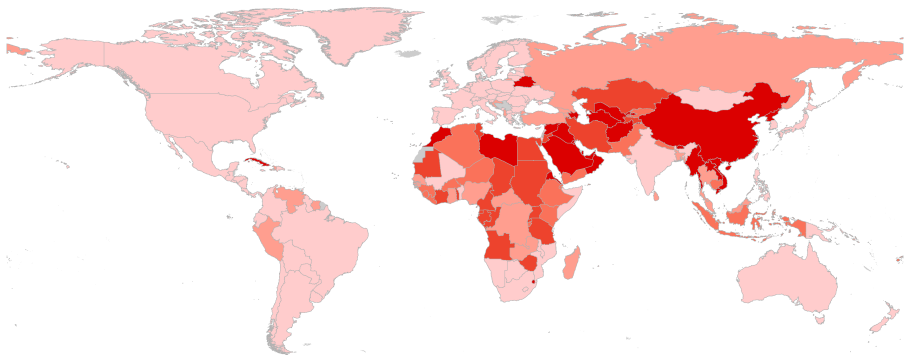


# Roots of Autocracy

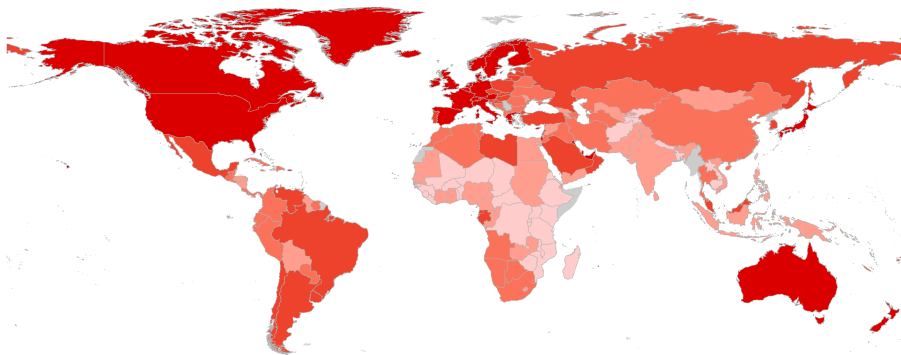
Oded Galor and Marc Klemp

January, 2017

## Variation in Autocratic Institutions (1994–2013)



# Income per Capita across the Globe (1994-2011)



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  - Class Stratification
  - The ability of some individuals to dominate others
- Heterogeneity contributed to the emergence of a ruling elite

# Chimpanzees: Genetically Diverse and Characterized by Alpha Male



## Bonobos: Genetically more Homogenous and More Egalitarian



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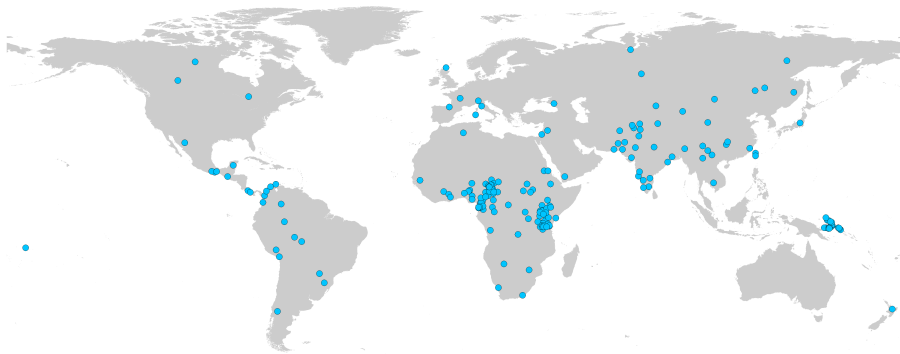
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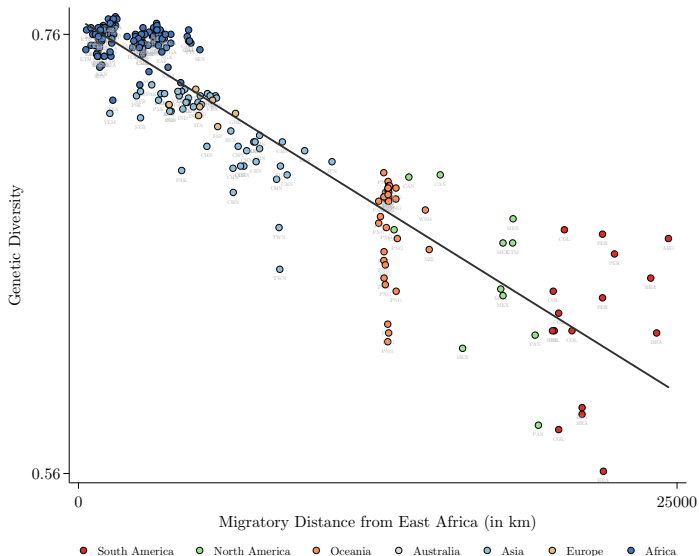
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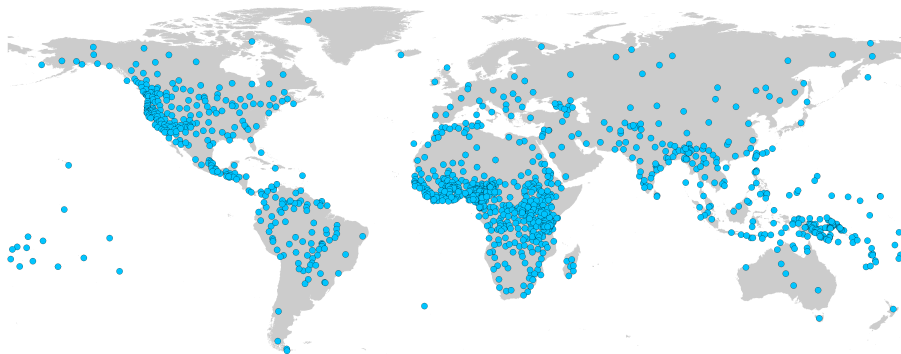
## The Spatial Distribution of Ethnic Groups — Observed Diversity (232)



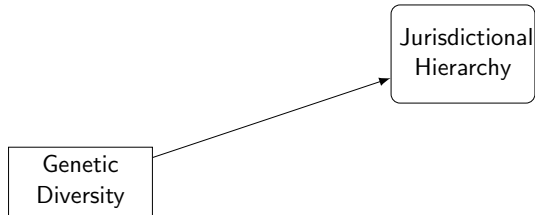
# Migratory Distance from Africa and Genetic Diversity



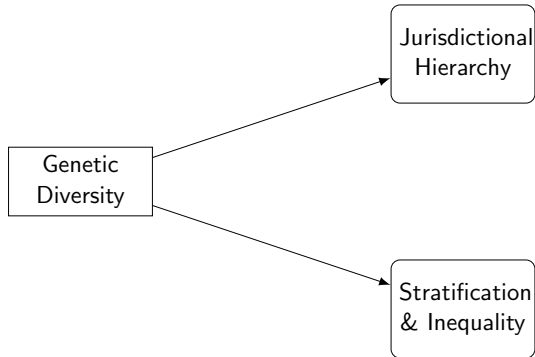
# The Spatial Distribution of Ethnic Groups — Predicted Sample

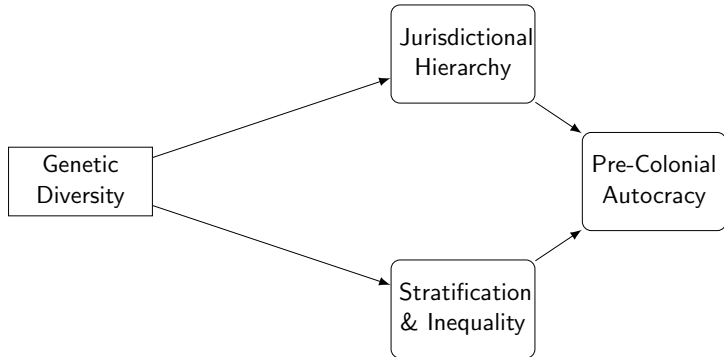


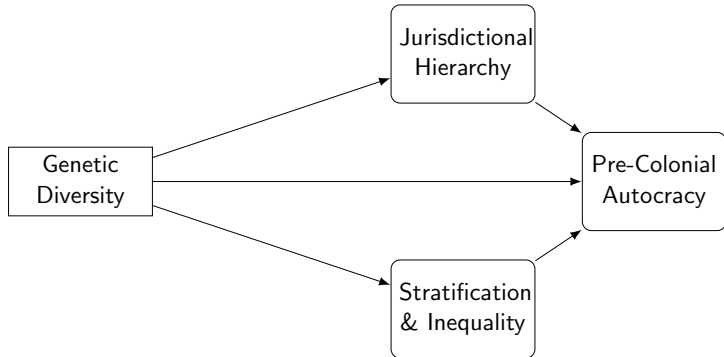
Genetic  
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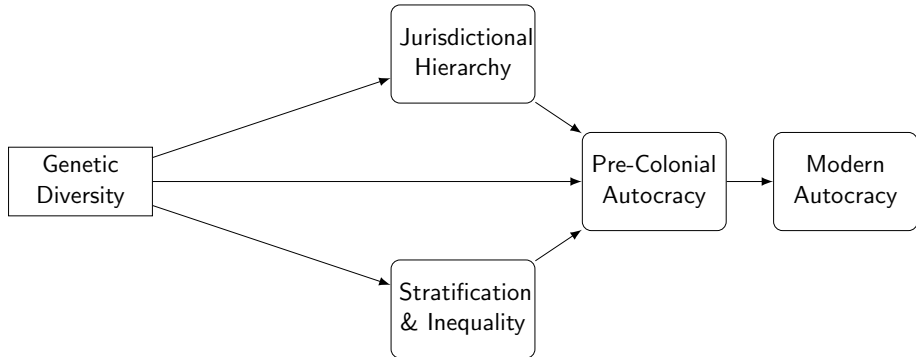


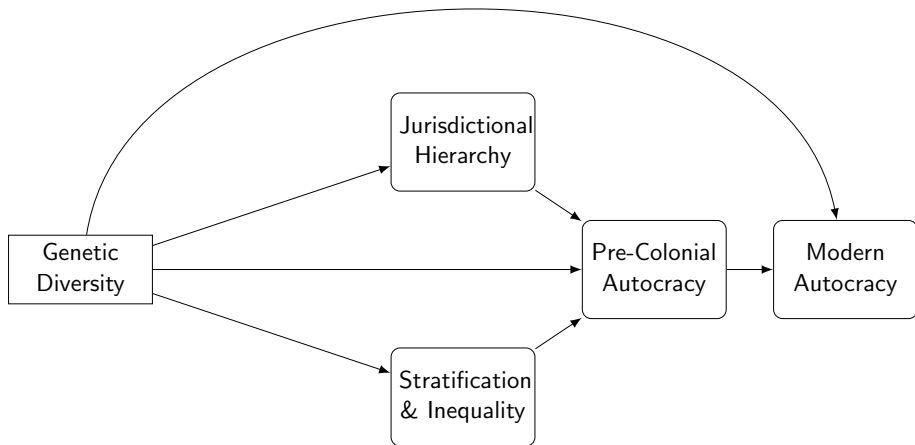


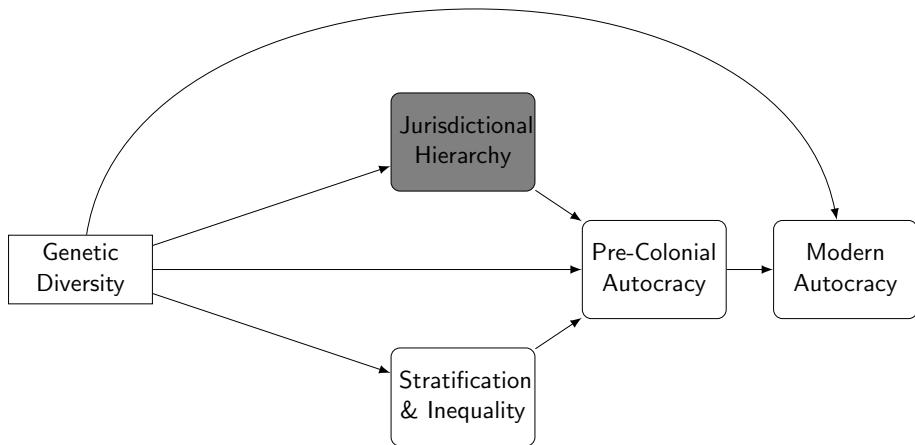






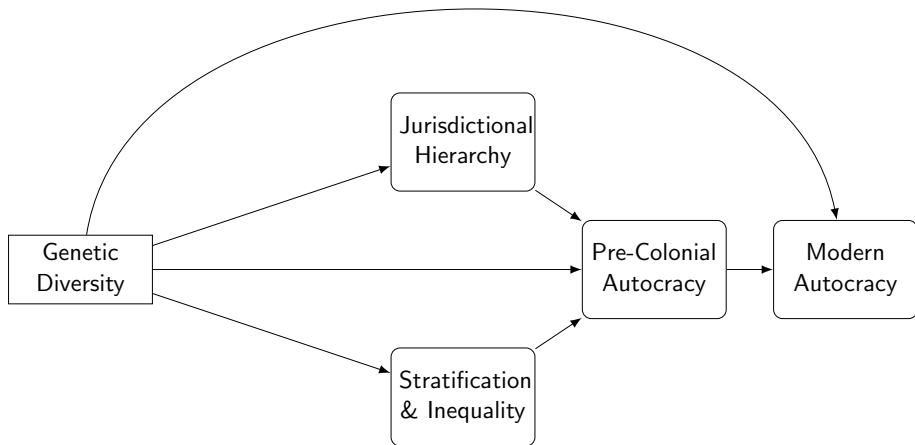




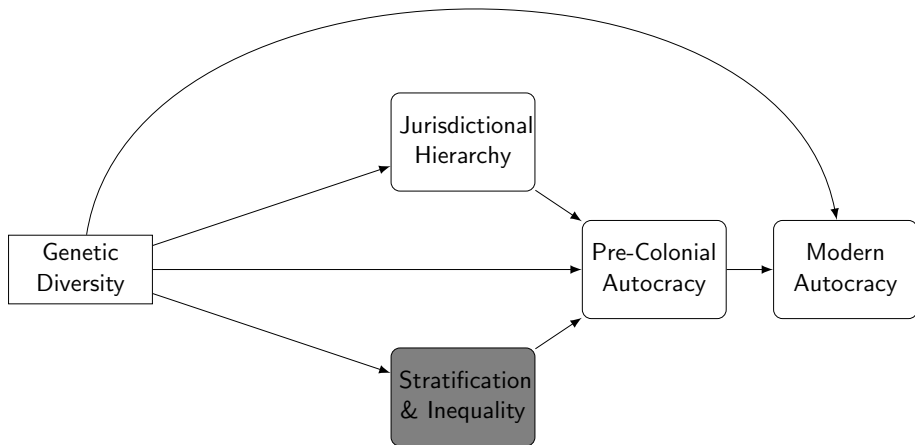


## Empirical Analysis - Pre-Colonial Period

Number of levels of jurisdictional hierarchy beyond the local level  $[(0-4); EA \ v33]$





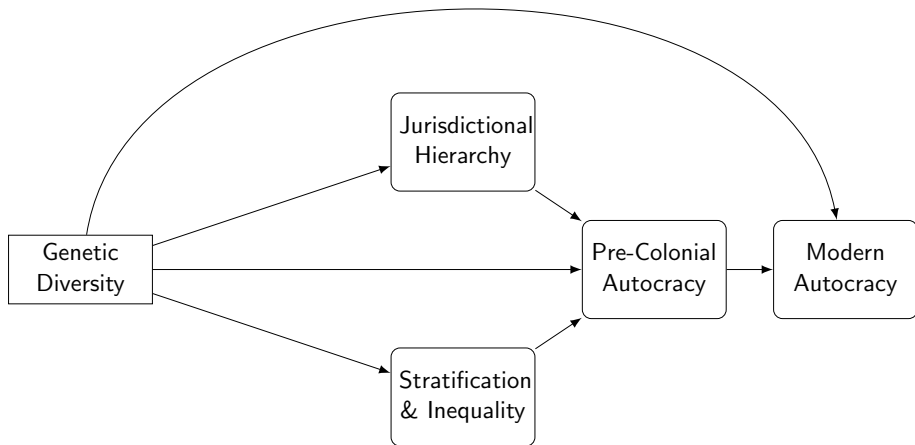


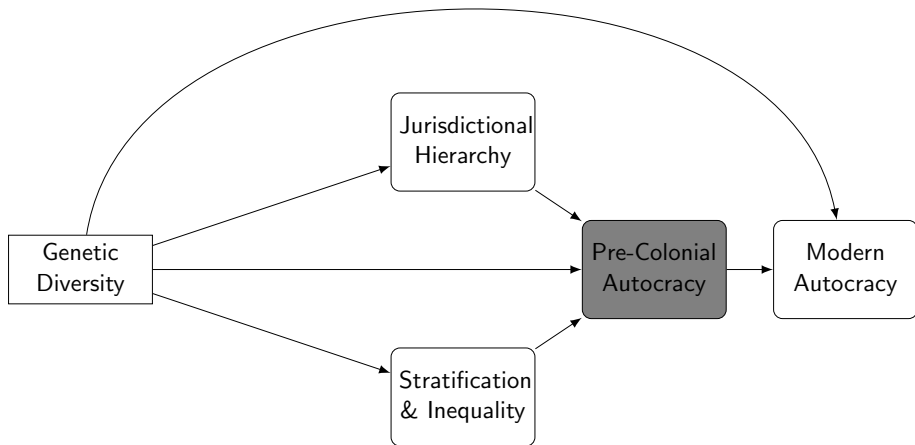
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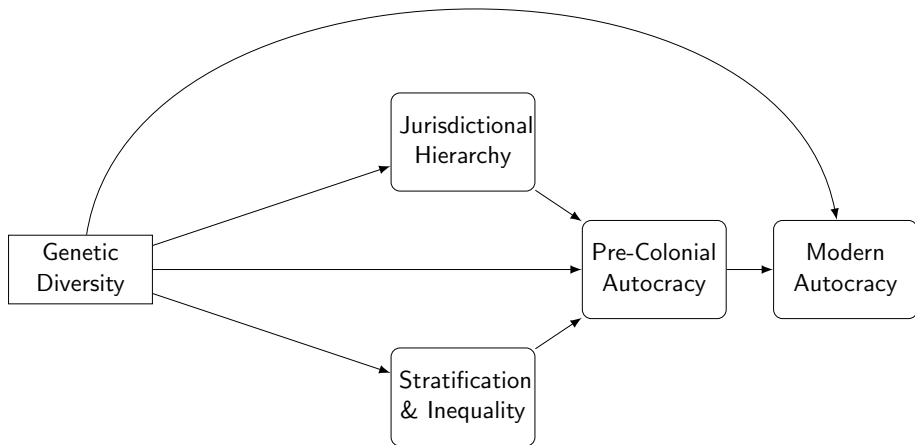
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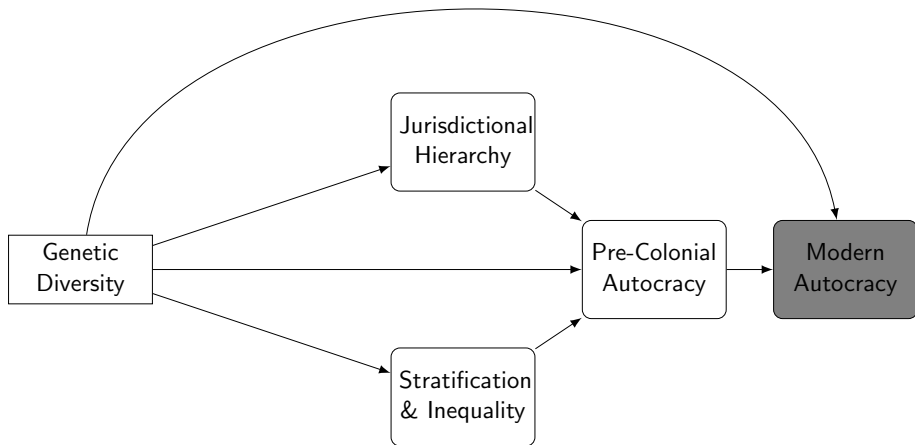
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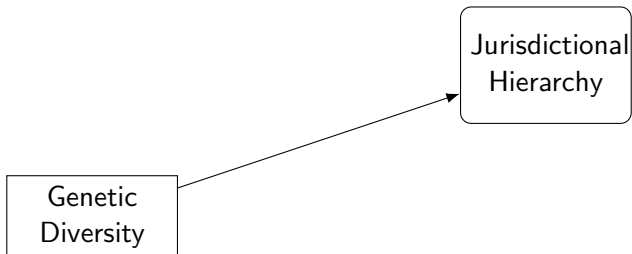




- Autocracy (1994-2013)

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- Constraints on the executive (1994-2013)

Genetic  
Diversity





# Observed Genetic Diversity and Jurisdictional Hierarchy

	Log Number of Levels of Jurisdictional Hierarchy					
	(1)	(2)	(3)	(4)	(5)	(6)
Genetic Diversity	2.685*** (0.922)	4.197*** (0.875)	4.350*** (0.908)	7.894*** (2.330)	9.503*** (3.023)	9.645*** (2.828)
Log Absolute Latitude		0.151*** (0.030)	0.153*** (0.032)	0.091** (0.035)	0.079* (0.042)	0.096** (0.043)
Elevation					-0.000 (0.000)	0.000 (0.000)
Terrain Ruggedness					0.000 (0.000)	0.000 (0.000)
River Length					0.001*** (0.000)	0.003*** (0.001)
River Density					0.017 (0.029)	0.027 (0.023)
Share Desert					-0.167 (0.304)	-0.504** (0.253)
Average Temperature						0.028** (0.011)
Temperature Range						0.016 (0.024)
Soil Quality (Climatic)	No	No	Yes	Yes	Yes	Yes
Continental FE	No	No	No	Yes	Yes	Yes
<i>N</i>	131	131	131	131	131	131
Adjusted <i>R</i> <sup>2</sup>	0.038	0.143	0.171	0.288	0.275	0.317

► Levels Specification

► Ordered Probit

► Ecological Diversity

► S.D. of Soil Suitability

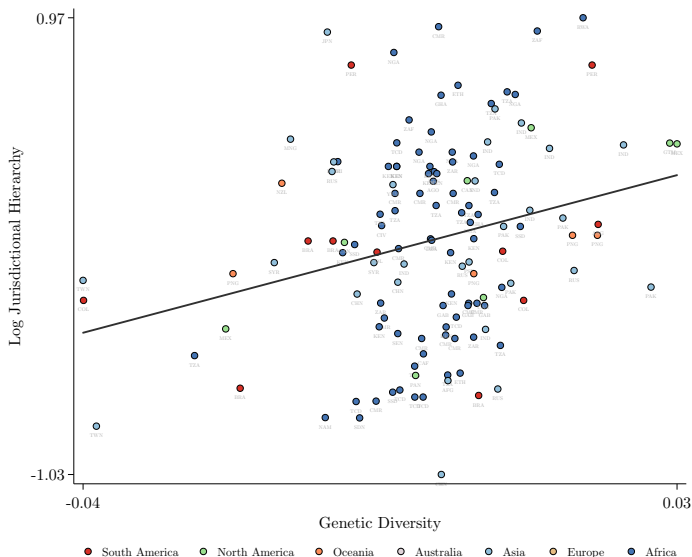
► Major Crop Type

► Scale

► Excluding Africa

► Year in E.A.

## Genetic Diversity and Jurisdictional Hierarchy



## Observed Genetic Diversity and Jurisdictional Hierarchy — IV Analysis

	Log Number of Levels of Jurisdictional Hierarchy				
	(1)	(2)	(3)	(4)	(5)
Genetic Diversity	2.911** (1.161)	4.570*** (1.233)	4.750*** (1.120)	5.407*** (1.504)	5.203*** (1.356)
Log Absolute Latitude		0.156*** (0.031)	0.157*** (0.031)	0.144*** (0.035)	0.193*** (0.041)
Elevation				0.000 (0.000)	0.000 (0.000)
Terrain Ruggedness				0.000 (0.000)	0.000 (0.000)
River Length				0.002*** (0.000)	0.003*** (0.001)
River Density				0.029 (0.021)	0.031* (0.016)
Share Desert				0.107 (0.240)	-0.088 (0.234)
Average Temperature					0.023*** (0.008)
Temperature Range					-0.012 (0.024)
Soil Quality (Climatic)	No	No	Yes	Yes	Yes
<i>N</i>	131	131	131	131	131
1 <sup>st</sup> Stage <i>F</i> -statistic (K-P)	237.138	194.590	177.812	188.822	173.749

# Predicted Genetic Diversity and Jurisdictional Hierarchy

	Log Number of Levels of Jurisdictional Hierarchy					
	(1)	(2)	(3)	(4)	(5)	(6)
Predicted Genetic Diversity	5.121*** (0.293)	5.771*** (0.320)	5.838*** (0.317)	5.496*** (1.010)	5.732*** (1.097)	5.949*** (1.106)
Log Absolute Latitude		0.068*** (0.013)	0.080*** (0.014)	0.110*** (0.018)	0.109*** (0.019)	0.130*** (0.021)
Elevation					0.000 (0.000)	0.000** (0.000)
Terrain Ruggedness					-0.000* (0.000)	-0.000*** (0.000)
River Length					0.003** (0.001)	0.003*** (0.001)
River Density					-0.003 (0.002)	-0.002 (0.002)
Share Desert					0.011 (0.062)	0.019 (0.072)
Average Temperature						0.007* (0.004)
Temperature Range						-0.020** (0.008)
Soil Quality (Climatic)	No	No	Yes	Yes	Yes	Yes
Continental FE	No	No	No	Yes	Yes	Yes
<i>N</i>	1,076	1,076	1,076	1,076	1,076	1,076
Adjusted <i>R</i> <sup>2</sup>	0.199	0.217	0.225	0.290	0.297	0.300

▸ Levels Specification

▸ Ordered Probit

▸ Ecological Diversity

▸ S.D. of Soil Suitability

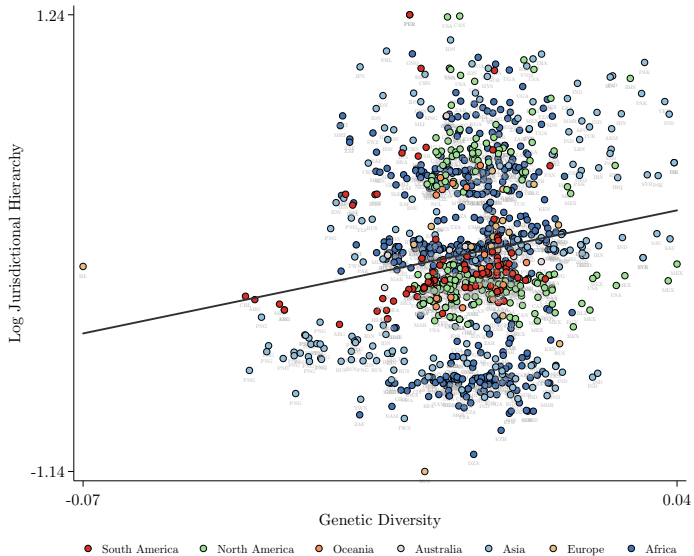
▸ Major Crop Type

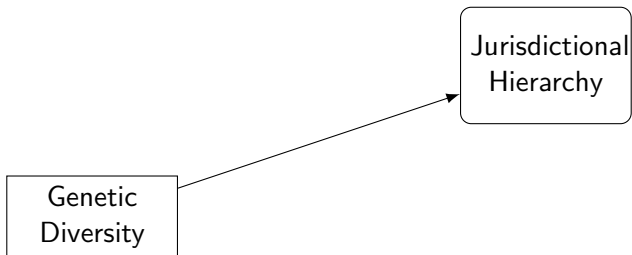
▸ Scale

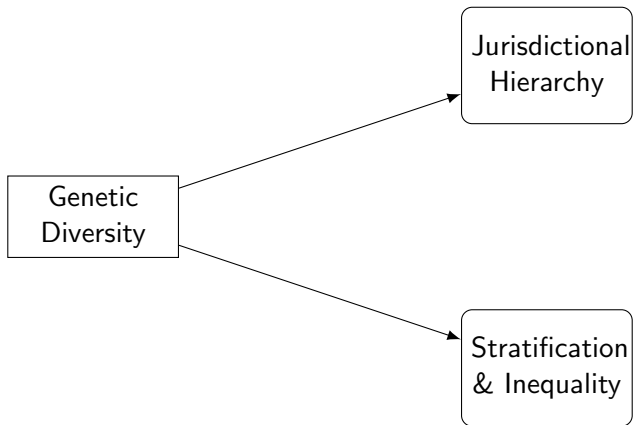
▸ Excluding Africa

▸ Year in E.A.

# Predicted Genetic Diversity and Jurisdictional Hierarchy







# Observed Genetic Diversity and Stratification & Inequality

	Social Stratification			Intensity of Slavery			Intensity of Property Rights		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Genetic Diversity	5.663*** (1.511)	6.549*** (2.076)	22.740*** (5.371)	7.239*** (1.373)	9.191*** (2.078)	11.406* (6.149)	3.455*** (0.965)	4.771** (1.839)	10.617** (4.110)
Log Absolute Latitude	0.263*** (0.056)	0.388*** (0.084)	0.277*** (0.091)	0.188*** (0.053)	0.278*** (0.080)	0.338*** (0.104)	0.077** (0.031)	0.023 (0.041)	-0.039 (0.046)
Elevation		0.000** (0.000)	0.000 (0.000)		0.000 (0.000)	0.000 (0.000)		-0.000** (0.000)	-0.000* (0.000)
Terrain Ruggedness		0.000 (0.000)	0.000 (0.000)		0.000 (0.000)	0.000 (0.000)		0.000* (0.000)	0.000** (0.000)
River Length		0.003*** (0.001)	0.002*** (0.001)		-0.001 (0.001)	-0.001 (0.001)		-0.001 (0.004)	0.001 (0.004)
River Density		0.004 (0.035)	0.045 (0.043)		0.079** (0.034)	0.086** (0.040)		0.015 (0.025)	0.024 (0.028)
Share Desert		-0.804** (0.365)	-1.874*** (0.363)		-0.066 (0.467)	0.293 (0.578)		0.034 (0.292)	-0.343 (0.327)
Average Temperature		0.052*** (0.012)	0.055*** (0.015)		0.039*** (0.011)	0.025 (0.016)		-0.013 (0.012)	-0.004 (0.014)
Temperature Range		-0.077* (0.045)	-0.022 (0.042)		-0.013 (0.039)	-0.031 (0.042)		-0.003 (0.028)	0.003 (0.027)
Soil Quality (Climatic)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Continental FE	No	No	Yes	No	No	Yes	No	No	Yes
<i>N</i>	121	121	121	120	120	120	98	98	98
Adjusted <i>R</i> <sup>2</sup>	0.155	0.218	0.322	0.182	0.277	0.285	0.174	0.162	0.233

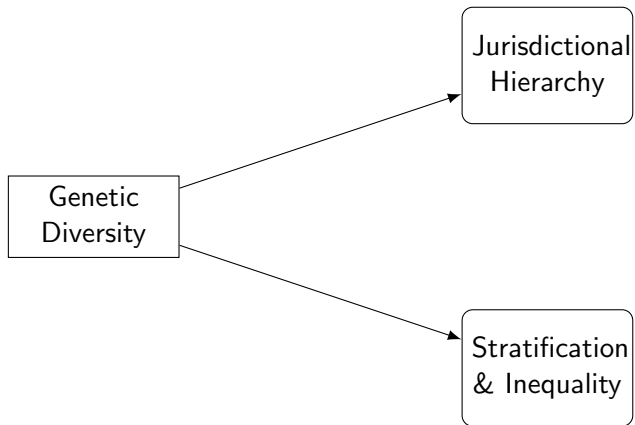


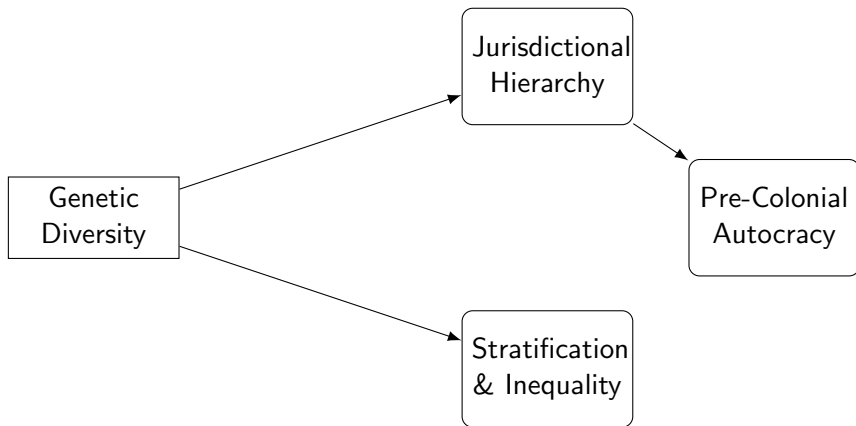
# Observed Genetic Diversity and Stratification & Inequality — IV

	Social Stratification		Intensity of Slavery		Intensity of Property Rights	
	(1)	(2)	(3)	(4)	(5)	(6)
Genetic Diversity	4.418** (1.753)	4.856** (2.184)	6.874*** (1.817)	7.816*** (2.493)	3.670*** (1.110)	4.717*** (1.827)
Log Absolute Latitude	0.251*** (0.054)	0.380*** (0.076)	0.185*** (0.050)	0.272*** (0.072)	0.079*** (0.030)	0.023 (0.037)
Elevation		0.000** (0.000)		0.000 (0.000)		-0.000** (0.000)
Terrain Ruggedness		-0.000 (0.000)		0.000 (0.000)		0.000* (0.000)
River Length		0.003*** (0.001)		-0.001* (0.001)		-0.001 (0.004)
River Density		-0.013 (0.031)		0.065* (0.035)		0.014 (0.024)
Share Desert		-0.771** (0.337)		-0.042 (0.422)		0.036 (0.266)
Average Temperature		0.052*** (0.011)		0.040*** (0.010)		-0.013 (0.011)
Temperature Range		-0.075* (0.042)		-0.012 (0.035)		-0.003 (0.025)
Soil Quality (Climatic)	Yes	Yes	Yes	Yes	Yes	Yes
<i>N</i>	121	121	120	120	98	98
1 <sup>st</sup> Stage <i>F</i> -statistic (K-P)	156.101	151.207	168.137	155.249	102.628	73.613

# Predicted Genetic Diversity and Stratification & Inequality

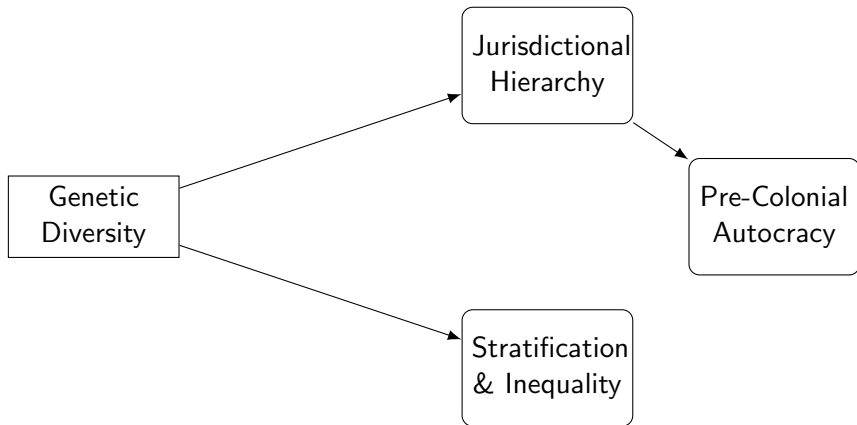
	Social Stratification			Intensity of Slavery			Intensity of Property Rights		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Predicted Genetic Diversity	6.845*** (0.555)	6.529*** (0.553)	9.520*** (2.000)	8.066*** (0.557)	7.618*** (0.571)	7.534*** (2.172)	9.573*** (0.675)	8.537*** (0.650)	3.330** (1.662)
Log Absolute Latitude	0.182*** (0.022)	0.257*** (0.035)	0.251*** (0.037)	0.027 (0.024)	0.152*** (0.032)	0.198*** (0.035)	-0.054*** (0.019)	0.075*** (0.022)	0.049** (0.020)
Elevation		0.000 (0.000)	0.000 (0.000)		0.000 (0.000)	0.000 (0.000)		0.000*** (0.000)	0.000*** (0.000)
Terrain Ruggedness		0.000*** (0.000)	0.000** (0.000)		0.000* (0.000)	0.000*** (0.000)		-0.000 (0.000)	-0.000 (0.000)
River Length		0.003** (0.001)	0.003** (0.001)		-0.001 (0.001)	-0.000 (0.001)		0.005** (0.002)	0.003 (0.002)
River Density		-0.003 (0.002)	-0.005** (0.002)		-0.000 (0.005)	0.001 (0.003)		0.002 (0.002)	0.000 (0.002)
Share Desert		-0.064 (0.109)	-0.212* (0.124)		-0.116 (0.113)	0.047 (0.123)		-0.245** (0.117)	-0.359** (0.141)
Average Temperature		0.018*** (0.005)	0.019*** (0.006)		0.026*** (0.004)	0.019*** (0.006)		0.032*** (0.004)	0.019*** (0.006)
Temperature Range		-0.090*** (0.014)	-0.068*** (0.016)		-0.052*** (0.013)	-0.077*** (0.014)		-0.074*** (0.010)	-0.037*** (0.011)
Soil Quality (Climatic)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Continental FE	No	No	Yes	No	No	Yes	No	No	Yes
N	982	982	982	979	979	979	685	685	685
Adjusted R <sup>2</sup>	0.127	0.215	0.229	0.208	0.266	0.330	0.389	0.476	0.513

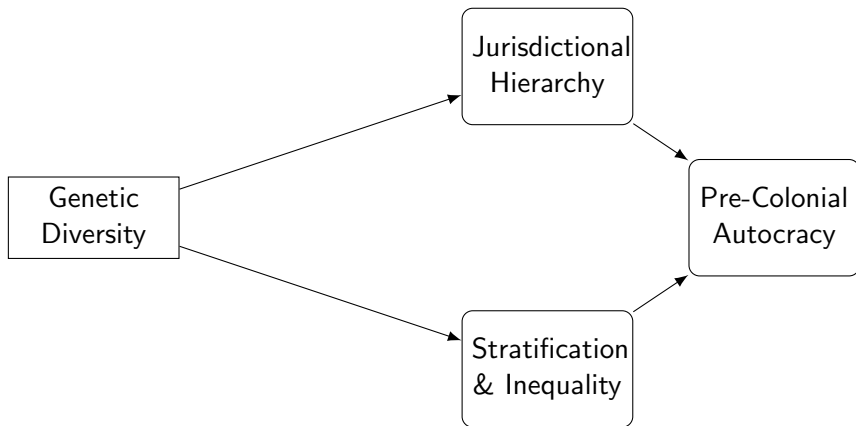




# Jurisdictional Hierarchy and Autocratic Institutions

	Degree of Absence of Checks on Leader's Power		Difficulty of Removal of Leaders		Leader's Exercise of Authority		Degree of Lack of Community Decisions		Perception of Leader's Power	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Log Levels of Jurisdictional Hierarchy	0.853*** (0.166)	0.738*** (0.167)	0.941*** (0.206)	0.802*** (0.212)	0.947*** (0.133)	0.904*** (0.145)	0.907*** (0.136)	0.896*** (0.155)	0.842*** (0.145)	0.841*** (0.157)
Log Absolute Latitude	-0.030 (0.083)	-0.119 (0.149)	0.061 (0.088)	0.069 (0.142)	-0.116 (0.070)	-0.071 (0.123)	-0.162** (0.063)	-0.100 (0.097)	-0.026 (0.074)	0.039 (0.115)
Elevation		-0.000 (0.000)		-0.000 (0.000)		-0.000 (0.000)		0.000 (0.000)		0.000 (0.000)
Terrain Ruggedness		0.000 (0.000)		0.000* (0.000)		0.000 (0.000)		0.000 (0.000)		-0.000 (0.000)
River Length		0.007 (0.007)		-0.008 (0.010)		-0.000 (0.005)		-0.007 (0.007)		0.006 (0.006)
River Density		-0.022 (0.050)		-0.001 (0.033)		0.003 (0.032)		0.032 (0.032)		0.002 (0.030)
Share Desert		0.293 (0.462)		0.271 (0.578)		-0.509 (0.453)		0.100 (0.389)		0.149 (0.426)
Average Temperature		-0.004 (0.016)		0.012 (0.017)		0.018 (0.015)		0.012 (0.012)		0.008 (0.014)
Temperature Range		0.079 (0.060)		0.058 (0.067)		0.048 (0.057)		-0.016 (0.050)		-0.051 (0.044)
Soil Quality (Climatic)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<i>N</i>	78	78	71	71	79	79	82	82	82	82
Adjusted <i>R</i> <sup>2</sup>	0.223	0.243	0.207	0.271	0.360	0.338	0.391	0.360	0.341	0.286





# Social Strata and Autocratic Institutions

	Degree of Absence of Checks on Leader's Power		Difficulty of Removal of Leaders		Leader's Exercise of Authority		Degree of Lack of Community Decisions		Perception of Leader's Power	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Social Stratification	0.532*** (0.099)	0.480*** (0.104)	0.532*** (0.122)	0.412*** (0.149)	0.486*** (0.095)	0.451*** (0.109)	0.507*** (0.086)	0.537*** (0.103)	0.428*** (0.103)	0.504*** (0.104)
Log Absolute Latitude	-0.053 (0.089)	-0.064 (0.153)	0.057 (0.090)	0.093 (0.138)	-0.132 (0.082)	-0.029 (0.139)	-0.189*** (0.065)	-0.066 (0.099)	-0.049 (0.077)	0.071 (0.119)
Elevation		0.000 (0.000)		0.000 (0.000)		0.000 (0.000)		0.000* (0.000)		0.001** (0.000)
Terrain Ruggedness		0.000 (0.000)		0.000 (0.000)		0.000 (0.000)		-0.000 (0.000)		-0.000** (0.000)
River Length		0.012 (0.008)		-0.002 (0.010)		0.007 (0.007)		-0.000 (0.006)		0.012* (0.007)
River Density		-0.004 (0.049)		0.011 (0.035)		0.012 (0.033)		0.044 (0.039)		0.013 (0.035)
Share Desert		0.537 (0.455)		0.338 (0.617)		-0.388 (0.532)		0.287 (0.434)		0.324 (0.447)
Average Temperature		0.003 (0.017)		0.016 (0.018)		0.024 (0.017)		0.018 (0.013)		0.013 (0.016)
Temperature Range		0.015 (0.057)		0.036 (0.069)		0.002 (0.057)		-0.079* (0.044)		-0.109** (0.047)
Soil Quality (Climatic)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	78	78	71	71	79	79	82	82	82	82
Adjusted R <sup>2</sup>	0.245	0.254	0.167	0.200	0.256	0.206	0.345	0.325	0.260	0.258

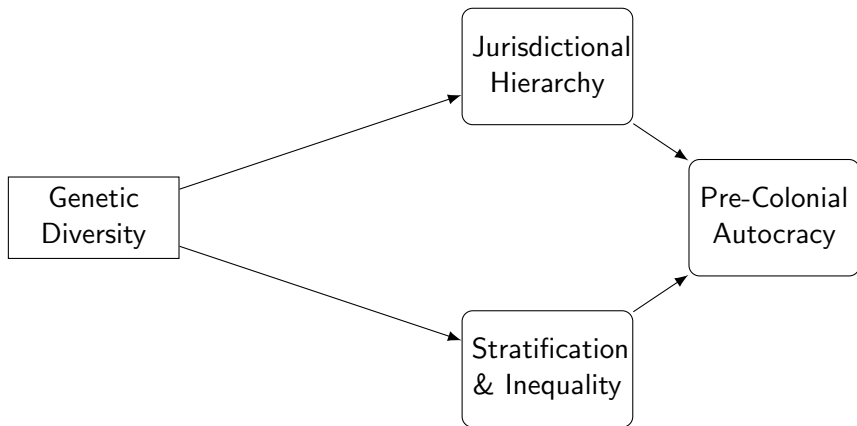


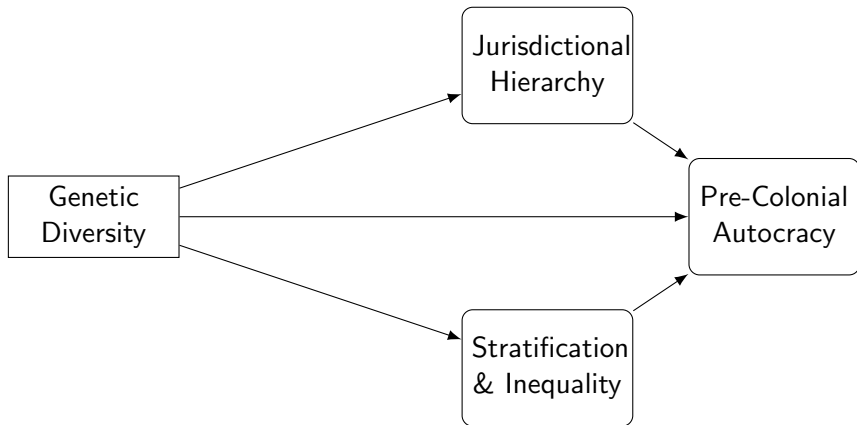
# Slavery and Autocratic Institutions

	Degree of Absence of Checks on Leader's Power		Difficulty of Removal of Leaders		Leader's Exercise of Authority		Degree of Lack of Community Decisions		Perception of Leader's Power	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Intensity of Slavery	0.332*** (0.116)	0.251* (0.130)	0.588*** (0.128)	0.525*** (0.143)	0.360*** (0.106)	0.297** (0.123)	0.413*** (0.099)	0.402*** (0.112)	0.322*** (0.105)	0.326*** (0.117)
Log Absolute Latitude	-0.010 (0.095)	-0.139 (0.190)	0.107 (0.075)	0.041 (0.115)	-0.085 (0.086)	-0.098 (0.167)	-0.140* (0.076)	-0.107 (0.110)	-0.008 (0.085)	0.033 (0.130)
Elevation		-0.000 (0.000)		-0.000 (0.000)		-0.000 (0.000)		0.000 (0.000)		0.000 (0.000)
Terrain Ruggedness		0.000 (0.000)		0.000* (0.000)		0.000 (0.000)		0.000 (0.000)		-0.000 (0.000)
River Length		0.013 (0.010)		-0.008 (0.012)		0.006 (0.009)		-0.002 (0.006)		0.011 (0.009)
River Density		-0.045 (0.053)		-0.004 (0.035)		-0.023 (0.035)		0.012 (0.043)		-0.018 (0.038)
Share Desert		0.307 (0.472)		0.268 (0.627)		-0.578 (0.513)		0.218 (0.413)		0.253 (0.460)
Average Temperature		-0.007 (0.020)		0.000 (0.018)		0.013 (0.018)		0.008 (0.013)		0.005 (0.017)
Temperature Range		0.094 (0.074)		0.082 (0.068)		0.074 (0.071)		-0.026 (0.048)		-0.058 (0.061)
Soil Quality (Climatic)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	77	77	70	70	78	78	81	81	81	81
Adjusted R <sup>2</sup>	0.082	0.076	0.254	0.254	0.139	0.100	0.229	0.159	0.167	0.105

# Property Rights and Autocratic Institutions

	Degree of Absence of Checks on Leader's Power		Difficulty of Removal of Leaders		Leader's Exercise of Authority		Degree of Lack of Community Decisions		Perception of Leader's Power	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Intensity of Property Rights	0.406*** (0.108)	0.422*** (0.112)	0.505*** (0.136)	0.426*** (0.131)	0.500*** (0.103)	0.520*** (0.104)	0.653*** (0.092)	0.657*** (0.102)	0.409*** (0.106)	0.442*** (0.125)
Log Absolute Latitude	0.069 (0.102)	0.006 (0.200)	0.083 (0.120)	0.017 (0.172)	0.024 (0.095)	0.154 (0.162)	-0.029 (0.079)	0.137 (0.131)	0.013 (0.113)	0.159 (0.194)
Elevation		-0.001 (0.000)		-0.001 (0.001)		-0.000 (0.000)		0.000 (0.000)		0.000 (0.000)
Terrain Ruggedness		0.000 (0.000)		0.000* (0.000)		0.000 (0.000)		-0.000 (0.000)		-0.000 (0.000)
River Length		0.014** (0.006)		0.005 (0.009)		0.013* (0.007)		0.008 (0.007)		0.019*** (0.007)
River Density		-0.049 (0.040)		-0.033 (0.030)		-0.041 (0.037)		-0.014 (0.065)		-0.036 (0.033)
Share Desert		-0.077 (0.555)		-0.040 (0.949)		-1.053 (0.659)		-0.396 (0.519)		-0.297 (0.666)
Average Temperature		0.005 (0.024)		0.017 (0.027)		0.037 (0.023)		0.032 (0.020)		0.026 (0.022)
Temperature Range		0.121* (0.070)		0.134 (0.110)		0.077 (0.080)		-0.014 (0.071)		-0.044 (0.081)
Soil Quality (Climatic)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<i>N</i>	62	62	55	55	61	61	63	63	63	63
Adjusted <i>R</i> <sup>2</sup>	0.192	0.248	0.180	0.234	0.223	0.265	0.422	0.385	0.191	0.146

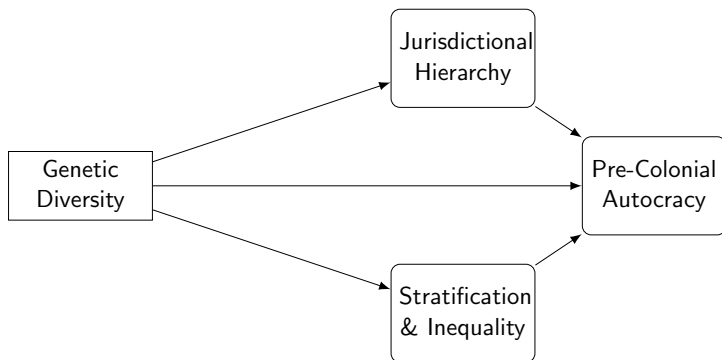


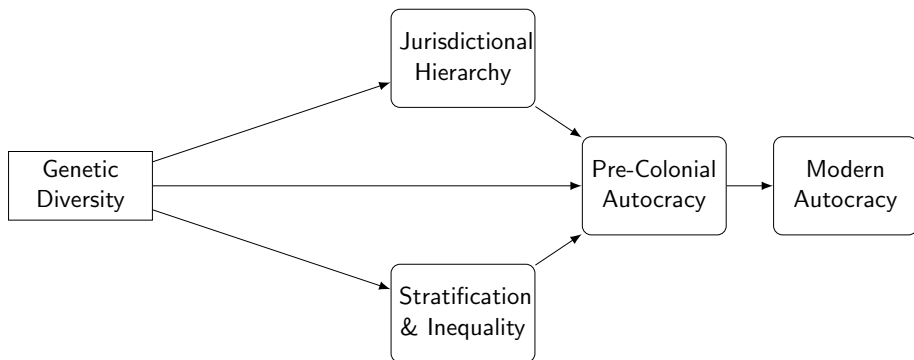


# Predicted Genetic Diversity and Autocratic Institutions

	Degree of Absence of Checks on Leader's Power		Difficulty of Removal of Leaders		Leader's Exercise of Authority		Degree of Lack of Community Decisions		Perception of Leader's Power	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Predicted Genetic Diversity	6.317*** (2.101)	5.042** (2.306)	7.374*** (2.222)	5.858** (2.236)	6.048*** (1.895)	5.489*** (1.984)	6.589*** (1.514)	6.023*** (1.679)	5.529*** (1.753)	5.504** (2.094)
Log Absolute Latitude	0.035 (0.099)	-0.080 (0.189)	0.143 (0.092)	0.111 (0.148)	-0.053 (0.091)	-0.030 (0.173)	-0.100 (0.069)	-0.044 (0.120)	0.026 (0.087)	0.090 (0.144)
Elevation		-0.000 (0.000)		-0.000 (0.000)		-0.000 (0.000)		0.000 (0.000)		0.000 (0.000)
Terrain Ruggedness		0.000* (0.000)		0.000** (0.000)		0.000 (0.000)		0.000 (0.000)		-0.000 (0.000)
River Length		0.013 (0.009)		-0.000 (0.010)		0.008 (0.007)		0.001 (0.007)		0.014* (0.007)
River Density		-0.061 (0.050)		-0.031 (0.040)		-0.044 (0.033)		-0.016 (0.041)		-0.043 (0.033)
Share Desert		0.235 (0.533)		0.157 (0.613)		-0.561 (0.543)		0.072 (0.479)		0.125 (0.473)
Average Temperature		-0.003 (0.020)		0.014 (0.021)		0.020 (0.019)		0.015 (0.015)		0.011 (0.017)
Temperature Range		0.091 (0.068)		0.087 (0.067)		0.061 (0.063)		-0.013 (0.049)		-0.047 (0.054)
Soil Quality (Climatic)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	78	78	71	71	79	79	82	82	82	82
Adjusted R <sup>2</sup>	0.067	0.111	0.079	0.168	0.121	0.109	0.198	0.146	0.164	0.108

► Indigenous Autocracy





# Persistence of Autocracy

	Full Sample				Old World	
	Executive Constraints		Autocracy		Executive Constraints	Autocracy
	(1)	(2)	(3)	(4)	(5)	(6)
Degree of Absence of Checks on Leader's Power	-0.183*** (0.050)		0.521*** (0.105)		-0.199*** (0.053)	0.555*** (0.113)
Degree of Absence of Checks on Leader's Power (Ancestry Adjusted)		-0.191*** (0.054)		0.556*** (0.118)		
<i>N</i>	48	48	48	48	38	38
Adjusted <i>R</i> <sup>2</sup>	0.149	0.124	0.239	0.210	0.184	0.288

► Indigenous Autocracy

► Indigenous Democracy (Nunn)

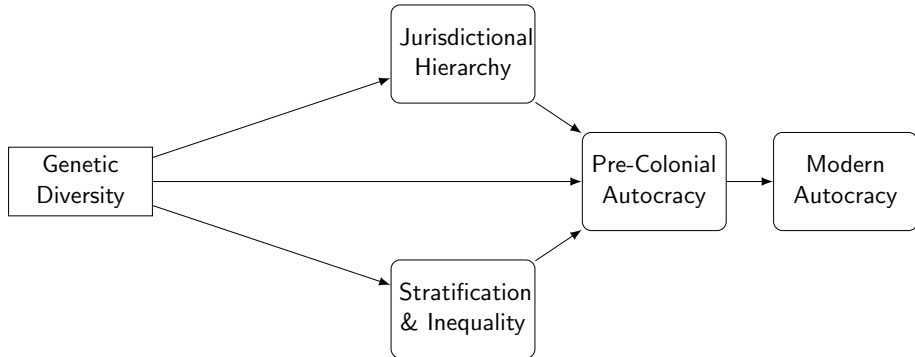


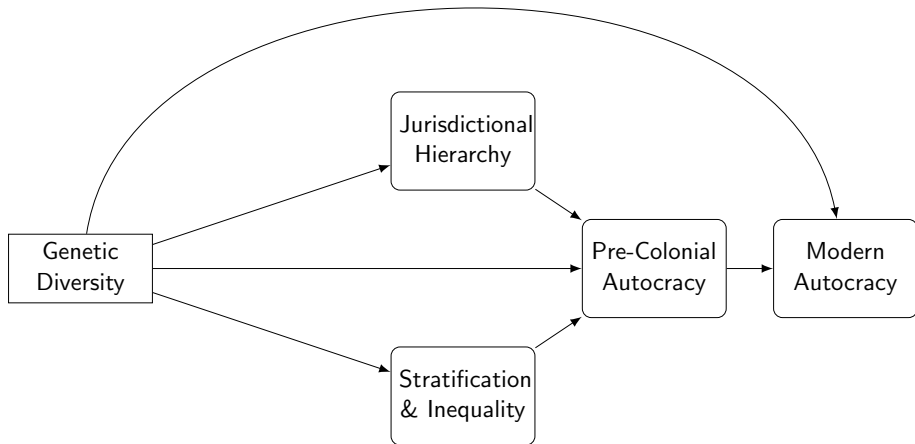
# Persistence of Autocracy — Continental FE

	Full Sample				Old World	
	Executive Constraints		Autocracy		Executive Constraints	Autocracy
	(1)	(2)	(3)	(4)	(5)	(6)
Degree of Absence of Checks on Leader's Power	-0.129** (0.049)		0.378*** (0.107)		-0.151** (0.059)	0.410*** (0.128)
Degree of Absence of Checks on Leader's Power (Ancestry Adjusted)		-0.132** (0.056)		0.396*** (0.120)		
Continental FE	Yes	Yes	Yes	Yes	Yes	Yes
<i>N</i>	48	48	48	48	38	38
Adjusted <i>R</i> <sup>2</sup>	0.250	0.236	0.414	0.398	0.124	0.325

► Indigenous Autocracy

► Indigenous Democracy (Nunn)





# Predicted Genetic Diversity and Constraint on the Executive (1994–2013)

	Log Constraint on Chief Executive						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Predicted Genetic Diversity	-4.050*** (0.825)	-4.094*** (0.836)	-2.814*** (0.888)	-2.804*** (0.867)	-3.280** (1.435)	-3.356** (1.350)	-3.808*** (1.364)
Log Absolute Latitude		0.094*** (0.028)	0.055* (0.030)	-0.059 (0.042)	0.022 (0.042)	0.018 (0.038)	0.020 (0.040)
Soil Fertility			0.500** (0.242)	0.415* (0.230)	0.166 (0.208)	0.310 (0.202)	0.365 (0.232)
Roughness			0.135 (0.316)	0.038 (0.326)	0.341 (0.324)	0.383 (0.297)	0.185 (0.288)
Elevation			-0.065 (0.095)	-0.103 (0.095)	-0.008 (0.110)	-0.062 (0.103)	-0.077 (0.091)
Average Distance to Nearest Waterway			-0.170* (0.094)	-0.248*** (0.090)	-0.161* (0.085)	-0.070 (0.091)	-0.130 (0.081)
Percentage of Arable Land			0.002 (0.002)	0.001 (0.002)	0.002 (0.003)	0.002 (0.002)	0.002 (0.003)
Temperature				-0.020*** (0.005)	-0.007 (0.009)	-0.009 (0.010)	-0.017** (0.008)
Colony							0.228** (0.099)
Continental FE	No	No	No	No	Yes	Yes	Yes
Legal Origin FE	No	No	No	No	No	Yes	Yes
<i>N</i>	145	145	145	145	145	145	130
Adjusted <i>R</i> <sup>2</sup>	0.068	0.108	0.221	0.292	0.405	0.456	0.508

► Constraint on the Executive in 2013

► Accounting for GDP

► Accounting for Schooling

► Accounting for Ethnic Fractionalization

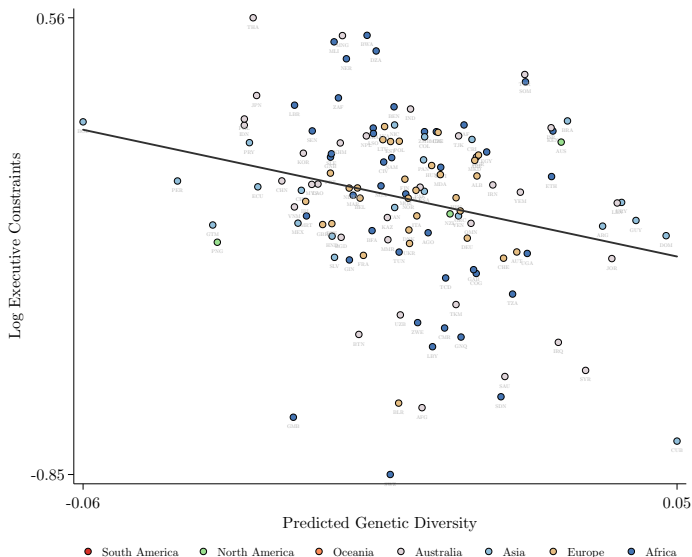
► Accounting for Percentage of Land near a Waterway

► Accounting for Climate Zone

► Accounting for Soil Suitability Gini

► Accounting for Colonizer Nation

# Predicted Diversity and Constraint on the Executive (1994–2013)



# Predicted Diversity and Constraint on the Executive (1994–2013) — IV

	Log Constraint on Chief Executive						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Predicted Genetic Diversity	-6.305*** (1.209)	-6.586*** (1.196)	-5.376*** (1.427)	-5.401*** (1.320)	-7.169*** (2.396)	-6.964*** (2.208)	-7.203*** (2.302)
Log Absolute Latitude		0.095*** (0.029)	0.057* (0.030)	-0.057 (0.041)	0.042 (0.043)	0.036 (0.037)	0.029 (0.038)
Soil Fertility			0.419* (0.249)	0.333 (0.238)	0.066 (0.227)	0.216 (0.219)	0.331 (0.231)
Roughness			0.005 (0.308)	-0.093 (0.318)	0.480 (0.333)	0.519* (0.305)	0.192 (0.296)
Elevation			-0.036 (0.095)	-0.073 (0.096)	-0.026 (0.107)	-0.086 (0.101)	-0.090 (0.086)
Average Distance to Nearest Waterway			-0.150 (0.093)	-0.228** (0.091)	-0.137* (0.083)	-0.050 (0.088)	-0.115 (0.076)
Percentage of Arable Land			0.003 (0.003)	0.002 (0.003)	0.003 (0.003)	0.003 (0.003)	0.002 (0.003)
Temperature				-0.020*** (0.005)	-0.007 (0.009)	-0.011 (0.010)	-0.018*** (0.007)
Colony							0.201** (0.090)
Continental FE	No	No	No	No	Yes	Yes	Yes
Legal Origin FE	No	No	No	No	No	Yes	Yes
<i>N</i>	145	145	145	145	145	145	130
1 <sup>st</sup> Stage <i>F</i> -statistic (K-P)	64.417	63.948	53.813	53.402	62.574	57.369	40.198

# Predicted Genetic Diversity and Autocracy (1994–2013)

	Log Autocracy						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Predicted Genetic Diversity	8.745*** (1.826)	8.814*** (1.862)	6.173*** (2.039)	6.153*** (2.016)	6.844** (3.035)	6.979** (2.693)	6.591** (2.928)
Log Absolute Latitude		-0.149*** (0.051)	-0.061 (0.055)	0.160** (0.078)	-0.048 (0.081)	-0.036 (0.073)	-0.045 (0.078)
Soil Fertility			-1.281*** (0.482)	-1.117** (0.461)	-0.422 (0.382)	-0.761** (0.379)	-0.708 (0.465)
Roughness			-0.244 (0.705)	-0.056 (0.722)	-0.844 (0.680)	-0.875 (0.603)	-0.729 (0.579)
Elevation			0.306 (0.195)	0.380* (0.198)	0.188 (0.201)	0.303* (0.182)	0.310* (0.163)
Average Distance to Nearest Waterway			0.203 (0.185)	0.355** (0.177)	0.154 (0.149)	-0.051 (0.162)	-0.026 (0.153)
Percentage of Arable Land			-0.001 (0.005)	0.001 (0.005)	-0.003 (0.005)	-0.003 (0.005)	-0.006 (0.006)
Temperature				0.039*** (0.011)	0.013 (0.017)	0.021 (0.017)	0.029* (0.015)
Colony							-0.445** (0.192)
Continental FE	No	No	No	No	Yes	Yes	Yes
Legal Origin FE	No	No	No	No	No	Yes	Yes
<i>N</i>	145	145	145	145	145	145	130
Adjusted <i>R</i> <sup>2</sup>	0.074	0.095	0.208	0.269	0.440	0.507	0.534

# Predicted Diversity and Autocracy (1994–2013) — IV

	Log Autocracy						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Predicted Genetic Diversity	14.510*** (2.614)	14.958*** (2.609)	12.215*** (3.206)	12.262*** (3.036)	11.767** (5.087)	11.258** (4.382)	10.953** (4.837)
Log Absolute Latitude		-0.151*** (0.053)	-0.066 (0.053)	0.154** (0.070)	-0.074 (0.077)	-0.057 (0.067)	-0.057 (0.069)
Soil Fertility			-1.090** (0.494)	-0.924* (0.476)	-0.294 (0.396)	-0.649* (0.388)	-0.664 (0.442)
Roughness			0.063 (0.706)	0.254 (0.723)	-1.021 (0.655)	-1.037* (0.580)	-0.738 (0.577)
Elevation			0.237 (0.198)	0.310 (0.202)	0.211 (0.192)	0.332* (0.175)	0.326** (0.154)
Average Distance to Nearest Waterway			0.156 (0.184)	0.307* (0.178)	0.124 (0.145)	-0.074 (0.156)	-0.045 (0.145)
Percentage of Arable Land			-0.004 (0.005)	-0.002 (0.005)	-0.005 (0.005)	-0.005 (0.004)	-0.006 (0.005)
Temperature				0.039*** (0.010)	0.013 (0.016)	0.022 (0.016)	0.031** (0.014)
Colony							-0.410** (0.181)
Continental FE	No	No	No	No	Yes	Yes	Yes
Legal Origin FE	No	No	No	No	No	Yes	Yes
<i>N</i>	145	145	145	145	145	145	130
1 <sup>st</sup> Stage <i>F</i> -statistic (K-P)	64.417	63.948	53.813	53.402	62.574	57.369	40.198



## Concluding Remarks

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- Expected heterozygosity calculated for the 232 ethnic groups using allelic frequencies for 645 microsatellite loci

► Diversity in Height

► Phenotypic Var.

► Phenotypic Var. (climate-corrected)

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    - Permitting an exploration of the effect of GD on economic outcomes

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## Jurisdictional Hierarchy

### Jurisdictional Hierarchy Beyond Local Community (EA var. 33)

- 0: No levels (no political authority beyond community)
- 1: One level (e.g., petty chiefdoms)
- 2: Two levels (e.g., larger chiefdoms)
- 3: Three levels (e.g., states)
- 4: Four levels (e.g., large states)

► [Return](#)

# Class Stratification

## Class Stratification (EA var. 66)

- 0: Absence among freemen
- 1: Wealth distinctions or elite (i.e., based on control of land or other resources)
- 2: Dual (hereditary aristocracy) or complex (social classes)

▸ [Return](#)



# Slavery

## Slavery (EA var. 70)

- 0: Absence or near absence
- 1: Incipient, nonhereditary or reported (but type not identified)
- 2: Hereditary and socially significant

▸ [Return](#)

## Intensity of Property Rights

### Inheritance Rule for Real Property (Land) (EA var. 74) and Inheritance Rule for Movable Property (EA var. 76)

- 0: Absence of individual property rights or rules
- 1: Presence of individual property rights or rules for either real or movable property
- 2: Presence of individual property rights or rules for both real and movable property

► Return

# Diversity and Jurisdictional Hierarchy — Levels Specification

	Number of Levels of Jurisdictional Hierarchy					
	(1)	(2)	(3)	(4)	(5)	(6)
Genetic Diversity	4.308** (2.065)	7.595*** (2.021)	8.109*** (1.919)	17.567*** (5.280)	19.777*** (6.844)	20.081*** (6.335)
Log Absolute Latitude		0.329** (0.069)	0.337*** (0.080)	0.181** (0.076)	0.140 (0.089)	0.191** (0.093)
Elevation					-0.000 (0.000)	0.000 (0.000)
Terrain Ruggedness					0.000 (0.000)	0.000 (0.000)
River Length					0.004*** (0.001)	0.007*** (0.002)
River Density					0.009 (0.071)	0.034 (0.055)
Share desert					-0.499 (0.677)	-1.284** (0.588)
Average Temperature						0.069** (0.026)
Temperature Range						0.026 (0.053)
Soil Quality (Climatic)	No	No	Yes	Yes	Yes	Yes
Continental FE	No	No	No	Yes	Yes	Yes
<i>N</i>	131	131	131	131	131	131
Adjusted <i>R</i> <sup>2</sup>	0.017	0.120	0.129	0.249	0.249	0.304

► Return

# Diversity and Jurisdictional Hierarchy — Ordered Probit

	Number of Levels of Jurisdictional Hierarchy					
	(1)	(2)	(3)	(4)	(5)	(6)
Genetic Diversity	5.195** (2.436)	10.143*** (3.139)	12.350*** (3.022)	29.074*** (8.399)	33.998*** (10.047)	31.789*** (9.652)
Log Absolute Latitude		0.379*** (0.089)	0.443*** (0.101)	0.304*** (0.099)	0.268** (0.114)	0.333** (0.130)
Elevation					-0.000 (0.000)	0.000 (0.000)
Terrain Ruggedness					0.000 (0.000)	0.000 (0.000)
River Length					0.006*** (0.003)	0.022* (0.013)
River Density					-0.170 (0.109)	-0.066 (0.106)
Share Desert					-0.711 (0.659)	-1.385** (0.661)
Average Temperature						0.081* (0.042)
Temperature Range						0.031 (0.063)
Soil Quality (Climatic)	No	No	Yes	Yes	Yes	Yes
Continental FE	No	No	No	Yes	Yes	Yes
N	131	131	131	131	131	131
Adjusted R2						

► Return

# Predicted Diversity and Jurisdictional Hierarchy — Levels Specification

	Number of Levels of Jurisdictional Hierarchy					
	(1)	(2)	(3)	(4)	(5)	(6)
Predicted Genetic Diversity	9.357*** (0.600)	10.779*** (0.684)	10.879*** (0.673)	11.149*** (2.144)	11.390*** (2.369)	11.810*** (2.417)
Log Absolute Latitude		0.149*** (0.028)	0.175*** (0.030)	0.214*** (0.037)	0.209*** (0.038)	0.250*** (0.043)
Elevation					0.000 (0.000)	0.000* (0.000)
Terrain Ruggedness					-0.000* (0.000)	-0.000** (0.000)
River Length					0.007*** (0.003)	0.008*** (0.003)
River Density					-0.010* (0.005)	-0.009* (0.005)
Share desert					0.012 (0.132)	0.027 (0.156)
Average Temperature						0.013 (0.008)
Temperature Range						-0.039** (0.017)
Soil Quality (Climatic)	No	No	Yes	Yes	Yes	Yes
Continental FE	No	No	No	Yes	Yes	Yes
<i>N</i>	1,076	1,076	1,076	1,076	1,076	1,076
Adjusted <i>R</i> <sup>2</sup>	0.158	0.179	0.185	0.269	0.285	0.287

► Return

# Predicted Diversity and Jurisdictional Hierarchy — Ordered Probit

	Number of Levels of Jurisdictional Hierarchy					
	(1)	(2)	(3)	(4)	(5)	(6)
Predicted Genetic Diversity	12.672*** (0.968)	15.294*** (1.285)	15.774*** (1.274)	12.562*** (2.626)	13.713*** (2.987)	14.761*** (3.062)
Log Absolute Latitude		0.208*** (0.039)	0.245*** (0.041)	0.278*** (0.049)	0.269*** (0.052)	0.341*** (0.062)
Elevation					0.000 (0.000)	0.000** (0.000)
Terrain Ruggedness					-0.000 (0.000)	-0.000** (0.000)
River Length					0.017*** (0.005)	0.020*** (0.005)
River Density					-0.013* (0.007)	-0.013* (0.007)
Share Desert					-0.003 (0.187)	-0.004 (0.207)
Average Temperature						0.024** (0.011)
Temperature Range						-0.062*** (0.022)
Soil Quality (Climatic)	No	No	Yes	Yes	Yes	Yes
Continental FE	No	No	No	Yes	Yes	Yes
N	1,076	1,076	1,076	1,076	1,076	1,076
Adjusted R2						

► Return

# Diversity and Jurisdictional Hierarchy — Accounting for Ecological Diversity

	Log Number of Levels of Jurisdictional Hierarchy					
	(1)	(2)	(3)	(4)	(5)	(6)
Genetic Diversity	2.482*** (0.949)	3.993*** (0.878)	4.113*** (0.918)	7.766*** (2.356)	9.327*** (3.199)	9.370*** (2.980)
Any Diversity (FAO)	0.506*** (0.127)	0.635*** (0.196)	0.636** (0.244)	0.215 (0.178)	0.128 (0.264)	0.208 (0.284)
Log Absolute Latitude		0.156*** (0.030)	0.155*** (0.032)	0.093** (0.036)	0.081* (0.044)	0.097** (0.043)
Elevation					-0.000 (0.000)	0.000 (0.000)
Terrain Ruggedness					0.000 (0.000)	0.000 (0.000)
River Length					0.001*** (0.000)	0.003*** (0.001)
River Density					0.016 (0.030)	0.025 (0.024)
Share Desert					-0.164 (0.306)	-0.508** (0.254)
Average Temperature						0.027** (0.011)
Temperature Range						0.019 (0.026)
Soil Quality (Climatic)	No	No	Yes	Yes	Yes	Yes
Continental FE	No	No	No	Yes	Yes	Yes
<i>N</i>	131	131	131	131	131	131
Adjusted <i>R</i> <sup>2</sup>	0.043	0.156	0.184	0.283	0.268	0.312

# Predicted Diversity and Jurisdictional Hierarchy — Accounting for Ecological Diversity

	Log Number of Levels of Jurisdictional Hierarchy					
	(1)	(2)	(3)	(4)	(5)	(6)
Predicted Genetic Diversity	5.068*** (0.294)	5.705*** (0.320)	5.773*** (0.317)	5.043*** (1.006)	5.344*** (1.094)	5.601*** (1.099)
Any Diversity (FAO)	0.147*** (0.043)	0.135*** (0.043)	0.119*** (0.045)	0.186*** (0.045)	0.172*** (0.046)	0.178*** (0.046)
Log Absolute Latitude		0.066*** (0.013)	0.078*** (0.014)	0.105*** (0.018)	0.104*** (0.019)	0.127*** (0.021)
Elevation					0.000 (0.000)	0.000** (0.000)
Terrain Ruggedness					-0.000 (0.000)	-0.000** (0.000)
River Length					0.002** (0.001)	0.003*** (0.001)
River Density					-0.002 (0.002)	-0.002 (0.002)
Share Desert					0.017 (0.063)	0.014 (0.072)
Average Temperature						0.008** (0.004)
Temperature Range						-0.020** (0.008)
Soil Quality (Climatic)	No	No	Yes	Yes	Yes	Yes
Continental FE	No	No	No	Yes	Yes	Yes
<i>N</i>	1,076	1,076	1,076	1,076	1,076	1,076
Adjusted <i>R</i> <sup>2</sup>	0.204	0.222	0.228	0.299	0.305	0.308



# Observed Diversity and Jurisdictional Hierarchy — Accounting for SD of Soil Suitability

	Log Number of Levels of Jurisdictional Hierarchy					
	(1)	(2)	(3)	(4)	(5)	(6)
Genetic Diversity	2.623*** (0.929)	4.282*** (0.953)	4.181*** (1.016)	6.313** (2.416)	7.673** (2.975)	7.655*** (2.905)
Log Absolute Latitude		0.158*** (0.031)	0.143*** (0.034)	0.084** (0.038)	0.053 (0.044)	0.082* (0.049)
Elevation					-0.000 (0.000)	0.000 (0.000)
Terrain Ruggedness					0.000 (0.000)	0.000 (0.000)
River Length					0.001 (0.001)	0.002*** (0.001)
River Density					-0.006 (0.037)	0.005 (0.031)
Share Desert					-0.396 (0.291)	-0.751*** (0.239)
Average Temperature						0.030*** (0.011)
Temperature Range						-0.001 (0.027)
Soil Suitability SD FE	Yes	Yes	Yes	Yes	Yes	Yes
Soil Quality (Climatic)	No	No	Yes	Yes	Yes	Yes
Continental FE	No	No	No	Yes	Yes	Yes
N	131	131	131	131	131	131
Adjusted R <sup>2</sup>	0.095	0.205	0.230	0.321	0.311	0.359

# Observed Diversity and Jurisdictional Hierarchy — Accounting for SD of Soil Suitability

	Log Number of Levels of Jurisdictional Hierarchy					
	(1)	(2)	(3)	(4)	(5)	(6)
Predicted Genetic Diversity	5.062*** (0.294)	5.720*** (0.323)	5.719*** (0.321)	4.093*** (1.060)	4.694*** (1.129)	4.840*** (1.125)
Log Absolute Latitude		0.070*** (0.014)	0.069*** (0.015)	0.097*** (0.018)	0.097*** (0.019)	0.123*** (0.021)
Elevation					-0.000 (0.000)	0.000** (0.000)
Terrain Ruggedness					-0.000 (0.000)	-0.000** (0.000)
River Length					0.002** (0.001)	0.003*** (0.001)
River Density					-0.001 (0.002)	-0.001 (0.002)
Share Desert					-0.005 (0.065)	-0.003 (0.073)
Average Temperature						0.009** (0.004)
Temperature Range						-0.026*** (0.008)
Soil Suitability SD FE	Yes	Yes	Yes	Yes	Yes	Yes
Soil Quality (Climatic)	No	No	Yes	Yes	Yes	Yes
Continental FE	No	No	No	Yes	Yes	Yes
<i>N</i>	1,076	1,076	1,076	1,076	1,076	1,076
Adjusted <i>R</i> <sup>2</sup>	0.214	0.232	0.237	0.309	0.313	0.319

# Observed Genetic Diversity and Jurisdictional Hierarchy — Accounting for Crop Type

	Log Number of Levels of Jurisdictional Hierarchy					
	(1)	(2)	(3)	(4)	(5)	(6)
Genetic Diversity	2.190** (0.972)	3.631*** (1.027)	3.734*** (1.002)	7.543*** (2.448)	8.834*** (3.263)	9.723*** (2.983)
Tree Fruits	-0.117 (0.326)	-0.171 (0.349)	0.004 (0.373)	0.265 (0.342)	0.253 (0.360)	0.166 (0.359)
Roots or Tubers	-0.016 (0.169)	-0.028 (0.178)	0.128 (0.171)	0.115 (0.211)	0.092 (0.262)	-0.041 (0.240)
Cereal Grains	0.301** (0.147)	0.181 (0.174)	0.316** (0.157)	0.139 (0.187)	0.133 (0.211)	-0.026 (0.191)
Log Absolute Latitude		0.125*** (0.033)	0.116*** (0.039)	0.079* (0.045)	0.069 (0.048)	0.103** (0.051)
Elevation					-0.000 (0.000)	0.000 (0.000)
Terrain Ruggedness					0.000 (0.000)	0.000 (0.000)
River Length					0.001*** (0.000)	0.003*** (0.001)
River Density					0.015 (0.031)	0.029 (0.025)
Share Desert					-0.167 (0.317)	-0.509* (0.271)
Average Temperature						0.028** (0.012)
Temperature Range						0.015 (0.025)
Soil Quality (Climatic)	No	No	Yes	Yes	Yes	Yes
Continental FE	No	No	No	Yes	Yes	Yes
N	131	131	131	131	131	131
Adjusted R <sup>2</sup>	0.092	0.154	0.190	0.274	0.260	0.300

# Predicted Genetic Diversity and Jurisdictional Hierarchy — Accounting for Crop Type

	Log Number of Levels of Jurisdictional Hierarchy					
	(1)	(2)	(3)	(4)	(5)	(6)
Predicted Genetic Diversity	3.846*** (0.356)	4.833*** (0.388)	4.910*** (0.385)	5.923*** (1.045)	6.125*** (1.113)	5.903*** (1.112)
Non Food Crops Only	0.694*** (0.086)	0.743*** (0.138)	0.705*** (0.102)	0.650*** (0.058)	0.647*** (0.062)	0.638*** (0.063)
Vegetables	0.302** (0.152)	0.359*** (0.107)	0.385*** (0.111)	0.220* (0.122)	0.237* (0.135)	0.269** (0.132)
Tree Fruits	0.198*** (0.069)	0.390*** (0.073)	0.394*** (0.073)	0.264*** (0.079)	0.262*** (0.080)	0.252*** (0.081)
Roots or Tubers	0.186*** (0.035)	0.361*** (0.046)	0.361*** (0.045)	0.249*** (0.060)	0.249*** (0.060)	0.245*** (0.063)
Cereal Grains	0.345*** (0.036)	0.405*** (0.038)	0.396*** (0.038)	0.301*** (0.045)	0.300*** (0.046)	0.315*** (0.048)
Log Absolute Latitude		0.112*** (0.017)	0.117*** (0.017)	0.108*** (0.020)	0.105*** (0.020)	0.111*** (0.022)
Elevation					0.000 (0.000)	0.000 (0.000)
Terrain Ruggedness					-0.000 (0.000)	-0.000* (0.000)
River Length					0.003** (0.001)	0.003** (0.001)
River Density					-0.003 (0.002)	-0.003 (0.002)
Share Desert					-0.040 (0.059)	0.044 (0.071)
Average Temperature						-0.000 (0.004)
Temperature Range						-0.021** (0.008)
Soil Quality (Climatic) Continental FE	No No	No No	Yes No	Yes Yes	Yes Yes	Yes Yes
N	1,076	1,076	1,076	1,076	1,076	1,076
Adjusted R <sup>2</sup>	0.254	0.291	0.292	0.317	0.323	0.326

# Observed Genetic Diversity and Jurisdictional Hierarchy — Accounting for Scale

	Log Number of Levels of Jurisdictional Hierarchy					
	(1)	(2)	(3)	(4)	(5)	(6)
Genetic Diversity	2.899*** (0.723)	3.845*** (0.800)	3.819*** (0.914)	3.778* (2.189)	5.399* (2.873)	5.689** (2.852)
Area	0.000 (0.000)	0.000 (0.000)	0.000** (0.000)	0.000** (0.000)	0.005** (0.002)	0.004** (0.002)
Size of Local Community: Fewer than 50	0.020 (0.155)	0.094 (0.163)	-0.002 (0.155)	-0.013 (0.151)	0.051 (0.138)	0.082 (0.140)
Size of Local Community: 50–99	-0.121 (0.142)	-0.114 (0.133)	0.001 (0.145)	0.039 (0.140)	0.039 (0.162)	0.077 (0.158)
Size of Local Community: 100–199	0.087 (0.120)	0.141 (0.119)	0.133 (0.129)	0.122 (0.150)	0.050 (0.145)	0.042 (0.152)
Size of Local Community: 200–399	-0.143 (0.176)	-0.133 (0.155)	-0.108 (0.162)	-0.114 (0.195)	-0.230 (0.200)	-0.237 (0.185)
Size of Local Community: 400–1,000	0.218* (0.119)	0.163 (0.118)	0.233* (0.132)	0.195 (0.135)	0.223 (0.156)	0.233 (0.153)
Size of Local Community: 1,000 w/o Towns over 5,000	-0.559*** (0.075)	-0.557*** (0.073)	-0.576*** (0.106)	-0.572*** (0.110)	-0.645*** (0.108)	-0.695*** (0.124)
Size of Local Community: Towns of 5,000–50,000	0.682*** (0.238)	0.661** (0.256)	0.628** (0.255)	0.857*** (0.133)	0.897*** (0.131)	0.922*** (0.134)
Size of Local Community: Cities of 50,000 or more	0.887*** (0.084)	0.825*** (0.088)	0.826*** (0.102)	0.760*** (0.109)	0.814*** (0.119)	0.779*** (0.128)
Log Absolute Latitude		0.082** (0.034)	0.054 (0.038)	0.061 (0.043)	0.082* (0.042)	0.071 (0.046)
Elevation					0.000 (0.000)	-0.000 (0.000)
Terrain Ruggedness					0.000 (0.000)	0.000* (0.000)
River Length					-0.012** (0.005)	-0.010** (0.005)
River Density					0.065*** (0.024)	0.067*** (0.024)
Share Desert					-0.076 (0.233)	-0.254 (0.245)
Average Temperature						0.006 (0.010)
Temperature Range						0.033 (0.022)
Soil Quality (Climatic)	No	No	Yes	Yes	Yes	Yes
Continental FE	No	No	No	Yes	Yes	Yes
N	131	131	131	131	131	131
Adjusted R <sup>2</sup>	0.387	0.411	0.427	0.503	0.522	0.526

# Predicted Genetic Diversity and Jurisdictional Hierarchy — Accounting for Scale

	Log Number of Levels of Jurisdictional Hierarchy					
	(1)	(2)	(3)	(4)	(5)	(6)
Predicted Genetic Diversity	4.215*** (0.286)	4.493*** (0.300)	4.566*** (0.304)	3.531*** (0.953)	3.061*** (1.037)	3.071*** (1.034)
Area	0.001 (0.001)	0.001 (0.001)	0.001 (0.001)	0.001 (0.001)	0.003*** (0.001)	0.003*** (0.001)
Size of Local Community: Fewer than 50	-0.180*** (0.037)	-0.183*** (0.038)	-0.171*** (0.038)	-0.145*** (0.038)	-0.161*** (0.039)	-0.162*** (0.039)
Size of Local Community: 50–99	-0.127*** (0.042)	-0.132*** (0.041)	-0.131*** (0.042)	-0.125*** (0.040)	-0.128*** (0.040)	-0.130*** (0.041)
Size of Local Community: 100–199	-0.007 (0.044)	-0.004 (0.044)	0.000 (0.045)	0.011 (0.044)	0.003 (0.044)	-0.002 (0.044)
Size of Local Community: 200–399	-0.052 (0.053)	-0.054 (0.053)	-0.054 (0.053)	-0.040 (0.052)	-0.055 (0.052)	-0.054 (0.052)
Size of Local Community: 400–1,000	0.069 (0.057)	0.064 (0.056)	0.052 (0.057)	0.047 (0.058)	0.043 (0.060)	0.041 (0.060)
Size of Local Community: 1,000 w/o Towns over 5,000	-0.110 (0.129)	-0.117 (0.131)	-0.107 (0.129)	-0.113 (0.131)	-0.125 (0.132)	-0.122 (0.131)
Size of Local Community: Towns of 5,000–50,000	0.597*** (0.081)	0.589*** (0.082)	0.591*** (0.082)	0.522*** (0.087)	0.519*** (0.084)	0.517*** (0.083)
Size of Local Community: Cities of 50,000 or more	0.837*** (0.033)	0.813*** (0.035)	0.805*** (0.037)	0.769*** (0.047)	0.772*** (0.049)	0.770*** (0.048)
Log Absolute Latitude		0.029** (0.012)	0.033** (0.013)	0.071*** (0.017)	0.074*** (0.018)	0.085*** (0.020)
Elevation					0.000* (0.000)	0.000** (0.000)
Terrain Ruggedness					-0.000 (0.000)	-0.000** (0.000)
River Length					-0.005** (0.002)	-0.005*** (0.002)
River Density					0.002 (0.002)	0.002 (0.002)
Share Desert					0.019 (0.055)	0.064 (0.067)
Average Temperature						0.002 (0.003)
Temperature Range						-0.016** (0.008)
Soil Quality (Climatic)	No	No	Yes	Yes	Yes	Yes
Continental FE	No	No	No	Yes	Yes	Yes
N	1,076	1,076	1,076	1,076	1,076	1,076
Adjusted R <sup>2</sup>	0.403	0.405	0.406	0.425	0.429	0.430

## Genetic Diversity and Jurisdictional Hierarchy — Omitting Africa

	Log Number of Levels of Jurisdictional Hierarchy					
	(1)	(2)	(3)	(4)	(5)	(6)
Genetic Diversity	8.694*** (1.186)	8.581*** (1.477)	10.082*** (1.352)	10.082*** (1.352)	8.511*** (2.539)	9.199*** (2.286)
Log Absolute Latitude		0.013 (0.106)	-0.173 (0.128)	-0.173 (0.128)	-0.227 (0.135)	0.088 (0.276)
Elevation					0.000* (0.000)	0.000 (0.000)
Terrain Ruggedness					-0.000** (0.000)	-0.000 (0.000)
River Length					0.002** (0.001)	0.003*** (0.001)
River Density					-0.008 (0.025)	0.017 (0.027)
Share Desert					0.247 (0.495)	-0.424 (0.541)
Average Temperature						0.033 (0.022)
Temperature Range						0.020 (0.046)
Soil Quality (Climatic)	No	No	Yes	Yes	Yes	Yes
<i>N</i>	54	54	54	54	54	54
Adjusted $R^2$	0.356	0.343	0.330	0.330	0.385	0.432

[► Return](#)

# Predicted Genetic Diversity and Jurisdictional Hierarchy — Omitting Africa

	Log Number of Levels of Jurisdictional Hierarchy					
	(1)	(2)	(3)	(4)	(5)	(6)
Predicted Genetic Diversity	6.525*** (0.548)	6.520*** (0.564)	6.538*** (0.569)	6.524*** (1.215)	7.791*** (1.297)	7.791*** (1.290)
Log Absolute Latitude		0.001 (0.020)	0.024 (0.022)	0.104*** (0.033)	0.099*** (0.033)	0.156*** (0.045)
Elevation					0.000 (0.000)	0.000* (0.000)
Terrain Ruggedness					-0.000*** (0.000)	-0.000*** (0.000)
River Length					0.002** (0.001)	0.003*** (0.001)
River Density					-0.003 (0.002)	-0.003 (0.002)
Share Desert					-0.037 (0.074)	-0.065 (0.084)
Average Temperature						0.012** (0.005)
Temperature Range						-0.022** (0.011)
Soil Quality (Climatic)	No	No	Yes	Yes	Yes	Yes
Continental FE	No	No	No	Yes	Yes	Yes
<i>N</i>	590	590	590	590	590	590
Adjusted <i>R</i> <sup>2</sup>	0.219	0.217	0.256	0.331	0.353	0.361

► Return



# Genetic Diversity and Jurisdictional Hierarchy — Accounting for Year in Ethnographic Atlas

	Log Levels of Jurisdictional Hierarchy			
	(1)	(2)	(3)	(4)
Genetic Diversity	1.940*	7.620***	7.222**	7.328**
	(1.089)	(2.551)	(3.140)	(3.068)
Year in Ethnographic Atlas	-0.001	-0.000	-0.001	-0.002
	(0.001)	(0.001)	(0.001)	(0.001)
Log Absolute Latitude		-0.009	0.054	0.095***
		(0.027)	(0.033)	(0.027)
Elevation			0.000***	0.000***
			(0.000)	(0.000)
Terrain Ruggedness			-0.000	-0.000
			(0.000)	(0.000)
River Length			0.000	0.002***
			(0.000)	(0.001)
River Density			-0.057	-0.065
			(0.083)	(0.075)
Share Desert			0.295*	0.337
			(0.172)	(0.226)
Average Temperature				0.023**
				(0.011)
Temperature Range				-0.040
				(0.027)
Soil Quality (Climatic)	No	Yes	Yes	Yes
Continental FE	No	Yes	Yes	Yes
<i>N</i>	94	94	94	94
Adjusted <i>R</i> <sup>2</sup>	0.029	0.085	0.150	0.202

# Predicted Genetic Diversity and Jurisdictional Hierarchy — Accounting for Year in Ethnographic Atlas

	Log Number of Levels of Jurisdictional Hierarchy					
	(1)	(2)	(3)	(4)	(5)	(6)
Predicted Genetic Diversity	5.223*** (0.288)	5.810*** (0.316)	5.879*** (0.313)	5.300*** (1.009)	5.422*** (1.100)	5.644*** (1.105)
Year in Ethnographic Atlas	-0.000*** (0.000)	-0.000** (0.000)	-0.000** (0.000)	-0.000** (0.000)	-0.000** (0.000)	-0.000** (0.000)
Log Absolute Latitude		0.064*** (0.014)	0.075*** (0.015)	0.107*** (0.018)	0.105*** (0.019)	0.127*** (0.021)
Elevation					0.000 (0.000)	0.000** (0.000)
Terrain Ruggedness					-0.000* (0.000)	-0.000*** (0.000)
River Length					0.003*** (0.001)	0.003*** (0.001)
River Density					-0.003 (0.002)	-0.002 (0.002)
Share Desert					0.005 (0.062)	0.009 (0.072)
Average Temperature						0.007* (0.004)
Temperature Range						-0.020** (0.008)
Soil Quality (Climatic)	No	No	Yes	Yes	Yes	Yes
Continental FE	No	No	No	Yes	Yes	Yes
<i>N</i>	1,075	1,075	1,075	1,075	1,075	1,075
Adjusted <i>R</i> <sup>2</sup>	0.204	0.220	0.228	0.295	0.302	0.305

# Predicted Diversity and Constraint on the Executive (2013)

	Log Constraint on Chief Executive						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Predicted Genetic Diversity	-3.397*** (0.902)	-3.449*** (0.898)	-2.423** (0.948)	-2.495*** (0.939)	-3.081** (1.547)	-3.159** (1.473)	-3.486** (1.435)
Log Absolute Latitude		0.082** (0.032)	0.051 (0.034)	-0.044 (0.049)	0.018 (0.051)	0.016 (0.048)	0.013 (0.050)
Soil Fertility			0.319 (0.227)	0.244 (0.217)	0.067 (0.193)	0.205 (0.191)	0.308 (0.250)
Roughness			0.167 (0.309)	0.059 (0.324)	0.355 (0.338)	0.441 (0.314)	0.183 (0.310)
Elevation			0.039 (0.084)	0.109 (0.084)	0.048 (0.105)	0.048 (0.096)	0.013 (0.083)
Average Distance to Nearest Waterway			-0.197** (0.096)	-0.265*** (0.092)	-0.171* (0.087)	-0.080 (0.092)	-0.166** (0.080)
Percentage of Arable Land			0.003 (0.002)	0.002 (0.002)	0.003 (0.003)	0.003 (0.002)	0.001 (0.003)
Temperature				-0.017*** (0.006)	-0.003 (0.010)	-0.005 (0.010)	-0.012 (0.008)
Colony							0.181 (0.117)
Continental FE	No	No	No	No	Yes	Yes	Yes
Legal Origin FE	No	No	No	No	No	Yes	Yes
<i>N</i>	140	140	140	140	140	140	126
Adjusted <i>R</i> <sup>2</sup>	0.050	0.082	0.175	0.228	0.330	0.390	0.423

► Return

# Predicted Diversity and Constraint on the Executive — Accounting for GDP

	Log Constraint on Chief Executive						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Predicted Genetic Diversity	-3.348*** (0.857)	-3.460*** (0.914)	-2.467*** (0.905)	-2.629*** (0.964)	-3.677*** (1.361)	-3.440*** (1.294)	-3.779*** (1.383)
Log Income per capita in 2000	0.112*** (0.028)	0.099*** (0.036)	0.103*** (0.036)	0.060 (0.054)	0.060 (0.048)	0.013 (0.053)	-0.010 (0.052)
Log Absolute Latitude		0.034 (0.037)	-0.012 (0.037)	-0.066 (0.044)	0.022 (0.044)	0.018 (0.038)	0.021 (0.040)
Soil Fertility			0.560** (0.231)	0.471** (0.223)	0.196 (0.208)	0.312 (0.204)	0.367 (0.229)
Roughness			-0.067 (0.309)	-0.049 (0.324)	0.355 (0.323)	0.388 (0.299)	0.191 (0.288)
Elevation			0.032 (0.094)	-0.036 (0.109)	0.024 (0.109)	-0.054 (0.104)	-0.083 (0.090)
Average Distance to Nearest Waterway			-0.139 (0.092)	-0.209** (0.099)	-0.129 (0.088)	-0.067 (0.093)	-0.135* (0.080)
Percentage of Arable Land			0.003 (0.002)	0.001 (0.002)	0.003 (0.003)	0.002 (0.002)	0.001 (0.003)
Temperature				-0.014* (0.008)	-0.004 (0.010)	-0.009 (0.011)	-0.017** (0.008)
Colony							0.235** (0.102)
Continental FE	No	No	No	No	Yes	Yes	Yes
Legal Origin FE	No	No	No	No	No	Yes	Yes
N	144	144	144	144	144	144	129
Adjusted R <sup>2</sup>	0.171	0.170	0.278	0.303	0.411	0.448	0.500

► Return

# Predicted Diversity and Constraint on the Executive — Accounting for Schooling

	Log Constraint on Chief Executive						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Predicted Genetic Diversity	-3.210*** (0.659)	-3.202*** (0.681)	-2.136** (0.827)	-2.299*** (0.857)	-3.170** (1.296)	-3.450*** (1.196)	-3.948*** (1.387)
Years of Schooling	0.064*** (0.009)	0.064*** (0.013)	0.061*** (0.012)	0.048*** (0.018)	0.048** (0.019)	0.053*** (0.015)	0.056*** (0.016)
Log Absolute Latitude		-0.002 (0.038)	-0.016 (0.037)	-0.039 (0.044)	0.030 (0.045)	0.027 (0.044)	0.024 (0.050)
Soil Fertility			0.128 (0.190)	0.135 (0.190)	-0.090 (0.166)	0.004 (0.161)	-0.023 (0.236)
Roughness			0.233 (0.284)	0.213 (0.290)	0.436* (0.247)	0.344 (0.221)	0.241 (0.282)
Elevation			-0.027 (0.093)	-0.055 (0.092)	-0.004 (0.086)	-0.015 (0.080)	-0.004 (0.086)
Average Distance to Nearest Waterway			-0.193** (0.095)	-0.218** (0.099)	-0.172** (0.079)	-0.102 (0.085)	-0.102 (0.084)
Percentage of Arable Land			0.002 (0.002)	0.001 (0.002)	0.002 (0.003)	0.003 (0.002)	0.004 (0.003)
Temperature				-0.007 (0.007)	0.003 (0.009)	0.000 (0.009)	-0.000 (0.009)
Colony							0.002 (0.084)
Continental FE	No	No	No	No	Yes	Yes	Yes
Legal Origin FE	No	No	No	No	No	Yes	Yes
N	110	110	110	110	110	110	102
r <sup>2</sup> a	0.343	0.336	0.397	0.397	0.465	0.504	0.495

# Predicted Diversity and Constraint on the Executive — Accounting for Ethnic Fractionalization

	Log Constraint on Chief Executive						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Predicted Genetic Diversity	-3.271*** (0.838)	-3.509*** (0.855)	-2.766*** (0.903)	-2.923*** (0.865)	-3.233** (1.450)	-3.373** (1.379)	-3.913*** (1.407)
Ethnic Fractionalization	-0.373*** (0.126)	-0.265* (0.157)	-0.017 (0.175)	0.115 (0.161)	-0.010 (0.158)	0.076 (0.175)	0.094 (0.186)
Log Absolute Latitude		0.056 (0.036)	0.053 (0.034)	-0.049 (0.045)	0.022 (0.043)	0.021 (0.038)	0.027 (0.040)
Soil Fertility			0.475* (0.246)	0.410* (0.231)	0.160 (0.208)	0.328 (0.202)	0.398* (0.229)
Roughness			0.138 (0.342)	0.101 (0.349)	0.334 (0.331)	0.403 (0.304)	0.215 (0.294)
Elevation			-0.061 (0.100)	-0.117 (0.100)	-0.004 (0.112)	-0.071 (0.105)	-0.095 (0.095)
Average Distance to Nearest Waterway			-0.174* (0.095)	-0.259*** (0.091)	-0.161* (0.085)	-0.074 (0.090)	-0.133 (0.081)
Percentage of Arable Land			0.002 (0.003)	0.001 (0.003)	0.002 (0.003)	0.002 (0.003)	0.001 (0.003)
Temperature				-0.021*** (0.005)	-0.006 (0.010)	-0.010 (0.010)	-0.018** (0.008)
Colony							0.239** (0.101)
Continental FE	No	No	No	No	Yes	Yes	Yes
Legal Origin FE	No	No	No	No	No	Yes	Yes
N	144	144	144	144	144	144	129
r <sup>2</sup> a	0.114	0.120	0.210	0.284	0.394	0.447	0.499

# Predicted Diversity and Constraint on the Executive — Accounting for Percentage of Land near a Waterway

	Log Constraint on Chief Executive						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Predicted Genetic Diversity	-3.116*** (0.855)	-3.251*** (0.876)	-2.773*** (0.889)	-2.812*** (0.873)	-3.278** (1.444)	-3.364** (1.352)	-3.896*** (1.363)
Percentage of Land near a Waterway	0.344*** (0.089)	0.306*** (0.093)	0.086 (0.151)	-0.018 (0.144)	0.016 (0.136)	-0.026 (0.133)	-0.078 (0.162)
Log Absolute Latitude		0.068** (0.030)	0.050 (0.031)	-0.059 (0.042)	0.022 (0.043)	0.018 (0.038)	0.019 (0.041)
Soil Fertility			0.485* (0.246)	0.418* (0.236)	0.163 (0.211)	0.314 (0.208)	0.382 (0.244)
Roughness			0.052 (0.357)	0.055 (0.359)	0.327 (0.353)	0.405 (0.323)	0.266 (0.316)
Elevation			-0.028 (0.120)	-0.111 (0.120)	-0.001 (0.130)	-0.074 (0.125)	-0.118 (0.130)
Average Distance to Nearest Waterway			-0.144 (0.098)	-0.254*** (0.097)	-0.155* (0.093)	-0.078 (0.100)	-0.156 (0.102)
Percentage of Arable Land			0.002 (0.002)	0.001 (0.002)	0.002 (0.003)	0.002 (0.002)	0.002 (0.003)
Temperature				-0.020*** (0.006)	-0.007 (0.010)	-0.010 (0.010)	-0.018** (0.008)
Colony							0.222** (0.101)
Continental FE	No	No	No	No	Yes	Yes	Yes
Legal Origin FE	No	No	No	No	No	Yes	Yes
N	145	145	145	145	145	145	130
r2a	0.156	0.174	0.218	0.287	0.400	0.452	0.505

# Predicted Diversity and Constraint on the Executive — Accounting for Percentages of Population Living in Various Climate Zones

	Log Constraint on Chief Executive						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Predicted Genetic Diversity	-3.926*** (0.888)	-3.864*** (0.908)	-3.369*** (0.985)	-3.172*** (0.985)	-3.066** (1.497)	-3.238** (1.413)	-4.167*** (1.392)
Percentage of Population Living in Temperate Zones	0.587*** (0.090)	0.578*** (0.103)	0.477*** (0.105)	0.377*** (0.139)	0.134 (0.176)	0.044 (0.182)	0.086 (0.169)
Percentage of Population Living in Tropical Zones	0.011 (0.165)	0.028 (0.186)	0.041 (0.200)	0.021 (0.202)	-0.082 (0.184)	-0.020 (0.169)	-0.078 (0.171)
Percentage of Population Living in Tropical and Subtropical Zones	0.198 (0.173)	0.198 (0.174)	0.107 (0.181)	0.115 (0.182)	0.119 (0.157)	0.047 (0.150)	-0.024 (0.144)
Log Absolute Latitude		0.013 (0.051)	-0.004 (0.053)	-0.025 (0.058)	0.023 (0.057)	0.022 (0.050)	-0.012 (0.049)
Soil Fertility			0.278 (0.234)	0.290 (0.233)	0.126 (0.206)	0.294 (0.205)	0.364 (0.240)
Roughness			0.028 (0.318)	0.024 (0.321)	0.333 (0.335)	0.373 (0.314)	0.184 (0.305)
Elevation			0.027 (0.097)	-0.007 (0.108)	0.007 (0.114)	-0.053 (0.107)	-0.078 (0.099)
Average Distance to Nearest Waterway			-0.101 (0.079)	-0.141 (0.087)	-0.126 (0.081)	-0.060 (0.088)	-0.116 (0.083)
Percentage of Arable Land			0.000 (0.002)	0.000 (0.002)	0.002 (0.003)	0.002 (0.002)	0.002 (0.003)
Temperature				-0.007 (0.007)	-0.004 (0.009)	-0.008 (0.010)	-0.013 (0.009)
Colony							0.227** (0.104)
Continental FE	No	No	No	No	Yes	Yes	Yes
Legal Origin FE	No	No	No	No	No	Yes	Yes
N	145	145	145	145	145	145	130
r2a	0.311	0.306	0.309	0.309	0.395	0.443	0.501



# Predicted Diversity and Constraint on the Executive — Accounting for Land Suitability Gini

	Log Constraint on Chief Executive						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Predicted Genetic Diversity	-3.863*** (0.829)	-3.891*** (0.845)	-2.746*** (0.890)	-2.768*** (0.869)	-3.549** (1.455)	-3.590*** (1.364)	-3.870*** (1.330)
Land Suitability Gini	-0.233 (0.150)	-0.256* (0.144)	0.460** (0.201)	0.304 (0.198)	0.263 (0.192)	0.162 (0.193)	0.062 (0.229)
Log Absolute Latitude		0.100*** (0.029)	0.027 (0.031)	-0.065 (0.042)	0.009 (0.042)	0.008 (0.038)	0.019 (0.040)
Soil Fertility			0.920*** (0.264)	0.752*** (0.255)	0.493* (0.264)	0.550** (0.255)	0.413 (0.313)
Roughness			-0.085 (0.307)	-0.164 (0.315)	0.148 (0.316)	0.200 (0.289)	0.188 (0.293)
Elevation			-0.071 (0.096)	-0.092 (0.096)	0.002 (0.112)	-0.044 (0.106)	-0.085 (0.102)
Average Distance to Nearest Waterway			-0.244*** (0.088)	-0.290*** (0.087)	-0.195** (0.084)	-0.097 (0.091)	-0.140* (0.081)
Percentage of Arable Land			0.002 (0.002)	0.000 (0.002)	0.001 (0.003)	0.001 (0.002)	0.001 (0.003)
Temperature				-0.018*** (0.006)	-0.003 (0.010)	-0.007 (0.010)	-0.016** (0.008)
Colony							0.222** (0.096)
Continental FE	No	No	No	No	Yes	Yes	Yes
Legal Origin FE	No	No	No	No	No	Yes	Yes
N	144	144	144	144	144	144	130
r2a	0.080	0.127	0.266	0.318	0.416	0.459	0.504

# Predicted Diversity and Constraint on the Executive — Accounting for Colonizer Nation

	Log Constraint on Chief Executive						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Predicted Genetic Diversity	-3.442*** (1.159)	-3.293*** (1.102)	-2.869** (1.131)	-2.739** (1.140)	-4.115** (1.606)	-3.648** (1.604)	-4.272*** (1.532)
British Colony	-0.072 (0.102)	-0.092 (0.095)	0.001 (0.109)	-0.006 (0.103)	0.163 (0.109)	0.051 (0.152)	0.092 (0.136)
French Colony	-0.223** (0.098)	-0.223** (0.092)	-0.130 (0.106)	-0.077 (0.113)	0.078 (0.096)	0.109 (0.103)	0.116 (0.102)
Other Colony	-0.052 (0.114)	-0.134 (0.107)	-0.107 (0.118)	-0.259** (0.114)	-0.105 (0.111)	-0.044 (0.119)	0.061 (0.110)
Non-colony	0.122 (0.104)	0.032 (0.101)	0.068 (0.099)	-0.076 (0.096)	0.029 (0.105)	-0.095 (0.123)	0.057 (0.114)
Log Absolute Latitude		0.092*** (0.028)	0.057** (0.028)	-0.052 (0.041)	0.014 (0.040)	0.014 (0.039)	0.014 (0.042)
Soil Fertility			0.450* (0.258)	0.331 (0.240)	0.187 (0.199)	0.310 (0.210)	0.396* (0.230)
Roughness			0.166 (0.321)	0.150 (0.320)	0.421 (0.314)	0.330 (0.300)	0.104 (0.293)
Elevation			-0.046 (0.090)	-0.074 (0.087)	0.014 (0.104)	0.005 (0.105)	-0.030 (0.090)
Average Distance to Nearest Waterway			-0.123 (0.091)	-0.206** (0.087)	-0.118 (0.087)	-0.051 (0.091)	-0.116 (0.082)
Percentage of Arable Land			0.003 (0.003)	0.003 (0.003)	0.003 (0.003)	0.002 (0.003)	0.002 (0.003)
Temperature				-0.025*** (0.006)	-0.011 (0.009)	-0.012 (0.010)	-0.018** (0.008)
Colony							0.168 (0.113)
Continental FE	No	No	No	No	Yes	Yes	Yes
Legal Origin FE	No	No	No	No	No	Yes	Yes
N	142	142	142	142	142	142	127
r2a	0.108	0.140	0.235	0.329	0.439	0.470	0.508

# Predicted Diversity and Constraint on the Executive — Accounting for Population Density in 1500

	Log Constraint on Chief Executive						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Predicted Genetic Diversity	-4.135*** (0.846)	-4.173*** (0.852)	-2.866*** (0.879)	-2.873*** (0.863)	-3.015** (1.432)	-3.446** (1.349)	-3.788*** (1.419)
Population Density in 1500 CE	0.012*** (0.003)	0.010*** (0.003)	0.005* (0.003)	0.003 (0.003)	0.007** (0.003)	0.002 (0.005)	0.003 (0.004)
Log Absolute Latitude		0.077*** (0.029)	0.055* (0.030)	-0.055 (0.042)	0.032 (0.043)	0.024 (0.037)	0.023 (0.040)
Soil Fertility			0.465* (0.248)	0.373 (0.233)	0.113 (0.202)	0.254 (0.194)	0.311 (0.233)
Roughness			0.103 (0.318)	0.023 (0.327)	0.305 (0.316)	0.389 (0.292)	0.216 (0.290)
Elevation			-0.029 (0.096)	-0.062 (0.094)	0.031 (0.105)	-0.017 (0.099)	-0.043 (0.087)
Average Distance to Nearest Waterway			-0.182* (0.094)	-0.265*** (0.088)	-0.170** (0.082)	-0.097 (0.087)	-0.151* (0.079)
Percentage of Arable Land			0.000 (0.003)	-0.000 (0.003)	0.000 (0.003)	0.001 (0.003)	0.001 (0.003)
Temperature				-0.020*** (0.005)	-0.006 (0.010)	-0.010 (0.010)	-0.017** (0.008)
Colony							0.211** (0.097)
Continental FE	No	No	No	No	Yes	Yes	Yes
Legal Origin FE	No	No	No	No	No	Yes	Yes
N	144	144	144	144	144	144	129
r2a	0.130	0.155	0.227	0.295	0.419	0.465	0.512

# Predicted Diversity and Constraint on the Executive — Accounting for Colonial Duration

	Log Constraint on Chief Executive						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Predicted Genetic Diversity	-3.565*** (0.939)	-3.137*** (0.927)	-2.079** (1.035)	-1.756* (0.985)	-2.840* (1.456)	-2.966** (1.373)	-3.624** (1.405)
Colonial Duration	0.022 (0.017)	0.044*** (0.014)	0.035** (0.017)	0.049*** (0.014)	0.062*** (0.015)	0.050*** (0.015)	0.025* (0.014)
Log Absolute Latitude		0.117*** (0.028)	0.075** (0.031)	-0.044 (0.042)	0.035 (0.041)	0.029 (0.037)	0.024 (0.041)
Soil Fertility			0.464* (0.236)	0.354 (0.219)	0.114 (0.191)	0.245 (0.194)	0.343 (0.236)
Roughness			0.179 (0.308)	0.089 (0.311)	0.445 (0.305)	0.459 (0.287)	0.231 (0.296)
Elevation			-0.056 (0.091)	-0.095 (0.091)	-0.016 (0.106)	-0.061 (0.101)	-0.082 (0.091)
Average Distance to Nearest Waterway			-0.167* (0.091)	-0.253*** (0.088)	-0.147* (0.085)	-0.066 (0.091)	-0.127 (0.082)
Percentage of Arable Land			0.002 (0.002)	0.001 (0.002)	0.001 (0.002)	0.001 (0.002)	0.001 (0.003)
Temperature				-0.022*** (0.005)	-0.010 (0.009)	-0.012 (0.010)	-0.017** (0.008)
Colony							0.200* (0.101)
Continental FE	No	No	No	No	Yes	Yes	Yes
Legal Origin FE	No	No	No	No	No	Yes	Yes
N	145	145	145	145	145	145	130
r <sup>2</sup> a	0.068	0.128	0.232	0.320	0.434	0.473	0.509

# Predicted Diversity and Constraint on the Executive — Accounting for Social Infrastructure

	Log Constraint on Chief Executive						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Predicted Genetic Diversity	-3.395*** (0.728)	-3.582*** (0.724)	-2.553*** (0.848)	-2.974*** (0.891)	-2.345** (1.173)	-3.030*** (1.151)	-2.781** (1.222)
Social Infrastructure	0.593*** (0.088)	0.463*** (0.114)	0.445*** (0.104)	0.139 (0.173)	0.222 (0.192)	0.070 (0.240)	0.131 (0.259)
Log Absolute Latitude		0.068** (0.031)	0.043 (0.031)	-0.013 (0.041)	0.030 (0.041)	0.029 (0.039)	0.033 (0.043)
Soil Fertility			0.387 (0.244)	0.326 (0.219)	0.091 (0.180)	0.084 (0.172)	0.032 (0.228)
Roughness			0.404 (0.298)	0.400 (0.300)	0.477* (0.279)	0.538* (0.275)	0.578* (0.305)
Elevation			-0.119 (0.098)	-0.189 (0.115)	-0.158 (0.106)	-0.188* (0.106)	-0.169* (0.100)
Average Distance to Nearest Waterway			0.018 (0.125)	-0.022 (0.126)	-0.034 (0.143)	0.005 (0.145)	-0.009 (0.146)
Percentage of Arable Land			0.001 (0.002)	0.001 (0.002)	0.004 (0.003)	0.003 (0.003)	0.005 (0.003)
Temperature				-0.017** (0.007)	-0.015** (0.007)	-0.018** (0.008)	-0.019** (0.008)
Colony							0.113 (0.133)
Continental FE	No	No	No	No	Yes	Yes	Yes
Legal Origin FE	No	No	No	No	No	Yes	Yes
N	108	108	108	108	108	108	102
r <sup>2</sup> a	0.286	0.306	0.353	0.394	0.448	0.461	0.463

# Predicted Genetic Diversity and Autocracy (2013)

	Log Autocracy						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Predicted Genetic Diversity	7.878*** (1.933)	7.938*** (1.942)	5.845*** (2.210)	5.983*** (2.218)	6.795* (3.566)	6.992** (3.173)	6.963** (3.239)
Log Absolute Latitude		-0.094 (0.060)	-0.023 (0.065)	0.158* (0.094)	0.013 (0.101)	0.023 (0.093)	0.031 (0.096)
Soil Fertility			-0.823* (0.494)	-0.681 (0.479)	-0.254 (0.407)	-0.619 (0.398)	-0.507 (0.524)
Roughness			-0.433 (0.672)	-0.226 (0.710)	-0.834 (0.716)	-0.931 (0.636)	-0.496 (0.663)
Elevation			0.098 (0.192)	0.147 (0.197)	-0.064 (0.224)	0.072 (0.199)	0.094 (0.187)
Average Distance to Nearest Waterway			0.249 (0.184)	0.378** (0.177)	0.166 (0.160)	-0.054 (0.174)	0.050 (0.157)
Percentage of Arable Land			-0.005 (0.005)	-0.003 (0.005)	-0.005 (0.005)	-0.005 (0.005)	-0.006 (0.007)
Temperature				0.032*** (0.011)	0.002 (0.018)	0.010 (0.019)	0.020 (0.017)
Colony							-0.421* (0.242)
Continental FE	No	No	No	No	Yes	Yes	Yes
Legal Origin FE	No	No	No	No	No	Yes	Yes
<i>N</i>	140	140	140	140	140	140	126
Adjusted <i>R</i> <sup>2</sup>	0.062	0.067	0.133	0.175	0.284	0.367	0.378

# Predicted Genetic Diversity and Autocracy — Accounting for GDP

	Log Autocracy						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Predicted Genetic Diversity	7.605*** (1.900)	7.725*** (1.978)	5.671*** (2.012)	5.996*** (2.126)	7.595** (2.981)	6.897** (2.719)	6.300** (3.023)
Log Income per capita in 2000	-0.201*** (0.057)	-0.187*** (0.070)	-0.183** (0.071)	-0.097 (0.102)	-0.092 (0.092)	0.027 (0.098)	0.078 (0.099)
Log Absolute Latitude		-0.037 (0.067)	0.057 (0.067)	0.166** (0.079)	-0.050 (0.082)	-0.038 (0.073)	-0.050 (0.078)
Soil Fertility			-1.375*** (0.469)	-1.196*** (0.456)	-0.472 (0.387)	-0.753* (0.383)	-0.726 (0.451)
Roughness			0.099 (0.697)	0.063 (0.725)	-0.873 (0.675)	-0.875 (0.606)	-0.736 (0.568)
Elevation			0.134 (0.205)	0.271 (0.232)	0.137 (0.204)	0.315 (0.194)	0.364** (0.174)
Average Distance to Nearest Waterway			0.147 (0.185)	0.288 (0.195)	0.104 (0.155)	-0.042 (0.166)	0.006 (0.151)
Percentage of Arable Land			-0.003 (0.005)	-0.000 (0.005)	-0.005 (0.005)	-0.003 (0.005)	-0.004 (0.006)
Temperature				0.029* (0.016)	0.007 (0.018)	0.021 (0.019)	0.032** (0.016)
Colony							-0.460** (0.198)
Continental FE	No	No	No	No	Yes	Yes	Yes
Legal Origin FE	No	No	No	No	No	Yes	Yes
<i>N</i>	144	144	144	144	144	144	129
Adjusted <i>R</i> <sup>2</sup>	0.154	0.150	0.252	0.276	0.441	0.496	0.528

► Return

# Predicted Genetic Diversity and Democracy (1994–2013)

	Log Democracy						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Predicted Genetic Diversity	-8.566*** (1.946)	-8.658*** (1.955)	-6.003*** (2.175)	-5.980*** (2.116)	-6.553* (3.333)	-6.866** (2.894)	-6.863** (3.099)
Log Absolute Latitude		0.196*** (0.062)	0.112* (0.066)	-0.137 (0.098)	0.059 (0.108)	0.043 (0.100)	0.048 (0.104)
Soil Fertility			1.132** (0.504)	0.946* (0.482)	0.309 (0.446)	0.704* (0.425)	0.593 (0.507)
Roughness			0.337 (0.715)	0.123 (0.737)	0.819 (0.733)	0.843 (0.641)	0.550 (0.639)
Elevation			-0.243 (0.202)	-0.327 (0.205)	-0.138 (0.213)	-0.284 (0.192)	-0.269 (0.183)
Average Distance to Nearest Waterway			-0.263 (0.191)	-0.435** (0.181)	-0.248 (0.160)	-0.012 (0.175)	-0.058 (0.169)
Percentage of Arable Land			0.002 (0.005)	-0.000 (0.005)	0.003 (0.006)	0.003 (0.005)	0.006 (0.006)
Temperature				-0.044*** (0.012)	-0.017 (0.018)	-0.029 (0.019)	-0.038** (0.017)
Colony							0.365 (0.229)
Continental FE	No	No	No	No	Yes	Yes	Yes
Legal Origin FE	No	No	No	No	No	Yes	Yes
<i>N</i>	145	145	145	145	145	145	130
Adjusted <i>R</i> <sup>2</sup>	0.063	0.100	0.195	0.267	0.397	0.484	0.511



# Observed Genetic Diversity and Indigenous Autocracy

	Indigenous Autocracy			
	(1)	(2)	(3)	(4)
Genetic Diversity	1.866* (1.070)	7.627*** (2.517)	7.338** (3.105)	7.591** (3.089)
Log Absolute Latitude		-0.008 (0.027)	0.055* (0.033)	0.093*** (0.027)
Elevation			0.000*** (0.000)	0.000*** (0.000)
Terrain Ruggedness			-0.000 (0.000)	-0.000 (0.000)
River Length			0.000 (0.000)	0.001** (0.001)
River Density			-0.059 (0.081)	-0.067 (0.073)
Share Desert			0.273 (0.169)	0.298 (0.224)
Average Temperature				0.019* (0.011)
Temperature Range				-0.038 (0.027)
Soil Quality (Climatic)	No	Yes	Yes	Yes
Continental FE	No	Yes	Yes	Yes
<i>N</i>	94	94	94	94
Adjusted <i>R</i> <sup>2</sup>	0.032	0.097	0.159	0.197

# Persistence of Institutions — Indigenous Autocracy

	Executive Constraints		Autocracy		Executive Constraints	Autocracy
	(1)	(2)	(3)	(4)	(5)	(6)
Log Indigenous Autocracy	-0.237*** (0.070)		0.466*** (0.158)		-0.287*** (0.076)	0.549*** (0.169)
Log Indigenous Autocracy (Ancestry Adjusted)		-0.377*** (0.077)		0.764*** (0.172)		
<i>N</i>	95	95	95	95	80	80
Adjusted <i>R</i> <sup>2</sup>	0.054	0.128	0.038	0.101	0.081	0.057

[▶ Return](#)

## Persistence of Institutions — Indigenous Autocracy — Continental FE

	Executive Constraints		Autocracy		Executive Constraints	Autocracy
	(1)	(2)	(3)	(4)	(5)	(6)
Log Indigenous Autocracy	-0.134 (0.083)		0.301* (0.178)		-0.162* (0.095)	0.360* (0.204)
Log Indigenous Autocracy (Ancestry Adjusted)		-0.188** (0.091)		0.404** (0.192)		
Continental FE	Yes	Yes	Yes	Yes	Yes	Yes
<i>N</i>	95	95	95	95	80	80
Adjusted $R^2$	0.265	0.276	0.305	0.314	0.189	0.219

[► Return](#)

# Persistence of Institutions — Indigenous Democracy (Nunn)

	Executive Constraints		Autocracy		Executive Constraints	Autocracy
	(1)	(2)	(3)	(4)	(5)	(6)
Indigenous Democracy	0.248*** (0.081)		-0.466*** (0.168)		0.305*** (0.085)	-0.553*** (0.176)
Indigenous Democracy (Ancestry Adjusted)		0.313*** (0.091)		-0.565*** (0.191)		
N	144	144	144	144	127	127
Adjusted R2	0.056	0.069	0.045	0.050	0.085	0.065

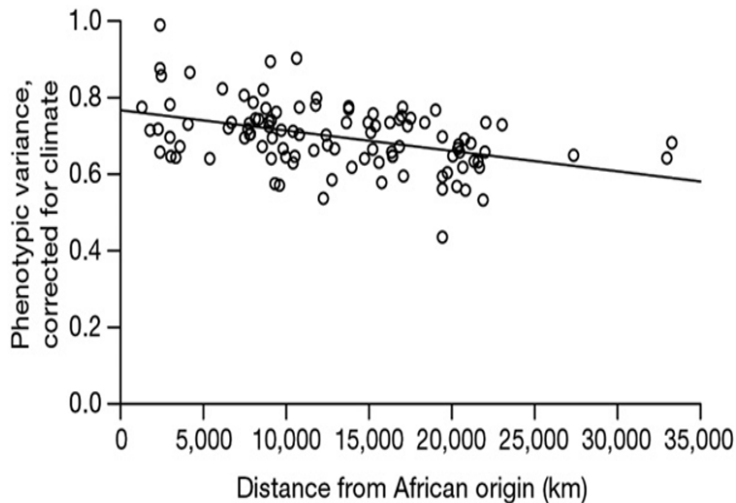
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## Persistence of Institutions — Indigenous Democracy (Nunn) — Cont. FE

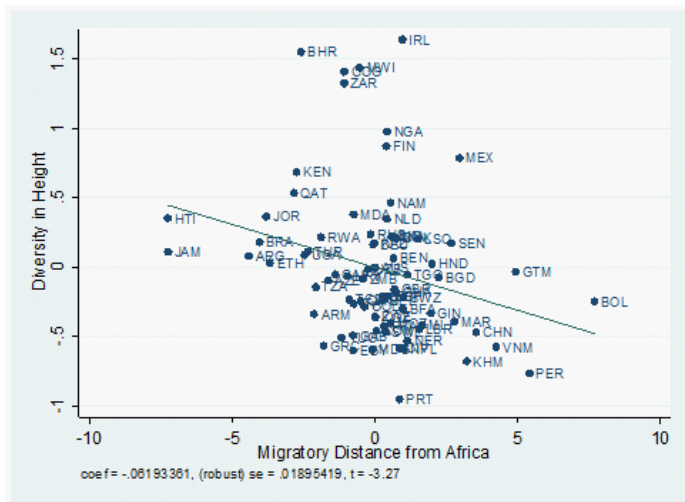
	Executive Constraints		Autocracy		Executive Constraints	Autocracy
	(1)	(2)	(3)	(4)	(5)	(6)
Indigenous Democracy	0.098 (0.082)		-0.195 (0.165)		0.164* (0.085)	-0.307* (0.168)
Indigenous Democracy (Ancestry Adjusted)		0.180* (0.094)		-0.362* (0.186)		
Continental FE	Yes	Yes	Yes	Yes	Yes	Yes
<i>N</i>	144	144	144	144	127	127
Adjusted <i>R</i> <sup>2</sup>	0.350	0.361	0.413	0.424	0.357	0.415

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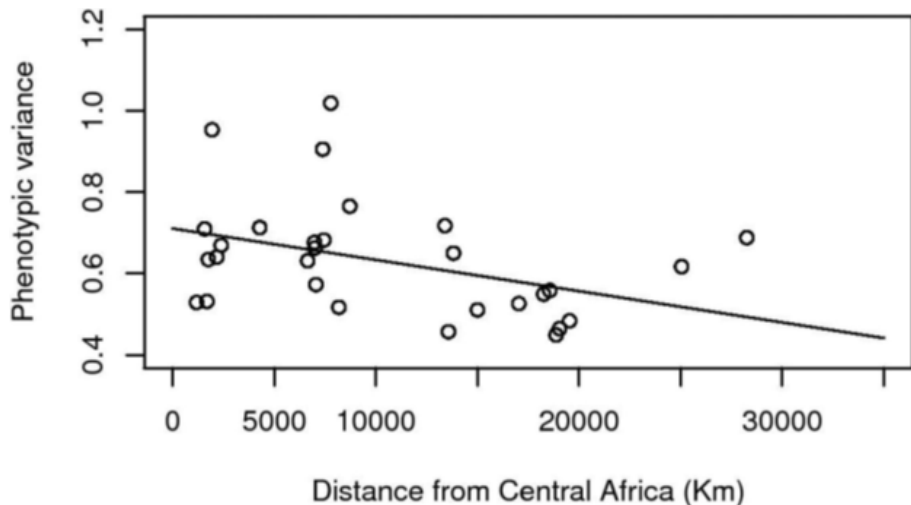
## Phenotypic Variance Corrected for Climate



# Diversity in Height



## Phenotypic Diversity — Pelvic Bone Diversity





# Phenotypic Diversity — Dental Diversity

