Econometrica Supplementary Material

SUPPLEMENT TO "DIVERSITY AND CONFLICT"

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SA. SUPPLEMENT TO THE COUNTRY-LEVEL ANALYSES

SA.1. *Robustness Checks for the Analysis of Civil Conflict in Cross-Country Data*

IN THIS APPENDIX SECTION, we present several robustness checks for our cross-country analysis of the influence of contemporary population diversity on the temporal frequency of civil conflict outbreaks in the post-1960 time period.

Robustness to Accounting for Deep-Rooted Determinants of Economic Development

In Table SA.I, we establish the robustness of our baseline cross-country analysis of civil conflict to *additionally* accounting for the potentially confounding influence of other deep-rooted determinants of comparative economic development. Specifically, we augment the analysis in Table I with controls for (i) the time elapsed since the onset of the Neolithic Revolution (e.g., Ashraf and Galor (2013a)); (ii) an index of experience with institutionalized statehood since antiquity (e.g., Bockstette, Chanda, and Putterman (2002)); (iii) the time elapsed since initial human settlement in prehistory (e.g., Ahlerup and Olsson (2012)); and (iv) the great-circle distance to the closest regional technological frontier in the year 1500 (e.g., Ashraf and Galor (2013a)). The results indicate that regardless of the estimation sample or the specification, contemporary population diversity remains a significant predictor of the annual frequency of civil conflict onsets.

Robustness to Accounting for Ethnic and Spatial Inequality

In Table SA.II, we check the robustness of our findings from Table I to *additionally* accounting for intracountry economic inequality (e.g., Alesina, Michalopoulos, and Papaioannou (2016)), as captured by the subnational spatial distribution of per-capita adjusted nighttime luminosity in the year 2000 across either (i) the georeferenced homelands of ethnic groups (ethnic inequality); or (ii) 2.5×2.5-degree geospatial grid cells (spatial inequality). The two inequality measures enter these regressions with a positive

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TABLE SA.I

POPULATION DIVERSITY AND THE FREQUENCY OF CIVIL CONFLICT ONSET ACROSS COUNTRIES—ROBUSTNESS TO ACCOUNTING FOR DEEP-ROOTED DETERMINANTS OF ECONOMIC DEVELOPMENT[a]

Cross-Country Sample:	Global					Old World		Global	
	(1) OLS	(2) OLS	(3) OLS	(4) OLS	(5) OLS	(6) OLS	(7) OLS	(8) 2SLS	(9) 2SLS
	Log number of new PRIO25 civil conflict onsets per year, 1960–2017								
Population diversity (ancestry adjusted)	0.23	0.38	0.31	0.32	0.33	0.55	0.66	0.50	0.60
	(0.070)	(0.10)	(0.11)	(0.12)	(0.14)	(0.27)	(0.27)	(0.19)	(0.20)
Log years since Neolithic Revolution		0.0075	0.011	0.010	0.0081	0.0045	−0.00054	0.0099	0.0077
		(0.0042)	(0.0052)	(0.0052)	(0.0062)	(0.010)	(0.011)	(0.0051)	(0.0058)
Log index of state antiquity		0.0066	0.0076	0.0081	0.0039	0.0077	0.00066	0.0081	0.0050
		(0.0031)	(0.0035)	(0.0037)	(0.0048)	(0.0041)	(0.0056)	(0.0033)	(0.0045)
Log duration of human settlement		0.0048	0.00071	0.00078	0.0025	0.0035	0.0086	0.00028	0.0021
		(0.0020)	(0.0029)	(0.0031)	(0.0033)	(0.0044)	(0.0046)	(0.0029)	(0.0032)
Log distance from regional frontier in 1500		0.0016	0.0022	0.0018	0.0013	0.0025	0.0020	0.0018	0.00076
		(0.0014)	(0.0015)	(0.0016)	(0.0014)	(0.0020)	(0.0018)	(0.0014)	(0.0014)
Continent dummies			×	×	×	×	×	×	×
Controls for geography		×	×	×	×	×	×	×	×
Controls for ethnic diversity				×	×		×		×
Controls for institutions					×		×		×
Controls for oil, population, and income					×		×		×
Observations	136	136	136	136	135	110	109	136	135
Partial R^2 of population diversity		0.085	0.046	0.044	0.054	0.044	0.077		
Adjusted R^2	0.034	0.23	0.22	0.22	0.35	0.22	0.40		
Effect of 10th–90th percentile move in diversity	0.016	0.026	0.022	0.022	0.022	0.026	0.033	0.034	0.041
	(0.0048)	(0.0071)	(0.0077)	(0.0080)	(0.0096)	(0.013)	(0.014)	(0.013)	(0.014)
First-stage F-statistic								69.3	52.1

[a]This table conducts a robustness check on the results from the baseline cross-country analysis of the reduced-form impact of contemporary population diversity on the annual frequency of civil conflict onsets, as shown in Table I. Specifically, it establishes robustness to *additionally* accounting for the potentially confounding influence of other deep-rooted determinants of comparative economic development, including (i) the time elapsed since the onset of the Neolithic Revolution (e.g., Ashraf and Galor (2013a)); (ii) an index of experience with institutionalized statehood since antiquity (e.g., Bockstette, Chanda, and Putterman (2002)); (iii) the time elapsed since initial human settlement in prehistory (e.g., Ahlerup and Olsson (2012)); and (iv) the great-circle distance to the closest regional technological frontier in the year 1500 (e.g., Ashraf and Galor (2013a)). The specifications examined in this table are otherwise identical to corresponding ones reported in Table I. The reader is therefore referred to Table I and the corresponding table notes for additional details on the baseline set of covariates considered by the current analysis as well as the identification strategy employed by the 2SLS regressions. The estimated effect associated with increasing population diversity from the 10th to the 90th percentile of its cross-country distribution is expressed in terms of the number of new conflict onsets per year. Heteroscedasticity-robust standard errors are reported in parentheses.

TABLE SA.II

POPULATION DIVERSITY AND THE FREQUENCY OF CIVIL CONFLICT ONSET ACROSS COUNTRIES—ROBUSTNESS TO ACCOUNTING FOR ETHNIC AND SPATIAL INEQUALITY[a]

Cross-Country Sample:	Global					Old World		Global	
	(1) OLS	(2) OLS	(3) OLS	(4) OLS	(5) OLS	(6) OLS	(7) OLS	(8) 2SLS	(9) 2SLS
	Log number of new PRIO25 civil conflict onsets per year, 1960–2017								
Population diversity (ancestry adjusted)	0.21	0.44	0.34	0.35	0.34	0.66	0.76	0.67	0.75
	(0.066)	(0.11)	(0.12)	(0.13)	(0.13)	(0.21)	(0.21)	(0.20)	(0.19)
Ethnic inequality in luminosity		0.021	0.020	0.018	0.013	0.023	0.022	0.024	0.018
		(0.014)	(0.014)	(0.015)	(0.017)	(0.017)	(0.018)	(0.014)	(0.015)
Spatial inequality in luminosity		0.0035	0.014	0.015	0.013	0.021	0.019	0.018	0.014
		(0.017)	(0.017)	(0.018)	(0.015)	(0.021)	(0.018)	(0.016)	(0.014)
Continent dummies			×	×	×	×	×	×	×
Controls for geography		×	×	×	×	×	×	×	×
Controls for ethnic diversity				×	×		×		×
Controls for institutions					×		×		×
Controls for oil, population, and income					×		×		×
Observations	147	147	147	147	145	120	119	147	145
Partial R^2 of population diversity		0.13	0.054	0.056	0.062	0.094	0.14		
Adjusted R^2	0.032	0.18	0.21	0.21	0.36	0.23	0.42		
Effect of 10th–90th percentile move in diversity	0.015	0.030	0.023	0.024	0.023	0.028	0.033	0.046	0.051
	(0.0044)	(0.0073)	(0.0083)	(0.0086)	(0.0089)	(0.0089)	(0.0093)	(0.013)	(0.013)
First-stage F-statistic								133.9	80.5

[a]This table conducts a robustness check on the results from the baseline cross-country analysis of the reduced-form impact of contemporary population diversity on the annual frequency of civil conflict onsets, as shown in Table I. Specifically, it establishes robustness to *additionally* accounting for the potentially confounding influence of measures of intracountry economic inequality (e.g., Alesina, Michalopoulos, and Papaioannou (2016)), as captured by the subnational spatial distribution of per-capita adjusted nighttime luminosity in the year 2000 across either (i) the georeferenced homelands of ethnic groups (ethnic inequality); or (ii) 2.5 × 2.5-degree geospatial grid cells (spatial inequality). The specifications examined in this table are otherwise identical to corresponding ones reported in Table I. The reader is therefore referred to Table I and the corresponding table notes for additional details on the baseline set of covariates considered by the current analysis as well as the identification strategy employed by the 2SLS regressions. The estimated effect associated with increasing population diversity from the 10th to the 90th percentile of its cross-country distribution is expressed in terms of the number of new conflict onsets per year. Heteroscedasticity-robust standard errors are reported in parentheses.

coefficient, and in at least one case, the coefficient on ethnic inequality is statistically significant. Nonetheless, our results indicate that the positive and significant influence of population diversity on the annual frequency of civil conflicts cannot be attributed to the potentially confounding influence of these inequality measures.

Robustness to Using Alternative Measures of Ethnolinguistic Fragmentation

Due to the sizable cross-country correlation between the ethnic and linguistic fractionalization measures of Alesina, Devleeschauwer, Easterly, Kurlat, and Wacziarg (2003), rather than exploiting both variables simultaneously, we chose to employ the more widely used of the two indices—namely, ethnic fractionalization—as one of the many covariates in our baseline analysis of the influence of population diversity on civil conflict frequency. In Table SA.III, we examine the sensitivity of our baseline findings from Table I to employing the *linguistic* fractionalization index of Alesina et al. (2003) in lieu of our baseline control for the *ethnic* fractionalization index from the same source. Furthermore, in Table SA.IV, we examine the robustness of our baseline findings to employing the country-level counterparts of our measures of linguistic fractionalization and polarization from our analysis of conflicts at the ethnic-homelands level. Specifically, these measures are constructed using georeferenced information on the spatial distribution of language homelands (from the World Language Mapping System [WLMS]) in combination with gridded population data, and they enter our regressions in Table SA.IV in lieu of our baseline controls for ethnic fractionalization from Alesina et al. (2003) and ethnolinguistic polarization from Desmet, Ortuño-Ortín, and Wacziarg (2012). Reassuringly, the results in Tables SA.III–SA.IV confirm that all our baseline findings regarding the significant influence of population diversity on the temporal frequency of civil conflict onsets remain qualitatively intact under these alternative controls for ethnolinguistic fragmentation.

Robustness to Using Initial Values of Time-Varying Covariates

In Table SA.V, we exploit the initial or year-1960 values of the time-dependent baseline controls employed by our analysis in Table I (i.e., the degree of executive constraints, indicators for democracy and autocracy, total population, and GDP per capita), rather than their respective temporal averages over the 1960–2017 time period. This robustness check is intended to examine whether our baseline estimates of the influence of population diversity in Table I could be explained away by the fact that the temporal averages of our time-varying controls over the entire sample period are likely to be more endogenous to the frequency of civil conflict onsets over the same period. Reassuringly, population diversity continues to remain a significant predictor of conflict frequency in these alternative specifications.

Robustness to Accounting for Spatial Autocorrelation in Errors

As with any analysis that exploits spatial variations in cross-sectional data, autocorrelation in disturbance terms across observations could be biasing our estimates of the standard errors in our baseline cross-country regressions of conflict frequency. Table SA.VI therefore reports, for our key specifications from Table I, standard errors that are corrected for cross-sectional spatial dependence, using the methodology proposed by Conley (1999). To perform this robustness check, the spatial distribution of observations is specified on the Euclidean plane using the full set of pairwise geodesic distances between country centroids, and the spatial autoregressive process across residuals is modeled as varying inversely with distance from each observation up to a maximum threshold of

TABLE SA.III

POPULATION DIVERSITY AND THE FREQUENCY OF CIVIL CONFLICT ONSET ACROSS COUNTRIES—THE ANALYSIS UNDER LINGUISTIC FRACTIONALIZATION[a]

Cross-Country Sample:	Global					Old World		Global	
	(1) OLS	(2) OLS	(3) OLS	(4) OLS	(5) OLS	(6) OLS	(7) OLS	(8) 2SLS	(9) 2SLS
	Log number of new PRIO25 civil conflict onsets per year, 1960–2017								
Population diversity (ancestry adjusted)	0.22	0.47	0.34	0.36	0.33	0.55	0.60	0.55	0.60
	(0.069)	(0.11)	(0.12)	(0.13)	(0.14)	(0.19)	(0.21)	(0.18)	(0.19)
Linguistic fractionalization				0.011	0.0047		0.0099		0.0050
				(0.012)	(0.0095)		(0.011)		(0.0090)
Ethnolinguistic polarization				0.014	0.012		0.013		0.016
				(0.013)	(0.012)		(0.014)		(0.012)
Continent dummies			×	×	×	×	×	×	×
Controls for geography		×	×	×	×	×	×	×	×
Controls for institutions					×		×		×
Controls for oil, population, and income					×		×		×
Observations	146	146	146	146	143	122	120	146	143
Partial R^2 of population diversity		0.14	0.049	0.056	0.057	0.068	0.092		
Adjusted R^2	0.031	0.20	0.22	0.23	0.37	0.23	0.41		
Effect of 10th–90th percentile move in diversity	0.014	0.031	0.022	0.023	0.022	0.025	0.027	0.036	0.039
	(0.0045)	(0.0071)	(0.0081)	(0.0082)	(0.0088)	(0.0090)	(0.0094)	(0.012)	(0.012)
First-stage F-statistic								163.9	100.1

[a]This table conducts a robustness check on the results from the baseline cross-country analysis of the reduced-form impact of contemporary population diversity on the annual frequency of civil conflict onsets, as shown in Table I. Specifically, it establishes robustness to accounting for the potentially confounding influence of linguistic rather than ethnic fractionalization (e.g., Alesina et al. (2003)), as a baseline control for subnational intergroup cultural fragmentation. The specifications examined in this table are otherwise identical to corresponding ones reported in Table I. The reader is therefore referred to Table I and the corresponding table notes for additional details on the other baseline covariates considered by the current analysis as well as the identification strategy employed by the 2SLS regressions. The estimated effect associated with increasing population diversity from the 10th to the 90th percentile of its cross-country distribution is expressed in terms of the number of new conflict onsets per year. Heteroscedasticity-robust standard errors are reported in parentheses.

TABLE SA.IV

POPULATION DIVERSITY AND THE FREQUENCY OF CIVIL CONFLICT ONSET ACROSS COUNTRIES—THE ANALYSIS UNDER GEOREFERENCED LINGUISTIC FRACTIONALIZATION AND POLARIZATION[a]

Cross-Country Sample:	Global					Old World		Global	
	(1) OLS	(2) OLS	(3) OLS	(4) OLS	(5) OLS	(6) OLS	(7) OLS	(8) 2SLS	(9) 2SLS
	Log number of new PRIO25 civil conflict onsets per year, 1960–2017								
Population diversity (ancestry adjusted)	0.21	0.44	0.31	0.33	0.28	0.56	0.58	0.54	0.56
	(0.066)	(0.10)	(0.11)	(0.12)	(0.12)	(0.19)	(0.21)	(0.18)	(0.18)
Linguistic fractionalization (georeferenced)				0.0019	−0.0060		−0.0080		−0.0025
				(0.011)	(0.0099)		(0.012)		(0.0097)
Linguistic polarization (georeferenced)				0.0064	0.0084		0.0097		0.0092
				(0.012)	(0.0096)		(0.010)		(0.0088)
Continent dummies			×	×	×	×	×	×	×
Controls for geography		×	×	×	×	×	×	×	×
Controls for institutions					×		×		×
Controls for oil, population, and income					×		×		×
Observations	151	151	151	151	148	124	122	151	148
Partial R^2 of population diversity		0.13	0.047	0.049	0.046	0.070	0.083		
Adjusted R^2	0.030	0.19	0.21	0.21	0.36	0.23	0.39		
Effect of 10th–90th percentile move in diversity	0.014	0.029	0.021	0.021	0.019	0.027	0.025	0.035	0.038
	(0.0043)	(0.0067)	(0.0075)	(0.0077)	(0.0083)	(0.0092)	(0.0090)	(0.011)	(0.012)
First-stage F-statistic								157.1	98.5

[a]This table conducts a robustness check on the results from the baseline cross-country analysis of the reduced-form impact of contemporary population diversity on the annual frequency of civil conflict onsets, as shown in Table I. Specifically, it establishes robustness to accounting for the potentially confounding influence of linguistic fractionalization and polarization, constructed using georeferenced information on the spatial distribution of language homelands (from the World Language Mapping System [WLMS]) in combination with gridded population data, rather than ethnic fractionalization (e.g., Alesina et al. (2003)) and ethnolinguistic polarization (e.g., Desmet, Ortuño-Ortín, and Wacziarg (2012)), as baseline controls for subnational intergroup cultural fragmentation. The specifications examined in this table are otherwise identical to corresponding ones reported in Table I. The reader i s therefore referred to Table I and the corresponding table notes for additional details on the other baseline covariates considered by the current analysis as well as the identification strategy employed by the 2SLS regressions. The estimated effect associated with increasing population diversity from the 10 to the 90th percentile of its cross-country distribution is expressed in terms of the number of new conflict onsets per year. Heteroscedasticity-robust standard errors are reported in parentheses.

TABLE SA.V

POPULATION DIVERSITY AND THE FREQUENCY OF CIVIL CONFLICT ONSET ACROSS COUNTRIES—THE ANALYSIS UNDER INITIAL VALUES OF TIME-VARYING COVARIATES[a]

Cross-Country Sample:	Global					Old World		Global	
	(1) OLS	(2) OLS	(3) OLS	(4) OLS	(5) OLS	(6) OLS	(7) OLS	(8) 2SLS	(9) 2SLS
	Log number of new PRIO25 civil conflict onsets per year, 1960–2017								
Population diversity (ancestry adjusted)	0.21	0.44	0.31	0.32	0.37	0.55	0.73	0.54	0.69
	(0.066)	(0.10)	(0.12)	(0.12)	(0.14)	(0.19)	(0.21)	(0.18)	(0.19)
Executive constraints in initial year					0.0036		0.0035		0.0047
					(0.0022)		(0.0026)		(0.0022)
Democracy score in initial year					−0.0024		−0.0015		−0.0032
					(0.0018)		(0.0020)		(0.0016)
Autocracy score in initial year					−0.00091		−0.00037		−0.0013
					(0.0014)		(0.0015)		(0.0013)
Log population in initial year					0.0046		0.0071		0.0042
					(0.0025)		(0.0033)		(0.0024)
Log GDP per capita in initial year					−0.0037		−0.0042		−0.0051
					(0.0022)		(0.0022)		(0.0022)
Continent dummies			×	×	×	×	×	×	×
Controls for geography		×	×	×	×	×	×	×	×
Controls for ethnic diversity				×	×		×		×
Controls for legal origin and colonial history					×		×		×
Control for oil or gas reserve discovery					×		×		×

(Continues)

TABLE SA.V—*Continued*

Cross-Country Sample:	Global					Old World		Global	
	(1) OLS	(2) OLS	(3) OLS	(4) OLS	(5) OLS	(6) OLS	(7) OLS	(8) 2SLS	(9) 2SLS
Observations	150	150	150	150	145	123	119	150	145
Partial R^2 of population diversity		0.13	0.044	0.046	0.063	0.068	0.12		
Adjusted R^2	0.029	0.19	0.21	0.21	0.28	0.23	0.34		
Effect of 10th–90th percentile move in diversity	0.014	0.029	0.020	0.021	0.025	0.026	0.031	0.036	0.047
	(0.0044)	(0.0069)	(0.0077)	(0.0079)	(0.0092)	(0.0092)	(0.0092)	(0.012)	(0.013)
First-stage F-statistic								153.5	81.2

[a]This table conducts a robustness check on the results from the baseline cross-country analysis of the reduced-form impact of contemporary population diversity on the annual frequency of civil conflict onsets, as shown in Table I. Specifically, it establishes robustness to considering the initial or year-1960 values of the time-dependent baseline controls for institutions (i.e., the degree of executive constraints and indicators for democracy and autocracy), total population, and GDP per capita, rather than their respective temporal averages over the 1960–2017 time period. The methodology exploited by the current analysis aims to reduce any ex ante bias in the baseline estimates of the influence of population diversity, arising from the fact that the temporal averages of the aforementioned time-varying controls may well vary more endogenously across countries with the contemporaneous measure of civil conflict onsets. In order to maintain a cross-country sample that is as consistent as possible with the baseline analysis, observations of the time-dependent covariates from the earliest available year after 1960 are used for the subset of countries with missing 1960 data. The specifications examined in this table are otherwise identical to corresponding ones reported in Table I. The reader is therefore referred to Table I and the corresponding table notes for additional details on the other baseline covariates considered by the current analysis as well as the identification strategy employed by the 2SLS regressions. The estimated effect associated with increasing population diversity from the 10th to the 90th percentile of its cross-country distribution is expressed in terms of the number of new conflict onsets per year. Heteroscedasticity-robust standard errors are reported in parentheses.

TABLE SA.VI

POPULATION DIVERSITY AND THE FREQUENCY OF CIVIL CONFLICT ONSET ACROSS COUNTRIES—ROBUSTNESS TO ACCOUNTING FOR SPATIAL AUTOCORRELATION IN ERRORS[a]

Cross-Country Sample:	Global					Old World		Global	
	(1) Conley OLS	(2) Conley OLS	(3) Conley OLS	(4) Conley OLS	(5) Conley OLS	(6) Conley OLS	(7) Conley OLS	(8) Conley GMM	(9) Conley GMM
	Log number of new PRIO25 civil conflict onsets per year, 1960–2017								
Population diversity (ancestry adjusted)	0.21	0.44	0.31	0.32	0.31	0.55	0.60	0.54	0.60
	(0.036)	(0.068)	(0.12)	(0.11)	(0.11)	(0.076)	(0.076)	(0.084)	(0.085)
Continent dummies			×	×	×	×	×	×	×
Controls for geography		×	×	×	×	×	×	×	×
Controls for ethnic diversity				×	×		×		×
Controls for institutions					×		×		×
Controls for oil, population, and income					×		×		×
Observations	150	150	150	150	147	123	121	150	147
Adjusted R^2	0.36	0.47	0.48	0.49	0.58	0.51	0.62		

[a]This table conducts a robustness check on the results from the baseline cross-country analysis of the reduced-form impact of contemporary population diversity on the annual frequency of civil conflict onsets, as shown in Table I. Specifically, it establishes robustness of the standard-error estimates to accounting for spatial dependence across observations, following the methodology of Conley (1999). To perform this robustness check, the spatial distribution of observations is specified on the Euclidean plane using the full set of pairwise geodesic distances between country centroids, and the spatial autoregressive process across residuals is modeled as varying inversely with distance from each observation up to a maximum threshold of 25,000 kilometers, thus admitting the possibility of spatial dependence at a global scale. The GMM specifications in this table correspond to the 2SLS specifications from Table I, exploiting prehistoric migratory distance from East Africa to the indigenous (precolonial) population of a country as an excluded instrument for the country's contemporary population diversity. The specifications examined in this table are otherwise identical to corresponding ones reported in Table I. The reader is therefore referred to Table I and the corresponding table notes for additional details on the baseline set of covariates considered by the current analysis. Standard errors, corrected for spatial autocorrelation, are reported in parentheses.

25,000 kilometers, thus admitting the possibility of spatial dependence at a global scale. The GMM specifications in this table correspond to the 2SLS specifications from Table I. Reassuringly, depending on the specification, the corrected standard errors of the estimated coefficient on population diversity are either similar in magnitude or noticeably smaller when compared to their heteroscedasticity-robust counterparts from our baseline analysis.

Robustness to the Elimination of Regions From the Estimation Sample

Following the norm in cross-country empirical studies of civil conflict, we investigate whether our main findings are driven by potentially influential world regions. The analysis in Table SA.VII checks the qualitative robustness of the results associated with our fully specified empirical models in Columns 8 and 12 of Table I, eliminating one-at-a-time the following world regions from our global sample of countries: Sub-Saharan Africa (SSA), Middle East and North Africa (MENA), East Asia and Pacific (EAP), and Latin America and the Caribbean (LAC). Due to the lower degrees of freedom afforded by the regression samples with eliminated regions, the analysis omits continent dummies from the empirical models in order to preserve as much of the cross-country variation in conflict frequency as possible. The findings reassuringly reveal that the significant influence of population diversity on conflict frequency is not qualitatively sensitive to the exclusion of any one of these potentially influential world region from our full estimation sample.

SA.2. *Robustness Checks for the Analysis of Civil Conflict in Repeated Cross-Country Data*

In this appendix section, we present several robustness checks for our analysis of the influence of contemporary population diversity on the quinquennial incidence or annual onset of civil conflict in repeated cross-country data for the post-1960 time period.

Robustness to Accounting for Deep-Rooted Determinants of Economic Development

The analysis in Table SA.IX establishes the robustness of our baseline results for the quinquennial incidence and annual onset of civil conflict in repeated cross-country data to *additionally* accounting for the potentially confounding influence of other deep-rooted determinants of comparative economic development. Specifically, we augment the analysis in Table II with controls for (i) the time elapsed since the onset of the Neolithic Revolution (e.g., Ashraf and Galor (2013a)); (ii) an index of experience with institutionalized statehood since antiquity (e.g., Bockstette, Chanda, and Putterman (2002)); (iii) the time elapsed since initial human settlement in prehistory (e.g., Ahlerup and Olsson (2012)); and (iv) the great-circle distance to the closest regional technological frontier in the year 1500 (e.g., Ashraf and Galor (2013a)). The results indicate that regardless of the estimation sample or the specification, contemporary population diversity remains a significant predictor of both the quinquennial likelihood of a conflict incidence (Columns 1–4) and the annual likelihood of a conflict onset (Columns 5–8).

Robustness to Accounting for Ethnic and Spatial Inequality

In Table SA.X, we check the robustness of our findings from Table II to *additionally* accounting for intracountry economic inequality (e.g., Alesina, Michalopoulos, and Papaioannou (2016)), as captured by the subnational spatial distribution of per-capita adjusted nighttime luminosity in the year 2000 across either (i) the georeferenced homelands of ethnic groups (ethnic inequality); or (ii) 2.5×2.5-degree geospatial grid cells

TABLE SA.VII

POPULATION DIVERSITY AND THE FREQUENCY OF CIVIL CONFLICT ONSET ACROSS COUNTRIES—ROBUSTNESS TO THE ELIMINATION OF REGIONS FROM THE GLOBAL SAMPLE[a]

Omitted Region:	None		SSA		MENA		EAP		LAC	
	(1) OLS	(2) 2SLS	(3) OLS	(4) 2SLS	(5) OLS	(6) 2SLS	(7) OLS	(8) 2SLS	(9) OLS	(10) 2SLS
	Log number of new PRIO25 civil conflict onsets per year, 1960–2017									
Population diversity (ancestry adjusted)	0.34	0.59	0.41	1.24	0.37	0.60	0.31	0.56	0.38	0.56
	(0.11)	(0.18)	(0.14)	(0.38)	(0.13)	(0.19)	(0.12)	(0.19)	(0.16)	(0.20)
Controls for geography	×	×	×	×	×	×	×	×	×	×
Controls for ethnic diversity	×	×	×	×	×	×	×	×	×	×
Controls for institutions	×	×	×	×	×	×	×	×	×	×
Controls for oil, population, and income	×	×	×	×	×	×	×	×	×	×
Observations	147	147	105	105	131	131	132	132	126	126
Partial R^2 of population diversity	0.051		0.058		0.039		0.011		0.087	
Adjusted R^2	0.34		0.34		0.36		0.33		0.36	
Effect of 10th–90th percentile move in diversity	0.023	0.040	0.026	0.077	0.025	0.041	0.018	0.033	0.019	0.027
	(0.0078)	(0.012)	(0.0087)	(0.024)	(0.0088)	(0.013)	(0.0073)	(0.011)	(0.0077)	(0.0098)
First-stage F-statistic		59.5		17.6		57.9		50.6		73.4

[a]This table conducts a robustness check on the results associated with the fully specified empirical models in the baseline cross-country analysis of the reduced-form impact of contemporary population diversity on the annual frequency of civil conflict onsets, as shown in Columns 8 and 12 of Table I. Specifically, it establishes robustness to the one-at-a-time elimination of world regions from the global sample, including Sub-Saharan Africa (SSA), Middle East and North Africa (MENA), East Asia and Pacific (EAP), and Latin America and the Caribbean (LAC). Due to the lower degrees of freedom afforded by the regression samples with eliminated regions, the current analysis omits continent dummies from the empirical models in order to preserve as much of the cross-country variation in conflict as possible. The regressions in Columns 1–2 should therefore be viewed as the relevant baselines for assessing the robustness results presented in the remaining columns. The set of covariates, however, is otherwise identical to those reported in Columns 8 and 12 of Table I. The reader is therefore referred to Table I and the corresponding table notes for additional details on the set of covariates considered by the current analysis as well as the identification strategy employed by the 2SLS regressions. The estimated effect associated with increasing population diversity from the 10th to the 90th percentile of its cross-country distribution is expressed in terms of the number of new conflict onsets per year. Heteroscedasticity-robust standard errors are reported in parentheses.

TABLE SA.VIII

ETHNIC FRACTIONALIZATION, POLARIZATION, AND THE FREQUENCY OF CIVIL CONFLICT ONSET ACROSS COUNTRIES[a]

	(1) OLS	(2) OLS	(3) OLS	(4) OLS	(5) OLS	(6) OLS	(7) OLS	(8) OLS	(9) OLS
	Log number of new PRIO25 civil conflict onsets per year, 1960–2017								
Ethnic fractionalization	0.024	0.021	0.016				0.022	0.015	0.012
	(0.0070)	(0.012)	(0.012)				(0.0075)	(0.012)	(0.012)
Ethnolinguistic polarization				0.014	0.019	0.012	0.0071	0.014	0.0078
				(0.0083)	(0.010)	(0.010)	(0.0088)	(0.010)	(0.010)
Continent dummies			×			×			×
Controls for geography		×	×		×	×		×	×
Observations	154	154	154	154	154	154	154	154	154
Adjusted R^2	0.037	0.095	0.18	0.0064	0.096	0.18	0.034	0.098	0.18

[a]This table examines the sensitivity of the association between ethnic fractionalization and ethnolinguistic polarization, on the one hand, and the annual frequency of new civil conflict onsets during the 1960–2017 time period, on the other, to controls for potentially confounding geographical characteristics and continent fixed effects. The controls for geography include absolute latitude, ruggedness, distance to the nearest waterway, the mean and range of agricultural suitability, the mean and range of elevation, and an indicator for small island nations. The set of continent dummies includes five indicators for Africa, Asia, North America, South America, and Oceania. Heteroscedasticity-robust standard errors are reported in parentheses.

TABLE SA.IX

POPULATION DIVERSITY AND THE INCIDENCE OR ONSET OF CIVIL CONFLICT IN REPEATED CROSS-COUNTRY DATA—ROBUSTNESS TO ACCOUNTING FOR DEEP-ROOTED DETERMINANTS OF ECONOMIC DEVELOPMENT[a]

Cross-Country Sample:	Old World		Global		Old World		Global	
	(1) Probit	(2) Probit	(3) IV Probit	(4) IV Probit	(5) Probit	(6) Probit	(7) IV Probit	(8) IV Probit
	Quinquennial PRIO25 civil conflict incidence, 1960–2017				Annual PRIO25 civil conflict onset, 1960–2017			
Population diversity (ancestry adjusted)	15.4	9.82	19.3	15.7	5.22	4.78	8.56	11.7
	(4.67)	(4.78)	(5.40)	(6.39)	(2.94)	(2.78)	(3.66)	(4.26)
Log years since Neolithic Revolution	0.085	0.19	−0.29	−0.24	0.33	0.32	0.029	−0.16
	(0.27)	(0.30)	(0.29)	(0.33)	(0.15)	(0.17)	(0.19)	(0.23)
Log index of state antiquity	0.24	0.076	0.29	0.14	0.093	0.035	0.12	0.096
	(0.088)	(0.10)	(0.10)	(0.12)	(0.041)	(0.057)	(0.051)	(0.070)
Log duration of human settlement	0.00047	0.070	−0.024	−0.0087	0.039	0.044	0.0035	0.019
	(0.13)	(0.13)	(0.097)	(0.12)	(0.066)	(0.071)	(0.059)	(0.069)
Log distance from regional frontier in 1500	−0.031	0.0014	−0.057	−0.025	0.049	0.050	−0.0040	−0.018
	(0.052)	(0.051)	(0.040)	(0.047)	(0.032)	(0.038)	(0.026)	(0.031)
Continent dummies	×	×	×	×	×	×	×	×
Time dummies	×	×	×	×	×	×	×	×
Controls for temporal spillovers	×	×	×	×	×	×	×	×
Controls for geography	×	×	×	×	×	×	×	×
Controls for ethnic diversity		×		×		×		×
Controls for institutions		×		×		×		×
Controls for oil, population, and income		×		×		×		×

(Continues)

TABLE SA.IX—*Continued*

Cross-Country Sample:	Old World		Global		Old World		Global	
	(1) Probit	(2) Probit	(3) IV Probit	(4) IV Probit	(5) Probit	(6) Probit	(7) IV Probit	(8) IV Probit
Observations	1141	953	1447	1219	4810	4481	6280	5886
Countries	110	109	136	135	110	109	136	135
Pseudo R^2	0.43	0.43			0.14	0.15		
Marginal effect of diversity	2.99	1.90	3.88	3.11	0.29	0.26	0.44	0.60
	(0.90)	(0.94)	(1.14)	(1.33)	(0.16)	(0.15)	(0.20)	(0.26)
First-stage F-statistic			41.1	39.9			48.2	45.0

[a]This table conducts a robustness check on the results from the baseline analysis of the reduced-form impact of contemporary population diversity on either the quinquennial incidence or the annual onset of civil conflict in repeated cross-country data, as shown in Table II. Specifically, it establishes robustness to *additionally* accounting for the potentially confounding influence of other deep-rooted determinants of comparative economic development, including (i) the time elapsed since the onset of the Neolithic Revolution (e.g., Ashraf and Galor (2013a)); (ii) an index of experience with institutionalized statehood since antiquity (e.g., Bockstette, Chanda, and Putterman (2002)); (iii) the time elapsed since initial human settlement in prehistory (e.g., Ahlerup and Olsson (2012)); and (iv) the great-circle distance to the closest regional technological frontier in the year 1500 (e.g., Ashraf and Galor (2013a)). The specifications examined in this table are otherwise identical to corresponding ones reported in Table II. The reader is therefore referred to Table II and the corresponding table notes for additional details on the baseline set of covariates considered by the current analysis, the identification strategy employed by the IV probit regressions, and the estimation and interpretation of the marginal effect of population diversity on the incidence or onset of conflict. Heteroscedasticity-robust standard errors, clustered at the country level, are reported in parentheses.

TABLE SA.X

POPULATION DIVERSITY AND THE INCIDENCE OR ONSET OF CIVIL CONFLICT IN REPEATED CROSS-COUNTRY DATA—ROBUSTNESS TO ACCOUNTING FOR ETHNIC AND SPATIAL INEQUALITY[a]

Cross-Country Sample:	Old World		Global		Old World		Global	
	(1) Probit	(2) Probit	(3) IV Probit	(4) IV Probit	(5) Probit	(6) Probit	(7) IV Probit	(8) IV Probit
	Quinquennial PRIO25 civil conflict incidence, 1960–2017				Annual PRIO25 civil conflict onset, 1960–2017			
Population diversity (ancestry adjusted)	14.7	14.3	16.4	16.1	6.69	6.81	7.89	9.10
	(3.87)	(3.80)	(3.78)	(4.05)	(2.86)	(2.95)	(2.97)	(3.37)
Ethnic inequality in luminosity	0.59	0.68	0.33	0.28	0.33	0.33	0.26	0.14
	(0.37)	(0.45)	(0.38)	(0.44)	(0.26)	(0.26)	(0.26)	(0.26)
Spatial inequality in luminosity	−0.035	0.15	0.29	0.52	−0.053	−0.017	0.070	0.086
	(0.41)	(0.43)	(0.39)	(0.41)	(0.26)	(0.26)	(0.25)	(0.28)
Continent dummies	×	×	×	×	×	×	×	×
Time dummies	×	×	×	×	×	×	×	×
Controls for temporal spillovers	×	×	×	×	×	×	×	×
Controls for geography	×	×	×	×	×	×	×	×
Controls for ethnic diversity		×		×		×		×
Controls for institutions		×		×		×		×
Controls for oil, population, and income		×		×		×		×
Observations	1234	1038	1547	1304	5206	4342	6840	5722
Countries	120	119	147	145	120	119	147	145
Pseudo R^2	0.41	0.44			0.13	0.17		
Marginal effect of diversity	2.84	2.63	3.27	3.09	0.35	0.35	0.37	0.43
	(0.72)	(0.70)	(0.79)	(0.84)	(0.15)	(0.15)	(0.15)	(0.18)
First-stage F-statistic			125.5	93.7			133.3	99.9

[a]This table conducts a robustness check on the results from the baseline analysis of the reduced-form impact of contemporary population diversity on either the quinquennial incidence or the annual onset of civil conflict in repeated cross-country data, as shown in Table II. Specifically, it establishes robustness to *additionally* accounting for the potentially confounding influence of measures of intrastate economic inequality (e.g., Alesina, Michalopoulos, and Papaioannou (2016)), as captured by the subnational spatial distribution of per-capita adjusted nighttime luminosity in the year 2000 across either (i) the georeferenced homelands of ethnic groups (ethnic inequality); or (ii) 2.5 × 2.5-degree geospatial grid cells (spatial inequality). The specifications examined in this table are otherwise identical to corresponding ones reported in Table II. The reader is therefore referred to Table II and the corresponding table notes for additional details on the baseline set of covariates considered by the current analysis, the identification strategy employed by the IV probit regressions, and the estimation and interpretation of the marginal effect of population diversity on the incidence or onset of conflict. Heteroscedasticity-robust standard errors, clustered at the country level, are reported in parentheses.

(spatial inequality). The two inequality measures enter these regressions with mostly positive but invariably insignificant coefficients. Thus, unsurprisingly, the positive and significant influence of population diversity on either the quinquennial incidence or the annual onset of civil conflict remains qualitatively unaffected.

Robustness to Accounting for Alternative Correlates of Conflict Incidence

The analysis in Table SA.XI checks the robustness of our baseline results for conflict incidence to controlling for the potentially confounding influence of *alternative* distributional indices of intergroup diversity (e.g., Fearon (2003), Alesina et al. (2003), Esteban, Mayoral, and Ray (2012)) as well as *additional* geographical correlates of conflict (e.g., Fearon and Laitin (2003), Cervellati, Sunde, and Valmori (2017)). The specifications examined by this robustness analysis are identical to the fully specified baseline models reported in Columns 2 and 4 of Table II, with the exception that in Columns 1–3 and 6–8 of the current analysis, each of the reported control variables is employed in lieu of the baseline control for ethnic fractionalization (Alesina et al. (2003)), whereas in Columns 4 and 9, the set of reported control variables replaces the baseline controls for both ethnic fractionalization and ethnolinguistic polarization (Desmet, Ortuño-Ortín, and Wacziarg (2012)), in the interest of mitigating multicollinearity. Further, in Columns 5 and 10, the set of reported geographical controls augments our fully specified baseline models of conflict incidence. Among the additional controls considered, ethnolinguistic polarization (Esteban, Mayoral, and Ray (2012)) and the geographical variables that capture the percentage of mountainous terrain and the presence of noncontiguous territories (Fearon and Laitin (2003)) enter the IV probit regressions in the global sample of countries with positive and significant coefficients. Nevertheless, our baseline findings regarding the significant impact of population diversity on the quinquennial incidence of civil conflict remain qualitatively unaltered across all specifications.

Robustness to Employing the Classical Logit and Rare-Events Logit Estimators

The analysis in Table SA.XII establishes the robustness of our baseline results for the quinquennial incidence and annual onset of civil conflict in repeated cross-sectional data on countries from the Old World, as shown in Columns 1–2 and 5–6 of Table II, to employing the classical logit and rare-events logit (King and Zeng (2001)) estimators, rather than the standard probit estimator. Given the absence of readily available ordinary logit and rare-events logit estimators that permit instrumentation, the current analysis is unable to implement our global-sample identification strategy of exploiting prehistoric migratory distance from East Africa to the indigenous (precolonial) population of a country as an excluded instrument for the country's contemporary population diversity. As expected, the rare-events logit estimates in Table SA.XII are somewhat smaller in absolute value than their counterparts under the classical logit estimator, due to bias arising in the latter estimates from ignoring the fact that civil conflict events (involving at least 25 battle-related deaths in a year) are generally rare occurrences in repeated cross-country data. Nonetheless, the findings attest to the robustness of the reduced-form influence of population diversity on either the quinquennial incidence or the annual onset of civil conflict under these alternative estimators.

Robustness to Accounting for Spatiotemporal Dependence Using Two-Way Clustering of Standard Errors

In Table SA.XIII, we check the robustness of the results from our baseline probit and logit analyses of the quinquennial incidence or annual onset of civil conflict in repeated

TABLE SA.XI

POPULATION DIVERSITY AND THE INCIDENCE OF CIVIL CONFLICT IN REPEATED CROSS-COUNTRY DATA—ROBUSTNESS TO ACCOUNTING FOR ALTERNATIVE CORRELATES OF CONFLICT INCIDENCE[a]

Cross-Country Sample:	Old World					Global				
	(1) Probit	(2) Probit	(3) Probit	(4) Probit	(5) Probit	(6) IV Probit	(7) IV Probit	(8) IV Probit	(9) IV Probit	(10) IV Probit
	Quinquennial PRIO25 civil conflict incidence, 1960–2017									
Population diversity (ancestry adjusted)	12.4	12.4	13.7	9.59	13.2	13.1	13.9	14.4	11.0	14.8
	(3.72)	(3.75)	(4.03)	(4.20)	(4.05)	(4.11)	(4.15)	(4.43)	(4.44)	(4.77)
Ethnic fractionalization (Fearon (2003))	−0.27					−0.15				
	(0.33)					(0.33)				
Linguistic fractionalization (Alesina et al. (2003))		0.35					0.28			
		(0.35)					(0.32)			
Religious fractionalization (Alesina et al. (2003))			−0.46					−0.71		
			(0.28)					(0.28)		
Ethnolinguistic fractionalization (Esteban, Mayoral, and Ray (2012))				0.11					0.18	
				(0.36)					(0.35)	
Ethnolinguistic polarization (Esteban, Mayoral, and Ray (2012))				0.72					3.22	
				(1.49)					(1.37)	
Gini index of ethnolinguistic diversity (Esteban, Mayoral, and Ray (2012))				−0.52					−1.36	
				(0.72)					(1.05)	
Log percentage mountainous terrain					0.099					0.11
					(0.063)					(0.062)
Noncontiguous state dummy					0.37					0.56
					(0.21)					(0.18)
Disease richness					0.00031					−0.0065
					(0.010)					(0.0095)
Controls for all baseline covariates	×	×	×	×	×	×	×	×	×	×

(Continues)

TABLE SA.XI—*Continued*

Cross-Country Sample:	Old World					Global				
	(1) Probit	(2) Probit	(3) Probit	(4) Probit	(5) Probit	(6) IV Probit	(7) IV Probit	(8) IV Probit	(9) IV Probit	(10) IV Probit
Observations	1020	1035	1046	950	1015	1286	1278	1312	1177	1281
Countries	119	120	121	106	118	145	143	147	128	144
Pseudo R^2	0.43	0.44	0.44	0.45	0.44					
Marginal effect of diversity	2.39	2.31	2.55	1.78	2.50	2.58	2.66	2.76	2.12	2.85
	(0.72)	(0.70)	(0.76)	(0.79)	(0.78)	(0.85)	(0.83)	(0.89)	(0.89)	(0.98)
First-stage F-statistic						100.6	105.0	98.7	68.5	70.5

[a]This table conducts a robustness check on the results from the baseline analysis of the reduced-form impact of contemporary population diversity on the quinquennial incidence of civil conflict in repeated cross-country data, as shown in Columns 2 and 4 of Table II. Specifically, it establishes robustness to accounting for the potentially confounding influence of *alternative* distributional indices of intergroup diversity (e.g., Fearon (2003), Alesina et al. (2003), Esteban, Mayoral, and Ray (2012)) and *additional* geographical correlates of conflict (e.g., Fearon and Laitin (2003), Cervellati, Sunde, and Valmori (2017)). The specifications examined in this table are identical to the fully specified baseline models of conflict incidence, as reported in Columns 2 and 4 of Table II, with the exception that in Columns 1–3 and 6–8 of the current analysis, each of the reported control variables is employed in lieu of the baseline control for ethnic fractionalization (Alesina et al. (2003)), whereas in Columns 4 and 9, the set of reported control variables replaces the baseline controls for both ethnic fractionalization and ethnolinguistic polarization (Desmet, Ortuño-Ortín, and Wacziarg (2012)), in the interest of mitigating multicollinearity. Further, in Columns 5 and 10 of the current analysis, the set of reported geographical controls augments the fully specified baseline models from Columns 2 and 4 of Table II. The reader is therefore referred to Table II and the corresponding table notes for additional details on the baseline set of covariates considered by the current analysis, the identification strategy employed by the IV probit regressions, and the estimation and interpretation of the marginal effect of population diversity on the incidence of conflict. Heteroscedasticity-robust standard errors, clustered at the country level, are reported in parentheses.

TABLE SA.XII

POPULATION DIVERSITY AND THE INCIDENCE OR ONSET OF CIVIL CONFLICT IN REPEATED CROSS-COUNTRY DATA—ROBUSTNESS TO EMPLOYING THE CLASSICAL LOGIT AND RARE-EVENTS LOGIT ESTIMATORS[a]

	(1) Classical Logit	(2) Rare-Events Logit	(3) Classical Logit	(4) Rare-Events Logit	(5) Classical Logit	(6) Rare-Events Logit	(7) Classical Logit	(8) Rare-Events Logit
	Quinquennial PRIO25 civil conflict incidence, 1960–2017				Annual PRIO25 civil conflict onset, 1960–2017			
Population diversity (ancestry adjusted)	24.4	23.8	22.3	20.9	13.9	13.4	13.2	12.4
	(6.65)	(6.53)	(6.70)	(6.48)	(6.27)	(6.18)	(6.58)	(6.52)
Continent dummies	×	×	×	×	×	×	×	×
Time dummies	×	×	×	×	×	×	×	×
Controls for temporal spillovers	×	×	×	×	×	×	×	×
Controls for geography	×	×	×	×	×	×	×	×
Controls for ethnic diversity			×	×			×	×
Controls for institutions			×	×			×	×
Controls for oil, population, and income			×	×			×	×
Observations	1270	1270	1045	1045	5452	6280	4377	5221
Countries	123	123	121	121	123	123	121	121
Pseudo R^2	0.41		0.44		0.13		0.16	
Marginal effect of diversity	3.73	4.00	2.99	3.19	0.19	0.20	0.16	0.16
	(1.01)	(1.21)	(0.94)	(1.13)	(0.086)	(0.099)	(0.081)	(0.098)

[a]This table conducts a robustness check on the results from the baseline analysis of the reduced-form impact of contemporary population diversity on either the quinquennial incidence or the annual onset of civil conflict in repeated cross-sectional data for the Old World sample of countries, as shown in Columns 1–2 and 5–6 of Table II. Specifically, it establishes robustness to employing the ordinary logit and rare-events logit (King and Zeng (2001)) estimators, rather than the probit estimator, for estimating the relevant empirical models of conflict incidence and onset. The specifications examined in this table are otherwise identical to corresponding ones reported in Columns 1–2 and 5–6 of Table II. The reader is therefore referred to Table II and the corresponding table notes for additional details on the baseline set of covariates considered by the current analysis. Given the absence of readily available ordinary logit and rare-events logit estimators that permit instrumentation, the current analysis is unable to implement the global-sample identification strategy of exploiting prehistoric migratory distance from East Africa to the indigenous (precolonial) population of a country as an excluded instrument for the country's contemporary population diversity. The estimated marginal effect of a 1 percentage point increase in population diversity is the marginal effect at the mean value of diversity in the cross-section, and it reflects the increase in either the quinquennial likelihood of a conflict incidence (Columns 1–4) or the annual likelihood of a conflict onset (Columns 5–8), both expressed in percentage points. Heteroscedasticity-robust standard errors, clustered at the country level, are reported in parentheses.

TABLE SA.XIII

POPULATION DIVERSITY AND THE INCIDENCE OR ONSET OF CIVIL CONFLICT IN REPEATED CROSS-COUNTRY DATA—ROBUSTNESS TO ACCOUNTING FOR SPATIOTEMPORAL DEPENDENCE USING TWO-WAY CLUSTERING OF STANDARD ERRORS[a]

	(1) Probit	(2) Logit	(3) Probit	(4) Logit	(5) Probit	(6) Logit	(7) Probit	(8) Logit
	Quinquennial PRIO25 civil conflict incidence, 1960–2017				Annual PRIO25 civil conflict onset, 1960–2017			
Population diversity (ancestry adjusted)	13.4	24.4	12.2	22.3	6.17	13.9	6.36	13.2
	(2.62)	(4.26)	(3.38)	(6.02)	(2.91)	(6.53)	(3.48)	(7.37)
Continent dummies	×	×	×	×	×	×	×	×
Time dummies	×	×	×	×	×	×	×	×
Controls for temporal spillovers	×	×	×	×	×	×	×	×
Controls for geography	×	×	×	×	×	×	×	×
Controls for ethnic diversity			×	×			×	×
Controls for institutions			×	×			×	×
Controls for oil, population, and income			×	×			×	×
Observations	1270	1270	1045	1045	5452	5452	4377	4377
Countries	123	123	121	121	123	123	121	121
Pseudo R^2	0.42	0.41	0.44	0.44	0.13	0.13	0.16	0.16

[a]This table conducts a robustness check on the results from the baseline probit and logit analyses of the reduced-form impact of contemporary population diversity on either the quinquennial incidence or the annual onset of civil conflict in repeated cross-sectional data for the Old World sample of countries, as shown in Columns 1–2 and 5–6 of Table II and in odd-numbered columns of Table SA.XII. Specifically, it establishes robustness of the standard-error estimates to accounting for spatiotemporal dependence across country-time observations by implementing multidimensional clustering of standard errors, following the methodology of Cameron, Gelbach, and Miller (2011). To implement this robustness check, the standard errors across country-time observations are clustered in two dimensions: (i) the country level, which allows for temporal dependence within a country over time (i.e., across either 5-year intervals or years); and (ii) the time level, which allows for spatial dependence across countries within a given time period (i.e., either a 5-year interval or a year). The specifications examined in this table are otherwise identical to corresponding ones reported in Columns 1–2 and 5–6 of Table II and in odd-numbered columns of Table SA.XII. The reader is therefore referred to Table II and the corresponding table notes for additional details on the baseline set of covariates considered by the current analysis. Given the absence of readily available probit and logit estimators that not only allow for multidimensional clustering of standard errors but also permit instrumentation, the current analysis is unable to implement the global-sample identification strategy of exploiting prehistoric migratory distance from East Africa to the indigenous (precolonial) population of a country as an excluded instrument for the country's contemporary population diversity. Heteroscedasticity-robust standard errors, clustered multidimensionally at both the country and time levels, are reported in parentheses.

cross-sectional data on countries from the Old World, as shown in Columns 1–2 and 5–6 of Table II and in odd-numbered columns of Table SA.XII, to accounting for spatiotemporal dependence across country-time observations. Specifically, we probe the statistical precision of our coefficient estimates by implementing multidimensional clustering of standard errors, following the methodology of Cameron, Gelbach, and Miller (2011). To implement this robustness check, the standard errors across country-time observations are clustered in two dimensions: (i) the country level, which allows for temporal dependence within a country over time (i.e., across either 5-year intervals or years); and (ii) the time level, which allows for spatial dependence across countries within a given time period (i.e., either a 5-year interval or a year). Given the absence of readily available probit and logit estimators that not only allow for multidimensional clustering of standard errors but also permit instrumentation, the current analysis is unable to implement the global-sample identification strategy of exploiting prehistoric migratory distance from East Africa to the indigenous (precolonial) population of a country as an excluded instrument for the country's contemporary population diversity. Reassuringly, the bi-dimensionally clustered standard errors of our coefficient of interest are either similar to or, in the specifications for conflict incidence, noticeably smaller in magnitude than their classically estimated counterparts in Tables II and SA.XII that do not admit spatiotemporal dependence across country-time observations.

Robustness to Accounting for Alternative Correlates of Conflict Onset

In Table SA.XIV, we check the robustness of the results from our baseline analysis of the annual onset of civil conflict in repeated cross-country data, as shown in Columns 5–8 of Table II, to accounting for the potentially confounding influence of an *additional* time-invariant distributional index of intergroup diversity, capturing the degree of "ethnic dominance" (e.g., Collier and Hoeffler (2004)), and *additional* time-varying institutional correlates of conflict onset, capturing the lagged annual values of an index of political instability and an indicator for the emergence of a newly independent state from colonial powers (e.g., Fearon and Laitin (2003)). In light of constraints imposed by the availability of data on these additional control variables, the analysis is restricted to a smaller sample of countries and to the 1960–1999 (as opposed to the 1960–2017) time period. Therefore, the specification presented in each odd-numbered column of the table is intended to provide a relevant baseline for the robustness check in the subsequent even-numbered column (i.e., by holding fixed the regression sample). Turning to the results in Table SA.XIV, the lagged index of political instability does appear to enter some of our specifications with a positive and statistically significant coefficient, although the other additional controls considered by the analysis do not seem to be significantly correlated with conflict onset. However, despite the substantial reduction in both the sample time-frame and the number of countries in the cross-section, our coefficient of interest reassuringly remains positive and precisely estimated, regardless of the inclusion of these additional controls to the specifications.

Robustness to Accounting for Commodity Export Price Shocks

The analysis in Table SA.XV checks the robustness of our baseline results for the annual onset of civil conflict in repeated cross-country data, as shown in Columns 5–8 of Table II, to *additionally* accounting for the potentially confounding "income effect" of commodity export price shocks (e.g., Bazzi and Blattman (2014)), as captured by the contemporaneous, lagged, and twice lagged values of either an annual price shock that has been aggregated across commodity export types (Columns 1–2 and 5–6) or annual price shocks

TABLE SA.XIV

POPULATION DIVERSITY AND THE ONSET OF CIVIL CONFLICT IN REPEATED CROSS-COUNTRY DATA—ROBUSTNESS TO ACCOUNTING FOR ALTERNATIVE CORRELATES OF CONFLICT ONSET[a]

Cross-Country Sample:	Old World				Global			
	(1) Probit	(2) Probit	(3) Probit	(4) Probit	(5) IV Probit	(6) IV Probit	(7) IV Probit	(8) IV Probit
	Annual PRIO25 civil conflict onset, 1960–1999							
Population diversity (ancestry adjusted)	7.79	6.87	8.27	8.33	8.81	8.11	12.0	11.5
	(3.66)	(3.47)	(4.18)	(4.34)	(3.52)	(3.42)	(4.84)	(4.97)
Ethnic dominance		0.15		−0.0017		0.15		0.040
		(0.11)		(0.14)		(0.10)		(0.13)
Political instability, lagged		0.26		0.16		0.25		0.056
		(0.11)		(0.14)		(0.098)		(0.13)
New state dummy, lagged		0.13				−0.15		
		(0.53)				(0.49)		
Continent dummies	×	×	×	×	×	×	×	×
Time dummies	×	×	×	×	×	×	×	×
Controls for temporal spillovers	×	×	×	×	×	×	×	×
Controls for geography	×	×	×	×	×	×	×	×
Controls for ethnic diversity			×	×			×	×
Controls for institutions			×	×			×	×
Controls for oil, population, and income			×	×			×	×
Observations	2761	2761	2139	2139	3728	3728	3031	3031
Countries	96	96	94	94	121	121	119	119
Pseudo R^2	0.14	0.14	0.16	0.16				
Marginal effect of diversity	0.47	0.41	0.52	0.52	0.50	0.45	0.71	0.67
	(0.23)	(0.22)	(0.27)	(0.28)	(0.22)	(0.21)	(0.35)	(0.35)
First-stage F-statistic					132.8	132.6	78.3	73.8

[a] This table conducts a robustness check on the results from the baseline analysis of the reduced-form impact of contemporary population diversity on the annual onset of civil conflict in repeated cross-country data, as shown in Columns 5–8 of Table II. Specifically, it establishes robustness to accounting for the potentially confounding influence of an *additional* distributional index of intergroup diversity (e.g., Collier and Hoeffler (2004)) and *additional* time-varying institutional correlates of conflict (e.g., Fearon and Laitin (2003)). The lagged indicator for the emergence of a newly independent state from colonial powers is dropped from the specifications in Columns 4 and 8 due to multicollinearity. In light of constraints imposed by the availability of data on the additional control variables in this table, the analysis is restricted to the 1960–1999 as opposed to the 1960–2017 time period. Therefore, the specification presented in each odd-numbered column of the table is intended to provide a relevant baseline for the robustness check in the subsequent even-numbered column (i.e., by holding fixed the regression sample). The specifications examined in this table are otherwise identical to the baseline models of conflict onset, as reported in Columns 5–8 of Table II. The reader is therefore referred to Table II and the corresponding table notes for additional details on the baseline set of covariates considered by the current analysis, the identification strategy employed by the IV probit regressions, and the estimation and interpretation of the marginal effect of population diversity on the onset of conflict. Heteroscedasticity-robust standard errors, clustered at the country level, are reported in parentheses.

TABLE SA.XV

POPULATION DIVERSITY AND THE ONSET OF CIVIL CONFLICT IN REPEATED CROSS-COUNTRY DATA—ROBUSTNESS TO ACCOUNTING FOR COMMODITY EXPORT PRICE SHOCKS[a]

Cross-Country Sample:	Old World				Global			
	(1) Probit	(2) Probit	(3) Probit	(4) Probit	(5) IV Probit	(6) IV Probit	(7) IV Probit	(8) IV Probit
	Annual PRIO25 civil conflict onset, 1960–2007							
Population diversity (ancestry adjusted)	8.60	8.95	8.63	8.73	9.01	10.7	9.09	10.6
	(3.66)	(3.89)	(3.62)	(3.90)	(3.40)	(4.54)	(3.39)	(4.57)
Aggregate price shock	−0.13	−0.16			−0.14	−0.19		
	(0.052)	(0.059)			(0.053)	(0.056)		
Aggregate price shock, lagged	0.026	0.021			0.014	0.017		
	(0.060)	(0.069)			(0.058)	(0.062)		
Aggregate price shock, twice lagged	−0.17	−0.18			−0.11	−0.12		
	(0.060)	(0.066)			(0.058)	(0.064)		
Annual crop price shock			−0.16	−0.19			−0.16	−0.22
			(0.071)	(0.083)			(0.071)	(0.075)
Annual crop price shock, lagged			−0.039	−0.048			−0.049	−0.045
			(0.083)	(0.093)			(0.082)	(0.088)
Annual crop price shock, twice lagged			−0.18	−0.18			−0.10	−0.11
			(0.084)	(0.094)			(0.084)	(0.095)
Perennial crop price shock			−0.13	−0.14			−0.13	−0.15
			(0.066)	(0.070)			(0.058)	(0.059)
Perennial crop price shock, lagged			0.12	0.12			0.094	0.089
			(0.045)	(0.054)			(0.046)	(0.051)
Perennial crop price shock, twice lagged			−0.13	−0.14			−0.076	−0.083
			(0.050)	(0.053)			(0.046)	(0.049)
Extractive crop price shock			−0.19	−0.25			−0.18	−0.27
			(0.081)	(0.092)			(0.081)	(0.086)
Extractive crop price shock, lagged			0.051	0.055			0.031	0.041
			(0.088)	(0.098)			(0.088)	(0.094)
Extractive crop price shock, twice lagged			−0.33	−0.33			−0.26	−0.26
			(0.10)	(0.11)			(0.096)	(0.10)

(Continues)

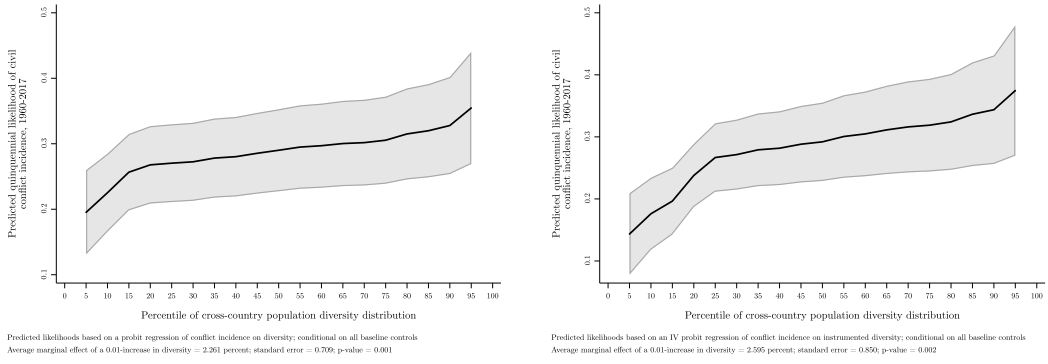
TABLE SA.XV—*Continued*

Cross-Country Sample:	Old World				Global			
	(1) Probit	(2) Probit	(3) Probit	(4) Probit	(5) IV Probit	(6) IV Probit	(7) IV Probit	(8) IV Probit
Continent dummies	×	×	×	×	×	×	×	×
Time dummies	×	×	×	×	×	×	×	×
Controls for temporal spillovers	×	×	×	×	×	×	×	×
Controls for geography	×	×	×	×	×	×	×	×
Controls for ethnic diversity		×		×		×		×
Controls for institutions		×		×		×		×
Observations	2876	2626	2876	2626	3906	3599	3906	3599
Countries	82	81	82	81	105	103	105	103
Pseudo R^2	0.12	0.15	0.13	0.16				
Marginal effect of diversity	0.53	0.53	0.53	0.52	0.50	0.58	0.50	0.57
	(0.24)	(0.24)	(0.23)	(0.24)	(0.21)	(0.28)	(0.21)	(0.28)
First-stage F-statistic					103.0	51.3	102.7	51.2

[a]This table conducts a robustness check on the results from the baseline analysis of the reduced-form impact of contemporary population diversity on the annual onset of civil conflict in repeated cross-country data, as shown in Columns 5–8 of Table II. Specifically, it establishes robustness to *additionally* accounting for the potentially confounding "income effect" of commodity export price shocks (e.g., Bazzi and Blattman (2014)), as captured by the contemporaneous, lagged, and twice lagged values of either an annual price shock that has been aggregated across commodity export types (Columns 1–2 and 5–6) or annual price shocks disaggregated by type of commodity export, including export price shocks associated with annual crops, perennial crops, and extractive crops (Columns 3–4 and 7–8). These export price shock variables are all obtained from the data set of Bazzi and Blattman (2014), so the reader is referred to that work for additional details on these variables. In light of constraints imposed by the availability of data on these export price shock variables, the analysis is restricted to the 1960–2007 as opposed to the 1960–2017 time period. The specifications examined in this table are otherwise identical to those reported in Columns 5–8 of Table II, with the exception that the fully specified models in the current analysis omit the controls for oil presence, total population, and GDP per capita, in the interest of minimizing endogeneity with the export price shock variables and maximizing degrees of freedom. The reader is therefore referred to Table II and the corresponding table notes for additional details on the baseline set of covariates considered by the current analysis, the identification strategy employed by the IV probit regressions, and the estimation and interpretation of the marginal effect of population diversity on the onset of conflict. Heteroscedasticity-robust standard errors, clustered at the country level, are reported in parentheses.

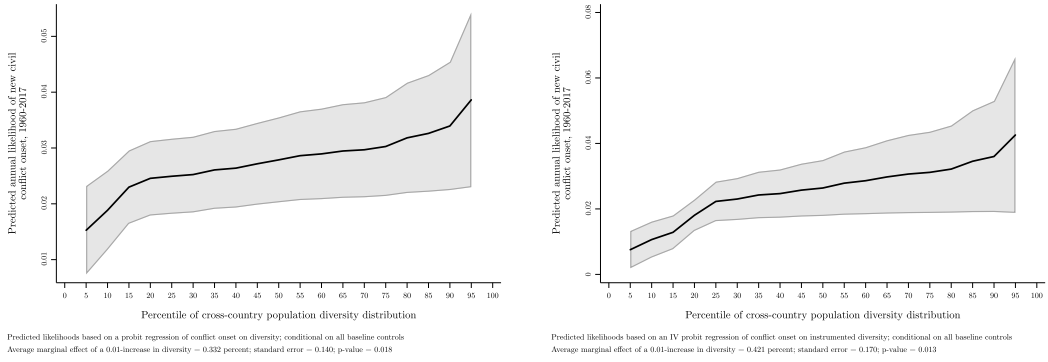
disaggregated by type of commodity export, including export price shocks associated with annual crops, perennial crops, and extractive crops (Columns 3–4 and 7–8). These export price shock variables are all obtained from the data set of Bazzi and Blattman (2014), so the reader is referred to that work for additional details on these variables. In light of constraints imposed by the availability of data on these additional covariates, the analysis is restricted to a smaller sample of countries and to the 1960–2007 (as opposed to the 1960–2017) time period. As is evident from the results in Table SA.XV, there is indeed a significant mitigating "income effect" on the annual likelihood of a conflict onset associated with the contemporaneous and twice lagged values of commodity export price shocks (for both aggregated and disaggregated variants of these shocks). Nonetheless, despite the reduction in both the number of countries in the cross-section and the sample time-frame, our coefficient of interest reassuringly remains positive and statistically significant when subjected to these additional covariates in the specifications.

SA.3. *Supplementary Figures*



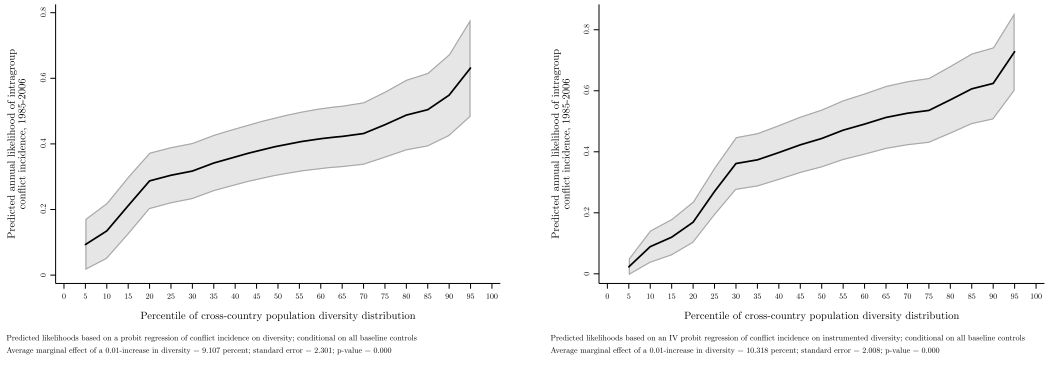
(a) Old World sample (b) Global sample

FIGURE SA.1.—Population diversity and the incidence of civil conflict. *Notes*: This figure depicts the influence of contemporary population diversity on the *predicted* likelihood of observing the incidence of a PRIO25 civil conflict in any given 5-year interval during the 1960–2017 time period, conditional on the full set of control variables, as considered by the specifications in Columns 2 and 4 of Table II. In each panel, the predicted likelihood of civil conflict incidence is illustrated as a function of the percentile of the cross-country diversity distribution in the relevant estimation sample, and the shaded area reflects the 95-percent confidence-interval region of the depicted relationship.



(a) Old World sample (b) Global sample

FIGURE SA.2.—Population diversity and the onset of civil conflict. *Notes*: This figure depicts the influence of contemporary population diversity on the *predicted* likelihood of observing the onset of a new PRIO25 civil conflict in any given year during the 1960–2017 time period, conditional on the full set of control variables, as considered by the specifications in Columns 6 and 8 of Table II. In each panel, the predicted likelihood of civil conflict onset is illustrated as a function of the percentile of the cross-country diversity distribution in the relevant estimation sample, and the shaded area reflects the 95-percent confidence-interval region of the depicted relationship.



(a) Old World sample (b) Global sample

FIGURE SA.3.—Population diversity and the incidence of intragroup conflict. *Notes*: This figure depicts the influence of contemporary population diversity on the *predicted* likelihood of observing the incidence of one or more intragroup conflicts in any given year during the 1985–2006 time period, conditional on the full set of control variables, as considered by the specifications in Columns 2 and 5 in Panel B of Table III. In each panel, the predicted likelihood of intragroup conflict incidence is illustrated as a function of the percentile of the cross-country diversity distribution in the relevant estimation sample, and the shaded area reflects the 95-percent confidence-interval region of the depicted relationship.

SB. SUPPLEMENT TO THE ETHNICITY-LEVEL ANALYSES

SB.1. *Robustness Checks*

TABLE SB.I

POPULATION DIVERSITY AND CONFLICT ACROSS ETHNIC HOMELANDS—ROBUSTNESS TO ACCOUNTING FOR ALTERNATIVE DISTANCES[a]

	Log conflict prevalence					
	(1) OLS	(2) OLS	(3) OLS	(4) OLS	(5) OLS	(6) OLS
Observed population diversity	28.3	31.3	30.6			
	(9.62)	(9.69)	(9.73)			
Predicted population diversity				73.8	70.2	75.3
				(7.39)	(7.31)	(7.30)
Distance to technological frontier in year 1 (in 1000 km)	−0.045			−0.17		
	(0.16)			(0.066)		
Distance to technological frontier in year 1000 (in 1000 km)		−0.32			−0.27	
		(0.17)			(0.062)	
Distance to technological frontier in year 1500 (in 1000 km)			−0.21			−0.12
			(0.15)			(0.061)
Ethnolinguistic fractionalization	1.63	1.45	1.47	0.28	0.34	0.33
	(1.22)	(1.17)	(1.20)	(0.38)	(0.38)	(0.38)
Ethnolinguistic polarization	−0.35	−0.21	−0.24	0.33	0.31	0.30
	(1.03)	(0.99)	(1.01)	(0.35)	(0.34)	(0.35)
Regional dummies	×	×	×	×	×	×
Geographical controls	×	×	×	×	×	×
Climatic controls	×	×	×	×	×	×
Sample	Observed	Observed	Observed	Predicted	Predicted	Predicted
Observations	207	207	207	901	901	901
Effect of 10th–90th percentile move in diversity	0.44	0.49	0.48	1.64	1.56	1.67
	(0.15)	(0.15)	(0.15)	(0.16)	(0.16)	(0.16)
Adjusted R^2	0.30	0.32	0.31	0.37	0.37	0.37
β^*	26.4	28.2	29.9	80.4	77.7	77.3

[a]This table exploits variations across ethnic homelands to establish a significant positive impact of observed and predicted population diversity on the log conflict prevalence during the 1989–2008 period, conditional on migratory distances from historical technological frontiers as well as the baseline geographical characteristics. Regional dummies include fixed effects for Europe, Asia, North America, South America, Oceania, North Africa, and Sub-Saharan Africa. See the notes accompanying Table V for details regarding the other baseline covariates. The estimated effect associated with increasing population diversity from the 10th to the 90th percentile of its distribution is expressed in terms of the change in the prevalence of conflicts within the territory of a homeland over the years 1989–2008. Heteroscedasticity-robust standard errors are reported in parentheses.

TABLE SB.II

OBSERVED POPULATION DIVERSITY AND CONFLICT ACROSS ETHNIC HOMELANDS —ROBUSTNESS TO ACCOUNTING FOR MEASURES OF ECOLOGICAL DIVERSITY[a]

	Log conflict prevalence						
	(1) OLS	(2) OLS	(3) OLS	(4) OLS	(5) OLS	(6) OLS	(7) OLS
Observed population diversity	27.7	33.0	24.7	25.6	25.0	26.9	26.3
	(10.4)	(10.5)	(9.32)	(9.31)	(9.29)	(10.4)	(10.4)
Ecological diversity	−0.84	−0.64	1.03	0.75	0.91	0.73	0.84
	(1.43)	(1.60)	(1.43)	(1.42)	(1.41)	(1.38)	(1.38)
Ecological polarization	0.94	1.10	0.67	0.70	0.69	1.01	1.01
	(1.14)	(1.23)	(1.06)	(1.05)	(1.05)	(1.02)	(1.02)
Ethnolinguistic fractionalization				1.14		0.89	
				(0.64)		(0.65)	
Ethnolinguistic polarization					0.73		0.64
					(0.53)		(0.53)
Regional dummies	×	×	×	×	×	×	×
Geographical controls		×	×	×	×	×	×
Climatic controls			×	×	×	×	×
Development outcomes						×	×
Disease environment						×	×
Sample	Observed	Observed	Observed	Observed	Observed	Observed	Observed
Observations	205	205	205	205	205	205	205
Effect of 10th–90th percentile	0.43	0.52	0.39	0.40	0.39	0.42	0.41
move in diversity	(0.16)	(0.16)	(0.15)	(0.15)	(0.15)	(0.16)	(0.16)
Adjusted R^2	0.11	0.17	0.31	0.32	0.31	0.33	0.33
β^*		37.0	23.3	24.6	23.7	26.5	25.7

[a]This table exploits cross-ethnicity variations to establish a significant positive impact of contemporary population diversity on the log spatiotemporal prevalence of UCDP/PRIO conflicts during the 1989–2008 period, conditional on ecological diversity and ecological polarization as well as the baseline control variables. Regional dummies include fixed effects for Europe, Asia, North America, South America, Oceania, North Africa, and Sub-Saharan Africa. See the notes accompanying Table V for details regarding the other baseline covariates. The 2SLS regressions exploit prehistoric migratory distance from East Africa to each ethnic homeland as an excluded instrument for the observed population diversity of this ethnic group. The estimated effect associated with increasing population diversity from the 10th to the 90th percentile of its cross-country distribution is expressed in terms of the change in the average yearly share of the area of each ethnic homeland that was within the boundaries of internal armed conflict over the period 1989–2008. Heteroscedasticity-robust standard errors are reported in parentheses.

TABLE SB.III

PREDICTED POPULATION DIVERSITY AND CONFLICT ACROSS ETHNIC HOMELANDS—ROBUSTNESS TO ACCOUNTING FOR MEASURES OF ECOLOGICAL DIVERSITY[a]

	Log conflict prevalence						
	(1) OLS	(2) OLS	(3) OLS	(4) OLS	(5) OLS	(6) OLS	(7) 2SLS
Predicted population diversity	77.6	79.8	76.1	75.7	77.9	77.6	
	(6.24)	(7.31)	(7.43)	(7.46)	(9.70)	(9.81)	
Observed population diversity							130.1
							(33.3)
Ecological diversity	0.71	0.81	1.06	1.07	1.57	1.50	−0.078
	(0.63)	(0.64)	(0.63)	(0.63)	(0.71)	(0.72)	(1.72)
Ecological polarization	0.40	0.47	0.32	0.30	−0.46	−0.44	0.26
	(0.59)	(0.54)	(0.53)	(0.54)	(0.60)	(0.60)	(1.23)
Ethnolinguistic fractionalization			0.34		0.17		
			(0.30)		(0.35)		
Ethnolinguistic polarization				0.45		0.57	
				(0.27)		(0.32)	
Regional dummies	×	×	×	×	×	×	×
Geographical controls		×	×	×	×	×	×
Climatic controls		×	×	×	×	×	×
Development outcomes			×	×	×	×	
Disease environment			×	×	×	×	

(Continues)

TABLE SB.III—*Continued*

	Log conflict prevalence						
	(1) OLS	(2) OLS	(3) OLS	(4) OLS	(5) OLS	(6) OLS	(7) 2SLS
Sample	Predicted	Predicted	Predicted	Predicted	Old World	Old World	Observed
Observations	891	891	891	891	697	697	205
Effect of 10th–90th percentile move in diversity	1.75	1.80	1.72	1.70	0.98	0.97	2.03
	(0.14)	(0.16)	(0.17)	(0.17)	(0.12)	(0.12)	(0.52)
Adjusted R^2	0.21	0.36	0.38	0.38	0.41	0.41	
β^*		81.3	75.2	74.4	69.1	68.7	
Migratory distance from East Africa (in 10,000 km)							−0.043
							(0.009)
First-stage F-statistic							23.6

[a] This table exploits cross-ethnicity variations to establish a significant positive impact of predicted population diversity on the log spatiotemporal prevalence of UCDP/PRIO conflicts during the 1989–2008 period, conditional on ecological diversity and ecological polarization as well as the baseline control variables. Regional dummies include fixed effects for Europe, Asia, North America, South America, Oceania, North Africa, and Sub-Saharan Africa. See the notes accompanying Table V for details regarding the other baseline covariates. The 2SLS regressions exploit prehistoric migratory distance from East Africa to each ethnic homeland as an excluded instrument for the observed population diversity of this ethnic group. The estimated effect associated with increasing population diversity from the 10th to the 90th percentile of its cross-country distribution is expressed in terms of the change in the average yearly share of the area of each ethnic homeland that was within the boundaries of internal armed conflict over the period 1989–2008. Heteroscedasticity-robust standard errors are reported in parentheses.

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