- 1 . discard
- 2 . do stata_acro_test

3 . quietly{

Creating acro session

INFO:acro:config: {'safe_threshold': 10, 'safe_dof_threshold': 10, 'safe_nk_n': 2, 'safe_nk_k': 0.9, 'safe_pratio_p': 0.1, 'check_missing_values': False} acro analysis session created

****** Tables

calling table survivor grant_type directly

	grant_type				
	G	N	R	R/G	Total
survivor Dead in 2015 Alive in 2015 Total	18 72 90	354 354	282 144 426	48 48	300 618 918

now calling: acro table survivor grant_type INFO:acro:outcome_df:

grant_type G

survivor

grant_type G N R R/G survivor 18 NaN 282 NaN 72 354.0 144 48.0

1.0

******* Regressions ******************

**** stata: regress inc_activity inc_grants inc_donations total_costs

	Source	SS	df	MS	Number of obs	=	811
-					F(3, 807)	=	2276.25
	Model	1.3357e+18	3	4.4524e+17	Prob > F	=	0.0000
	Residual	1.5785e+17	807	1.9560e+14	R-squared	=	0.8943
-					Adj R-squared	=	0.8939
	Total	1.4936e+18	810	1.8439e+15	Root MSE	=	1.4e+07

inc_activity	Coefficient	Std. err.	t	P> t	[95% conf.	interval]
inc_grants inc_donations total_costs _cons	8855681	.0245118	-36.13	0.000	9336825	8374536
	6658834	.0162787	-40.91	0.000	6978369	6339299
	.8318309	.010538	78.94	0.000	.8111458	.8525159
	399436.3	531251.9	0.75	0.452	-643362.2	1442235

	OLS REGIESSE	on nesuces		
Dep. Variable:	,inc_activity	, R-squared:	, 0.894	
Model:	, OLS	, Adj. R-squared:	, 0.894	
Method:	,Least Squares	, F-statistic:	, 2276.	
Date:	,Thu, 15 Jun 2023	, Prob (F-statistic)	:, 0.00	
Time:	,15:08:46	, Log-Likelihood:	, -14493.	
No. Observations	:, 811	, AIC:	,2.899e+04	
Df Residuals:	, 807	, BIC:	,2.901e+04	
Df Model:	, 3		,	
Covariance Type:	,nonrobust		,	
		, t ,P> t , [(0.025 , 0.975]	
const , 3	.994e+05, 5.31e+05	, 0.752, 0.452,-6.4	43e+05, 1.44e+06	
inc_grants ,	-0.8856, 0.025	, -36.128, 0.000, -	-0.934, -0.837	
inc_donations,	-0.6659, 0.016	, -40.905, 0.000, -	-0.698, -0.634	
total_costs ,	0.8318, 0.011	, 78.937, 0.000,	0.811, 0.853	
Omnibus: ,1	348.637, Durbin-Wa	atson: , 1.424		
Prob(Omnibus):, 0.000 , Jarque-Bera (JB): ,1298161.546				
Skew: ,10	0.026 , Prob(JB)	, 0.00		
Kurtosis: ,19	97.973 , Cond. No	,1.06e+08		

[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

[2] The condition number is large, 1.06e+08. This might indicate that there are

strong multicollinearity or other numerical problems.

**** stata: probit survivor inc_activity inc_grants inc_donations total_costs

Iteration 0: Log likelihood = -509.50051 | Teration 1: Log likelihood = -451.16345 |
| Iteration 2: Log likelihood = -428.05889 |
| Iteration 3: Log likelihood = -409.37624 |
| Iteration 4: Log likelihood = -403.51851 |



```
Iteration 5: Log likelihood = -403.24397
Iteration 6: Log likelihood = -403.24344
Iteration 7: Log likelihood = -403.24344
                                                              Number of obs =
Probit regression
                                                                                  811
                                                              LR chi2(4) = 212.51
Prob > chi2 = 0.0000
Log\ likelihood = -403.24344
                                                              Pseudo R2
                                                                             = 0.2086
                 Coefficient Std. err.
                                                      P>|z|
                                                                 [95% conf. interval]
     survivor
                                                z
                                                      0.530
                                                                -8.71e-08
 inc activity
                   4.11e-08
                                6.54e-08
                                              0.63
                                                                              1.69e-07
                                              -0.71
                                                                -1.62e-07
   inc_grants
inc donations
                   1.36e-07
                                6.27e-08
                                              2.16
                                                      0.031
                                                                 1.28e-08
                                                                              2.59e-07
                   3.47e-08
                                5.84e-08
  total costs
                                              0.60
                                                      0.552
                                                                -7.96e-08
                                                                              1.49e-07
                    .0445422
                                .0563431
                                                                -.0658883
                                                                               .1549726
Note: 0 failures and 129 successes completely determined.
** acro: acro probit survivor inc_activity inc_grants inc_donations total_costs
Optimization terminated successfully.
         Current function value: 0.497218
         Iterations 10
INFO:acro:probit() outcome: pass; dof=806.0 >= 10
INFO:acro:add_output(): output_2_2023-06-15-15084678
                     Probit Regression Results
                                  , No. Observations: , 811
, Df Residuals: , 806
Dep. Variable: ,survivor
Model:
                 ,Probit
Method:
                 . MLE
                                      Df Model:
                 Thu, 15 Jun 2023, Pseudo R-squ.:
                                                            ,0.2086
Date:
                 ,15:08:46
                                       Log-Likelihood:
                                                           , -403.24
, -509.50
converged:
                 .True
                                       LL-Null:
Covariance Type:,nonrobust
                                    , LLR p-value:
                                                             ,7.648e-45
                                       z ,P>|z| ,
0.791, 0.429,
            , coef , std err ,
, 0.0445, 0.056,
                                                          [0.025 , 0.975]
                                                            -0.066,
inc_activity , 4.114e-08, 6.54e-08,
                                          0.629, 0.530,-8.71e-08, 1.69e-07
                                       -0.708, 0.479,-1.62e-07, 7.6e-08
2.163, 0.031, 1.28e-08, 2.59e-07
0.595, 0.552,-7.96e-08, 1.49e-07
inc_grants ,-4.297e-08, 6.07e-08, inc_donations, 1.357e-07, 6.27e-08,
total_costs , 3.473e-08, 5.84e-08,
Possibly complete quasi-separation: A fraction 0.18 of observations can be
perfectly predicted. This might indicate that there is complete quasi-separation. In this case some parameters will not be identified.
*********list the session contents using :acro print_outputs ***** output_0_2023-06-15-15084596:
command: safe_output=myacro.crosstab(df[rowvar],df[colvar])
survivor
             ok threshold: ok threshold:
0.0
ok ok ok ok output: [grant_type G N survivor
                                     R R/G
            18 NaN 282 NaN
72 354.0 144 48.0]
1.0
timestamp: 2023-06-15-15084596
comments:
output 1 2023-06-15-15084606:
command: results = myacro.ols(y,x)
summary: pass; dof=807.0 >= 10
outcome: Empty DataFrame
Columns: []
Index: []
output: [
                                  inc activity
                                                            R-squared:
                                                                              0.894
Dep. Variable:
Model:
                                   OLS
                                             Adj. R-squared:
                                                                    0.894
Method:
                                                F-statistic:
                        Least Squares
                                                                2276.000
                    Thu, 15 Jun 2023 Prob (F-statistic):
Date:
                                                                    0.000
                                           Log-Likelihood: -14493.000
Time:
                            15:08:46
No. Observations:
                                   811
                                                         AIC: 28990.000
Df Residuals:
                                   807
                                                         BIC: 29010.000
Df Model:
                                                          NaN
                                                                      NaN
                                     3
Covariance Type:
                            nonrobust
                                                          NaN
                                                                      NaN
                                                                                                              std err
                                                                                                                              t P>|t|
                                                                                                                                             [0.025
                                                                                                                                                            0.9751
                399400.0000 531000.000 0.752 0.452 -643000.000 1440000.000
const
inc_grants
                   -0.8856
                                    0.025 -36.128 0.000
                                                                -0.934
                                                                               -0.837
                                    0.016 -40.905 0.000
0.011 78.937 0.000
inc_donations
                     -0.6659
                                                                 -0.698
                                                                                -0.634
                     0.8318
                                                                                                         1348.637
                                                                                                                        Durbin-Watson:
                                                                                                                                                 1.424
total costs
                                                                  0.811
                                                                                0.853,
                    0.000 Jarque-Bera (JB): 1.298162e+06
10.026 Prob(JB): 0.000000e+00
Prob(Omnibus):
                   10.026
Skew:
Kurtosis:
                  197.973
                                     Cond. No. 1.060000e+08]
timestamp: 2023-06-15-15084606
comments:
output_2_2023-06-15-15084678:
```



command: results = myacro.probit(y,x)

```
summary: pass; dof=806.0 >= 10
        outcome: Empty DataFrame
Columns: []
           Index: []
                                                                                                                                                                                                                                                                                                                                                                                              811
                                                                                                                                                                                            survivor No. Observations:
         output: [
        Dep. Variable:
Model:
Method:
                                                                                                 Probit Df Residuals: 8.060000e+02

MLE Df Model: 4.000000e+00

Thu, 15 Jun 2023 Pseudo R-squ.: 2.086000e-01

15:08:46 Log-Likelihood: -4.032400e+02

True LL-Null: -5.095000e+02

IIR n-value: 7.648000e-45,
           Date:
                                                                                             Thu, 15 Jun 2023
         Time:
       | True | LL-Null: -5.99500e-02 | Covariance Type: | non-obst | LLR | p-value: | 7.64800e-04 | Covariance Type: | non-obst | LLR | p-value: | 7.64800e-04 | Covariance Type: | non-obst | LLR | p-value: | 7.64800e-04 | Covariance Type: | non-obst | LLR | p-value: | 7.64800e-04 | Covariance Type: | non-obst | LLR | p-value: | 7.64800e-04 | Covariance Type: | 1.55000e-01 | Covariance Type: | 1.55000e-01 | Covariance Type: | 1.65000e-01 | 1.65000e-01 | Covariance Type: | 1.65000e-01 | Covariance 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 coef
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        std err ...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               [0.025
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0.975]
         [5 rows x 6 columns]]
timestamp: 2023-06-15-15084678
         comments:
              INFO:acro:Directory outputs/ already exists
INFO:acro:output written to: stata_out.json
         outputs and stata\_out.json written
        end of do-file
5.
```

