriv3b_riv3b	.8579854	2.139514	0.40	0.688	-3.335384	5.051355
l_ratio_smar3b_mar3b	-.4961067	3.458911	-0.14	0.886	-7.275448	6.283235
icowsal	-.1274277	.5287523	-0.24	0.810	-1.163763	.9089077
recmidwt	.1348066	.8481297	0.16	0.874	-1.527497	1.79711
chal_cinc_share	.1842441	2.497816	0.07	0.941	-4.711386	5.079874
jtdem	1.64727	1.77157	0.93	0.352	-1.824943	5.119484
duration	-.0680759	.1220367	-0.56	0.577	-.3072634	.1711116
duration2	.0009982	.0022572	0.44	0.658	-.0034258	.0054221

```
            duration3 |  -3.71e-06   .0000102    -0.37   0.715    -.0000236    .0000162
                _cons |  -4.534402   3.943688    -1.15   0.250    -12.26389    3.195083
------------------------------------------------------------------------------

175 .
176 . estimates store t3m4

177 .
178 . firthlogit mar3b l_ratio_terr3b_peacefulcm l_ratio_riv3b_peacefulcm l_ratio_mar3b_peacefulcm icowsal recmidwt chal_cinc
    > _share jtdem duration duration2 duration3 if ir_three==2 & year<2002

    initial:       penalized log likelihood = -17.937352
    rescale:       penalized log likelihood = -17.937352
    Iteration 0:   penalized log likelihood = -17.937352  (not concave)
    Iteration 1:   penalized log likelihood = -14.001427  (not concave)
    Iteration 2:   penalized log likelihood = -12.586684  (not concave)
    Iteration 3:   penalized log likelihood = -12.372427  (not concave)
    Iteration 4:   penalized log likelihood = -11.729474  (not concave)
    Iteration 5:   penalized log likelihood =  -10.70488  (not concave)
    Iteration 6:   penalized log likelihood = -10.163017  (not concave)
    Iteration 7:   penalized log likelihood = -9.7660542  (not concave)
    Iteration 8:   penalized log likelihood = -9.7303619  (not concave)
    Iteration 9:   penalized log likelihood = -9.6774437  (not concave)
    Iteration 10:  penalized log likelihood = -9.5732463  (not concave)
    Iteration 11:  penalized log likelihood = -8.6756263  (not concave)
    Iteration 12:  penalized log likelihood =  -8.356424  (not concave)
    Iteration 13:  penalized log likelihood = -8.2755628  (not concave)
    Iteration 14:  penalized log likelihood = -8.1486073  (not concave)
    Iteration 15:  penalized log likelihood = -8.1083408  (not concave)
    Iteration 16:  penalized log likelihood = -8.0070602  (not concave)
    Iteration 17:  penalized log likelihood =  -7.969015  (not concave)
    Iteration 18:  penalized log likelihood =  -7.856861  (not concave)
    Iteration 19:  penalized log likelihood = -7.6885715
    Iteration 20:  penalized log likelihood =  -7.590253  (not concave)
    Iteration 21:  penalized log likelihood = -7.4299993  (not concave)
    Iteration 22:  penalized log likelihood = -7.3010865  (not concave)
    Iteration 23:  penalized log likelihood = -7.2755037  (not concave)
    Iteration 24:  penalized log likelihood = -7.1788809  (not concave)
    Iteration 25:  penalized log likelihood = -6.9883251  (not concave)
    Iteration 26:  penalized log likelihood = -6.9555974
    Iteration 27:  penalized log likelihood = -6.5110207  (not concave)
    Iteration 28:  penalized log likelihood = -6.4598385  (not concave)
    Iteration 29:  penalized log likelihood =  -6.439239  (not concave)
    Iteration 30:  penalized log likelihood = -6.3284533  (not concave)
    Iteration 31:  penalized log likelihood = -6.2856621  (not concave)
    Iteration 32:  penalized log likelihood = -6.1985597  (not concave)
    Iteration 33:  penalized log likelihood = -6.1632227  (not concave)
    Iteration 34:  penalized log likelihood = -6.1128274  (not concave)
    Iteration 35:  penalized log likelihood = -6.0607023  (not concave)
    Iteration 36:  penalized log likelihood = -5.7867479  (not concave)
    Iteration 37:  penalized log likelihood = -5.5876999  (not concave)
    Iteration 38:  penalized log likelihood = -5.5382565  (not concave)
    Iteration 39:  penalized log likelihood = -5.4984329  (not concave)
    Iteration 40:  penalized log likelihood = -5.4761889  (not concave)
    Iteration 41:  penalized log likelihood = -5.4564127  (not concave)
    Iteration 42:  penalized log likelihood = -5.4508347  (not concave)
    Iteration 43:  penalized log likelihood = -5.4412054  (not concave)
    Iteration 44:  penalized log likelihood = -5.4250587  (not concave)
    Iteration 45:  penalized log likelihood = -5.4136267  (not concave)
    Iteration 46:  penalized log likelihood = -5.4068975  (not concave)
    Iteration 47:  penalized log likelihood = -5.3996888  (not concave)
    Iteration 48:  penalized log likelihood = -5.3717589  (not concave)
    Iteration 49:  penalized log likelihood = -5.3511414  (not concave)
    Iteration 50:  penalized log likelihood = -5.3429371  (not concave)
    Iteration 51:  penalized log likelihood = -5.3289964  (not concave)
```

```
Iteration 52:  penalized log likelihood = -5.3165307  (not concave)
Iteration 53:  penalized log likelihood = -5.3091184  (not concave)
Iteration 54:  penalized log likelihood =  -5.297704  (not concave)
Iteration 55:  penalized log likelihood = -5.2900274  (not concave)
Iteration 56:  penalized log likelihood = -5.2824798  (not concave)
Iteration 57:  penalized log likelihood = -5.2580753  (not concave)
Iteration 58:  penalized log likelihood = -5.2379576  (not concave)
Iteration 59:  penalized log likelihood = -5.2242134  (not concave)
Iteration 60:  penalized log likelihood = -5.2097473  (not concave)
Iteration 61:  penalized log likelihood = -5.2032636  (not concave)
Iteration 62:  penalized log likelihood = -5.1971643  (not concave)
Iteration 63:  penalized log likelihood = -5.1919909
Iteration 64:  penalized log likelihood =  -5.131186  (not concave)
Iteration 65:  penalized log likelihood = -5.1240149
Iteration 66:  penalized log likelihood = -5.1184935  (not concave)
Iteration 67:  penalized log likelihood =  -5.116135  (not concave)
Iteration 68:  penalized log likelihood = -5.1147076  (not concave)
Iteration 69:  penalized log likelihood = -5.1133177
Iteration 70:  penalized log likelihood = -5.0226643
Iteration 71:  penalized log likelihood = -4.9904902
Iteration 72:  penalized log likelihood = -4.9872351
Iteration 73:  penalized log likelihood = -4.9848747
Iteration 74:  penalized log likelihood = -4.9844024
Iteration 75:  penalized log likelihood = -4.9843947
Iteration 76:  penalized log likelihood = -4.9843947

                                                Number of obs =    858
                                                Wald chi2(10) =  17.32
Penalized log likelihood = -4.9843947           Prob > chi2   = 0.0676
```

mar3b	Coefficient	Std. err.	z	P>|z|	[95% conf.	interval]
l_ratio_terr3b_peacefulcm	21.7279	6.934789	3.13	0.002	8.135967	35.31984
l_ratio_riv3b_peacefulcm	37.586	19.16468	1.96	0.050	.023911	75.14808
l_ratio_mar3b_peacefulcm	-49.66586	32.75424	-1.52	0.129	-113.863	14.53127
icowsal	.6679502	.2776621	2.41	0.016	.1237425	1.212158
recmidwt	-.8639128	1.152971	-0.75	0.454	-3.123695	1.395869
chal_cinc_share	1.782365	1.584204	1.13	0.261	-1.322618	4.887347
jtdem	2.600191	1.244538	2.09	0.037	.1609412	5.039442
duration	-.028895	.0723633	-0.40	0.690	-.1707245	.1129345
duration2	.0006515	.0012749	0.51	0.609	-.0018472	.0031502
duration3	-2.92e-06	5.63e-06	-0.52	0.603	-.000014	8.11e-06
_cons	-12.58953	3.403839	-3.70	0.000	-19.26093	-5.918127

```
179 .
180 . estimates store t3m5

181 .
182 . firthlogit mar3b l_ratio_sterr3b_terr3b l_ratio_sriv3b_riv3b l_ratio_smar3b_mar3b icowsal recmidwt chal_cinc_share jtde
    > m duration duration2 duration3 if ir_three==2 & year<2002

initial:       penalized log likelihood =  -9.824112
rescale:       penalized log likelihood =  -9.824112
Iteration 0:   penalized log likelihood =  -9.824112
Iteration 1:   penalized log likelihood = -.93122041  (not concave)
Iteration 2:   penalized log likelihood = -.69984876  (not concave)
Iteration 3:   penalized log likelihood = -.65545204  (not concave)
Iteration 4:   penalized log likelihood = -.12847068  (not concave)
Iteration 5:   penalized log likelihood = -.10475684  (not concave)
Iteration 6:   penalized log likelihood =  .45525133  (not concave)
Iteration 7:   penalized log likelihood =  .70574076  (not concave)
Iteration 8:   penalized log likelihood =  .95440089  (not concave)
Iteration 9:   penalized log likelihood =  1.0387898  (not concave)
```

```
Iteration 10:  penalized log likelihood =  1.2689705  (not concave)
Iteration 11:  penalized log likelihood =  1.3313707  (not concave)
Iteration 12:  penalized log likelihood =  1.3892236  (not concave)
Iteration 13:  penalized log likelihood =  1.4187993  (not concave)
Iteration 14:  penalized log likelihood =  1.4393482  (not concave)
Iteration 15:  penalized log likelihood =  1.4486238  (not concave)
Iteration 16:  penalized log likelihood =  1.4725282  (not concave)
Iteration 17:  penalized log likelihood =   1.508442  (not concave)
Iteration 18:  penalized log likelihood =  1.5238549  (not concave)
Iteration 19:  penalized log likelihood =  1.5377368  (not concave)
Iteration 20:  penalized log likelihood =  1.5502381  (not concave)
Iteration 21:  penalized log likelihood =  1.5713446  (not concave)
Iteration 22:  penalized log likelihood =  1.6515007  (not concave)
Iteration 23:  penalized log likelihood =  1.6673536  (not concave)
Iteration 24:  penalized log likelihood =  1.6784157  (not concave)
Iteration 25:  penalized log likelihood =  1.6878114  (not concave)
Iteration 26:  penalized log likelihood =  1.6952333  (not concave)
Iteration 27:  penalized log likelihood =  1.6965946  (not concave)
Iteration 28:  penalized log likelihood =  1.7350704  (not concave)
Iteration 29:  penalized log likelihood =  1.7358632  (not concave)
Iteration 30:  penalized log likelihood =  1.7389599  (not concave)
Iteration 31:  penalized log likelihood =  1.9226964  (not concave)
Iteration 32:  penalized log likelihood =  1.9421331  (not concave)
Iteration 33:  penalized log likelihood =  1.9726306  (not concave)
Iteration 34:  penalized log likelihood =  1.9810211  (not concave)
Iteration 35:  penalized log likelihood =   1.989664  (not concave)
Iteration 36:  penalized log likelihood =   2.007817  (not concave)
Iteration 37:  penalized log likelihood =  2.0100083  (not concave)
Iteration 38:  penalized log likelihood =  2.0118582  (not concave)
Iteration 39:  penalized log likelihood =  2.0139009  (not concave)
Iteration 40:  penalized log likelihood =  2.0210312  (not concave)
Iteration 41:  penalized log likelihood =  2.0236746  (not concave)
Iteration 42:  penalized log likelihood =  2.0364401  (not concave)
Iteration 43:  penalized log likelihood =  2.0501587  (not concave)
Iteration 44:  penalized log likelihood =  2.0528986  (not concave)
Iteration 45:  penalized log likelihood =  2.0536073  (not concave)
Iteration 46:  penalized log likelihood =  2.0701793  (not concave)
Iteration 47:  penalized log likelihood =  2.0813768  (not concave)
Iteration 48:  penalized log likelihood =  2.0841387
Iteration 49:  penalized log likelihood =  2.2582008  (not concave)
Iteration 50:  penalized log likelihood =  2.2823955  (not concave)
Iteration 51:  penalized log likelihood =  2.3303304  (not concave)
Iteration 52:  penalized log likelihood =  2.3401689  (not concave)
Iteration 53:  penalized log likelihood =  2.3495256  (not concave)
Iteration 54:  penalized log likelihood =  2.3717559  (not concave)
Iteration 55:  penalized log likelihood =  2.3766666  (not concave)
Iteration 56:  penalized log likelihood =  2.3897536  (not concave)
Iteration 57:  penalized log likelihood =  2.3918578  (not concave)
Iteration 58:  penalized log likelihood =  2.4091199
Iteration 59:  penalized log likelihood =  2.4280977  (not concave)
Iteration 60:  penalized log likelihood =  2.4469626  (not concave)
Iteration 61:  penalized log likelihood =  2.4534766  (not concave)
Iteration 62:  penalized log likelihood =  2.4668553  (not concave)
Iteration 63:  penalized log likelihood =  2.4841888  (not concave)
Iteration 64:  penalized log likelihood =  2.5025548  (not concave)
Iteration 65:  penalized log likelihood =  2.5072494  (not concave)
Iteration 66:  penalized log likelihood =  2.5136616  (not concave)
Iteration 67:  penalized log likelihood =   2.519864  (not concave)
Iteration 68:  penalized log likelihood =  2.5326364
Iteration 69:  penalized log likelihood =  2.5486495  (not concave)
Iteration 70:  penalized log likelihood =  2.5554926  (not concave)
Iteration 71:  penalized log likelihood =   2.577777  (not concave)
Iteration 72:  penalized log likelihood =  2.5839142  (not concave)
Iteration 73:  penalized log likelihood =  2.5907635  (not concave)
Iteration 74:  penalized log likelihood =  2.5969514  (not concave)
```

```
Iteration 75:  penalized log likelihood =    2.62166  (not concave)
Iteration 76:  penalized log likelihood =  2.6274439  (not concave)
Iteration 77:  penalized log likelihood =  2.6335293  (not concave)
Iteration 78:  penalized log likelihood =  2.6440077  (not concave)
Iteration 79:  penalized log likelihood =  2.6493163
Iteration 80:  penalized log likelihood =  2.6641957  (not concave)
Iteration 81:  penalized log likelihood =  2.6702373  (not concave)
Iteration 82:  penalized log likelihood =  2.6747465  (not concave)
Iteration 83:  penalized log likelihood =  2.6786078
Iteration 84:  penalized log likelihood =  2.7051429  (not concave)
Iteration 85:  penalized log likelihood =  2.7083904  (not concave)
Iteration 86:  penalized log likelihood =  2.7097303
Iteration 87:  penalized log likelihood =  2.7118308  (not concave)
Iteration 88:  penalized log likelihood =  2.7123417  (not concave)
Iteration 89:  penalized log likelihood =  2.7142665  (not concave)
Iteration 90:  penalized log likelihood =  2.7151591  (not concave)
Iteration 91:  penalized log likelihood =  2.7158026
Iteration 92:  penalized log likelihood =   2.720218  (not concave)
Iteration 93:  penalized log likelihood =  2.7215162  (not concave)
Iteration 94:  penalized log likelihood =  2.7221554
Iteration 95:  penalized log likelihood =  2.7230736
Iteration 96:  penalized log likelihood =  2.7231706
Iteration 97:  penalized log likelihood =  2.7231706

                                                Number of obs =    858
                                                Wald chi2(10) =  17.06
Penalized log likelihood = 2.7231706            Prob > chi2   = 0.0730
```

mar3b	Coefficient	Std. err.	z	P>|z|	[95% conf.	interval]
l_ratio_sterr3b_terr3b	3.085674	1.162567	2.65	0.008	.8070847	5.364264
l_ratio_sriv3b_riv3b	2.680893	1.855744	1.44	0.149	-.9562992	6.318085
l_ratio_smar3b_mar3b	-1.333091	1.196929	-1.11	0.265	-3.679029	1.012848
icowsal	.566058	.2866517	1.97	0.048	.004231	1.127885
recmidwt	-.7158606	.8769862	-0.82	0.414	-2.434722	1.003001
chal_cinc_share	.2305709	1.61095	0.14	0.886	-2.926833	3.387975
jtdem	2.398366	1.046401	2.29	0.022	.3474574	4.449276
duration	-.0524476	.0723097	-0.73	0.468	-.194172	.0892768
duration2	.0010005	.0012648	0.79	0.429	-.0014785	.0034794
duration3	-4.29e-06	5.55e-06	-0.77	0.440	-.0000152	6.60e-06
_cons	-11.02857	3.076513	-3.58	0.000	-17.05843	-4.998716

```
183 .
184 . estimates store t3m6

185 .
186 . *Table A6 (online appendix)
187 . firthlogit terrmultineg l_ratio_terrmn_peacefulcm l_ratio_rivmn_peacefulcm l_ratio_marmn_peacefulcm icowsal recmidwt ch
    > al_cinc_share jtdem duration duration2 duration3 if ir_three==2 & year<2002

initial:       penalized log likelihood = -43.422143
rescale:       penalized log likelihood = -43.422143
Iteration 0:   penalized log likelihood = -43.422143  (not concave)
Iteration 1:   penalized log likelihood = -27.953729  (not concave)
Iteration 2:   penalized log likelihood = -25.714181
Iteration 3:   penalized log likelihood = -23.405538  (not concave)
Iteration 4:   penalized log likelihood = -22.471238  (not concave)
Iteration 5:   penalized log likelihood = -22.101524
Iteration 6:   penalized log likelihood = -21.874288  (not concave)
Iteration 7:   penalized log likelihood = -21.862435
Iteration 8:   penalized log likelihood = -21.636067
Iteration 9:   penalized log likelihood = -21.624564
Iteration 10:  penalized log likelihood = -21.623529
```

```
Iteration 11:  penalized log likelihood = -21.623528

                                                Number of obs =    858
                                                Wald chi2(10) =  34.51
Penalized log likelihood = -21.623528           Prob > chi2   = 0.0002
```

terrmultineg	Coefficient	Std. err.	z	P>|z|	[95% conf.	interval]
l_ratio_terrmn_peacefulcm	4.489908	1.028977	4.36	0.000	2.47315	6.506667
l_ratio_rivmn_peacefulcm	134.9686	72.64842	1.86	0.063	-7.419637	277.3569
l_ratio_marmn_peacefulcm	.5083289	4.271149	0.12	0.905	-7.862969	8.879627
icowsal	.1292096	.1403691	0.92	0.357	-.1459087	.4043279
recmidwt	-.1401724	.5971034	-0.23	0.814	-1.310473	1.030129
chal_cinc_share	-2.99338	1.570957	-1.91	0.057	-6.072399	.0856386
jtdem	-2.343305	1.43042	-1.64	0.101	-5.146876	.4602665
duration	-.0540211	.0636222	-0.85	0.396	-.1787183	.070676
duration2	.0008561	.0012471	0.69	0.492	-.0015883	.0033004
duration3	-3.57e-06	6.40e-06	-0.56	0.577	-.0000161	8.97e-06
_cons	-3.39875	1.356037	-2.51	0.012	-6.056534	-.7409666

```
188 .
189 . estimates store t4m1

190 .
191 . firthlogit terrmultineg l_ratio_sterrmn_terrmn l_ratio_srivmn_rivmn l_ratio_smarmn_marmn icowsal recmidwt chal_cinc_sha
    > re jtdem duration duration2 duration3 if ir_three==2 & year<2002

initial:       penalized log likelihood = -38.356448
rescale:       penalized log likelihood = -38.356448
Iteration 0:   penalized log likelihood = -38.356448  (not concave)
Iteration 1:   penalized log likelihood = -32.598591  (not concave)
Iteration 2:   penalized log likelihood = -28.416309  (not concave)
Iteration 3:   penalized log likelihood = -27.818725  (not concave)
Iteration 4:   penalized log likelihood = -26.037211  (not concave)
Iteration 5:   penalized log likelihood =  -25.95722  (not concave)
Iteration 6:   penalized log likelihood = -25.602373
Iteration 7:   penalized log likelihood = -25.056129  (not concave)
Iteration 8:   penalized log likelihood = -24.930513  (not concave)
Iteration 9:   penalized log likelihood = -24.860437  (not concave)
Iteration 10:  penalized log likelihood =  -24.79591
Iteration 11:  penalized log likelihood = -24.225007
Iteration 12:  penalized log likelihood = -24.118969
Iteration 13:  penalized log likelihood = -24.096395
Iteration 14:  penalized log likelihood = -24.096351
Iteration 15:  penalized log likelihood = -24.096351

                                                Number of obs =    858
                                                Wald chi2(10) =  22.19
Penalized log likelihood = -24.096351           Prob > chi2   = 0.0142
```

terrmultineg	Coefficient	Std. err.	z	P>|z|	[95% conf.	interval]
l_ratio_sterrmn_terrmn	3.745716	1.154229	3.25	0.001	1.483469	6.007963
l_ratio_srivmn_rivmn	3.17879	2.004077	1.59	0.113	-.749128	7.106708
l_ratio_smarmn_marmn	-.5872312	1.674787	-0.35	0.726	-3.869754	2.695291
icowsal	-.0976223	.1154287	-0.85	0.398	-.3238584	.1286137
recmidwt	.4046273	.3904602	1.04	0.300	-.3606606	1.169915
chal_cinc_share	-2.206846	1.202575	-1.84	0.066	-4.563848	.1501574
jtdem	-2.203991	1.353562	-1.63	0.103	-4.856925	.4489424
duration	-.0735384	.0581368	-1.26	0.206	-.1874844	.0404077
duration2	.0009194	.001228	0.75	0.454	-.0014875	.0033262
duration3	-3.02e-06	6.70e-06	-0.45	0.651	-.0000161	.0000101

```
               _cons |   -1.51058   .9782808    -1.54   0.123    -3.427975    .4068149
-----------------------------------------------------------------------------------------

192 .
193 . estimates store t4m2

194 .
195 . firthlogit rivmultineg l_ratio_terrmn_peacefulcm l_ratio_rivmn_peacefulcm l_ratio_marmn_peacefulcm icowsal recmidwt cha
    > l_cinc_share jtdem duration duration2 duration3 if ir_three==2 & year<2002

    initial:       penalized log likelihood =  2.1606974
    rescale:       penalized log likelihood =  2.1606974
    Iteration 0:   penalized log likelihood =  2.1606974  (not concave)
    Iteration 1:   penalized log likelihood =  7.3813758  (not concave)
    Iteration 2:   penalized log likelihood =  9.0894422  (not concave)
    Iteration 3:   penalized log likelihood =  9.9376904  (not concave)
    Iteration 4:   penalized log likelihood =  10.247165  (not concave)
    Iteration 5:   penalized log likelihood =  10.615638  (not concave)
    Iteration 6:   penalized log likelihood =  10.782979  (not concave)
    Iteration 7:   penalized log likelihood =   10.88911  (not concave)
    Iteration 8:   penalized log likelihood =   11.04883  (not concave)
    Iteration 9:   penalized log likelihood =   11.30911  (not concave)
    Iteration 10:  penalized log likelihood =  11.484936  (not concave)
    Iteration 11:  penalized log likelihood =  11.569925
    Iteration 12:  penalized log likelihood =  11.637405  (not concave)
    Iteration 13:  penalized log likelihood =  11.651415  (not concave)
    Iteration 14:  penalized log likelihood =  11.656043  (not concave)
    Iteration 15:  penalized log likelihood =  11.660045
    Iteration 16:  penalized log likelihood =  11.700017  (not concave)
    Iteration 17:  penalized log likelihood =  11.701957
    Iteration 18:  penalized log likelihood =  11.744042
    Iteration 19:  penalized log likelihood =  11.760754  (not concave)
    Iteration 20:  penalized log likelihood =  11.760828
    Iteration 21:  penalized log likelihood =  11.766163
    Iteration 22:  penalized log likelihood =  11.784742  (not concave)
    Iteration 23:  penalized log likelihood =  11.789638
    Iteration 24:  penalized log likelihood =  11.792245
    Iteration 25:  penalized log likelihood =  11.794375  (not concave)
    Iteration 26:  penalized log likelihood =  11.794491
    Iteration 27:  penalized log likelihood =   11.80382
    Iteration 28:  penalized log likelihood =  11.803865
    Iteration 29:  penalized log likelihood =  11.803895
    Iteration 30:  penalized log likelihood =  11.803895

                                                  Number of obs =    858
                                                  Wald chi2(10) =   7.51
    Penalized log likelihood = 11.803895          Prob > chi2   = 0.6762

------------------------------------------------------------------------------
             rivmultineg | Coefficient  Std. err.      z    P>|z|     [95% conf. interval]
-------------------------+----------------------------------------------------
l_ratio_terrmn_peacefulcm |   3.446368   2.337452     1.47   0.140    -1.134955     8.02769
 l_ratio_rivmn_peacefulcm |   54.60859   58.65307     0.93   0.352    -60.34932     169.5665
 l_ratio_marmn_peacefulcm |   4.590935   4.287921     1.07   0.284    -3.813236     12.99511
                  icowsal |   .0834969   .3420635     0.24   0.807    -.5869352      .753929
                recmidwt |   .0885053   .8767596     0.10   0.920    -1.629912     1.806923
          chal_cinc_share |   2.391946   2.510162     0.95   0.341    -2.527882     7.311774
                   jtdem |   1.688911   1.632365     1.03   0.301    -1.510466     4.888288
                duration |   -.065433   .1126855    -0.58   0.561    -.2862925     .1554265
               duration2 |   .0010441   .0020305     0.51   0.607    -.0029356     .0050239
               duration3 |  -3.89e-06   8.98e-06    -0.43   0.665    -.0000215     .0000137
                   _cons |  -7.578612   3.685576    -2.06   0.040    -14.80221    -.3550163
------------------------------------------------------------------------------

196 .
```

```
197 . estimates store t4m3

198 .
199 . firthlogit rivmultineg l_ratio_sterrmn_terrmn l_ratio_srivmn_rivmn l_ratio_smarmn_marmn icowsal recmidwt chal_cinc_shar
    > e jtdem duration duration2 duration3 if ir_three==2 & year<2002

    initial:       penalized log likelihood =  7.2263919
    rescale:       penalized log likelihood =  7.2263919
    Iteration 0:   penalized log likelihood =  7.2263919  (not concave)
    Iteration 1:   penalized log likelihood =  11.569035  (not concave)
    Iteration 2:   penalized log likelihood =  12.332692  (not concave)
    Iteration 3:   penalized log likelihood =  13.413098  (not concave)
    Iteration 4:   penalized log likelihood =  14.052456  (not concave)
    Iteration 5:   penalized log likelihood =  14.667839  (not concave)
    Iteration 6:   penalized log likelihood =  15.793914  (not concave)
    Iteration 7:   penalized log likelihood =  15.811156  (not concave)
    Iteration 8:   penalized log likelihood =  16.022381  (not concave)
    Iteration 9:   penalized log likelihood =  16.126763  (not concave)
    Iteration 10:  penalized log likelihood =  16.205617  (not concave)
    Iteration 11:  penalized log likelihood =  16.243998  (not concave)
    Iteration 12:  penalized log likelihood =  16.299066  (not concave)
    Iteration 13:  penalized log likelihood =   16.32699  (not concave)
    Iteration 14:  penalized log likelihood =  16.333245  (not concave)
    Iteration 15:  penalized log likelihood =  16.337918  (not concave)
    Iteration 16:  penalized log likelihood =  16.342013  (not concave)
    Iteration 17:  penalized log likelihood =  16.345703
    Iteration 18:  penalized log likelihood =  16.414397  (not concave)
    Iteration 19:  penalized log likelihood =  16.416836
    Iteration 20:  penalized log likelihood =  16.453667  (not concave)
    Iteration 21:  penalized log likelihood =  16.455824
    Iteration 22:  penalized log likelihood =  16.467808
    Iteration 23:  penalized log likelihood =  16.482975
    Iteration 24:  penalized log likelihood =  16.483363
    Iteration 25:  penalized log likelihood =  16.483377
    Iteration 26:  penalized log likelihood =  16.483377

                                                  Number of obs =    858
                                                  Wald chi2(10) =   5.61
    Penalized log likelihood = 16.483377          Prob > chi2   = 0.8472

    ------------------------------------------------------------------------------
               rivmultineg | Coefficient  Std. err.      z    P>|z|     [95% conf. interval]
    ---------------------------------------------------------------------------
    l_ratio_sterrmn_terrmn |    3.09989   1.954815     1.59   0.113    -.7314758    6.931256
      l_ratio_srivmn_rivmn |   1.315564   1.708015     0.77   0.441    -2.032084    4.663212
      l_ratio_smarmn_marmn |   .1899397   1.992013     0.10   0.924    -3.714335    4.094214
                   icowsal |   .0992552   .4338292     0.23   0.819    -.7510344    .9495447
                  recmidwt |   .2639873   .9878346     0.27   0.789    -1.672133    2.200108
            chal_cinc_share |   2.179799   2.413588     0.90   0.366    -2.550748    6.910345
                     jtdem |   2.027469   1.569033     1.29   0.196     -1.04778    5.102718
                  duration |  -.0629743    .104689    -0.60   0.547     -.268161    .1422124
                 duration2 |   .0008812   .0019977     0.44   0.659    -.0030343    .0047966
                 duration3 |  -3.09e-06   9.20e-06    -0.34   0.737    -.0000211    .0000149
                     _cons |  -7.614704    4.44676    -1.71   0.087    -16.33019    1.100785
    ------------------------------------------------------------------------------

200 .
201 . estimates store t4m4

202 .
203 . firthlogit marmultineg l_ratio_terrmn_peacefulcm l_ratio_rivmn_peacefulcm l_ratio_marmn_peacefulcm icowsal recmidwt cha
    > l_cinc_share jtdem duration duration2 duration3 if ir_three==2 & year<2002

    initial:       penalized log likelihood =  -24.05735
    rescale:       penalized log likelihood =  -24.05735
```

```
Iteration 0:   penalized log likelihood =  -24.05735  (not concave)
Iteration 1:   penalized log likelihood =  -20.71762  (not concave)
Iteration 2:   penalized log likelihood = -18.612609
Iteration 3:   penalized log likelihood =  -16.31915  (not concave)
Iteration 4:   penalized log likelihood = -15.061339  (not concave)
Iteration 5:   penalized log likelihood = -14.320973  (not concave)
Iteration 6:   penalized log likelihood = -14.139591  (not concave)
Iteration 7:   penalized log likelihood = -13.695865  (not concave)
Iteration 8:   penalized log likelihood =  -13.46995  (not concave)
Iteration 9:   penalized log likelihood = -13.314212  (not concave)
Iteration 10:  penalized log likelihood = -13.251545  (not concave)
Iteration 11:  penalized log likelihood = -13.168592
Iteration 12:  penalized log likelihood = -13.080604  (not concave)
Iteration 13:  penalized log likelihood = -13.021032  (not concave)
Iteration 14:  penalized log likelihood = -12.957196
Iteration 15:  penalized log likelihood = -12.737649
Iteration 16:  penalized log likelihood = -12.640623  (not concave)
Iteration 17:  penalized log likelihood = -12.473854  (not concave)
Iteration 18:  penalized log likelihood = -12.450411  (not concave)
Iteration 19:  penalized log likelihood = -12.442538  (not concave)
Iteration 20:  penalized log likelihood = -12.439093
Iteration 21:  penalized log likelihood = -12.343929  (not concave)
Iteration 22:  penalized log likelihood = -12.338091
Iteration 23:  penalized log likelihood = -12.293544
Iteration 24:  penalized log likelihood = -12.292519
Iteration 25:  penalized log likelihood =   -12.2925
Iteration 26:  penalized log likelihood =   -12.2925

                                                Number of obs =    858
                                                Wald chi2(10) =  18.33
Penalized log likelihood = -12.2925             Prob > chi2   = 0.0497
```

marmultineg	Coefficient	Std. err.	z	P>|z|	[95% conf.	interval]
l_ratio_terrmn_peacefulcm	.0989863	2.119662	0.05	0.963	-4.055475	4.253447
l_ratio_rivmn_peacefulcm	24.58761	54.70545	0.45	0.653	-82.63309	131.8083
l_ratio_marmn_peacefulcm	7.618355	2.408669	3.16	0.002	2.897451	12.33926
icowsal	-.4312969	.1684045	-2.56	0.010	-.7613637	-.1012301
recmidwt	.6880917	.3754003	1.83	0.067	-.0476793	1.423863
chal_cinc_share	.9004025	1.163668	0.77	0.439	-1.380345	3.181151
jtdem	1.926738	.7995614	2.41	0.016	.359626	3.493849
duration	-.0720744	.0683133	-1.06	0.291	-.205966	.0618172
duration2	.0011613	.0013046	0.89	0.373	-.0013956	.0037183
duration3	-5.26e-06	6.42e-06	-0.82	0.413	-.0000178	7.33e-06
_cons	-2.535421	1.414733	-1.79	0.073	-5.308246	.2374038

```
204 .
205 . estimates store t4m5

206 .
207 . firthlogit marmultineg l_ratio_sterrmn_terrmn l_ratio_srivmn_rivmn l_ratio_smarmn_marmn icowsal recmidwt chal_cinc_shar
    > e jtdem duration duration2 duration3 if ir_three==2 & year<2002

    initial:       penalized log likelihood = -18.991655
    rescale:       penalized log likelihood = -18.991655
    Iteration 0:   penalized log likelihood = -18.991655  (not concave)
    Iteration 1:   penalized log likelihood = -15.684269  (not concave)
    Iteration 2:   penalized log likelihood = -14.825809  (not concave)
    Iteration 3:   penalized log likelihood = -12.756944  (not concave)
    Iteration 4:   penalized log likelihood = -12.476458  (not concave)
    Iteration 5:   penalized log likelihood = -11.806867  (not concave)
    Iteration 6:   penalized log likelihood = -11.561322  (not concave)
    Iteration 7:   penalized log likelihood = -11.461342  (not concave)
```

```
Iteration 8:   penalized log likelihood = -11.415547
Iteration 9:   penalized log likelihood = -10.945996  (not concave)
Iteration 10:  penalized log likelihood = -10.722417  (not concave)
Iteration 11:  penalized log likelihood = -10.662678  (not concave)
Iteration 12:  penalized log likelihood = -10.639881  (not concave)
Iteration 13:  penalized log likelihood =  -10.63249
Iteration 14:  penalized log likelihood = -10.610624  (not concave)
Iteration 15:  penalized log likelihood = -10.609218
Iteration 16:  penalized log likelihood =   -10.4897
Iteration 17:  penalized log likelihood =  -10.48766
Iteration 18:  penalized log likelihood = -10.486883
Iteration 19:  penalized log likelihood =  -10.48686
Iteration 20:  penalized log likelihood =  -10.48686

                                                Number of obs =    858
                                                Wald chi2(10) =  11.30
Penalized log likelihood = -10.48686            Prob > chi2   = 0.3345
```

marmultineg	Coefficient	Std. err.	z	P>|z|	[95% conf.	interval]
l_ratio_sterrmn_terrmn	1.304271	4.64484	0.28	0.779	-7.799448	10.40799
l_ratio_srivmn_rivmn	.256513	1.533014	0.17	0.867	-2.748139	3.261165
l_ratio_smarmn_marmn	-.1780364	1.099518	-0.16	0.871	-2.333051	1.976978
icowsal	-.3585313	.1857196	-1.93	0.054	-.722535	.0054725
recmidwt	.6671475	.4176304	1.60	0.110	-.151393	1.485688
chal_cinc_share	.7849724	1.137312	0.69	0.490	-1.444117	3.014062
jtdem	2.2531	.8898745	2.53	0.011	.5089778	3.997222
duration	-.0716028	.0635354	-1.13	0.260	-.1961299	.0529243
duration2	.0011011	.0011682	0.94	0.346	-.0011886	.0033907
duration3	-4.68e-06	5.52e-06	-0.85	0.396	-.0000155	6.14e-06
_cons	-2.862423	1.632769	-1.75	0.080	-6.062592	.3377452

```
208 .
209 . estimates store t4m6

210 .
211 . *Figure A1 (online appendix)
212 . *This code produces the individual panels located within Figure A1. We reformatted each panel in Stata's Graph Editor f
    > or presentational purposes. We then combined the individual four panels into a single figure using Stata's graph combin
    > e command.
213 . coefplot (t1m1, offset(.25) label(Territorial)) (t1m2, offset(.25)) (t1m3, offset(0)) (t1m4, offset(0)) (t1m5, offset(-
    > 0.25)) (t1m6, offset(-0.25)), xline(0) drop(_cons icowsal recmidwt chal_cinc_share jtdem duration duration2 duration3)
    > byopts(xrescale legend(position(5)))

214 .
215 . coefplot (t2m1, offset(.25) label(Territorial)) (t2m2, offset(.25)) (t2m3, offset(0)) (t2m4, offset(0)) (t2m5, offset(-
    > 0.25)) (t2m6, offset(-0.25)), xline(0) drop(_cons icowsal recmidwt chal_cinc_share jtdem duration duration2 duration3)
    > byopts(xrescale legend(position(5)))

216 .
217 . coefplot (t3m1, offset(.25) label(Territorial)) (t3m2, offset(.25)) (t3m3, offset(0)) (t3m4, offset(0)) (t3m5, offset(-
    > 0.25)) (t3m6, offset(-0.25)), xline(0) drop(_cons icowsal recmidwt chal_cinc_share jtdem duration duration2 duration3)
    > byopts(xrescale legend(position(5)))

218 .
219 . coefplot (t4m1, offset(.25) label(Territorial)) (t4m2, offset(.25)) (t4m3, offset(0)) (t4m4, offset(0)) (t4m5, offset(-
    > 0.25)) (t4m6, offset(-0.25)), xline(0) drop(_cons icowsal recmidwt chal_cinc_share jtdem duration duration2 duration3)
    > byopts(xrescale legend(position(5)))

220 .
    end of do-file

221 . log close
```

```
      name:  <unnamed>
       log:  /Users/Owsiak/Dropbox/CM Territorial Issues (Mitchell and Owsiak)/ISA 2024/Environment and Security/Replicat
> ion Files/Replication Log.smcl
  log type:  smcl
 closed on:  18 Mar 2025, 14:52:23
-------------------------------------------------------------------------------------------------------------------------------
```