Appendices - Methods for Panel Data Models

Schooling Inequality - Four Methods for Panel Data Models

	Dependent variable: Standard Deviation - IDEPE				
	Pooled	First Difference	Fixed	Random	
	(1)	(2)	(3)	(4)	
2009	-0.105	-0.056		-0.083	
	(0.064)	(0.062)		(0.062)	
2010	-0.139*	-0.086		-0.108	
	(0.077)	(0.081)		(0.076)	
2011	-0.033	0.018		-0.001	
	(0.089)	(0.090)		(0.089)	
2012	-0.096	0.024		-0.061	
	(0.091)	(0.086)		(0.092)	
2013	-0.084	0.001		-0.053	
	(0.101)	(0.090)		(0.103)	
2014	-0.065	0.004		-0.042	
	(0.111)	(0.089)		(0.114)	
2015	-0.012	0.061		0.008	
	(0.115)	(0.081)		(0.119)	
2016	-0.080	0.011		-0.071	
	(0.121)	(0.074)		(0.126)	
2017	-0.077	-0.019		-0.085	
	(0.138)	(0.082)		(0.143)	
2018	-0.128	-0.042		-0.133	
	(0.141)	(0.080)		(0.148)	
2019	-0.098	-0.008		-0.100	
	(0.144)	(0.068)		(0.151)	
2021	-0.212			-0.180	
	(0.136)			(0.144)	
idepe	0.238	-0.265	-0.466*	0.099	
	(0.255)	(0.384)	(0.281)	(0.252)	
idepe ²	-0.021	0.053	0.076**	0.0004	
	(0.031)	(0.046)	(0.033)	(0.031)	
GDP per capita	-0.002	-0.001	-0.006	-0.004	
	(0.003)	(0.009)	(0.004)	(0.003)	
5 days full-time schools	0.054**	0.009	0.024	0.039	
	(0.023)	(0.040)	(0.029)	(0.024)	
Part-time schools	0.011	0.021	0.040	0.012	
	(0.027)	(0.030)	(0.025)	(0.026)	
3 days full-time schools	-0.001	0.029	0.038	0.005	
	(0.031)	(0.043)	(0.031)	(0.031)	
Professional full-time schools	0.232***	0.096	0.164**	0.211***	
	(0.067)	(0.080)	(0.068)	(0.068)	

Urban Schools	-0.023*	-0.028	-0.068***	-0.037***
	(0.012)	(0.032)	(0.021)	(0.013)
Schools with Internet	0.041***	0.019	0.057***	0.048^{***}
	(0.011)	(0.012)	(0.010)	(0.011)
Schools with Night Classes	-0.029	-0.029	-0.019	-0.029
	(0.027)	(0.025)	(0.024)	(0.026)
Schools with Adult Classes	-0.002	0.022	0.008	0.0004
	(0.007)	(0.014)	(0.011)	(0.008)
White Students	0.403	0.852	-0.148	0.258
	(0.301)	(0.971)	(0.518)	(0.334)
Female Students	-3.109***	-0.603	0.721	-2.719**
	(1.027)	(1.780)	(1.298)	(1.057)
Age-grade Distortion	0.006^{**}	0.006^{*}	-0.001	0.005^{*}
	(0.002)	(0.004)	(0.003)	(0.003)
Constant	1.535**	0.003		1.660^{**}
	(0.664)	(0.023)		(0.680)
Observations	156	144	156	156
\mathbb{R}^2	0.743	0.383	0.604	0.743
Adjusted R ²	0.691	0.252	0.480	0.691
F Statistic	14.345*** (df = 26; 129)	2.925*** (df = 25; 118)	12.874*** (df = 14; 118)	372.443***

Note: *p<0.1; **p<0.05; ***p<0.01