

Results:

Variables	Fixed Effects Model	Random Effects Model	Pooled OLS Model
TA	-0.06359744*** (0.01386035)	-0.06359744 *** (0.01386035)	-0.06359744*** (0.01790291)
FFR	-0.00393280** (0.00134578)	-0.00393280** (0.00134578)	-0.00393280 (0.00328559)
CC	0.09454816*** (0.02424029)	0.09454816*** (0.02424029)	0.09454816** (0.03425906)
LF	0.00161893*** (0.00040175)	0.00161893*** (0.00040175)	0.00161893*** (0.00034738)
Constant Term		0.37211476***	0.37211476***
	N =380 R-squared = 0.30474 Prob > F = 2.22e-16	N = 380 R-squared = 0.29384 Prob > F = 2.22e-16	N = 380 R-squared = 0.22603 Prob > F = 2.22e-16

Poolability Test: The null Hypothesis is that: pooled OLS is stable

Model	Test Statistic	P value	Decision
roe~ta+ffr+cc+lf	9.3851	2.2e-16	Reject the null and stated that Pooled OLS is unstable here and Fixed effect model is consistent

Hausman Test:

Null: Random is consistent

Alternative: Fixed is constant

Test Statistic	P value	Decision
chisq = 1.6518e-14	1	Random Effect Model is more consistent

Time-series econometric pretesting and specification testing:

✓ ADF TEST:

The Null hypothesis: Variable is non-Stationary

alternative hypothesis: stationary

Variables	Test Statistic	P value	Decision
ROE	-6.3018	0.01	Stationary
TA	-10.472	0.01	Stationary
CC	-10.713	0.01	Stationary
FFR	-8.1069	0.01	Stationary
LF	-11.271	0.01	Stationary

✓ Durbin Watson for Autocorrelation:

The null hypothesis is that there is no autocorrelation.

Model	Test Statistic	P value	Decision
Random Effect Model	0.91544	2.2e-16	The error term generated from random effect has autocorrelation problem of serial correlation

✓ Homoscedasticity Test: Breusch-Pagan test

The Null hypothesis is that there is homoskedasticity

Test Statistic	P value	Decision
92.245	2.2e-16	The dataset is heteroskedastic

✓ Breusch-Godfrey/Wooldridge test for serial correlation in panel models

Null: There is no serial correlation

Model	Test Statistic	P value	Decision
Fixed Effect Model	chisq = 125	2.2e-16	Reject the null

Model	Test Statistic	P value	Decision
Random Effect Model	chisq = 130.18	2.2e-16	Reject the null

- ✓ Panel Unit Root Testing: Levin-Lin-Chu Unit-Root Test
The null hypothesis is that the variable is non-stationary.

Variables	Test Statistic	P value	Decision
ROE	-5.635	8.754e-09	Reject the null hypothesis
TA	-1.5469	0.06095	Cannot Reject the null hypothesis
CC	13.863	1	Cannot Reject the null hypothesis
FFR	-8.8073	2.2e-16	Reject the null hypothesis
LF	-0.58249	0.2801	Cannot Reject the null hypothesis