(R)
Statistics/Data Analysis

7	**522**	**.2916174**	**.2782884**	**.3061603**	**.0082511**	**.2908255**
8	**522**	**.3239885**	**.3061906**	**.3421507**	**.0102721**	**.3235635**
9	**522**	**.3683848**	**.3422715**	**.3993648**	**.0158872**	**.3686695**
10	**521**	**.462891**	**.3996781**	**1**	**.0615626**	**.446676**
Total	**5218**	**.2658209**	**0**	**1**	**.0981052**	**.2531885**

```
1 . gen highriskinstitution25 =.
  (5,240 missing values generated)

2 .
3 . replace highriskinstitution25 =1 if rasiomodal>0.3236399
  (1,326 real changes made)

4 .
5 . replace highriskinstitution25 =0 if rasiomodal<0.3236399
  (3,914 real changes made)

6 .
7 . summarize highriskinstitution25, detail
```

highriskinstitution25

Percentiles		Smallest		
1%	**0**	**0**		
5%	**0**	**0**		
10%	**0**	**0**	Obs	**5,240**
25%	**0**	**0**	Sum of Wgt.	**5,240**
50%	**0**		Mean	**.2530534**
	Largest		Std. Dev.	**.4348028**
75%	**1**	**1**		
90%	**1**	**1**	Variance	**.1890535**
95%	**1**	**1**	Skewness	**1.13601**
99%	**1**	**1**	Kurtosis	**2.290518**

```
8 .
9 . summarize highriskinstitution25
```

Variable	Obs	Mean	Std. Dev.	Min	Max
highriski~25	**5,240**	**.2530534**	**.4348028**	**0**	**1**

```
10 . gen highriskinstitution50 =.
   (5,240 missing values generated)

11 .
12 . replace highriskinstitution50 =1 if rasiomodal>0.2532205
   (2,630 real changes made)

13 .
14 . replace highriskinstitution50 =0 if rasiomodal<0.2532205
   (2,610 real changes made)
```

```
15 .
16 . summarize highriskinstitution50, detail
```

highriskinstitution50

Percentiles		Smallest		
1%	0	0		
5%	0	0		
10%	0	0	Obs	5,240
25%	0	0	Sum of Wgt.	5,240
50%	1		Mean	.5019084
		Largest	Std. Dev.	.5000441
75%	1	1		
90%	1	1	Variance	.2500441
95%	1	1	Skewness	-.0076336
99%	1	1	Kurtosis	1.000058

```
17 .
18 . summarize highriskinstitution50
```

Variable	Obs	Mean	Std. Dev.	Min	Max
highriski~50	5,240	.5019084	.5000441	0	1

```
19 . gen highriskinstitution75 =.
(5,240 missing values generated)

20 .
21 . replace highriskinstitution75 =1 if rasiomodal>0.195118
(3,934 real changes made)

22 .
23 . replace highriskinstitution75 =0 if rasiomodal<0.195118
(1,306 real changes made)

24 .
25 . summarize highriskinstitution75, detail
```

highriskinstitution75

Percentiles		Smallest		
1%	0	0		
5%	0	0		
10%	0	0	Obs	5,240
25%	1	0	Sum of Wgt.	5,240
50%	1		Mean	.7507634
		Largest	Std. Dev.	.4326124
75%	1	1		
90%	1	1	Variance	.1871535
95%	1	1	Skewness	-1.159409
99%	1	1	Kurtosis	2.344229

```
26 .
27 . summarize highriskinstitution75
```

Variable	Obs	Mean	Std. Dev.	Min	Max
highriski~75	**5,240**	**.7507634**	**.4326124**	**0**	**1**

```
28 . gen highriskinstitution10 =.
(5,240 missing values generated)

29 .
30 . replace highriskinstitution10 =1 if rasiomodal >0.3996781
(542 real changes made)

31 .
32 . replace highriskinstitution10 =0 if rasiomodal <0.3996781
(4,698 real changes made)

33 .
34 . summarize highriskinstitution10, detail
```

highriskinstitution10

Percentiles		Smallest		
1%	**0**	**0**		
5%	**0**	**0**		
10%	**0**	**0**	Obs	**5,240**
25%	**0**	**0**	Sum of Wgt.	**5,240**
50%	**0**		Mean	**.1034351**
		Largest	Std. Dev.	**.3045554**
75%	**0**	**1**		
90%	**1**	**1**	Variance	**.092754**
95%	**1**	**1**	Skewness	**2.60447**
99%	**1**	**1**	Kurtosis	**7.783265**

```
35 .
36 . summarize highriskinstitution10
```

Variable	Obs	Mean	Std. Dev.	Min	Max
highriski~10	**5,240**	**.1034351**	**.3045554**	**0**	**1**

```
37 . gen highriskinstitution20 =.
(5,240 missing values generated)

38 .
39 . replace highriskinstitution20 =1 if rasiomodal >0.3422715
(1,065 real changes made)

40 .
41 . replace highriskinstitution20 =0 if rasiomodal <0.3422715
(4,175 real changes made)
```

```
42 .
43 . summarize highriskinstitution20, detail
```

highriskinstitution20

Percentiles		Smallest		
1%	0	0		
5%	0	0		
10%	0	0	Obs	5,240
25%	0	0	Sum of Wgt.	5,240
50%	0		Mean	.2032443
		Largest	Std. Dev.	.4024512
75%	0	1		
90%	1	1	Variance	.1619669
95%	1	1	Skewness	1.474882
99%	1	1	Kurtosis	3.175278

```
44 .
45 . summarize highriskinstitution20
```

Variable	Obs	Mean	Std. Dev.	Min	Max
highriski~20	5,240	.2032443	.4024512	0	1

```
46 . gen highriskinstitution30 =.
(5,240 missing values generated)

47 .
48 . replace highriskinstitution30 =1 if rasiomodal >0.3061906
(1,586 real changes made)

49 .
50 . replace highriskinstitution30 =0 if rasiomodal <0.3061906
(3,654 real changes made)

51 .
52 . summarize highriskinstitution30, detail
```

highriskinstitution30

Percentiles		Smallest		
1%	0	0		
5%	0	0		
10%	0	0	Obs	5,240
25%	0	0	Sum of Wgt.	5,240
50%	0		Mean	.3026718
		Largest	Std. Dev.	.4594582
75%	1	1		
90%	1	1	Variance	.2111019
95%	1	1	Skewness	.8590425
99%	1	1	Kurtosis	1.737954

```
53 .
54 . summarize highriskinstitution30
```

Variable	Obs	Mean	Std. Dev.	Min	Max
highriski~30	**5,240**	**.3026718**	**.4594582**	**0**	**1**

```
55 . gen highriskinstitution40 =.
(5,240 missing values generated)

56 .
57 . replace highriskinstitution40 =1 if rasiomodal >0.2782884
(2,108 real changes made)

58 .
59 . replace highriskinstitution40 =0 if rasiomodal <0.2782884
(3,132 real changes made)

60 .
61 . summarize highriskinstitution40, detail
```

highriskinstitution40

Percentiles		Smallest		
1%	**0**	**0**		
5%	**0**	**0**		
10%	**0**	**0**	Obs	**5,240**
25%	**0**	**0**	Sum of Wgt.	**5,240**
50%	**0**		Mean	**.4022901**
		Largest	Std. Dev.	**.4904066**
75%	**1**	**1**		
90%	**1**	**1**	Variance	**.2404987**
95%	**1**	**1**	Skewness	**.3985234**
99%	**1**	**1**	Kurtosis	**1.158821**

```
62 .
63 . summarize highriskinstitution40
```

Variable	Obs	Mean	Std. Dev.	Min	Max
highriski~40	**5,240**	**.4022901**	**.4904066**	**0**	**1**

```
64 . gen highriskinstitution60 =.
(5,240 missing values generated)

65 .
66 . replace highriskinstitution60 =1 if rasiomodal >0.2300607
(3,151 real changes made)

67 .
68 . replace highriskinstitution60 =0 if rasiomodal <0.2300607
(2,089 real changes made)
```

```
69 .
70 . summarize highriskinstitution60, detail
```

highriskinstitution60

Percentiles		Smallest		
1%	0	0		
5%	0	0		
10%	0	0	Obs	5,240
25%	0	0	Sum of Wgt.	5,240
50%	1		Mean	.6013359
		Largest	Std. Dev.	.4896701
75%	1	1		
90%	1	1	Variance	.2397768
95%	1	1	Skewness	-.413934
99%	1	1	Kurtosis	1.171341

```
71 .
72 . summarize highriskinstitution60
```

Variable	Obs	Mean	Std. Dev.	Min	Max
highriski~60	5,240	.6013359	.4896701	0	1

```
73 . gen highriskinstitution70 =.
(5,240 missing values generated)

74 .
75 . replace highriskinstitution70 =1 if rasiomodal >0.2063678
(3,673 real changes made)

76 .
77 . replace highriskinstitution70 =0 if rasiomodal <0.2063678
(1,567 real changes made)

78 .
79 . summarize highriskinstitution70, detail
```

highriskinstitution70

Percentiles		Smallest		
1%	0	0		
5%	0	0		
10%	0	0	Obs	5,240
25%	0	0	Sum of Wgt.	5,240
50%	1		Mean	.7009542
		Largest	Std. Dev.	.4578836
75%	1	1		
90%	1	1	Variance	.2096574
95%	1	1	Skewness	-.877836
99%	1	1	Kurtosis	1.770596

```
80 .
81 . summarize highriskinstitution70
```

Variable	Obs	Mean	Std. Dev.	Min	Max
highriski~70	**5,240**	**.7009542**	**.4578836**	**0**	**1**

```
82 . gen highriskinstitution80 =.
(5,240 missing values generated)

83 .
84 . replace highriskinstitution80 =1 if rasiomodal >0.1835068
(4,195 real changes made)

85 .
86 . replace highriskinstitution80 =0 if rasiomodal <0.1835068
(1,045 real changes made)

87 .
88 . summarize highriskinstitution80, detail
```

highriskinstitution80

Percentiles		Smallest		
1%	**0**	**0**		
5%	**0**	**0**		
10%	**0**	**0**	Obs	**5,240**
25%	**1**	**0**	Sum of Wgt.	**5,240**
50%	**1**		Mean	**.8005725**
		Largest	Std. Dev.	**.3996081**
75%	**1**	**1**		
90%	**1**	**1**	Variance	**.1596866**
95%	**1**	**1**	Skewness	**-1.50448**
99%	**1**	**1**	Kurtosis	**3.26346**

```
89 .
90 . summarize highriskinstitution80
```

Variable	Obs	Mean	Std. Dev.	Min	Max
highriski~80	**5,240**	**.8005725**	**.3996081**	**0**	**1**

```
91 . gen highriskinstitution90 =.
(5,240 missing values generated)

92 .
93 . replace highriskinstitution90 =1 if rasiomodal >0.1524969
(4,718 real changes made)

94 .
95 . replace highriskinstitution90 =0 if rasiomodal <0.1524969
(522 real changes made)
```

```
 96 .
 97 . summarize highriskinstitution90, detail
```

highriskinstitution90

Percentiles		Smallest		
1%	**0**	**0**		
5%	**0**	**0**		
10%	**1**	**0**	Obs	**5,240**
25%	**1**	**0**	Sum of Wgt.	**5,240**
50%	**1**		Mean	**.9003817**
		Largest	Std. Dev.	**.299519**
75%	**1**	**1**		
90%	**1**	**1**	Variance	**.0897116**
95%	**1**	**1**	Skewness	**-2.673753**
99%	**1**	**1**	Kurtosis	**8.148954**

```
 98 .
 99 . summarize highriskinstitution90
```

Variable	Obs	Mean	Std. Dev.	Min	Max
highriski~90	**5,240**	**.9003817**	**.299519**	**0**	**1**

```
100 . gen polXhighrisk25= Policy * highriskinstitution25

101 .
102 . gen polXhighrisk50= Policy * highriskinstitution50

103 .
104 . gen polXhighrisk75= Policy * highriskinstitution75

105 .
106 .
107 .
108 . gen polXhighrisk10= Policy * highriskinstitution10

109 .
110 . gen polXhighrisk20= Policy * highriskinstitution20

111 .
112 . gen polXhighrisk30= Policy * highriskinstitution30

113 .
114 . gen polXhighrisk40= Policy * highriskinstitution40

115 .
116 . gen polXhighrisk60= Policy * highriskinstitution60

117 .
118 . gen polXhighrisk70= Policy * highriskinstitution70
```

```
119 .
120 . gen polXhighrisk80= Policy * highriskinstitution80

121 .
122 . gen polXhighrisk90= Policy * highriskinstitution90

123 . generate timerescale = year - 2014 if highriskinstitution20 ==1
(4,175 missing values generated)

124 .
125 . replace timerescale = year - 2014 if highriskinstitution20 ==0
(4,175 real changes made)

126 .
127 . gen timerescaleXhighrisk = timerescale* highriskinstitution20

128 .
129 . xtreg rasiokerugian  timerescale timerescaleXhighrisk  i.year, fe cluster( id ), if timerescale<
> 0
note: 2013.year omitted because of collinearity

Fixed-effects (within) regression               Number of obs      =         2,598
Group variable:  id                             Number of groups   =           523

R-sq:                                           Obs per group:
     within  =  0.0521                                         min =             4
     between =  0.0340                                         avg =           5.0
     overall =  0.0313                                         max =             5

                                                F(    5,522)               =     11.28
corr(u_i, Xb)  =  -0.0302                       Prob > F             =     0.0000

                                          (Std. Err. adjusted for     523 clusters in id)
------------------------------------------------------------------------------
             |               Robust
rasiokerugian|      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
  timerescale |  -.0021941   .000316    -6.94   0.000    -.0028148   -.0015733
timerescaleX~k|   .0002694   .0003217    0.84   0.403    -.0003625    .0009014
             |
        year |
        2010 |  -.0046121   .0009313   -4.95   0.000    -.0064418   -.0027825
        2011 |  -.0027537   .0006612   -4.16   0.000    -.0040527   -.0014548
        2012 |  -.0009069   .0005479   -1.66   0.098    -.0019831    .0001694
        2013 |           0  (omitted)
             |
       _cons |     .00063   .000637     0.99   0.323    -.0006213    .0018814
-------------+----------------------------------------------------------------
     sigma_u |  .00842468
     sigma_e |  .01406675
         rho |  .26399681   (fraction of variance due to u_i)
------------------------------------------------------------------------------
```

```
130 . regress rasiokerugian Policy highriskinstitution20 polXhighrisk20
```

Source	SS	df	MS	Number of obs	=	5,218
				F(3, 5214)	=	41.20
Model	.018273335	3	.006091112	Prob > F	=	0.0000
Residual	.770884388	5,214	.000147849	R-squared	=	0.0232
				Adj R-squared	=	0.0226
Total	.789157723	5,217	.000151267	Root MSE	=	.01216

rasiokerugian	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
Policy	-.0021038	.0003765	-5.59	0.000	-.0028419	-.0013658
highriskinstitution20	.0041701	.0005794	7.20	0.000	.0030342	.0053059
polXhighrisk20	-.0027051	.0008439	-3.21	0.001	-.0043595	-.0010506
_cons	.0044299	.0002695	16.44	0.000	.0039016	.0049582

```
131 .
132 . xtreg rasiokerugian Policy highriskinstitution20 polXhighrisk20 , re
```

Random-effects GLS regression — Number of obs = 5,218
Group variable: id — Number of groups = 524

R-sq:
within = 0.0159
between = 0.0762
overall = 0.0227

Obs per group:
min = 5
avg = 10.0
max = 10

Wald chi2(3) = 103.45
corr(u_i, X) = 0 (assumed) — Prob > chi2 = 0.0000

rasiokerugian	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
Policy	-.0021805	.0003607	-6.05	0.000	-.0028874	-.0014736
highriskinstitution20	.0032933	.0006069	5.43	0.000	.0021038	.0044828
polXhighrisk20	-.002524	.0008227	-3.07	0.002	-.0041365	-.0009115
_cons	.0046343	.0003072	15.08	0.000	.0040321	.0052365
sigma_u	.00363042					
sigma_e	.01155872					
rho	.0897913	(fraction of variance due to u_i)				

```
133 .
134 . xtreg rasiokerugian Policy highriskinstitution20 polXhighrisk20 , fe
```

Fixed-effects (within) regression — Number of obs = 5,218
Group variable: id — Number of groups = 524

R-sq:
within = 0.0175
between = 0.0313
overall = 0.0170

Obs per group:
min = 5
avg = 10.0
max = 10

F(3,4691) = 27.82
corr(u_i, Xb) = 0.0239 — Prob > F = 0.0000

rasiokerugian	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
Policy	-.0023142	.000362	-6.39	0.000	-.0030239	-.0016046
highriskinstitution20	.0015452	.0006981	2.21	0.027	.0001765	.0029139
polXhighrisk20	-.0022804	.0008412	-2.71	0.007	-.0039295	-.0006313
_cons	.0050211	.0002729	18.40	0.000	.0044861	.0055561
sigma_u	.00537233					
sigma_e	.01155872					
rho	.17764911	(fraction of variance due to u_i)				

F test that all u_i=0: F(523, 4691) = 2.06 Prob > F = 0.0000

```
135 .
136 . quietly xtreg rasiokerugian Policy highriskinstitution20 polXhighrisk20 , fe

137 .
138 . estimates store fe

139 .
140 . quietly xtreg rasiokerugian Policy highriskinstitution20 polXhighrisk20 , re

141 .
142 . estimates store re

143 .
144 . hausman fe re
```

	Coefficients (b) fe	(B) re	(b-B) Difference	sqrt(diag(V_b-V_B)) S.E.
Policy	-.0023142	-.0021805	-.0001337	.0000305
highriski~20	.0015452	.0032933	-.0017481	.0003451
polXhighr~20	-.0022804	-.002524	.0002436	.0001752

b = consistent under Ho and Ha; obtained from xtreg
B = inconsistent under Ha, efficient under Ho; obtained from xtreg

Test: Ho: difference in coefficients not systematic

chi2(3) = (b-B)'[(V_b-V_B)^(-1)](b-B)
= 25.68
Prob>chi2 = 0.0000
(V_b-V_B is not positive definite)

```
145 .
146 . vif, uncentered
```

Variable	VIF	1/VIF
polXhighr~20	2.08	0.480597
highriski~20	1.86	0.538830
Policy	1.22	0.816412
Mean VIF	1.72	

```
147 .
148 . quietly regress rasiokerugian Policy highriskinstitution20 polXhighrisk20

149 .
150 . szroeter rasiokerugian Policy highriskinstitution20 polXhighrisk20

Szroeter's test for homoskedasticity

    Ho: variance constant
    Ha: variance monotonic in variable
```

Variable	chi2	df	p	
rasiokerug~n	**6328.22**	**1**	**0.0000**	**#**
Policy	**854.43**	**1**	**0.0000**	**#**
highriski~20	**644.38**	**1**	**0.0000**	**#**
polXhighr~20	**12.31**	**1**	**0.0004**	**#**

 # unadjusted p-values

```
151 . xtreg rasiokerugian Policy highriskinstitution20 polXhighrisk20, fe robust

Fixed-effects (within) regression               Number of obs      =       5,218
Group variable: id                              Number of groups   =         524

R-sq:                                           Obs per group:
     within  = 0.0175                                         min =           5
     between = 0.0313                                         avg =        10.0
     overall = 0.0170                                         max =          10

                                                F(   3,523)        =       17.42
corr(u_i, Xb)  = 0.0239                         Prob > F           =      0.0000

                                              (Std. Err. adjusted for     524 clusters in id)
```

rasiokerugian	Coef.	Robust Std. Err.	t	P>|t|	[95% Conf.	Interval]
Policy	**-.0023142**	**.0003465**	**-6.68**	**0.000**	**-.0029948**	**-.0016336**
highriskinstitution20	**.0015452**	**.0012107**	**1.28**	**0.202**	**-.0008333**	**.0039236**
polXhighrisk20	**-.0022804**	**.0011616**	**-1.96**	**0.050**	**-.0045624**	**1.65e-06**
_cons	**.0050211**	**.0002397**	**20.94**	**0.000**	**.0045501**	**.0054921**
sigma_u	**.00537233**					
sigma_e	**.01155872**					
rho	**.17764911**	(fraction of variance due to u_i)				

```
152 . xtreg rasiokerugian Policy highriskinstitution20 polXhighrisk20 Jumlahauditor , fe robust

Fixed-effects (within) regression               Number of obs      =       5,218
Group variable: id                              Number of groups   =         524

R-sq:                                           Obs per group:
     within  = 0.0181                                         min =           5
     between = 0.0392                                         avg =        10.0
     overall = 0.0208                                         max =          10

                                                F(   4,523)        =       16.76
corr(u_i, Xb)  = 0.0370                         Prob > F           =      0.0000
```

(Std. Err. adjusted for **524** clusters in id)

rasiokerugian	Coef.	Robust Std. Err.	t	P>|t|	[95% Conf.	Interval]
Policy	**-.0020008**	**.0004191**	**-4.77**	**0.000**	**-.0028241**	**-.0011775**
highriskinstitution20	**.0015417**	**.0012098**	**1.27**	**0.203**	**-.0008349**	**.0039183**
polXhighrisk20	**-.0023332**	**.0011514**	**-2.03**	**0.043**	**-.0045952**	**-.0000712**
Jumlahauditor	**-.0000634**	**.0000364**	**-1.74**	**0.082**	**-.000135**	**8.19e-06**
_cons	**.0054847**	**.0003696**	**14.84**	**0.000**	**.0047586**	**.0062108**
sigma_u	**.0053264**					
sigma_e	**.0115563**					
rho	**.17521457**	(fraction of variance due to u_i)				

153 . xtreg rasiokerugian Policy highriskinstitution20 polXhighrisk20 Jumlahauditor lnBelanjapengawasa
> n , fe robust

Fixed-effects (within) regression — Number of obs = **5,208**
Group variable: **id** — Number of groups = **524**

R-sq:
within = **0.0223**
between = **0.0008**
overall = **0.0123**

Obs per group:
min = **5**
avg = **9.9**
max = **10**

F(**5,523**) = **12.91**
corr(u_i, Xb) = **-0.1490** — Prob > F = **0.0000**

(Std. Err. adjusted for **524** clusters in id)

rasiokerugian	Coef.	Robust Std. Err.	t	P>|t|	[95% Conf.	Interval]
Policy	**-.0009916**	**.0003791**	**-2.62**	**0.009**	**-.0017363**	**-.000247**
highriskinstitution20	**.0014217**	**.0012**	**1.18**	**0.237**	**-.0009357**	**.0037792**
polXhighrisk20	**-.0022778**	**.0011509**	**-1.98**	**0.048**	**-.0045387**	**-.0000169**
Jumlahauditor	**-.0000492**	**.0000385**	**-1.28**	**0.202**	**-.0001249**	**.0000265**
lnBelanjapengawasan	**-.0024891**	**.0007098**	**-3.51**	**0.000**	**-.0038836**	**-.0010947**
_cons	**.0607947**	**.015722**	**3.87**	**0.000**	**.0299086**	**.0916808**
sigma_u	**.00555283**					
sigma_e	**.01153835**					
rho	**.18804914**	(fraction of variance due to u_i)				

154 . gen polXrasiomodal= Policy * rasiomodal
(22 missing values generated)

155 .
156 . xtreg rasiokerugian Policy rasiomodal polXrasiomodal Jumlahauditor lnBelanjapengawasan , fe robu
> st

Fixed-effects (within) regression — Number of obs = **5,208**
Group variable: **id** — Number of groups = **524**

R-sq:
within = **0.0222**
between = **0.0019**
overall = **0.0131**

Obs per group:
min = **5**
avg = **9.9**
max = **10**

F(**5,523**) = **13.11**
corr(u_i, Xb) = **-0.1428** — Prob > F = **0.0000**

(Std. Err. adjusted for **524** clusters in id)

rasiokerugian	Coef.	Robust Std. Err.	t	P>|t|	[95% Conf.	Interval]
Policy	**.0008142**	**.0009341**	**0.87**	**0.384**	**-.0010208**	**.0026491**
rasiomodal	**.0058099**	**.0040943**	**1.42**	**0.156**	**-.0022335**	**.0138533**
polXrasiomodal	**-.0085445**	**.0041656**	**-2.05**	**0.041**	**-.0167279**	**-.0003611**
Jumlahauditor	**-.0000491**	**.0000381**	**-1.29**	**0.199**	**-.000124**	**.0000259**
lnBelanjapengawasan	**-.00252**	**.0007189**	**-3.51**	**0.000**	**-.0039323**	**-.0011078**
_cons	**.0602703**	**.0157882**	**3.82**	**0.000**	**.0292543**	**.0912864**
sigma_u	**.0055354**					
sigma_e	**.01153872**					
rho	**.18708114**	(fraction of variance due to u_i)				

157 . xtreg rasiokerugian Policy highriskinstitution10 polXhighrisk10 Jumlahauditor lnBelanjapengawasa
> n , fe robust

Fixed-effects (within) regression — Number of obs = **5,208**
Group variable: **id** — Number of groups = **524**

R-sq:
within = **0.0221**
between = **0.0012**
overall = **0.0082**

Obs per group:
min = **5**
avg = **9.9**
max = **10**

F(**5,523**) = **14.97**
corr(u_i, Xb) = **-0.1963** — Prob > F = **0.0000**

(Std. Err. adjusted for **524** clusters in id)

rasiokerugian	Coef.	Robust Std. Err.	t	P>|t|	[95% Conf.	Interval]
Policy	**-.0012604**	**.0003812**	**-3.31**	**0.001**	**-.0020093**	**-.0005114**
highriskinstitution10	**-.0000452**	**.0015915**	**-0.03**	**0.977**	**-.0031718**	**.0030814**
polXhighrisk10	**-.0026004**	**.0012648**	**-2.06**	**0.040**	**-.0050852**	**-.0001156**
Jumlahauditor	**-.0000517**	**.0000395**	**-1.31**	**0.191**	**-.0001293**	**.0000259**
lnBelanjapengawasan	**-.0025033**	**.0007132**	**-3.51**	**0.000**	**-.0039043**	**-.0011023**
_cons	**.0614434**	**.0158101**	**3.89**	**0.000**	**.0303843**	**.0925025**
sigma_u	**.0056575**					
sigma_e	**.01153926**					
rho	**.19379356**	(fraction of variance due to u_i)				

158 . xtreg rasiokerugian Policy highriskinstitution20 polXhighrisk20 Jumlahauditor lnBelanjapengawasa
> n , fe robust

Fixed-effects (within) regression — Number of obs = **5,208**
Group variable: **id** — Number of groups = **524**

R-sq:
within = **0.0223**
between = **0.0008**
overall = **0.0123**

Obs per group:
min = **5**
avg = **9.9**
max = **10**

F(**5,523**) = **12.91**
corr(u_i, Xb) = **-0.1490** — Prob > F = **0.0000**

(Std. Err. adjusted for **524** clusters in id)

rasiokerugian	Coef.	Robust Std. Err.	t	P>|t|	[95% Conf.	Interval]
Policy	**-.0009916**	**.0003791**	**-2.62**	**0.009**	**-.0017363**	**-.000247**
highriskinstitution20	**.0014217**	**.0012**	**1.18**	**0.237**	**-.0009357**	**.0037792**
polXhighrisk20	**-.0022778**	**.0011509**	**-1.98**	**0.048**	**-.0045387**	**-.0000169**
Jumlahauditor	**-.0000492**	**.0000385**	**-1.28**	**0.202**	**-.0001249**	**.0000265**
lnBelanjapengawasan	**-.0024891**	**.0007098**	**-3.51**	**0.000**	**-.0038836**	**-.0010947**
_cons	**.0607947**	**.015722**	**3.87**	**0.000**	**.0299086**	**.0916808**
sigma_u	**.00555283**					
sigma_e	**.01153835**					
rho	**.18804914**	(fraction of variance due to u_i)				

159 . xtreg rasiokerugian Policy highriskinstitution25 polXhighrisk25 Jumlahauditor lnBelanjapengawasa
> n , fe robust

Fixed-effects (within) regression — Number of obs = **5,208**
Group variable: **id** — Number of groups = **524**

R-sq:
within = **0.0219**
between = **0.0024**
overall = **0.0133**

Obs per group:
min = **5**
avg = **9.9**
max = **10**

F(**5,523**) = **13.29**
corr(u_i, Xb) = **-0.1375** — Prob > F = **0.0000**

(Std. Err. adjusted for **524** clusters in id)

rasiokerugian	Coef.	Robust Std. Err.	t	P>|t|	[95% Conf.	Interval]
Policy	**-.0010485**	**.0003741**	**-2.80**	**0.005**	**-.0017835**	**-.0003136**
highriskinstitution25	**.0014638**	**.0009721**	**1.51**	**0.133**	**-.0004459**	**.0033735**
polXhighrisk25	**-.0015999**	**.0011333**	**-1.41**	**0.159**	**-.0038263**	**.0006264**
Jumlahauditor	**-.0000479**	**.000038**	**-1.26**	**0.208**	**-.0001227**	**.0000268**
lnBelanjapengawasan	**-.0024787**	**.0007114**	**-3.48**	**0.001**	**-.0038763**	**-.0010812**
_cons	**.0604766**	**.0157594**	**3.84**	**0.000**	**.029517**	**.0914362**
sigma_u	**.00552345**					
sigma_e	**.01154071**					
rho	**.18637269**	(fraction of variance due to u_i)				

160 . xtreg rasiokerugian Policy highriskinstitution30 polXhighrisk30 Jumlahauditor lnBelanjapengawasa
> n , fe robust

Fixed-effects (within) regression — Number of obs = **5,208**
Group variable: **id** — Number of groups = **524**

R-sq:
within = **0.0217**
between = **0.0018**
overall = **0.0128**

Obs per group:
min = **5**
avg = **9.9**
max = **10**

F(**5,523**) = **14.78**
corr(u_i, Xb) = **-0.1408** — Prob > F = **0.0000**

(Std. Err. adjusted for **524** clusters in id)

rasiokerugian	Coef.	Robust Std. Err.	t	P>|t|	[95% Conf.	Interval]
Policy	**-.0010518**	**.0003632**	**-2.90**	**0.004**	**-.0017653**	**-.0003384**
highriskinstitution30	**.0012636**	**.0008681**	**1.46**	**0.146**	**-.0004419**	**.002969**
polXhighrisk30	**-.0013799**	**.0010548**	**-1.31**	**0.191**	**-.0034521**	**.0006923**
Jumlahauditor	**-.0000474**	**.0000382**	**-1.24**	**0.214**	**-.0001224**	**.0000276**
lnBelanjapengawasan	**-.0024829**	**.0007142**	**-3.48**	**0.001**	**-.0038859**	**-.0010798**
_cons	**.0605705**	**.0158316**	**3.83**	**0.000**	**.0294692**	**.0916718**
sigma_u	**.00553117**					
sigma_e	**.011542**					
rho	**.18676229**	(fraction of variance due to u_i)				

161 . xtreg rasiokerugian Policy highriskinstitution40 polXhighrisk40 Jumlahauditor lnBelanjapengawasa
> n , fe robust

Fixed-effects (within) regression — Number of obs = **5,208**
Group variable: **id** — Number of groups = **524**

R-sq:
within = **0.0226**
between = **0.0054**
overall = **0.0154**

Obs per group:
min = **5**
avg = **9.9**
max = **10**

F(**5,523**) = **14.84**
corr(u_i, Xb) = **-0.1234** — Prob > F = **0.0000**

(Std. Err. adjusted for **524** clusters in id)

rasiokerugian	Coef.	Robust Std. Err.	t	P>|t|	[95% Conf.	Interval]
Policy	**-.0009467**	**.0003502**	**-2.70**	**0.007**	**-.0016348**	**-.0002587**
highriskinstitution40	**.0017944**	**.0008176**	**2.19**	**0.029**	**.0001883**	**.0034005**
polXhighrisk40	**-.0014453**	**.0009372**	**-1.54**	**0.124**	**-.0032865**	**.0003959**
Jumlahauditor	**-.0000444**	**.000038**	**-1.17**	**0.243**	**-.0001191**	**.0000302**
lnBelanjapengawasan	**-.0024857**	**.0007171**	**-3.47**	**0.001**	**-.0038944**	**-.0010771**
_cons	**.0603124**	**.0159114**	**3.79**	**0.000**	**.0290543**	**.0915706**
sigma_u	**.00549101**					
sigma_e	**.01153649**					
rho	**.1847025**	(fraction of variance due to u_i)				

162 . xtreg rasiokerugian Policy highriskinstitution50 polXhighrisk50 Jumlahauditor lnBelanjapengawasa
> n , fe robust

Fixed-effects (within) regression — Number of obs = **5,208**
Group variable: **id** — Number of groups = **524**

R-sq:
within = **0.0225**
between = **0.0026**
overall = **0.0137**

Obs per group:
min = **5**
avg = **9.9**
max = **10**

F(**5,523**) = **13.18**
corr(u_i, Xb) = **-0.1400** — Prob > F = **0.0000**

(Std. Err. adjusted for **524** clusters in id)

rasiokerugian	Coef.	Robust Std. Err.	t	P>|t|	[95% Conf.	Interval]
Policy	**-.0006606**	**.0003794**	**-1.74**	**0.082**	**-.0014059**	**.0000847**
highriskinstitution50	**.0015563**	**.000756**	**2.06**	**0.040**	**.0000711**	**.0030416**
polXhighrisk50	**-.0017002**	**.0007768**	**-2.19**	**0.029**	**-.0032262**	**-.0001743**
Jumlahauditor	**-.0000476**	**.0000381**	**-1.25**	**0.213**	**-.0001225**	**.0000273**
lnBelanjapengawasan	**-.0025183**	**.0007188**	**-3.50**	**0.000**	**-.0039304**	**-.0011061**
_cons	**.0610279**	**.0159566**	**3.82**	**0.000**	**.029681**	**.0923747**
sigma_u	**.00552681**					
sigma_e	**.01153723**					
rho	**.1866482**	(fraction of variance due to u_i)				

163 . regress rasiokerugian Policy rasiomodal polXrasiomodal

Source	SS	df	MS		
Model	**.020671507**	**3**	**.006890502**	Number of obs	= **5,218**
Residual	**.768486217**	**5,214**	**.000147389**	F(3, 5214)	= **46.75**
Total	**.789157723**	**5,217**	**.000151267**	Prob > F	= **0.0000**
				R-squared	= **0.0262**
				Adj R-squared	= **0.0256**
				Root MSE	= **.01214**

rasiokerugian	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
Policy	**-.0011577**	**.0010211**	**-1.13**	**0.257**	**-.0031595**	**.0008442**
rasiomodal	**.0166378**	**.0021189**	**7.85**	**0.000**	**.0124838**	**.0207918**
polXrasiomodal	**-.006395**	**.0036083**	**-1.77**	**0.076**	**-.0134687**	**.0006787**
_cons	**.0009843**	**.0006028**	**1.63**	**0.103**	**-.0001974**	**.0021659**

164 .
165 . xtreg rasiokerugian Policy rasiomodal polXrasiomodal , re

Random-effects GLS regression — Number of obs = **5,218**
Group variable: **id** — Number of groups = **524**

R-sq:
- within = **0.0158**
- between = **0.0851**
- overall = **0.0259**

Obs per group:
- min = **5**
- avg = **10.0**
- max = **10**

Wald chi2(**3**) = **112.95**
corr(u_i, X) = **0** (assumed) — Prob > chi2 = **0.0000**

rasiokerugian	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
Policy	**-.0011263**	**.0009948**	**-1.13**	**0.258**	**-.003076**	**.0008234**
rasiomodal	**.0138955**	**.0022762**	**6.10**	**0.000**	**.0094343**	**.0183567**
polXrasiomodal	**-.0064678**	**.0035224**	**-1.84**	**0.066**	**-.0133717**	**.000436**
_cons	**.0017138**	**.0006566**	**2.61**	**0.009**	**.0004269**	**.0030006**
sigma_u	**.00360766**					
sigma_e	**.01155943**					
rho	**.08875868**	(fraction of variance due to u_i)				

```
166 .
167 . xtreg rasiokerugian Policy rasiomodal polXrasiomodal , fe

Fixed-effects (within) regression               Number of obs      =         5,218
Group variable: id                              Number of groups   =           524

R-sq:                                           Obs per group:
     within  = 0.0174                                         min =             5
     between = 0.0583                                         avg =          10.0
     overall = 0.0188                                         max =            10

                                                F(3,4691)          =         27.62
corr(u_i, Xb)  = 0.0386                         Prob > F           =        0.0000

------------------------------------------------------------------------------
 rasiokerugian |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
---------------+--------------------------------------------------------------
        Policy |  -.0006584   .0010216    -0.64   0.519    -.0026612    .0013444
    rasiomodal |   .0062439   .0028578     2.18   0.029     .0006413    .0118466
polXrasiomodal |  -.0080647   .0036245    -2.23   0.026    -.0151703   -.0009591
         _cons |   .0037231   .0007815     4.76   0.000     .0021909    .0052553
---------------+--------------------------------------------------------------
       sigma_u |  .00534745
       sigma_e |  .01155943
           rho |  .17627922   (fraction of variance due to u_i)
------------------------------------------------------------------------------
F test that all u_i=0: F(523, 4691) = 2.03                     Prob > F = 0.0000

168 .
169 . quietly xtreg rasiokerugian Policy rasiomodal polXrasiomodal , fe

170 .
171 . estimates store fe

172 .
173 . quietly xtreg rasiokerugian Policy rasiomodal polXrasiomodal , re

174 .
175 . estimates store re

176 .
177 . hausman fe re

                 ---- Coefficients ----
                |      (b)          (B)            (b-B)     sqrt(diag(V_b-V_B))
                |       fe           re         Difference          S.E.
----------------+----------------------------------------------------------------
         Policy |  -.0006584   -.0011263        .0004679        .0002326
     rasiomodal |   .0062439    .0138955       -.0076516        .0017281
polXrasiom~l    |  -.0080647   -.0064678       -.0015969        .0008538
------------------------------------------------------------------------------
                           b = consistent under Ho and Ha; obtained from xtreg
            B = inconsistent under Ha, efficient under Ho; obtained from xtreg

    Test:  Ho:  difference in coefficients not systematic

                  chi2(3) = (b-B)'[(V_b-V_B)^(-1)](b-B)
                          =          18.56
                Prob>chi2 =         0.0003
                (V_b-V_B is not positive definite)
```

```
178 .
179 . vif, uncentered
```

Variable	VIF	1/VIF
polXrasiom~l	**13.07**	**0.076514**
Policy	**12.08**	**0.082803**
rasiomodal	**1.99**	**0.501852**
Mean VIF	**9.05**	

```
180 .
181 . quietly regress rasiokerugian Policy rasiomodal polXrasiomodal

182 .
183 . szroeter rasiokerugian Policy rasiomodal polXrasiomodal
```

Szroeter's test for homoskedasticity

Ho: variance constant
Ha: variance monotonic in variable

Variable	chi2	df	p	
rasiokerug~n	**6324.64**	**1**	**0.0000**	**#**
Policy	**857.95**	**1**	**0.0000**	**#**
rasiomodal	**539.45**	**1**	**0.0000**	**#**
polXrasiom~l	**478.90**	**1**	**0.0000**	**#**

 # unadjusted p-values

```
184 .
185 . xtreg rasiokerugian Policy rasiomodal polXrasiomodal Jumlahauditor lnBelanjapengawasan , fe robu
> st
```

Fixed-effects (within) regression — Number of obs = **5,208**
Group variable: **id** — Number of groups = **524**

R-sq:
within = **0.0222**
between = **0.0019**
overall = **0.0131**

Obs per group:
min = **5**
avg = **9.9**
max = **10**

F(**5,523**) = **13.11**
corr(u_i, Xb) = **-0.1428** — Prob > F = **0.0000**

(Std. Err. adjusted for **524** clusters in id)

rasiokerugian	Coef.	Robust Std. Err.	t	P>|t|	[95% Conf.	Interval]
Policy	**.0008142**	**.0009341**	**0.87**	**0.384**	**-.0010208**	**.0026491**
rasiomodal	**.0058099**	**.0040943**	**1.42**	**0.156**	**-.0022335**	**.0138533**
polXrasiomodal	**-.0085445**	**.0041656**	**-2.05**	**0.041**	**-.0167279**	**-.0003611**
Jumlahauditor	**-.0000491**	**.0000381**	**-1.29**	**0.199**	**-.000124**	**.0000259**
lnBelanjapengawasan	**-.00252**	**.0007189**	**-3.51**	**0.000**	**-.0039323**	**-.0011078**
_cons	**.0602703**	**.0157882**	**3.82**	**0.000**	**.0292543**	**.0912864**
sigma_u	**.0055354**					
sigma_e	**.01153872**					
rho	**.18708114**	(fraction of variance due to u_i)				

```
186 . regress rasiokerugian Policy highriskinstitution10 polXhighrisk10
```

Source	SS	df	MS	Number of obs =	5,218
				F(3, 5214) =	32.87
Model	.014649481	3	.00488316	Prob > F =	0.0000
Residual	.774508242	5,214	.000148544	R-squared =	0.0186
				Adj R-squared =	0.0180
Total	.789157723	5,217	.000151267	Root MSE =	.01219

rasiokerugian	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
Policy	-.0023249	.0003559	-6.53	0.000	-.0030226	-.0016273
highriskinstitution10	.0039644	.0007153	5.54	0.000	.0025621	.0053667
polXhighrisk10	-.0026175	.0011692	-2.24	0.025	-.0049096	-.0003253
_cons	.0048238	.0002561	18.84	0.000	.0043218	.0053259

```
187 .
188 . xtreg rasiokerugian Policy highriskinstitution10 polXhighrisk10 , re
```

Random-effects GLS regression — Number of obs = 5,218
Group variable: id — Number of groups = 524

R-sq:
- within = 0.0147
- between = 0.0644
- overall = 0.0176

Obs per group:
- min = 5
- avg = 10.0
- max = 10

Wald chi2(3) = 85.82
corr(u_i, X) = 0 (assumed) — Prob > chi2 = 0.0000

rasiokerugian	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
Policy	-.0024217	.0003402	-7.12	0.000	-.0030885	-.001755
highriskinstitution10	.0026126	.0007433	3.51	0.000	.0011557	.0040695
polXhighrisk10	-.0025646	.0011423	-2.25	0.025	-.0048035	-.0003257
_cons	.0050134	.000294	17.05	0.000	.004437	.0055897
sigma_u	.00363089					
sigma_e	.01156053					
rho	.08978682	(fraction of variance due to u_i)				

```
189 .
190 . xtreg rasiokerugian Policy highriskinstitution10 polXhighrisk10 , fe
```

Fixed-effects (within) regression — Number of obs = 5,218
Group variable: id — Number of groups = 524

R-sq:
- within = 0.0172
- between = 0.0556
- overall = 0.0102

Obs per group:
- min = 5
- avg = 10.0
- max = 10

F(3,4691) = 27.32
corr(u_i, Xb) = -0.0409 — Prob > F = 0.0000

rasiokerugian	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
Policy	-.0025925	.0003404	-7.62	0.000	-.0032599	-.0019251
highriskinstitution10	.0001354	.0008375	0.16	0.872	-.0015065	.0017774
polXhighrisk10	-.0026341	.0011703	-2.25	0.024	-.0049285	-.0003397
_cons	.0053404	.0002513	21.25	0.000	.0048478	.005833
sigma_u	.00546987					
sigma_e	.01156053					
rho	.18292078	(fraction of variance due to u_i)				

F test that all u_i=0: F(523, 4691) = 2.11 Prob > F = 0.0000

```
191 .
192 . quietly xtreg rasiokerugian Policy highriskinstitution10 polXhighrisk10 , fe

193 .
194 . estimates store fe

195 .
196 . quietly xtreg rasiokerugian Policy highriskinstitution10 polXhighrisk10 , re

197 .
198 . estimates store re

199 .
200 . hausman fe re
```

	Coefficients (b) fe	(B) re	(b-B) Difference	sqrt(diag(V_b-V_B)) S.E.
Policy	-.0025925	-.0024217	-.0001708	.0000124
highriski~10	.0001354	.0026126	-.0024771	.0003859
polXhighr~10	-.0026341	-.0025646	-.0000695	.0002544

b = consistent under Ho and Ha; obtained from xtreg
B = inconsistent under Ha, efficient under Ho; obtained from xtreg

Test: Ho: difference in coefficients not systematic

chi2(3) = (b-B)'[(V_b-V_B)^(-1)](b-B)
= 43.17
Prob>chi2 = 0.0000
(V_b-V_B is not positive definite)

```
201 .
202 . vif, uncentered
```

Variable	VIF	1/VIF
polXhighr~10	1.64	0.610344
highriski~10	1.56	0.640385
Policy	1.08	0.928626
Mean VIF	1.43	

```
203 .
204 . quietly regress rasiokerugian Policy highriskinstitution10 polXhighrisk10

205 .
206 . szroeter rasiokerugian Policy highriskinstitution10 polXhighrisk10
```

Szroeter's test for homoskedasticity

Ho: variance constant
Ha: variance monotonic in variable

Variable	chi2	df	p	
rasiokerug~n	**6355.34**	**1**	**0.0000**	**#**
Policy	**856.40**	**1**	**0.0000**	**#**
highriski~10	**634.97**	**1**	**0.0000**	**#**
polXhighr~10	**49.31**	**1**	**0.0000**	**#**

 # unadjusted p-values

```
207 .
208 . xtreg rasiokerugian Policy highriskinstitution10 polXhighrisk10, fe robust
```

Fixed-effects (within) regression — Number of obs = **5,218**
Group variable: **id** — Number of groups = **524**

R-sq:
within = **0.0172**
between = **0.0556**
overall = **0.0102**

Obs per group:
min = **5**
avg = **10.0**
max = **10**

F(**3,523**) = **22.54**
corr(u_i, Xb) = **-0.0409** — Prob > F = **0.0000**

(Std. Err. adjusted for **524** clusters in id)

rasiokerugian	Coef.	Robust Std. Err.	t	P>|t|	[95% Conf.	Interval]
Policy	**-.0025925**	**.0003571**	**-7.26**	**0.000**	**-.003294**	**-.001891**
highriskinstitution10	**.0001354**	**.0015906**	**0.09**	**0.932**	**-.0029894**	**.0032602**
polXhighrisk10	**-.0026341**	**.0012648**	**-2.08**	**0.038**	**-.0051189**	**-.0001493**
_cons	**.0053404**	**.0002025**	**26.38**	**0.000**	**.0049426**	**.0057381**
sigma_u	**.00546987**					
sigma_e	**.01156053**					
rho	**.18292078**	(fraction of variance due to u_i)				

```
209 . regress rasiokerugian Policy highriskinstitution20 polXhighrisk20
```

Source	SS	df	MS		
Model	**.018273335**	**3**	**.006091112**	Number of obs	= **5,218**
Residual	**.770884388**	**5,214**	**.000147849**	F(3, 5214)	= **41.20**
Total	**.789157723**	**5,217**	**.000151267**	Prob > F	= **0.0000**
				R-squared	= **0.0232**
				Adj R-squared	= **0.0226**
				Root MSE	= **.01216**

rasiokerugian	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
Policy	-.0021038	.0003765	-5.59	0.000	-.0028419	-.0013658
highriskinstitution20	.0041701	.0005794	7.20	0.000	.0030342	.0053059
polXhighrisk20	-.0027051	.0008439	-3.21	0.001	-.0043595	-.0010506
_cons	.0044299	.0002695	16.44	0.000	.0039016	.0049582

```
210 .
211 . xtreg rasiokerugian Policy highriskinstitution20 polXhighrisk20 , re

Random-effects GLS regression                   Number of obs     =         5,218
Group variable:  id                             Number of groups  =           524

R-sq:                                           Obs per group:
     within  =  0.0159                                          min =             5
     between =  0.0762                                          avg =          10.0
     overall =  0.0227                                          max =            10

                                                Wald chi2( 3)     =        103.45
corr(u_i, X)   =  0 (assumed)                   Prob > chi2       =        0.0000
```

rasiokerugian	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
Policy	-.0021805	.0003607	-6.05	0.000	-.0028874	-.0014736
highriskinstitution20	.0032933	.0006069	5.43	0.000	.0021038	.0044828
polXhighrisk20	-.002524	.0008227	-3.07	0.002	-.0041365	-.0009115
_cons	.0046343	.0003072	15.08	0.000	.0040321	.0052365
sigma_u	.00363042					
sigma_e	.01155872					
rho	.0897913	(fraction of variance due to u_i)				

```
212 .
213 . xtreg rasiokerugian Policy highriskinstitution20 polXhighrisk20 , fe

Fixed-effects (within) regression               Number of obs     =         5,218
Group variable:  id                             Number of groups  =           524

R-sq:                                           Obs per group:
     within  =  0.0175                                          min =             5
     between =  0.0313                                          avg =          10.0
     overall =  0.0170                                          max =            10

                                                F(   3,4691)      =        27.82
corr(u_i, Xb)  =  0.0239                        Prob > F          =        0.0000
```

rasiokerugian	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
Policy	-.0023142	.000362	-6.39	0.000	-.0030239	-.0016046
highriskinstitution20	.0015452	.0006981	2.21	0.027	.0001765	.0029139
polXhighrisk20	-.0022804	.0008412	-2.71	0.007	-.0039295	-.0006313
_cons	.0050211	.0002729	18.40	0.000	.0044861	.0055561
sigma_u	.00537233					
sigma_e	.01155872					
rho	.17764911	(fraction of variance due to u_i)				

```
F test that all u_i=0: F(  523, 4691) = 2.06                     Prob > F =  0.0000
```

```
214 .
215 . quietly xtreg rasiokerugian Policy highriskinstitution20 polXhighrisk20 , fe

216 .
217 . estimates store fe

218 .
219 . quietly xtreg rasiokerugian Policy highriskinstitution20 polXhighrisk20 , re

220 .
221 . estimates store re

222 .
223 . hausman fe re
```

	——— Coefficients ———			
	(b) fe	(B) re	(b-B) Difference	sqrt(diag(V_b-V_B)) S.E.
Policy	**-.0023142**	**-.0021805**	**-.0001337**	**.0000305**
highriski~20	**.0015452**	**.0032933**	**-.0017481**	**.0003451**
polXhighr~20	**-.0022804**	**-.002524**	**.0002436**	**.0001752**

b = consistent under Ho and Ha; obtained from xtreg
B = inconsistent under Ha, efficient under Ho; obtained from xtreg

Test: Ho: difference in coefficients not systematic

chi2(**3**) = (b-B)'[(V_b-V_B)^(-1)](b-B)
= **25.68**
Prob>chi2 = **0.0000**
(V_b-V_B is not positive definite)

```
224 .
225 . vif, uncentered
```

Variable	VIF	1/VIF
polXhighr~20	**2.08**	**0.480597**
highriski~20	**1.86**	**0.538830**
Policy	**1.22**	**0.816412**
Mean VIF	**1.72**	

```
226 .
227 . quietly regress rasiokerugian Policy highriskinstitution20 polXhighrisk20

228 .
229 . szroeter rasiokerugian Policy highriskinstitution20 polXhighrisk20
```

Szroeter's test for homoskedasticity

Ho: variance constant
Ha: variance monotonic in variable

Variable	chi2	df	p	
rasiokerug~n	**6328.22**	**1**	**0.0000**	**#**
Policy	**854.43**	**1**	**0.0000**	**#**
highriski~20	**644.38**	**1**	**0.0000**	**#**
polXhighr~20	**12.31**	**1**	**0.0004**	**#**

 # unadjusted p-values

```
230 .
231 . xtreg rasiokerugian Policy highriskinstitution20 polXhighrisk20, fe robust

Fixed-effects (within) regression               Number of obs      =         5,218
Group variable: id                              Number of groups   =           524

R-sq:                                           Obs per group:
     within  = 0.0175                                         min =             5
     between = 0.0313                                         avg =          10.0
     overall = 0.0170                                         max =            10

                                                F(3,523)           =         17.42
corr(u_i, Xb)  = 0.0239                         Prob > F           =        0.0000

                                               (Std. Err. adjusted for 524 clusters in id)
------------------------------------------------------------------------------
             |               Robust
rasiokerugian|      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
      Policy |  -.0023142   .0003465    -6.68   0.000    -.0029948   -.0016336
highriskins~20|   .0015452   .0012107     1.28   0.202    -.0008333    .0039236
polXhighris~20|  -.0022804   .0011616    -1.96   0.050    -.0045624    1.65e-06
       _cons |   .0050211   .0002397    20.94   0.000     .0045501    .0054921
-------------+----------------------------------------------------------------
     sigma_u |  .00537233
     sigma_e |  .01155872
         rho |  .17764911   (fraction of variance due to u_i)
------------------------------------------------------------------------------

232 . regress rasiokerugian Policy highriskinstitution25 polXhighrisk25

      Source |       SS           df       MS      Number of obs   =     5,218
-------------+----------------------------------   F(3, 5214)      =     41.93
       Model |  .018590223         3  .006196741   Prob > F        =    0.0000
    Residual |   .7705675      5,214  .000147788   R-squared       =    0.0236
-------------+----------------------------------   Adj R-squared   =    0.0230
       Total |  .789157723     5,217  .000151267   Root MSE        =    .01216

------------------------------------------------------------------------------
rasiokerugian|      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
      Policy |  -.0021389   .0003887    -5.50   0.000    -.0029009   -.0013769
highriskins~25|   .0038449   .0005426     7.09   0.000     .0027812    .0049086
polXhighris~25|  -.0021305    .000778    -2.74   0.006    -.0036557   -.0006053
       _cons |   .0043256   .0002776    15.58   0.000     .0037814    .0048698
------------------------------------------------------------------------------

233 .
234 . xtreg rasiokerugian Policy highriskinstitution25 polXhighrisk25, re

Random-effects GLS regression                   Number of obs      =         5,218
Group variable: id                                 Number of groups   =           524

R-sq:                                           Obs per group:
     within  = 0.0159                                         min =             5
     between = 0.0745                                         avg =          10.0
     overall = 0.0232                                         max =            10

                                                   Wald chi2(3)       =       105.11
corr(u_i, X)   = 0 (assumed)                    Prob > chi2        =        0.0000
```

rasiokerugian	Coef.	Std. Err.	z	P>|z|	[95% Conf. Interval]	
Policy	-.0022255	.0003727	-5.97	0.000	-.0029561	-.0014949
highriskinstitution25	.0030914	.0005707	5.42	0.000	.0019727	.00421
polXhighrisk25	-.0019002	.0007586	-2.50	0.012	-.0033871	-.0004133
_cons	.0045369	.0003157	14.37	0.000	.0039182	.0051556
sigma_u	.00364497					
sigma_e	.01156081					
rho	.09041765	(fraction of variance due to u_i)				

```
235 .
236 . xtreg rasiokerugian Policy highriskinstitution25 polXhighrisk25, fe

Fixed-effects (within) regression               Number of obs     =         5,218
Group variable: id                              Number of groups  =           524

R-sq:                                           Obs per group:
     within  = 0.0171                                         min =             5
     between = 0.0583                                         avg =          10.0
     overall = 0.0187                                         max =            10

                                                F(3,4691)         =         27.24
corr(u_i, Xb)  = 0.0395                         Prob > F          =        0.0000
```

rasiokerugian	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]	
Policy	-.0023654	.0003747	-6.31	0.000	-.0031	-.0016308
highriskinstitution25	.0015717	.0006626	2.37	0.018	.0002727	.0028707
polXhighrisk25	-.0015907	.0007766	-2.05	0.041	-.0031131	-.0000682
_cons	.0049429	.000286	17.28	0.000	.0043821	.0055037
sigma_u	.0053447					
sigma_e	.01156081					
rho	.17609543	(fraction of variance due to u_i)				

```
F test that all u_i=0: F(523, 4691) = 2.05                     Prob > F = 0.0000

237 .
238 . quietly xtreg rasiokerugian Policy highriskinstitution25 polXhighrisk25, fe

239 .
240 . estimates store fe

241 .
242 . quietly xtreg rasiokerugian Policy highriskinstitution25 polXhighrisk25, re

243 .
244 . estimates store re
```

```
245 .
246 . hausman fe re
```

	Coefficients (b) fe	(B) re	(b-B) Difference	sqrt(diag(V_b-V_B)) S.E.
Policy	**-.0023654**	**-.0022255**	**-.0001399**	**.0000383**
highriski~25	**.0015717**	**.0030914**	**-.0015197**	**.0003366**
polXhighr~25	**-.0015907**	**-.0019002**	**.0003096**	**.0001659**

b = consistent under Ho and Ha; obtained from xtreg
B = inconsistent under Ha, efficient under Ho; obtained from xtreg

Test: Ho: difference in coefficients not systematic

chi2(**3**) = (b-B)'[(V_b-V_B)^(-1)](b-B)
= **19.53**
Prob>chi2 = **0.0002**
(V_b-V_B is not positive definite)

```
247 .
248 . vif, uncentered
```

Variable	VIF	1/VIF
polXhighr~25	**2.23**	**0.448376**
highriski~25	**1.92**	**0.521472**
Policy	**1.31**	**0.761832**
Mean VIF	**1.82**	

```
249 .
250 . quietly regress rasiokerugian Policy highriskinstitution25 polXhighrisk25

251 .
252 . szroeter rasiokerugian Policy highriskinstitution25 polXhighrisk25
```

Szroeter's test for homoskedasticity

Ho: variance constant
Ha: variance monotonic in variable

Variable	chi2	df	p	
rasiokerug~n	**6331.82**	**1**	**0.0000**	**#**
Policy	**858.20**	**1**	**0.0000**	**#**
highriski~25	**690.59**	**1**	**0.0000**	**#**
polXhighr~25	**1.44**	**1**	**0.2307**	**#**

 # unadjusted p-values

```
253 .
254 . xtreg rasiokerugian Policy highriskinstitution25 polXhighrisk25, fe robust

Fixed-effects (within) regression               Number of obs      =         5,218
Group variable: id                              Number of groups   =           524

R-sq:                                           Obs per group:
     within  = 0.0171                                         min =             5
     between = 0.0583                                         avg =          10.0
     overall = 0.0187                                         max =            10

                                                F(3,523)           =         18.31
corr(u_i, Xb)  = 0.0395                         Prob > F           =        0.0000

                                              (Std. Err. adjusted for 524 clusters in id)
------------------------------------------------------------------------------
             |               Robust
 rasiokerugian |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
      Policy |  -.0023654   .0003565    -6.64   0.000    -.0030657   -.0016651
highriskinst~25 |   .0015717    .000985     1.60   0.111    -.0003634    .0035068
polXhighrisk25 |  -.0015907   .0011415    -1.39   0.164    -.0038332    .0006519
       _cons |   .0049429   .0002523    19.59   0.000     .0044473    .0054385
-------------+----------------------------------------------------------------
     sigma_u |   .0053447
     sigma_e |  .01156081
         rho |  .17609543   (fraction of variance due to u_i)
------------------------------------------------------------------------------

255 . regress rasiokerugian Policy highriskinstitution30 polXhighrisk30

      Source |       SS           df       MS      Number of obs   =     5,218
-------------+----------------------------------   F(3, 5214)      =     41.48
       Model |  .018394186         3  .006131395   Prob > F        =    0.0000
    Residual |  .770763538     5,214  .000147826   R-squared       =    0.0233
-------------+----------------------------------   Adj R-squared   =    0.0227
       Total |  .789157723     5,217  .000151267   Root MSE        =    .01216

------------------------------------------------------------------------------
 rasiokerugian |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
      Policy |  -.0022173   .0004023    -5.51   0.000    -.0030059   -.0014287
highriskinst~30 |   .0035441    .000521     6.80   0.000     .0025228    .0045655
polXhighrisk30 |  -.0017453   .0007348    -2.38   0.018    -.0031857   -.0003048
       _cons |    .004272   .0002849    14.99   0.000     .0037135    .0048306
------------------------------------------------------------------------------

256 .
257 . xtreg rasiokerugian Policy highriskinstitution30 polXhighrisk30 , re

Random-effects GLS regression                   Number of obs      =         5,218
Group variable: id                                 Number of groups   =           524

R-sq:                                           Obs per group:
     within  = 0.0156                                         min =             5
     between = 0.0743                                         avg =          10.0
     overall = 0.0229                                         max =            10

                                                   Wald chi2(3)       =    103.49
corr(u_i, X)   = 0 (assumed)                    Prob > chi2        =    0.0000
```

rasiokerugian	Coef.	Std. Err.	z	P>|z|	[95% Conf. Interval]	
Policy	-.00228	.0003861	-5.90	0.000	-.0030369	-.0015232
highriskinstitution30	.0028375	.0005475	5.18	0.000	.0017643	.0039106
polXhighrisk30	-.0015807	.0007171	-2.20	0.028	-.0029862	-.0001751
_cons	.0044976	.0003228	13.94	0.000	.003865	.0051302
sigma_u	.0036454					
sigma_e	.0115622					
rho	.09041724	(fraction of variance due to u_i)				

```
258 .
259 . xtreg rasiokerugian Policy highriskinstitution30 polXhighrisk30 , fe
```

Fixed-effects (within) regression — Number of obs = **5,218**
Group variable: **id** — Number of groups = **524**

R-sq:
within = **0.0169**
between = **0.0555**
overall = **0.0181**

Obs per group:
min = **5**
avg = **10.0**
max = **10**

F(**3,4691**) = **26.86**
corr(u_i, Xb) = **0.0367** — Prob > F = **0.0000**

rasiokerugian	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]	
Policy	-.0023785	.0003884	-6.12	0.000	-.00314	-.001617
highriskinstitution30	.001373	.000636	2.16	0.031	.0001262	.0026198
polXhighrisk30	-.0013476	.0007345	-1.83	0.067	-.0027876	.0000923
_cons	.0049437	.0002965	16.67	0.000	.0043624	.0055251
sigma_u	.00535047					
sigma_e	.0115622					
rho	.17637352	(fraction of variance due to u_i)				

F test that all u_i=0: F(**523, 4691**) = **2.05** — Prob > F = **0.0000**

```
260 .
261 . quietly xtreg rasiokerugian Policy highriskinstitution30 polXhighrisk30 , fe

262 .
263 . estimates store fe

264 .
265 . quietly xtreg rasiokerugian Policy highriskinstitution30 polXhighrisk30 , re

266 .
267 . estimates store re
```

```
268 .
269 . hausman fe re
```

	Coefficients (b) fe	(B) re	(b-B) Difference	sqrt(diag(V_b-V_B)) S.E.
Policy	**-.0023785**	**-.00228**	**-.0000984**	**.0000419**
highriski~30	**.001373**	**.0028375**	**-.0014645**	**.0003235**
polXhighr~30	**-.0013476**	**-.0015807**	**.0002331**	**.0001587**

b = consistent under Ho and Ha; obtained from xtreg
B = inconsistent under Ha, efficient under Ho; obtained from xtreg

Test: Ho: difference in coefficients not systematic

chi2(**3**) = (b-B)'[(V_b-V_B)^(-1)](b-B)
= **19.98**
Prob>chi2 = **0.0002**
(V_b-V_B is not positive definite)

```
270 .
271 . vif, uncentered
```

Variable	VIF	1/VIF
polXhighr~30	**2.44**	**0.409463**
highriski~30	**2.01**	**0.496803**
Policy	**1.43**	**0.699618**
Mean VIF	**1.96**	

```
272 .
273 . quietly regress rasiokerugian Policy highriskinstitution30 polXhighrisk30

274 .
275 . szroeter rasiokerugian Policy highriskinstitution30 polXhighrisk30
```

Szroeter's test for homoskedasticity

Ho: variance constant
Ha: variance monotonic in variable

Variable	chi2	df	p	
rasiokerug~n	**6338.18**	**1**	**0.0000**	**#**
Policy	**861.52**	**1**	**0.0000**	**#**
highriski~30	**620.86**	**1**	**0.0000**	**#**
polXhighr~30	**5.16**	**1**	**0.0232**	**#**

 # unadjusted p-values

```
276 .
277 . xtreg rasiokerugian Policy highriskinstitution30 polXhighrisk30, fe robust

Fixed-effects (within) regression               Number of obs      =         5,218
Group variable: id                              Number of groups   =           524

R-sq:                                           Obs per group:
     within  = 0.0169                                         min =             5
     between = 0.0555                                         avg =          10.0
     overall = 0.0181                                         max =            10

                                                F(3,523)           =         20.92
corr(u_i, Xb)  = 0.0367                         Prob > F           =        0.0000

                                              (Std. Err. adjusted for 524 clusters in id)
------------------------------------------------------------------------------
             |               Robust
 rasiokerugian |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
      Policy |  -.0023785   .0003549    -6.70   0.000    -.0030757   -.0016813
highriskinst~30 |   .001373   .0008762     1.57   0.118    -.0003484    .0030943
polXhighrisk30 |  -.0013476   .0010614    -1.27   0.205    -.0034328    .0007376
       _cons |   .0049437   .0002698    18.33   0.000     .0044138    .0054737
-------------+----------------------------------------------------------------
     sigma_u |  .00535047
     sigma_e |   .0115622
         rho |  .17637352   (fraction of variance due to u_i)
------------------------------------------------------------------------------

278 . regress rasiokerugian Policy highriskinstitution40 polXhighrisk40

      Source |       SS           df       MS      Number of obs   =     5,218
-------------+----------------------------------   F(3, 5214)      =     43.92
       Model |  .019451422         3  .006483807   Prob > F        =    0.0000
    Residual |  .769706301     5,214  .000147623   R-squared       =    0.0246
-------------+----------------------------------   Adj R-squared   =    0.0241
       Total |  .789157723     5,217  .000151267   Root MSE        =    .01215

------------------------------------------------------------------------------
 rasiokerugian |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
      Policy |  -.0021302   .0004345    -4.90   0.000    -.0029819   -.0012785
highriskinst~40 |  .0035623   .0004919     7.24   0.000      .002598    .0045267
polXhighrisk40 |  -.0018213   .0006877    -2.65   0.008    -.0031694   -.0004731
       _cons |   .0039896    .000302    13.21   0.000     .0033976    .0045816
------------------------------------------------------------------------------

279 .
280 . xtreg rasiokerugian Policy highriskinstitution40 polXhighrisk40 , re

Random-effects GLS regression                   Number of obs      =         5,218
Group variable: id                                 Number of groups   =           524

R-sq:                                           Obs per group:
     within  = 0.0170                                         min =             5
     between = 0.0689                                         avg =          10.0
     overall = 0.0244                                         max =            10

                                                   Wald chi2(3)       =       111.54
corr(u_i, X)   = 0 (assumed)                    Prob > chi2        =        0.0000
```

rasiokerugian	Coef.	Std. Err.	z	P>|z|	[95% Conf. Interval]	
Policy	-.0021985	.0004176	-5.26	0.000	-.003017	-.00138
highriskinstitution40	.0029946	.0005159	5.81	0.000	.0019835	.0040056
polXhighrisk40	-.0016323	.0006701	-2.44	0.015	-.0029457	-.000319
_cons	.004218	.0003394	12.43	0.000	.0035528	.0048833
sigma_u	.00365904					
sigma_e	.01155661					
rho	.09111343	(fraction of variance due to u_i)				

```
281 .
282 . xtreg rasiokerugian Policy highriskinstitution40 polXhighrisk40 , fe
```

Fixed-effects (within) regression — Number of obs = **5,218**
Group variable: **id** — Number of groups = **524**

R-sq:
within = **0.0178**
between = **0.0634**
overall = **0.0215**

Obs per group:
min = **5**
avg = **10.0**
max = **10**

F(**3,4691**) = **28.40**
corr(u_i, Xb) = **0.0507** — Prob > F = **0.0000**

rasiokerugian	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]	
Policy	-.0022735	.0004208	-5.40	0.000	-.0030985	-.0014484
highriskinstitution40	.0018516	.0005982	3.10	0.002	.0006789	.0030242
polXhighrisk40	-.0013992	.0006852	-2.04	0.041	-.0027425	-.0000559
_cons	.0046559	.0003202	14.54	0.000	.0040282	.0052836
sigma_u	.00531533					
sigma_e	.01155661					
rho	.17460671	(fraction of variance due to u_i)				

F test that all u_i=0: F(**523, 4691**) = **2.05** — Prob > F = **0.0000**

```
283 .
284 . quietly xtreg rasiokerugian Policy highriskinstitution40 polXhighrisk40 , fe

285 .
286 . estimates store fe

287 .
288 . quietly xtreg rasiokerugian Policy highriskinstitution40 polXhighrisk40 , re

289 .
290 . estimates store re
```

```
291 .
292 . hausman fe re
```

	Coefficients (b) fe	(B) re	(b-B) Difference	sqrt(diag(V_b-V_B)) S.E.
Policy	**-.0022735**	**-.0021985**	**-.0000749**	**.000052**
highriski~40	**.0018516**	**.0029946**	**-.001143**	**.0003028**
polXhighr~40	**-.0013992**	**-.0016323**	**.0002331**	**.0001431**

b = consistent under Ho and Ha; obtained from xtreg
B = inconsistent under Ha, efficient under Ho; obtained from xtreg

Test: Ho: difference in coefficients not systematic

chi2(**3**) = (b-B)'[(V_b-V_B)^(-1)](b-B)
= **12.45**
Prob>chi2 = **0.0060**
(V_b-V_B is not positive definite)

```
293 .
294 . vif, uncentered
```

Variable	VIF	1/VIF
polXhighr~40	**2.86**	**0.349357**
highriski~40	**2.13**	**0.469319**
Policy	**1.73**	**0.577481**
Mean VIF	**2.24**	

```
295 .
296 . quietly regress rasiokerugian Policy highriskinstitution40 polXhighrisk40

297 .
298 . szroeter rasiokerugian Policy highriskinstitution40 polXhighrisk40
```

Szroeter's test for homoskedasticity

Ho: variance constant
Ha: variance monotonic in variable

Variable	chi2	df	p	
rasiokerug~n	**6332.54**	**1**	**0.0000**	**#**
Policy	**860.97**	**1**	**0.0000**	**#**
highriski~40	**631.38**	**1**	**0.0000**	**#**
polXhighr~40	**2.85**	**1**	**0.0913**	**#**

 # unadjusted p-values

```
299 .
300 . xtreg rasiokerugian Policy highriskinstitution40 polXhighrisk40, fe robust

Fixed-effects (within) regression               Number of obs      =         5,218
Group variable: id                              Number of groups   =           524

R-sq:                                           Obs per group:
     within  = 0.0178                                         min =             5
     between = 0.0634                                         avg =          10.0
     overall = 0.0215                                         max =            10

                                                F(3,523)           =         21.98
corr(u_i, Xb)  = 0.0507                         Prob > F           =        0.0000

                                              (Std. Err. adjusted for 524 clusters in id)
------------------------------------------------------------------------------
             |               Robust
 rasiokerugian |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
      Policy |  -.0022735   .0003615    -6.29   0.000    -.0029837   -.0015632
highriskinst~40 |   .0018516   .0008181     2.26   0.024     .0002443    .0034588
polXhighrisk40 |  -.0013992   .0009417    -1.49   0.138    -.0032491    .0004507
       _cons |   .0046559   .0003067    15.18   0.000     .0040535    .0052584
-------------+----------------------------------------------------------------
     sigma_u |  .00531533
     sigma_e |  .01155661
         rho |  .17460671   (fraction of variance due to u_i)
------------------------------------------------------------------------------

301 . regress rasiokerugian Policy highriskinstitution50 polXhighrisk50

      Source |       SS           df       MS      Number of obs   =     5,218
-------------+----------------------------------   F(3, 5214)      =     40.91
       Model |  .018146448         3  .006048816   Prob > F        =    0.0000
    Residual |  .771011275     5,214  .000147873   R-squared       =    0.0230
-------------+----------------------------------   Adj R-squared   =    0.0224
       Total |  .789157723     5,217  .000151267   Root MSE        =    .01216

------------------------------------------------------------------------------
 rasiokerugian |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
      Policy |  -.0020019   .0004777    -4.19   0.000    -.0029383   -.0010655
highriskinst~50 |   .0033072    .000479     6.90   0.000     .0023682    .0042462
polXhighrisk50 |  -.0018799   .0006759    -2.78   0.005    -.0032049   -.0005548
       _cons |   .0038222   .0003236    11.81   0.000     .0031878    .0044567
------------------------------------------------------------------------------

302 .
303 . xtreg rasiokerugian Policy highriskinstitution50 polXhighrisk50 , re

Random-effects GLS regression                   Number of obs      =         5,218
Group variable: id                                 Number of groups   =           524

R-sq:                                           Obs per group:
     within  = 0.0165                                         min =             5
     between = 0.0646                                         avg =          10.0
     overall = 0.0227                                         max =            10

                                                   Wald chi2(3)       =       104.79
corr(u_i, X)   = 0 (assumed)                    Prob > chi2        =        0.0000
```

rasiokerugian	Coef.	Std. Err.	z	P>|z|	[95% Conf. Interval]	
Policy	-.0020284	.0004605	-4.40	0.000	-.002931	-.0011258
highriskinstitution50	.0027171	.0005011	5.42	0.000	.001735	.0036993
polXhighrisk50	-.0017655	.0006595	-2.68	0.007	-.0030581	-.0004729
_cons	.0041069	.0003606	11.39	0.000	.0034002	.0048136
sigma_u	.00367229					
sigma_e	.01155848					
rho	.09168698	(fraction of variance due to u_i)				

```
304 .
305 . xtreg rasiokerugian Policy highriskinstitution50 polXhighrisk50 , fe
```

Fixed-effects (within) regression — Number of obs = **5,218**
Group variable: **id** — Number of groups = **524**

R-sq:
within = **0.0175**
between = **0.0492**
overall = **0.0188**

Obs per group:
min = **5**
avg = **10.0**
max = **10**

F(**3,4691**) = **27.88**
corr(u_i, Xb) = **0.0366** — Prob > F = **0.0000**

rasiokerugian	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]	
Policy	-.0020359	.0004656	-4.37	0.000	-.0029487	-.001123
highriskinstitution50	.001542	.0005764	2.68	0.007	.000412	.002672
polXhighrisk50	-.0016194	.0006752	-2.40	0.017	-.0029431	-.0002957
_cons	.0046506	.0003478	13.37	0.000	.0039687	.0053325
sigma_u	.00534773					
sigma_e	.01155848					
rho	.1763185	(fraction of variance due to u_i)				

F test that all u_i=0: F(**523, 4691**) = **2.07** — Prob > F = **0.0000**

```
306 .
307 . quietly xtreg rasiokerugian Policy highriskinstitution50 polXhighrisk50 , fe

308 .
309 . estimates store fe

310 .
311 . quietly xtreg rasiokerugian Policy highriskinstitution50 polXhighrisk50 , re

312 .
313 . estimates store re
```

```
314 .
315 . hausman fe re
```

	Coefficients (b) fe	(B) re	(b-B) Difference	sqrt(diag(V_b-V_B)) S.E.
Policy	**-.0020359**	**-.0020284**	**-7.50e-06**	**.0000689**
highriski~50	**.001542**	**.0027171**	**-.0011751**	**.0002848**
polXhighr~50	**-.0016194**	**-.0017655**	**.0001461**	**.0001447**

b = consistent under Ho and Ha; obtained from xtreg
B = inconsistent under Ha, efficient under Ho; obtained from xtreg

Test: Ho: difference in coefficients not systematic

chi2(**3**) = (b-B)'[(V_b-V_B)^(-1)](b-B)
= **15.94**
Prob>chi2 = **0.0012**
(V_b-V_B is not positive definite)

```
316 .
317 . vif, uncentered
```

Variable	VIF	1/VIF
polXhighr~50	**3.39**	**0.295337**
highriski~50	**2.20**	**0.454755**
Policy	**2.19**	**0.457252**
Mean VIF	**2.59**	

```
318 .
319 . quietly regress rasiokerugian Policy highriskinstitution50 polXhighrisk50

320 .
321 . szroeter rasiokerugian Policy highriskinstitution50 polXhighrisk50
```

Szroeter's test for homoskedasticity

Ho: variance constant
Ha: variance monotonic in variable

Variable	chi2	df	p
rasiokerug~n	**6344.63**	**1**	**0.0000 #**
Policy	**858.38**	**1**	**0.0000 #**
highriski~50	**337.60**	**1**	**0.0000 #**
polXhighr~50	**65.33**	**1**	**0.0000 #**

 # unadjusted p-values

```
322 .
323 . xtreg rasiokerugian Policy highriskinstitution50 polXhighrisk50 , fe robust

Fixed-effects (within) regression               Number of obs      =         5,218
Group variable: id                              Number of groups   =           524

R-sq:                                           Obs per group:
     within  = 0.0175                                         min =             5
     between = 0.0492                                         avg =          10.0
     overall = 0.0188                                         max =            10

                                                F(   3,523)        =         18.40
corr(u_i, Xb)  = 0.0366                         Prob > F           =        0.0000

                                              (Std. Err. adjusted for      524 clusters in id)
------------------------------------------------------------------------------
             |               Robust
rasiokerugian|      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
      Policy |  -.0020359    .000386    -5.27   0.000    -.0027942   -.0012775
highriskins~50|    .001542   .0007573     2.04   0.042     .0000542    .0030298
polXhighris~50|  -.0016194   .0007784    -2.08   0.038    -.0031487   -.0000901
       _cons |   .0046506   .0003493    13.31   0.000     .0039643    .0053368
-------------+----------------------------------------------------------------
     sigma_u |  .00534773
------------------------------------------------------------------------------
--more--
```