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The Influence of Crop Type on Comparative Development

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ABSTRACT

Stuff

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Table 1: Estimates of Malthusian Tightness, β , by Region, 2000CE

Dependent Variable: Log caloric yield (A_{ic})						
	Region:					
	Europe (1)	Asia (2)	Sub- Saharan Africa (3)	South & Central America (4)	North Africa & Mideast (5)	North America (6)
Log rural density	0.443 (0.114)	0.213 (0.070)	0.146 (0.061)	0.348 (0.051)	0.096 (0.061)	0.394 (0.015)
p-value $\beta = \beta^{Eur}$.	0.087	0.023	0.446	0.009	0.667
Countries	34	23	44	18	26	2
Observations	529	636	574	296	418	62
Adjusted R-square	0.53	0.65	0.54	0.65	0.40	0.71

Notes: Standard errors are clustered at the country level, *** indicates significance at 1%, ** at 5%, and * at 10%. All regressions include country fixed effects and a constant. See appendix for lists of exact countries included in each region. The coefficient estimate on rural population density indicates the value of β , see equation (??). Rural population is from HYDE database (?), and caloric yield is the author's calculations based on the data from ?. The p-value is from a hypothesis test that the estimated β is equal to that estimated for Europe, β^{Eur} , and is obtained from an interaction term in a separate regression including both Europe and the given region, see equation (??) and the text for details.

Table 2: Estimates of Malthusian Tightness, β , by Sub-regions, 2000CEDependent Variable in both panels: Log caloric yield (A_{ic})

Panel A	Sub-Region:				
	North & Western Europe (1)	Eastern Europe (2)	Southern Europe (3)	Excl. China	
				South & Southeast Asia (4)	Central & West Asia (5)
Log rural density	0.562 (0.185)	0.478 (0.172)	0.119 (0.069)	0.052 (0.012)	0.353 (0.095)
p-value $\beta = \beta^{NW Eur}$.	0.734	0.031	0.009	0.313
Countries	16	9	9	10	11
Observations	177	216	136	343	201
Adjusted R-square	0.64	0.32	0.29	0.40	0.59

Panel B	Sub-Region:				
	Temperate Americas	Tropical Americas	Tropical Africa	South Africa	North Africa
Log rural density	0.394 (0.015)	0.096 (0.061)	0.133 (0.064)	0.329 (0.068)	0.385 (0.074)
p-value $\beta = \beta^{NW Eur}$	0.371	0.018	0.028	0.245	0.374
Countries	2	26	40	4	5
Observations	62	418	539	35	94
Adjusted R-square	0.71	0.40	0.56	0.22	0.53

Notes: Standard errors are clustered at the country level, *** indicates significance at 1%, ** at 5%, and * at 10%. All regressions include country fixed effects and a constant. See appendix for lists of exact countries included in each region. The coefficient estimate on rural population density indicates the value of β , see equation (??). Rural population is from HYDE database (?), and caloric yield is the author's calculations based on the data from ?. The p-value is from a hypothesis test that the estimated β is equal to that estimated for Northwest Europe, $\beta^{NW Eur}$, and is obtained from an interaction term in a separate regression including both Northwest Europe and the given region, see equation (??) and the text for details.

Table 3: Estimates of Malthusian Tightness, β , China, 2000CE

Dependent Variable: Log caloric yield (A_{ic})						
	Province level:			District level:		
	All China (1)	North China (2)	South China (3)	All China (4)	North China (5)	South China (6)
Rural density 1900	0.824 (0.093)	0.849 (0.103)	0.104 (0.065)	0.788 (0.076)	0.865 (0.090)	0.171 (0.030)
p-value $\beta = \beta^{North}$			0.000			0.000
Observations	30	15	15	329	156	173
Adjusted R-square	0.85	0.87	0.10	0.55	0.54	0.43

Notes: Standard errors are clustered at the country level, *** indicates significance at 1%, ** at 5%, and * at 10%. All regressions include country fixed effects and a constant. See appendix for lists of exact countries included in each region. The coefficient estimate on rural population density indicates the value of β , see equation (??). Rural population is from HYDE database (?), and caloric yield is the author's calculations based on the data from ?. The p-value is from a hypothesis test that the estimated β is equal to that estimated for North China, β^{North} , and is obtained from an interaction term in a separate regression including both North and South China, see equation (??) and the text for details.

Table 4: Estimates of Malthusian Tightness, β , by Crop Suitability, 2000CEDependent Variable in all panels: Log caloric yield (A_{ic})

Panel A: Wheat and rice

	Inclusion by crop suitability:					
	Entire world:				Ex. Americas:	
	Wheat>0 Rice=0 (1)	Wheat=0 Rice>0 (2)	Wheat>0 (3)	Rice>0 (4)	Wheat>0 Rice=0 (5)	Wheat=0 Rice>0 (6)
Log rural density	0.437 (0.050)	0.072 (0.029)	0.260 (0.044)	0.072 (0.019)	0.440 (0.059)	0.080 (0.041)
Countries	85	69	136	134	73	48
Observations	694	630	1931	1867	632	502
Adjusted R-square	0.60	0.37	0.60	0.52	0.63	0.31

Panel B: Tropical crops

	Inclusion by crop suitability:					
	Cassava>0	Cowpeas>0	Maize>0	Pearl Millet>0	Sweet Potato>0	Yams>0
Log rural density	0.039 (0.018)	0.145 (0.031)	0.155 (0.029)	0.090 (0.035)	0.086 (0.020)	0.078 (0.021)
Countries	97	126	147	89	122	110
Observations	1386	1884	2445	1190	1800	1574
Adjusted R-square	0.41	0.58	0.57	0.61	0.53	0.53

Panel C: Temperate crops

	Inclusion by crop suitability:					
	Barley>0	Buck- wheat>0	Oats>0	Flax>0	Rye>0	White Potato>0
Log rural density	0.264 (0.045)	0.375 (0.034)	0.405 (0.041)	0.364 (0.033)	0.422 (0.040)	0.268 (0.050)
Countries	136	85	74	81	74	133
Observations	1931	1276	1226	1254	1228	1891
Adjusted R-square	0.59	0.63	0.63	0.65	0.63	0.58

Notes: Standard errors are clustered at the country level, *** indicates significance at 1%, ** at 5%, and * at 10%. All regressions include country fixed effects and a constant. The coefficient estimate on rural population density indicates the value of β , see equation (??). Rural population is from HYDE database (?), and caloric yield is the author's calculations based on the data from ?. Inclusion of sub-national units in the regression is based on crop suitability indices from ?, which range from 0 to 100, and are calculated by the author's for each sub-national unit. See text for details.