1. Hasil Uji *Model Pooled Least Square* (PLS)

```
. reg roe em tato opm ib tb ldr npl
```

Source	SS	df	MS	Number of obs	=	360
				F(7, 352)	=	101.04
Model	12378.325	7	1768.33215	Prob > F	=	0.0000
Residual	6160.67389	352	17.5019145	R-squared	=	0.6677
				Adj R-squared	=	0.6611
Total	18538.9989	359	51.6406655	Root MSE	=	4.1835

roe	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
em	.0089025	.0008957	9.94	0.000	.0071409	.0106641
tato	-.0524098	.0733002	-0.72	0.475	-.1965713	.0917516
opm	.3902652	.0176679	22.09	0.000	.3555173	.425013
ib	.0016505	.0014185	1.16	0.245	-.0011393	.0044404
tb	-.0933204	.0188159	-4.96	0.000	-.1303262	-.0563147
ldr	.0064603	.0026538	2.43	0.015	.001241	.0116797
npl	-.0371424	.1321381	-0.28	0.779	-.2970219	.2227372
_cons	2.408779	1.706693	1.41	0.159	-.9478189	5.765377

2. Hasil Uji *Model Fixed Effect* (FE)

```
. xtreg roe em tato opm ib tb ldr npl, fe

Fixed-effects (within) regression               Number of obs      =       360
Group variable: firm                            Number of groups   =        18

R-sq:                                           Obs per group:
     within  = 0.5557                                         min =        20
     between = 0.7791                                         avg =      20.0
     overall = 0.6480                                         max =        20

                                                F(7,335)           =     59.86
corr(u_i, Xb)  = -0.2420                        Prob > F           =    0.0000

------------------------------------------------------------------------------
         roe |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
          em |   .0118795   .0018465     6.43   0.000     .0082473    .0155117
        tato |  -.1216128   .0690378    -1.76   0.079    -.2574151    .0141894
         opm |   .3808016    .021643    17.59   0.000     .3382282     .423375
          ib |   .0001786   .0013002     0.14   0.891    -.0023789    .0027361
          tb |   -.110801   .0187055    -5.92   0.000     -.147596    -.074006
         ldr |   .0025607   .0030587     0.84   0.403     -.003456    .0085774
         npl |  -.3192874   .1529509    -2.09   0.038    -.6201527   -.0184221
       _cons |   3.547728   1.922719     1.85   0.066    -.2343956    7.329852
-------------+----------------------------------------------------------------
     sigma_u |  2.4015215
     sigma_e |  3.7375605
         rho |  .29221278   (fraction of variance due to u_i)
------------------------------------------------------------------------------
F test that all u_i=0: F(17, 335) = 6.24                     Prob > F = 0.0000
```

3. Hasil Uji *Model Random Effect* (RE)

```
. xtreg roe em tato opm ib tb ldr npl, re

Random-effects GLS regression                   Number of obs     =       360
Group variable: firm                            Number of groups  =        18

R-sq:                                           Obs per group:
     within  = 0.5537                                         min =        20
     between = 0.8040                                         avg =      20.0
     overall = 0.6600                                         max =        20

                                                Wald chi2(7)      =    493.12
corr(u_i, X)   = 0 (assumed)                    Prob > chi2       =    0.0000
```

roe	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
em	.0101699	.0013468	7.55	0.000	.0075301	.0128096
tato	-.1011718	.0687676	-1.47	0.141	-.2359538	.0336103
opm	.381809	.0198282	19.26	0.000	.3429464	.4206716
ib	.0005514	.001304	0.42	0.672	-.0020044	.0031071
tb	-.1048132	.0182511	-5.74	0.000	-.1405846	-.0690418
ldr	.0041939	.0028372	1.48	0.139	-.0013669	.0097547
npl	-.2715703	.1428789	-1.90	0.057	-.5516077	.0084671
_cons	3.660218	1.816412	2.02	0.044	.1001169	7.22032
sigma_u	1.7569302					
sigma_e	3.7375605					
rho	.18097879	(fraction of variance due to u_i)				

4. Hasil Uji *General Least Square* (GLS)

```
. xtgls roe em tato opm ib tb ldr npl

Cross-sectional time-series FGLS regression

Coefficients:  generalized least squares
Panels:        homoskedastic
Correlation:   no autocorrelation

Estimated covariances      =         1          Number of obs      =       360
Estimated autocorrelations =         0          Number of groups   =        18
Estimated coefficients     =         8          Time periods       =        20
                                                Wald chi2(7)       =    723.33
Log likelihood             = -1021.989          Prob > chi2        =    0.0000
```

roe	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
em	.0089025	.0008857	10.05	0.000	.0071666	.0106384
tato	-.0524098	.0724812	-0.72	0.470	-.1944704	.0896507
opm	.3902652	.0174704	22.34	0.000	.3560237	.4245066
ib	.0016505	.0014027	1.18	0.239	-.0010987	.0043997
tb	-.0933204	.0186057	-5.02	0.000	-.1297869	-.056854
ldr	.0064603	.0026242	2.46	0.014	.0013171	.0116036
npl	-.0371424	.1306617	-0.28	0.776	-.2932345	.2189498
_cons	2.408779	1.687623	1.43	0.153	-.8989018	5.71646

5. Hasil Uji *Hausman* (FE atau RE)

```
. quietly xtreg roe em tato opm ib tb ldr npl, fe

. estimates store fe

. quietly xtreg roe em tato opm ib tb ldr npl, re

. estimates store re

. hausman fe re
```

	——— Coefficients ———			
	(b) fe	(B) re	(b-B) Difference	sqrt(diag(V_b-V_B)) S.E.
em	.0118795	.0101699	.0017097	.0012632
tato	-.1216128	-.1011718	-.0204411	.006102
opm	.3808016	.381809	-.0010074	.0086754
ib	.0001786	.0005514	-.0003728	.
tb	-.110801	-.1048132	-.0059878	.0040981
ldr	.0025607	.0041939	-.0016332	.0011428
npl	-.3192874	-.2715703	-.0477171	.0545859

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(7) = (b-B)'[(V_b-V_B)^(-1)](b-B)
= 0.31
Prob>chi2 = 0.9999
(V_b-V_B is not positive definite)

6. Hasil Uji LM Test (PLS atau RE)

```
. xttest0

Breusch and Pagan Lagrangian multiplier test for random effects

        roe[firm,t] = Xb + u[firm] + e[firm,t]

        Estimated results:
                         |       Var     sd = sqrt(Var)
                ---------+------------------------------
                     roe |    51.64067       7.186144
                       e |    13.96936       3.737561
                       u |    3.086804        1.75693

        Test:   Var(u) = 0
                                 chibar2(01) =    98.66
                              Prob > chibar2 =   0.0000
```

```
. estimates store fe

. estimates store re

. estimates store pls

. estimates store gls

. estimates table fe re pls gls, star stats (N r2 r2_a)
```

Variable	fe	re	pls	gls
em	.0089025***	.0089025***	.0089025***	.0089025***
tato	-.05240982	-.05240982	-.05240982	-.05240982
opm	.39026517***	.39026517***	.39026517***	.39026517***
ib	.00165053	.00165053	.00165053	.00165053
tb	-.09332044***	-.09332044***	-.09332044***	-.09332044***
ldr	.00646034*	.00646034*	.00646034*	.00646034*
npl	-.03714235	-.03714235	-.03714235	-.03714235
_cons	2.4087789	2.4087789	2.4087789	2.4087789
N	360	360	360	360
r2				
r2_a				

legend: * p<0.05; ** p<0.01; *** p<0.001

```
.
```

7. Hasil Uji Multikolenaritas

```
. vif, uncentered

    Variable |      VIF       1/VIF
-------------+----------------------
          tb |    11.47    0.087159
          em |     6.32    0.158208
        tato |     5.37    0.186166
         ldr |     3.18    0.314150
         npl |     1.81    0.553220
          ib |     1.49    0.672880
         opm |     1.46    0.682851
-------------+----------------------
    Mean VIF |     4.44
```

8. Hasil Uji Heterokedastisitas

```
. hettest

Breusch-Pagan / Cook-Weisberg test for heteroskedasticity
         Ho: Constant variance
         Variables: fitted values of roe

         chi2(1)      =  1094.61
         Prob > chi2  =   0.0000
```