

```
. gen var4=bankdepend*ROA1
```

```
. xtreg BankDebt2 var1
```

```
Random-effects GLS regression              Number of obs   =    94296
Group variable: firmno                    Number of groups  =    19782

R-sq:  within = 0.0023                    obs per group: min =     1
       between = 0.0000                    avg           =    4.8
       overall = 0.0005                    max           =    13

Random effects u_i ~ Gaussian              wald chi2(1)     =   151.16
corr(u_i, X) = 0 (assumed)                Prob > chi2      =    0.0000
```

BankDebt2	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
var1	-.0616647	.0050155	-12.29	0.000	-.0714949	-.0518345
_cons	.4401204	.0023566	186.76	0.000	.4355016	.4447392
sigma_u	.27034116					
sigma_e	.27365362					
rho	.49391109	(fraction of variance due to u_i)				

```
. edit
- preserve
```

```
. xtreg BankDebt2 var1 var2 var3 var4
```

```
Random-effects GLS regression              Number of obs   =    94296
Group variable: firmno                    Number of groups  =    19782

R-sq:  within = 0.0042                    obs per group: min =     1
       between = 0.0149                    avg           =    4.8
       overall = 0.0094                    max           =    13

Random effects u_i ~ Gaussian              wald chi2(4)     =   591.64
corr(u_i, X) = 0 (assumed)                Prob > chi2      =    0.0000
```

BankDebt2	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
var1	.0109034	.0072112	1.51	0.131	-.0032303	.0250372
var2	-.7489599	.2326384	-3.22	0.001	-1.204923	-.292997
var3	.0556903	.0944965	0.59	0.556	-.1295195	.2409001
var4	-.3800439	.0388808	-9.77	0.000	-.4562489	-.3038389
_cons	.4586735	.0031199	147.02	0.000	.4525587	.4647883
sigma_u	.26679923					
sigma_e	.27331524					
rho	.48793762	(fraction of variance due to u_i)				

```
. xtreg BankDebt2 var1 var2 var3 var4, fe
```

```
Fixed-effects (within) regression          Number of obs   =    94296
Group variable: firmno                    Number of groups  =    19782

R-sq:  within = 0.0047                    obs per group: min =     1
       between = 0.0042                    avg           =    4.8
       overall = 0.0036                    max           =    13

corr(u_i, Xb) = -0.0105                    F(3,74511)       =   118.40
                                           Prob > F         =    0.0000
```

BankDebt2	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
var1	.0048941	.0079726	0.61	0.539	-.0107322	.0205204
var2	-2.347553	.2698229	-8.70	0.000	-2.876405	-1.818701
var3	.7398001	.1095647	6.75	0.000	.5250539	.9545464
var4	(dropped)					
_cons	.4341372	.0013512	321.29	0.000	.4314888	.4367856
sigma_u	.31816838					
sigma_e	.27331524					
rho	.57539801	(fraction of variance due to u_i)				

```
F test that all u_i=0:      F(19781, 74511) =    4.70      Prob > F = 0.0000
```