Econometric estimation

Pooled estimator

Random effects estimator

Fixed effects estimator

Poisson pseudo-maximum-likelihood estimator For regressors not in logs, the semi-elasticity is given by 100*(exp(beta) - 1)%.

https://www.statalist.org/forums/forum/general-stata-discussion/general/1458657-interpretation-of-coefficients-in-gravity-model-using-ppml-dummies

Hausman test

Results

% Table created by stargazer v.5.2.3 by Marek Hlavac, Social Policy Institute. E-mail: marek.hlavac at gmail.com % Date and time: Thu, Jun 30, 2022 - 17:15:30

	POLS	REE	FEE	PPML
	(1)	(2)	(3)	(4)
Suma bilateral del producto interno bruto	2.428***	1.718***	3.508***	0.971***
	(0.476)	(0.093)	(0.562)	(0.017)
Diferencia en la dotación relativa de factores	0.434	−0.125	0.690	0.168**
	(0.539)	(0.187)	(0.684)	(0.081)
Similitud en el tamaño de las economías	11.410***	5.441***	18.646***	2.483***
	(4.197)	(0.786)	(3.701)	(0.247)
Distancia entre principales centros urbanos	−2.092***	−2.554***	−1.753***	−1.117***
	(0.307)	(0.092)	(0.499)	(0.054)
Fronteras en común	−0.752	−1.632***	−0.247	−0.275**
	(0.677)	(0.165)	(1.209)	(0.111)
Lenguaje en común	3.914**	1.136***	7.215***	0.041
	(1.744)	(0.179)	(1.499)	(0.205)
Colonizador en común	−2.320**	−0.923***	−4.764**	0.632***
	(1.072)	(0.220)	(1.958)	(0.089)
Índice de similitud en creencias religiosas	−1.991	−1.269***	−2.894	0.199
	(1.878)	(0.234)	(2.335)	(0.323)
Acuerdos comerciales regionales	0.579	0.671*	0.629	0.565***
	(0.450)	(0.368)	(0.728)	(0.090)
Constante	−33.028**	−9.726***		
	(14.829)	(2.343)		
N	1,560	1,560	1,560	1,560
R^2	0.640	0.613	0.771	
Adjusted R^2	0.638	0.611	0.537	
F Statistic	306.748***	1,956.964***	288.501***	
Pseudo R^2				0.915

Table 1: