The following commands in Stata, when used with the appropriate dataset, should produce the results in Table 2 of Dennis, Medoff and Magnera, in the Journal of Socio-Economics. The regression results are only run in order to then be able to use the VIF command to examine multicolliearity. The probit results are what appear in the article

Table 2 – GRH85

```
probit grh85 poole85 ideo8089 defcon85p nonwhite rat1985 margin85 appro85 ///
>       fin85 bud85 elder85 medinc85

Iteration 0:   log likelihood =  -58.78764
Iteration 1:   log likelihood = -44.637748
Iteration 2:   log likelihood = -43.839432
Iteration 3:   log likelihood = -43.824273
Iteration 4:   log likelihood = -43.824263
Probit regression                                 Number of obs   =         92
                                                  LR chi2(11)     =      29.93
                                                  Prob > chi2     =     0.0016
Log likelihood = -43.824263                       Pseudo R2       =     0.2545
------------------------------------------------------------------------------
       grh85 |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
     poole85 |    1.84837   .6438534     2.87   0.004     .5864404    3.110299
    ideo8089 |   .0349622   .0349534     1.00   0.317    -.0335451    .1034696
   defcon85p |   9.83e-07   5.85e-07     1.68   0.093    -1.64e-07    2.13e-06
    nonwhite |  -.0078372    .020469    -0.38   0.702    -.0479556    .0322813
     rat1985 |  -1.379264   .7765397    -1.78   0.076    -2.901254    .1427261
    margin85 |  -.0122738   .0099074    -1.24   0.215    -.0316919    .0071444
     appro85 |   .3264272   .3609207     0.90   0.366    -.3809644    1.033819
       fin85 |   .3339798   .6124664     0.55   0.586    -.8664322    1.534392
       bud85 |  -.3203248   .3734971    -0.86   0.391    -1.052366     .411716
     elder85 |  -.2241777   .1043689    -2.15   0.032    -.4287371   -.0196184
    medinc85 |  -.1979899   .0782373    -2.53   0.011    -.3513322   -.0446477
       _cons |   9.664336   3.209732     3.01   0.003     3.373377     15.9553
------------------------------------------------------------------------------

. regress grh85 poole85 ideo8089 defcon85p nonwhite rat1985 margin85 appro85
///
>       fin85 bud85 elder85 medinc85
      Source |       SS       df       MS              Number of obs =      92
-------------+------------------------------           F( 11,    80) =    2.84
       Model |  5.76655739    11   .52423249           Prob > F      =  0.0035
    Residual |  14.7877904    80   .18484738           R-squared     =  0.2806
-------------+------------------------------           Adj R-squared =  0.1816
       Total |  20.5543478    91  .225871954           Root MSE      =  .42994
------------------------------------------------------------------------------
       grh85 |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
     poole85 |   .4758053   .1572189     3.03   0.003     .1629298    .7886808
    ideo8089 |   .0085565   .0089418     0.96   0.341    -.0092382    .0263513
   defcon85p |   3.03e-07   1.75e-07     1.73   0.088    -4.62e-08    6.52e-07
    nonwhite |  -.0015755   .0056106    -0.28   0.780     -.012741      .00959
     rat1985 |  -.3856105    .225644    -1.71   0.091    -.8346563    .0634353
    margin85 |  -.0034224   .0029353    -1.17   0.247    -.0092639    .0024191
     appro85 |   .1025273    .107483     0.95   0.343    -.1113707    .3164253
       fin85 |   .1437738   .1552537     0.93   0.357     -.165191    .4527385
       bud85 |  -.1019828   .1077936    -0.95   0.347     -.316499    .1125333
     elder85 |   -.060389   .0304123    -1.99   0.050    -.1209113    .0001333
    medinc85 |  -.0591546   .0223294    -2.65   0.010    -.1035916   -.0147176
       _cons |   3.214385   .8855213     3.63   0.000     1.452141    4.976628
------------------------------------------------------------------------------
```

```
. vif

    Variable |       VIF       1/VIF
-------------+----------------------
    medinc85 |      3.28    0.304794
    ideo8089 |      2.29    0.436977
   defcon85p |      2.20    0.454520
     rat1985 |      1.77    0.563673
     poole85 |      1.56    0.639284
     elder85 |      1.52    0.658853
       fin85 |      1.26    0.791844
    nonwhite |      1.25    0.800969
    margin85 |      1.19    0.843837
     appro85 |      1.17    0.857836
       bud85 |      1.05    0.950373
-------------+----------------------
    Mean VIF |      1.69

. probit grh85 poole85 ideo8089 defcon85p nonwhite rat1985 margin85 appro85int
//
> /
>       fin85int bud85int elder85 medinc85 appro85 fin85 bud85 par85

note: fin85int dropped due to collinearity
Iteration 0:   log likelihood =  -58.78764
Iteration 1:   log likelihood = -42.781296
Iteration 2:   log likelihood = -41.283311
Iteration 3:   log likelihood =  -41.18518
Iteration 4:   log likelihood = -41.184575
Iteration 5:   log likelihood = -41.184575

Probit regression                                 Number of obs   =         92
                                                  LR chi2(14)     =      35.21
                                                  Prob > chi2     =     0.0014
Log likelihood = -41.184575                       Pseudo R2       =     0.2994

------------------------------------------------------------------------------
       grh85 |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
     poole85 |    4.13914   1.514388     2.73   0.006     1.170994    7.107287
    ideo8089 |   .0695428   .0426802     1.63   0.103    -.0141089    .1531945
   defcon85p |   8.85e-07   6.06e-07     1.46   0.144    -3.03e-07    2.07e-06
    nonwhite |   -.001537   .0224747    -0.07   0.945    -.0455866    .0425126
     rat1985 |  -1.218842   .8217473    -1.48   0.138    -2.829437    .3917532
    margin85 |  -.0133172   .0101522    -1.31   0.190    -.0332151    .0065807
  appro85int |  -.1867011   .7703224    -0.24   0.808    -1.696505    1.323103
    bud85int |  -1.011846   .9125698    -1.11   0.268     -2.80045    .7767581
     elder85 |  -.1866198   .1084956    -1.72   0.085    -.3992673    .0260277
    medinc85 |  -.1684841   .0789178    -2.13   0.033    -.3231601    -.013808
     appro85 |   .6442744   .6153354     1.05   0.295    -.5617608     1.85031
       fin85 |   .6454969   .6880764     0.94   0.348    -.7031081    1.994102
       bud85 |   .2619161   .6799294     0.39   0.700    -1.070721    1.594553
       par85 |   1.704326   .8824593     1.93   0.053    -.0252622    3.433915
       _cons |   8.011703   3.295242     2.43   0.015     1.553147    14.47026
------------------------------------------------------------------------------
```

```
. regress grh85 poole85 ideo8089 defcon85p nonwhite rat1985 margin85 appro85int
/
> //
>       fin85int bud85int elder85 medinc85 appro85 fin85 bud85 par85

      Source |       SS       df       MS              Number of obs =      92
-------------+------------------------------           F( 14,    77) =    2.52
       Model |  6.46553025    14  .461823589           Prob > F      =  0.0051
    Residual |  14.0888176    77  .182971657           R-squared     =  0.3146
-------------+------------------------------           Adj R-squared =  0.1899
       Total |  20.5543478    91  .225871954           Root MSE      =  .42775

------------------------------------------------------------------------------
       grh85 |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
     poole85 |   .7968952   .3246516     2.45   0.016     .1504312    1.443359
    ideo8089 |   .0126108   .0095901     1.31   0.192    -.0064854    .0317071
   defcon85p |   2.84e-07   1.76e-07     1.61   0.110    -6.62e-08    6.33e-07
    nonwhite |   .0003515    .005808     0.06   0.952    -.0112138    .0119168
     rat1985 |  -.3834246   .2369078    -1.62   0.110    -.8551683    .0883192
    margin85 |  -.0034147   .0029222    -1.17   0.246    -.0092337    .0024042
  appro85int |  -.0420529   .2126979    -0.20   0.844    -.4655886    .3814828
    fin85int |  (dropped)
    bud85int |  -.3147095   .2347289    -1.34   0.184    -.7821144    .1526954
     elder85 |   -.050011   .0312295    -1.60   0.113    -.1121968    .0121749
    medinc85 |   -.053589   .0224861    -2.38   0.020    -.0983646   -.0088134
     appro85 |   .1664295   .1533626     1.09   0.281    -.1389545    .4718135
       fin85 |   .1790749   .1621949     1.10   0.273    -.1438965    .5020462
       bud85 |   .0415365   .1514098     0.27   0.785    -.2599589    .3430319
       par85 |   .3213225   .2233414     1.44   0.154     -.123407     .766052
       _cons |   2.839272   .9251285     3.07   0.003     .9971056    4.681438
------------------------------------------------------------------------------

. vif

    Variable |       VIF       1/VIF
-------------+----------------------
     poole85 |      6.74    0.148402
       par85 |      6.26    0.159786
    medinc85 |      3.36    0.297511
  appro85int |      2.76    0.362305
    bud85int |      2.68    0.372584
    ideo8089 |      2.66    0.376041
     appro85 |      2.40    0.417076
   defcon85p |      2.23    0.448486
       bud85 |      2.10    0.476808
     rat1985 |      1.98    0.506158
     elder85 |      1.62    0.618481
       fin85 |      1.39    0.718157
    nonwhite |      1.35    0.739859
    margin85 |      1.19    0.842769
-------------+----------------------
    Mean VIF |      2.76

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.
```

Table 2 – GRH87

```
probit grh87 poole87 ideo8089 defcon87p nonwhite rat1987 margin87 appro87 ///
>       fin87 bud87 elder87 medinc87

Iteration 0:   log likelihood = -61.060786
Iteration 1:   log likelihood = -51.381309
Iteration 2:   log likelihood = -51.001464
Iteration 3:   log likelihood = -50.998501
Iteration 4:   log likelihood = -50.998501

Probit regression                                 Number of obs   =         93
                                                  LR chi2(11)     =      20.12
                                                  Prob > chi2     =     0.0437
Log likelihood = -50.998501                       Pseudo R2       =     0.1648

------------------------------------------------------------------------------
       grh87 |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
     poole87 |    .640428   .4731996     1.35   0.176    -.2870261    1.567882
    ideo8089 |  -.0037172   .0290926    -0.13   0.898    -.0607377    .0533032
   defcon87p |   1.08e-06   5.81e-07     1.86   0.063    -5.96e-08    2.22e-06
    nonwhite |  -.0054107   .0180447    -0.30   0.764    -.0407776    .0299562
     rat1987 |  -1.691018   .7933621    -2.13   0.033    -3.245979   -.1360566
    margin87 |  -.0098672   .0088946    -1.11   0.267    -.0273003    .0075659
     appro87 |  -.2307053    .336516    -0.69   0.493    -.8902644    .4288539
       fin87 |   .7566688   .4428063     1.71   0.087    -.1112157    1.624553
       bud87 |  -.0387664   .3402203    -0.11   0.909     -.705586    .6280532
     elder87 |  -.0085398   .0966708    -0.09   0.930    -.1980112    .1809315
    medinc87 |  -.1830389   .0690733    -2.65   0.008    -.3184201   -.0476578
       _cons |   6.710046   3.002638     2.23   0.025      .824984    12.59511
------------------------------------------------------------------------------

. regress grh87 poole87 ideo8089 defcon87p nonwhite rat1987 margin87 appro87
///
>       fin87 bud87 elder87 medinc87

      Source |       SS       df       MS              Number of obs =      93
-------------+------------------------------           F( 11,    81) =    1.75
       Model |  4.14354146    11  .376685587           Prob > F      =  0.0769
    Residual |   17.426351    81  .215140136           R-squared     =  0.1921
-------------+------------------------------           Adj R-squared =  0.0824
       Total |  21.5698925    92  .234455353           Root MSE      =  .46383

------------------------------------------------------------------------------
       grh87 |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
     poole87 |   .2034171   .1583195     1.28   0.203     -.111589    .5184231
    ideo8089 |  -.0012311   .0097415    -0.13   0.900    -.0206136    .0181514
   defcon87p |   3.12e-07   1.87e-07     1.66   0.100    -6.14e-08    6.84e-07
    nonwhite |  -.0006018   .0060678    -0.10   0.921    -.0126748    .0114712
     rat1987 |  -.5278158   .2444888    -2.16   0.034    -1.014272   -.0413599
    margin87 |  -.0033588   .0030451    -1.10   0.273    -.0094177       .0027
     appro87 |  -.0713569   .1175128    -0.61   0.545    -.3051705    .1624567
       fin87 |     .21116   .1302856     1.62   0.109    -.0480675    .4703874
       bud87 |  -.0274788   .1145554    -0.24   0.811    -.2554082    .2004506
     elder87 |    .000145   .0322499     0.00   0.996    -.0640222    .0643123
    medinc87 |  -.0543392   .0207903    -2.61   0.011    -.0957053    -.012973
       _cons |   2.506256     .92973     2.70   0.009     .6563854    4.356127
------------------------------------------------------------------------------
```

```
. vif

    Variable |       VIF       1/VIF
-------------+----------------------
    medinc87 |      3.21    0.311644
    ideo8089 |      2.43    0.412260
     rat1987 |      2.22    0.450686
   defcon87p |      2.01    0.496507
     elder87 |      1.44    0.696176
     poole87 |      1.42    0.704811
    nonwhite |      1.27    0.787764
     appro87 |      1.23    0.813067
       fin87 |      1.19    0.838352
    margin87 |      1.07    0.932488
       bud87 |      1.06    0.946994
-------------+----------------------
    Mean VIF |      1.69

. probit grh87 poole87 ideo8089 defcon87p nonwhite rat1987 margin87 appro87int
//
> /
>       fin87int bud87int elder87 medinc87 appro87 bud87 fin87 par87

Iteration 0:   log likelihood = -61.060786
Iteration 1:   log likelihood = -51.012847
Iteration 2:   log likelihood = -50.583084
Iteration 3:   log likelihood = -50.578858
Iteration 4:   log likelihood = -50.578858

Probit regression                                 Number of obs   =         93
                                                  LR chi2(15)     =      20.96
                                                  Prob > chi2     =     0.1380
Log likelihood = -50.578858                       Pseudo R2       =     0.1717

------------------------------------------------------------------------------
       grh87 |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
     poole87 |   .6557826   1.039674     0.63   0.528    -1.381941    2.693506
    ideo8089 |  -.0058992   .0307808    -0.19   0.848    -.0662284      .05443
   defcon87p |   1.14e-06   5.92e-07     1.92   0.055    -2.41e-08    2.30e-06
    nonwhite |  -.0044275   .0186203    -0.24   0.812    -.0409226    .0320675
     rat1987 |  -1.789434   .8081046    -2.21   0.027     -3.37329   -.2055783
    margin87 |  -.0107925   .0090255    -1.20   0.232    -.0284822    .0068973
  appro87int |   .4894323   .6882913     0.71   0.477    -.8595938    1.838459
    fin87int |  -.0088415   .8801773    -0.01   0.992    -1.733957    1.716274
    bud87int |   -.427903   .7208442    -0.59   0.553    -1.840732    .9849256
     elder87 |  -.0099922   .1003586    -0.10   0.921    -.2066915    .1867072
    medinc87 |  -.1830469   .0702238    -2.61   0.009    -.3206831   -.0454107
     appro87 |  -.5034632   .5221168    -0.96   0.335    -1.526793    .5198669
       bud87 |   .2152137   .5450844     0.39   0.693     -.853132     1.28356
       fin87 |    .775909   .6787619     1.14   0.253    -.5544398    2.106258
       par87 |  -.0068441   .7761583    -0.01   0.993    -1.528086    1.514398
       _cons |   6.786559   3.140233     2.16   0.031     .6318146     12.9413
------------------------------------------------------------------------------
```

```
. regress grh87 poole87 ideo8089 defcon87p nonwhite rat1987 margin87 appro87int
/
> //
>       fin87int bud87int elder87 medinc87 appro87 bud87 fin87 par87

      Source |       SS       df       MS              Number of obs =      93
-------------+------------------------------           F( 15,    77) =    1.27
       Model |  4.26992166    15  .284661444           Prob > F      =  0.2438
    Residual |  17.2999708    77  .224674946           R-squared     =  0.1980
-------------+------------------------------           Adj R-squared =  0.0417
       Total |  21.5698925    92  .234455353           Root MSE      =    .474

------------------------------------------------------------------------------
       grh87 |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
     poole87 |   .2201358   .3634297     0.61   0.546    -.5035452    .9438168
    ideo8089 |  -.0019346   .0106294    -0.18   0.856    -.0231005    .0192313
   defcon87p |   3.16e-07   1.92e-07     1.65   0.103    -6.59e-08    6.99e-07
    nonwhite |  -.0004901   .0063778    -0.08   0.939    -.0131899    .0122097
     rat1987 |  -.5515232   .2562013    -2.15   0.034    -1.061685   -.0413613
    margin87 |  -.0035527   .0031349    -1.13   0.261    -.0097951    .0026897
  appro87int |   .1365893   .2424538     0.56   0.575    -.3461979    .6193766
    fin87int |  -.0091912    .265575    -0.03   0.972    -.5380186    .5196361
    bud87int |  -.1117714   .2437103    -0.46   0.648    -.5970606    .3735178
     elder87 |   .0012388   .0340361     0.04   0.971    -.0665358    .0690134
    medinc87 |  -.0533966   .0216809    -2.46   0.016    -.0965688   -.0102244
     appro87 |  -.1489975   .1827842    -0.82   0.417    -.5129673    .2149723
       bud87 |   .0302415   .1728322     0.17   0.862    -.3139113    .3743944
       fin87 |   .2133223   .1920772     1.11   0.270    -.1691523    .5957968
       par87 |   .0128808   .2692487     0.05   0.962    -.5232619    .5490234
       _cons |   2.478985   .9957194     2.49   0.015     .4962545    4.461716
------------------------------------------------------------------------------

. vif

    Variable |       VIF       1/VIF
-------------+----------------------
       par87 |      7.46    0.134058
     poole87 |      7.16    0.139680
  appro87int |      3.47    0.288515
    medinc87 |      3.34    0.299266
     appro87 |      2.85    0.350956
    fin87int |      2.80    0.356932
    ideo8089 |      2.77    0.361605
    bud87int |      2.76    0.361929
       fin87 |      2.48    0.402810
     rat1987 |      2.33    0.428610
       bud87 |      2.30    0.434473
   defcon87p |      2.02    0.494183
     elder87 |      1.53    0.652723
    nonwhite |      1.34    0.744653
    margin87 |      1.09    0.918837
-------------+----------------------
    Mean VIF |      3.05

.
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```

Table 2 – Balanced Budget Amendment

```
probit ballbddole poole95 ideo9099 defcon95p nonwhite rat1995 margin95 appro95
> ///
>       fin95 bud95 elder95 medinc95

Iteration 0:   log likelihood = -60.697268
Iteration 1:   log likelihood = -30.519058
Iteration 2:   log likelihood =   -25.1891
Iteration 3:   log likelihood = -23.386642
Iteration 4:   log likelihood =  -22.96348
Iteration 5:   log likelihood = -22.936969
Iteration 6:   log likelihood = -22.936862
Iteration 7:   log likelihood = -22.936862

Probit regression                                 Number of obs   =         95
                                                  LR chi2(11)     =      75.52
                                                  Prob > chi2     =     0.0000
Log likelihood = -22.936862                       Pseudo R2       =     0.6221

------------------------------------------------------------------------------
  ballbddole |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
     poole95 |   5.813161    1.38466     4.20   0.000     3.099278    8.527045
    ideo9099 |  -.0446794     .03803    -1.17   0.240    -.1192169     .029858
   defcon95p |  -1.56e-07   9.77e-07    -0.16   0.873    -2.07e-06    1.76e-06
    nonwhite |  -.0060449   .0340033    -0.18   0.859    -.0726901    .0606003
     rat1995 |  -.3667426   1.544503    -0.24   0.812    -3.393913    2.660428
    margin95 |   .0061907    .012325     0.50   0.615     -.017966    .0303473
     appro95 |  -.5458093    .560787    -0.97   0.330    -1.644932     .553313
       fin95 |   .4726962   .6490424     0.73   0.466    -.7994035    1.744796
       bud95 |  -.1538174    .539557    -0.29   0.776     -1.21133     .903695
     elder95 |  -.0066126   .1620546    -0.04   0.967    -.3242337    .3110086
    medinc95 |   .1241744    .098998     1.25   0.210     -.069858    .3182069
       _cons |  -2.690837   5.655453    -0.48   0.634    -13.77532    8.393647
------------------------------------------------------------------------------
```

```
note: 0 failures and 3 successes completely determined.

. regress ballbddole poole95 ideo9099 defcon95p nonwhite rat1995 margin95
appro95
>  ///
>       fin95 bud95 elder95 medinc95

      Source |       SS       df       MS              Number of obs =      95
-------------+------------------------------           F( 11,    83) =    9.37
       Model |  11.7554137    11  1.06867397           Prob > F      =  0.0000
    Residual |  9.46563891    83  .114043842           R-squared     =  0.5540
-------------+------------------------------           Adj R-squared =  0.4948
       Total |  21.2210526    94  .225755879           Root MSE      =   .3377

------------------------------------------------------------------------------
  ballbddole |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
     poole95 |   .8531542   .1013341     8.42   0.000     .6516047    1.054704
    ideo9099 |  -.0028119   .0063322    -0.44   0.658    -.0154063    .0097825
   defcon95p |   3.36e-08   1.64e-07     0.21   0.838    -2.92e-07    3.59e-07
    nonwhite |  -.0003426   .0046042    -0.07   0.941    -.0095001    .0088149
     rat1995 |  -.0352608    .247949    -0.14   0.887    -.5284213    .4578997
    margin95 |   .0024478   .0020379     1.20   0.233    -.0016054    .0065011
     appro95 |  -.0265787   .0851406    -0.31   0.756      -.19592    .1427625
       fin95 |   .1033713   .1008545     1.02   0.308    -.0972243    .3039669
       bud95 |   -.030591   .0856557    -0.36   0.722    -.2009567    .1397746
     elder95 |   .0014979   .0229304     0.07   0.948    -.0441097    .0471054
    medinc95 |   .0132572   .0161029     0.82   0.413    -.0187708    .0452852
       _cons |   .1193267   .9078508     0.13   0.896    -1.686352    1.925006
------------------------------------------------------------------------------

. vif

    Variable |       VIF       1/VIF
-------------+----------------------
    medinc95 |      4.65    0.215141
     rat1995 |      3.52    0.283886
    ideo9099 |      2.39    0.417614
   defcon95p |      2.15    0.465779
     poole95 |      1.44    0.694224
    nonwhite |      1.39    0.719045
     elder95 |      1.36    0.736558
    margin95 |      1.32    0.757525
       fin95 |      1.30    0.768496
     appro95 |      1.20    0.833105
       bud95 |      1.09    0.919470
-------------+----------------------
    Mean VIF |      1.98
```

```
. probit ballbddole poole95 ideo9099 defcon95p nonwhite rat1995 margin95
appro95i
> nt ///
>       fin95int bud95int elder95 medinc95 appro95 bud95 fin95 par95

Iteration 0:   log likelihood = -60.697268
Iteration 1:   log likelihood = -29.179162
Iteration 2:   log likelihood = -24.700664
Iteration 3:   log likelihood = -23.038035
Iteration 4:   log likelihood = -22.411883
Iteration 5:   log likelihood = -22.238445
Iteration 6:   log likelihood = -22.187931
Iteration 7:   log likelihood = -22.172756
Iteration 8:   log likelihood = -22.168143
Iteration 9:   log likelihood = -22.166694
Iteration 10:  log likelihood = -22.166226
Iteration 11:  log likelihood = -22.166072
Iteration 12:  log likelihood = -22.166021
Iteration 13:  log likelihood = -22.166003
Iteration 14:  log likelihood = -22.165997
Iteration 15:  log likelihood = -22.165995
Iteration 16:  log likelihood = -22.165995
Iteration 17:  log likelihood = -22.165994
Iteration 18:  log likelihood = -22.165994
Iteration 19:  log likelihood = -22.165994
Iteration 20:  log likelihood = -22.165994
Iteration 21:  log likelihood = -22.165994

Probit regression                                 Number of obs   =         95
                                                  LR chi2(15)     =      77.06
                                                  Prob > chi2     =     0.0000
Log likelihood = -22.165994                       Pseudo R2       =     0.6348

------------------------------------------------------------------------------
  ballbddole |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
     poole95 |    4.51151   2.297331     1.96   0.050     .0088235    9.014197
    ideo9099 |  -.0545517   .0463216    -1.18   0.239    -.1453405     .036237
   defcon95p |   3.39e-08   1.04e-06     0.03   0.974    -2.01e-06    2.07e-06
    nonwhite |   .0028152   .0353088     0.08   0.936    -.0663887    .0720191
     rat1995 |  -.9320107   1.735003    -0.54   0.591    -4.332553    2.468532
    margin95 |   .0047722   .0120487     0.40   0.692    -.0188429    .0283873
  appro95int |   5.065718   1.388189     3.65   0.000     2.344917    7.786519
    fin95int |   .0402866   .6630344     0.06   0.952    -1.259237     1.33981
    bud95int |  -5.481609   .5896714    -9.30   0.000    -6.637343   -4.325874
     elder95 |   .0007604   .1690071     0.00   0.996    -.3304875    .3320083
    medinc95 |   .0896439   .1027723     0.87   0.383    -.1117862     .291074
     appro95 |  -5.521114   1.340061    -4.12   0.000    -8.147585   -2.894643
       bud95 |   5.165861          .        .       .            .           .
       fin95 |   .4111796          .        .       .            .           .
       par95 |  -5.390035          .        .       .            .           .
       _cons |   3.612387   5.745539     0.63   0.530    -7.648663    14.87344
------------------------------------------------------------------------------

note: 0 failures and 42 successes completely determined.
```

```
. regress ballbddole poole95 ideo9099 defcon95p nonwhite rat1995 margin95
appro95
> int ///
>       fin95int bud95int elder95 medinc95 appro95 bud95 fin95 par95

      Source |       SS       df       MS              Number of obs =      95
-------------+------------------------------           F( 15,    79) =    7.74
       Model |  12.6278623    15   .84185749           Prob > F      =  0.0000
    Residual |  8.59319029    79  .108774561           R-squared     =  0.5951
-------------+------------------------------           Adj R-squared =  0.5182
       Total |  21.2210526    94  .225755879           Root MSE      =  .32981

------------------------------------------------------------------------------
  ballbddole |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
     poole95 |   .3378119   .2272207     1.49   0.141    -.1144597    .7900834
    ideo9099 |  -.0075244   .0064061    -1.17   0.244    -.0202755    .0052267
   defcon95p |   4.73e-08   1.61e-07     0.29   0.769    -2.72e-07    3.67e-07
    nonwhite |   .0019027   .0046081     0.41   0.681    -.0072696    .0110749
     rat1995 |  -.1304931   .2447684    -0.53   0.595    -.6176924    .3567062
    margin95 |   .0018199   .0020184     0.90   0.370    -.0021976    .0058374
  appro95int |  -.1186935    .165932    -0.72   0.477    -.4489729    .2115859
    fin95int |    .062828    .185368     0.34   0.736    -.3061378    .4317939
    bud95int |  -.1209026   .1676926    -0.72   0.473    -.4546864    .2128812
     elder95 |   .0000981   .0224519     0.00   0.997    -.0445913    .0447874
    medinc95 |    .009001    .015948     0.56   0.574    -.0227426    .0407447
     appro95 |   .0015821   .1149558     0.01   0.989    -.2272317    .2303959
       bud95 |   .0252869   .1122248     0.23   0.822    -.1980909    .2486647
       fin95 |   .0573003    .131463     0.44   0.664    -.2043703    .3189709
       par95 |  -.3811155    .189596    -2.01   0.048    -.7584968   -.0037341
       _cons |   .4903351   .9076263     0.54   0.591     -1.31625     2.29692
------------------------------------------------------------------------------

. vif

    Variable |       VIF       1/VIF
-------------+----------------------
       par95 |      7.81    0.128106
     poole95 |      7.59    0.131695
    medinc95 |      4.78    0.209206
     rat1995 |      3.60    0.277852
  appro95int |      2.65    0.376818
    fin95int |      2.57    0.388544
    ideo9099 |      2.57    0.389173
       fin95 |      2.32    0.431400
    bud95int |      2.31    0.432319
     appro95 |      2.29    0.435880
   defcon95p |      2.17    0.461676
       bud95 |      1.96    0.510891
    nonwhite |      1.46    0.684640
     elder95 |      1.36    0.732788
    margin95 |      1.36    0.736544
-------------+----------------------
    Mean VIF |      3.12
```

```
. probit ballbddole poole95 ideo9099 defcon95p nonwhite rat1995 margin95
appro95i
> nt ///
>       fin95int bud95int elder95 medinc95

Iteration 0:   log likelihood = -60.697268
Iteration 1:   log likelihood = -30.127145
Iteration 2:   log likelihood = -25.124102
Iteration 3:   log likelihood = -23.594811
Iteration 4:   log likelihood = -23.277319
Iteration 5:   log likelihood =  -23.26172
Iteration 6:   log likelihood = -23.261682

Probit regression                                 Number of obs   =         95
                                                  LR chi2(11)     =      74.87
                                                  Prob > chi2     =     0.0000
Log likelihood = -23.261682                       Pseudo R2       =     0.6168

------------------------------------------------------------------------------
  ballbddole |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
     poole95 |   5.330261   1.341401     3.97   0.000     2.701164    7.959358
    ideo9099 |   -.047979   .0381786    -1.26   0.209    -.1228077    .0268496
   defcon95p |  -3.39e-08   9.23e-07    -0.04   0.971    -1.84e-06    1.77e-06
    nonwhite |  -.0017075   .0335881    -0.05   0.959     -.067539     .064124
     rat1995 |  -.4966454   1.489961    -0.33   0.739    -3.416915    2.423624
    margin95 |   .0069896   .0122152     0.57   0.567    -.0169517    .0309309
  appro95int |  -.4552442    .609091    -0.75   0.455    -1.649041    .7385522
    fin95int |   .4333787   .6460894     0.67   0.502    -.8329334    1.699691
    bud95int |   -.289631   .5920685    -0.49   0.625    -1.450064    .8708019
     elder95 |   .0064276   .1583168     0.04   0.968    -.3038675    .3167228
    medinc95 |   .1166728   .0968157     1.21   0.228    -.0730825     .306428
       _cons |    -2.8005   5.585946    -0.50   0.616    -13.74875    8.147754
------------------------------------------------------------------------------

note: 0 failures and 1 success completely determined.

. regress ballbddole poole95 ideo9099 defcon95p nonwhite rat1995 margin95
appro95
> int ///
>       fin95int bud95int elder95 medinc95
      Source |       SS       df       MS              Number of obs =      95
-------------+------------------------------           F( 11,    83) =    9.88
       Model |  12.0312077    11  1.09374616           Prob > F      =  0.0000
    Residual |  9.18984492    83  .110721023           R-squared     =  0.5669
-------------+------------------------------           Adj R-squared =  0.5096
       Total |  21.2210526    94  .225755879           Root MSE      =  .33275

------------------------------------------------------------------------------
  ballbddole |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
     poole95 |   .7700945   .1170599     6.58   0.000     .5372671    1.002922
    ideo9099 |  -.0040353   .0062491    -0.65   0.520    -.0164646     .008394
   defcon95p |  -1.40e-08   1.58e-07    -0.09   0.930    -3.29e-07    3.01e-07
    nonwhite |   .0008464   .0046251     0.18   0.855    -.0083528    .0100455
     rat1995 |  -.0242263   .2414554    -0.10   0.920    -.5044714    .4560187
    margin95 |   .0020792   .0020246     1.03   0.307    -.0019477     .006106
  appro95int |  -.1817132   .1187642    -1.53   0.130    -.4179304     .054504
    fin95int |   .0369449   .1358983     0.27   0.786    -.2333514    .3072412
    bud95int |  -.1173539   .1259229    -0.93   0.354    -.3678095    .1331017
     elder95 |   .0040407   .0225078     0.18   0.858    -.0407263    .0488077
    medinc95 |    .014759   .0158648     0.93   0.355    -.0167955    .0463134
       _cons |   .0553732   .8934235     0.06   0.951     -1.72161    1.832357
------------------------------------------------------------------------------
```

```
. vif

    Variable |       VIF       1/VIF
-------------+----------------------
    medinc95 |      4.65    0.215188
     rat1995 |      3.44    0.290639
    ideo9099 |      2.40    0.416291
   defcon95p |      2.07    0.483703
     poole95 |      1.98    0.505072
    nonwhite |      1.45    0.691786
    fin95int |      1.36    0.735842
     elder95 |      1.35    0.742202
    margin95 |      1.34    0.745132
  appro95int |      1.34    0.748727
    bud95int |      1.28    0.780414
-------------+----------------------
    Mean VIF |      2.06

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end of do-file

.
.
```