Economics of Persistence

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Economics of Persistence

- A growing literature suggests that events ("shocks") and institutions in the distant past can influence norms and preferences today
  - Slave trade took place in an environment of ubiquitous insecurity and nurtured a culture of mistrust, which persisted even after end of trade (Nunn and Wantchekon, 2011)
  - Anti-Semitism persisted 600 years later in the same localities where the Jews were blamed for poisoning the wells during the Black Death in Europe in 1348-50, even without direct economic benefits and where Jews were largely absent for centuries (Voigtlander and Voth, 2012)
  - Cross-cultural differences in beliefs and values regarding the appropriate role of women in society influenced by traditional agricultural practices (Alesina, Giuliano, and Nunn, 2013)

Transmission of Beliefs, Norms, etc. Through Culture

- Persistence is transmitted through culture
- As decision-making heuristics or "rules-of-thumb" employed in uncertain or complex environments, i.e., when information acquisition is costly or imperfect (Boyd and Richerson, 1985); cultural beliefs are transmitted/evolved through a natural-selection-like process
- Manifested as values, beliefs, or gut feelings about the appropriate action, culture refers to general beliefs about the right thing to do in different situations

- "On the Origins of Gender Roles: Women and the Plough," Alesina, A., P. Giuliano, N. Nunn. *Quarterly Journal of Economics* 128 (2): 469-530.

Introduction

- What's a woman's place in the society?
  - Historical origins of existing cross-cultural differences in beliefs and values regarding the appropriate role of women in society
- Traditional agricultural practices influenced the historical gender division of labor and the evolution of gender norms
  - Descendants of societies that traditionally practiced plough agriculture have less equal gender norms today measured by female participation in the workplace, politics, and entrepreneurial activities and (surveyed) gender-role attitudes

Motivation

- Boserup (1970): identifies important differences between shifting cultivation and plough cultivation in the extent to which women are engaged in farm work
  - Shifting cultivation is labor intensive and uses hoe and digging stick
  - Plough agriculture requires significant upper body strength to pull the plough or control the animal that pulls it
  - Reinforced by less need for weeding (predominantly women's task)
  - Plough agriculture is also less friendly to childcare
- Societies characterized by plough agriculture (and the resulting gender-based division of labor) developed a cultural belief that the natural place for women is within the home

Cultural Transmission

- Boserup's hypothesis suggests that in societies that engaged in plough agriculture, cultural beliefs about gender inequality were relatively beneficial
- Norms of gender inequality may persist even after the economy moves out of agriculture or industrializes, affecting the participation of women in activities performed outside the home
  - Market employment, entrepreneurship, participation in politics, etc.
- Underlying cultural traits may be reinforced by policies, laws, and institutions, affecting the benefit of beliefs about gender inequality
  - Unequal property rights, voting rights, parental leave policies, etc.

OLS Estimates (ethnicity level)

- Whether societies traditionally used the plough
- Gender participation in agriculture
  - Males only
  - Males appreciably more
  - Equal participation
  - Females appreciably more
  - Females only
- Controlling for: large domesticated animals, density of ethnic groups' settlements (categorical), political complexity (levels of jurisdictional hierarchies), geography (crops suitability, tropical/subtropical)

Decline in FLFP

TABLE I

TRADITIONAL PLOUGH USE AND FEMALE PARTICIPATION IN PRE-INDUSTRIAL AGRICULTURE

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Dependent variable: Traditional participation of females relative to males in the following tasks:						
	Overall agriculture		Land clearance	Soil preparation	Planting	Crop tending	Harvesting
Mean of dep. var.	3.04	2.83	1.45	2.15	2.86	3.16	3.23
Traditional plough agriculture	−0.883***	−1.136***	−0.434**	−1.182***	−1.290***	−1.188***	−0.954***
	(0.225)	(0.240)	(0.197)	(0.320)	(0.306)	(0.351)	(0.271)
Ethnographic controls	yes	yes	yes	yes	yes	yes	yes
Observations	660	124	129	124	131	122	131
Adjusted R-squared	0.13	0.19	0.14	0.10	0.09	0.13	0.16
R-squared	0.14	0.23	0.18	0.14	0.13	0.18	0.20

Notes. The unit of observation is an ethnic group. In column 1, ethnic groups are from the *Ethnographic Atlas,* and in columns 2–7, they are from the *Standard Cross-Cultural Sample*. The dependent variable measures traditional female participation in a particular agricultural activity in the pre-industrial period. The variables take on integer values between 1 and 5 and are increasing in female participation. "Traditional plough use" is an indicator variable that equals one if the plough was traditionally used in pre-industrial agriculture. For the *Ethnographic Atlas*, the mean (and standard deviation) of the traditional plough agriculture variable is 0.186 (0.390), and for the *SCCS* it is 0.234 (0.425); these correspond to the samples from columns 1 and 2, respectively. The same statistics for the other columns are slightly different. "Ethnographic controls" include: the suitability of the local environment for agriculture, the presence of large domesticated animals, the proportion of the local environment that is tropical or subtropical, an index of settlement density, and an index of political development. Finer details about variable construction are provided in the text and appendix. Coefficients are reported with robust standard errors in brackets. Column 1 reports Conley standard errors adjusted for spatial correlation. ***, **, and * indicate significance at the 1%, 5%, and 10% levels.

- Plough use is associated with a decline in female participation in agriculture regardless of samples used

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- Plough use is associated with less female participation in all agricultural tasks, with the largest decline in soil preparation, planting, and crop tending

Female Participation Outside of Agriculture

TABLE II

TRADITIONAL PLOUGH USE AND TRADITIONAL FEMALE PARTICIPATION OUTSIDE OF AGRICULTURE IN THE PRE-INDUSTRIAL PERIOD

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Dependent variable: Traditional participation of females relative to males in the following tasks:								
	Caring for small animals	Caring for large animals	Milking	Cooking	Fuel gathering	Water fetching	Burden carrying	Handicrafts	Trading
Mean of dep. var.	3.53	1.73	3.25	4.65	3.90	4.64	3.47	2.78	2.47
Traditional plough use	0.14	0.064	0.63	−0.019	−0.638	−0.052	−0.962**	−0.157	−0.155
	(0.517)	(0.254)	(0.697)	(0.108)	(0.403)	(0.205)	(0.378)	(0.274)	(0.542)
Ethnographic controls	yes	yes	yes	yes	yes	yes	yes	yes	yes
Observations	88	95	48	173	159	154	135	74	59
Adjusted R-squared	−0.02	−0.02	0.03	0.01	−0.001	0.01	0.12	0.07	−0.01
R-squared	0.05	0.04	0.14	0.04	0.04	0.04	0.16	0.15	0.10

Notes. The unit of observation is an ethnic group from the *Standard Cross-Cultural Sample*. The dependent variable measures traditional female participation in a particular activity in the pre-industrial period. The variables take on integer values between 1 and 5 and are increasing in female participation. "Traditional plough use" is an indicator variable that equals one if the plough was traditionally used in pre-industrial agriculture. The mean (and standard deviation) of this variable is 0.239 (0.429); this corresponds to the sample from column 1. "Ethnographic controls" include: the suitability of the local environment for agriculture, the presence of large domesticated animals, the proportion of the local environment that is tropical or subtropical, an index of settlement density, and an index of political development. Finer details about variable construction are provided in the text and appendix. Coefficients are reported with robust standard errors in brackets. ***, **, and * indicate significance at the 1%, 5%, and 10% levels.

- Plough tends not to be significantly correlated with female participation in other activities (an exception is "burden carrying")

Country-Level OLS Estimates

- Historical plough use and role of women in societies today
- Outcome variables are supposed to reflect cultural attitudes and beliefs about the role of women in society

$$y_c = \alpha + \beta Plough_c + X_c^H \Gamma + X_c^C \prod + \varepsilon_c$$

In countries with a tradition of plough use, women are less likely to:

(a) Traditional plough use and current FLFP

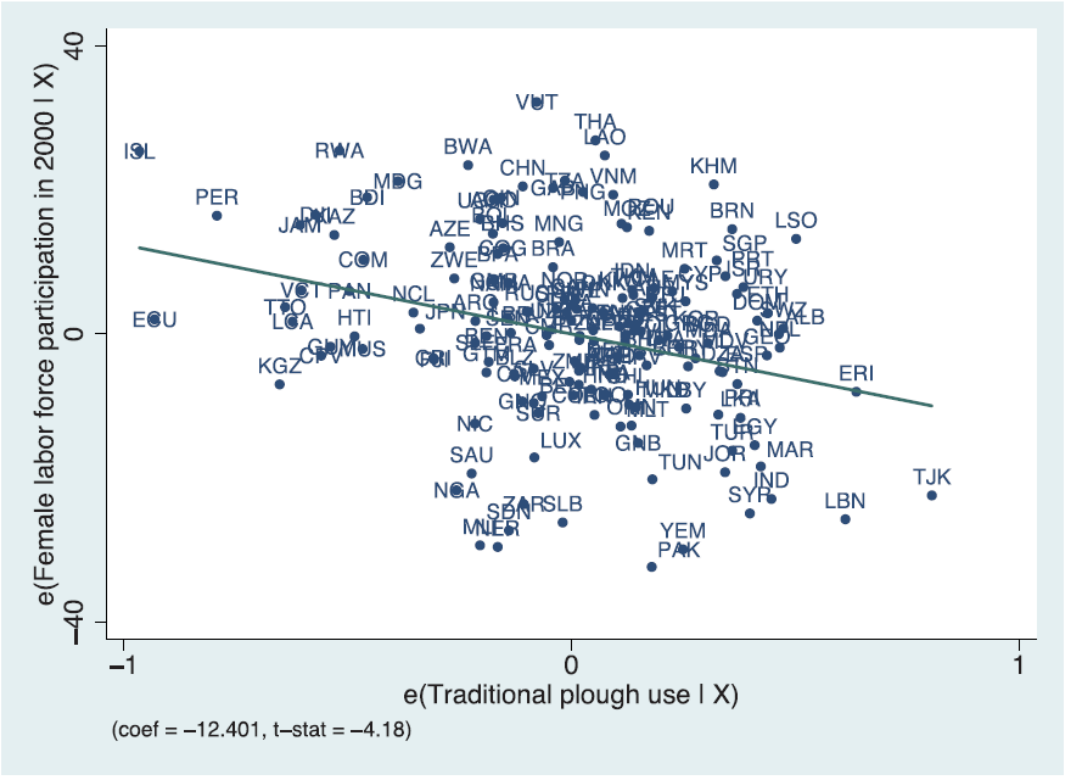

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TABLE IV

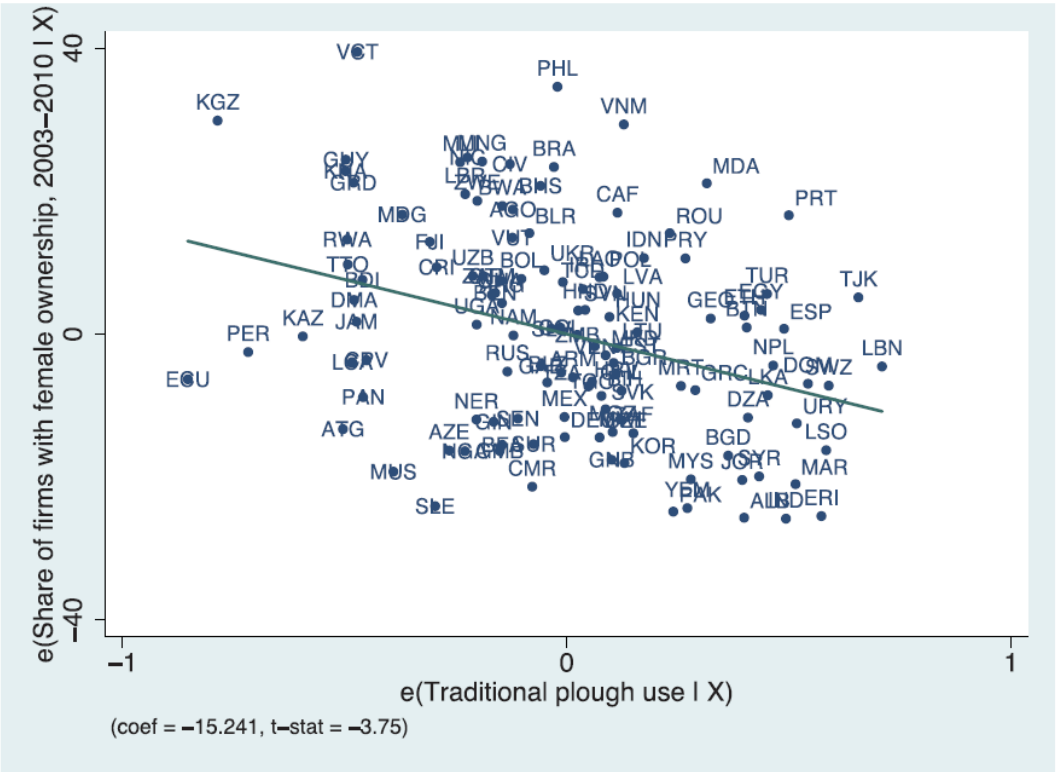
COUNTRY-LEVEL OLS ESTIMATES WITH HISTORICAL AND CONTEMPORARY CONTROLS

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Dependent variable:							
	Female labor force participation in 2000		Share of firms with female ownership, 2003–2010		Share of political positions held by women in 2000		Average effect size (AES)	
Mean of dep. var.	51.35		35.17		11.83		2.31	
Traditional plough use	−12.401***	−12.930***	−15.241***	−16.587***	−4.821***	−5.129**	−0.743***	−0.845***
	(2.964)	(3.537)	(4.060)	(4.960)	(1.782)	(2.061)	(0.080)	(0.091)
Historical controls:								
Agricultural suitability	6.073	7.181*	0.803	4.322	2.198	1.081	0.262*	0.342**
	(3.696)	(4.175)	(5.447)	(6.071)	(2.605)	(2.548)	(0.139)	(0.139)
Tropical climate	−9.718***	−10.906***	−10.432***	−3.712	−6.086***	−4.169*	−0.362***	−0.06
	(2.487)	(3.070)	(3.762)	(5.711)	(2.094)	(2.396)	(0.084)	(0.101)
Presence of large animals	−2.015	−2.166	2.707	5.610	−5.718	−4.688	0.005	0.201
	(5.372)	(6.072)	(9.745)	(10.417)	(3.565)	(4.132)	(0.121)	(0.146)
Political hierarchies	0.779	1.181	1.128	0.207	0.744	0.656	0.102**	0.070*
	(1.515)	(1.482)	(1.941)	(1.878)	(0.822)	(0.807)	(0.040)	(0.042)
Economic complexity	1.157	1.411*	1.693	0.764	0.454	0.333	0.063***	0.027
	(0.793)	(0.815)	(1.129)	(1.382)	(0.487)	(0.502)	(0.023)	(0.026)
Contemporary controls:								
ln income in 2000	−34.612***	−32.685***	10.766	6.385	−6.530	−6.616	−0.776***	−0.815***
	(6.528)	(7.023)	(9.986)	(10.482)	(4.071)	(4.335)	(0.221)	(0.231)
ln income in 2000 squared	2.038***	1.936***	−0.707	−0.523	0.539**	0.535*	0.051***	0.051***
	(0.406)	(0.431)	(0.688)	(0.706)	(0.271)	(0.281)	(0.015)	(0.015)
Continent fixed effects	no	yes	no	yes	no	yes	no	yes
Observations	165	165	123	123	144	144	144	144
Adjusted R-squared	0.37	0.36	0.11	0.13	0.27	0.27	0.26	0.30
R-squared	0.40	0.41	0.16	0.22	0.31	0.34	0.28	0.33

- Participate in the labor market

In countries with a tradition of plough use, women are less likely to:

(b) Traditional plough use and current female firm ownership



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- Own firms

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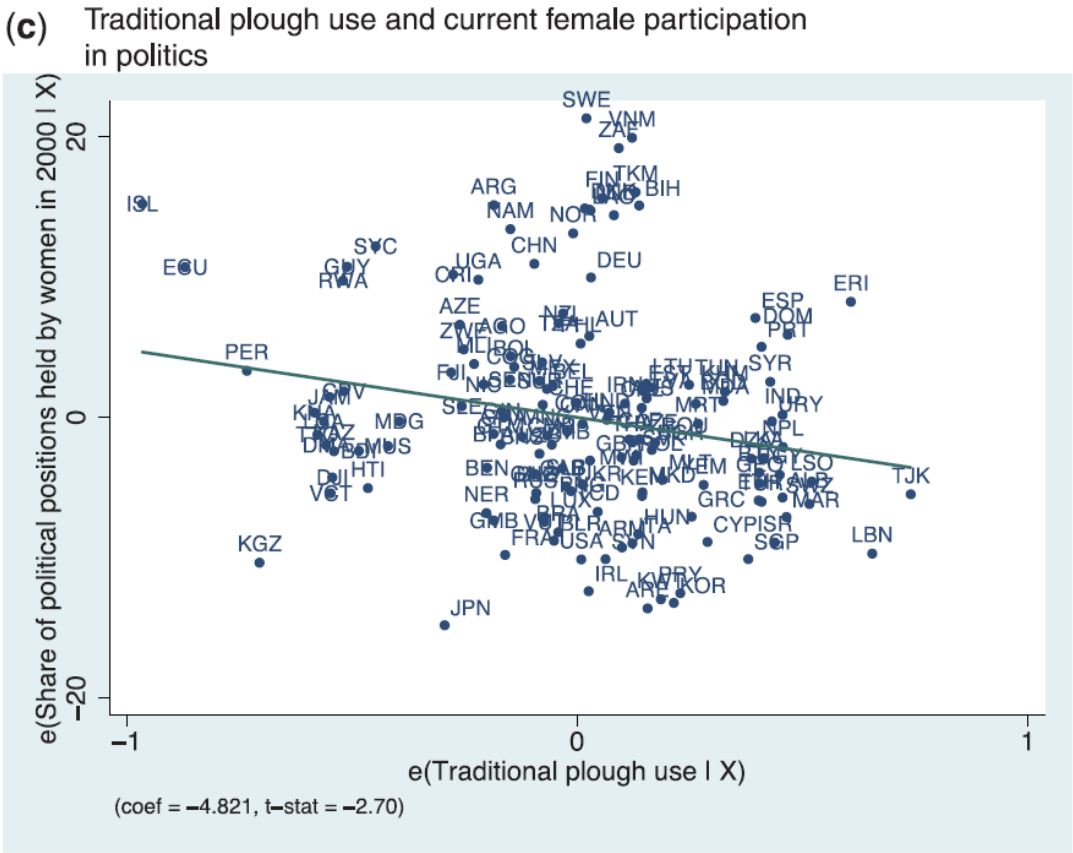

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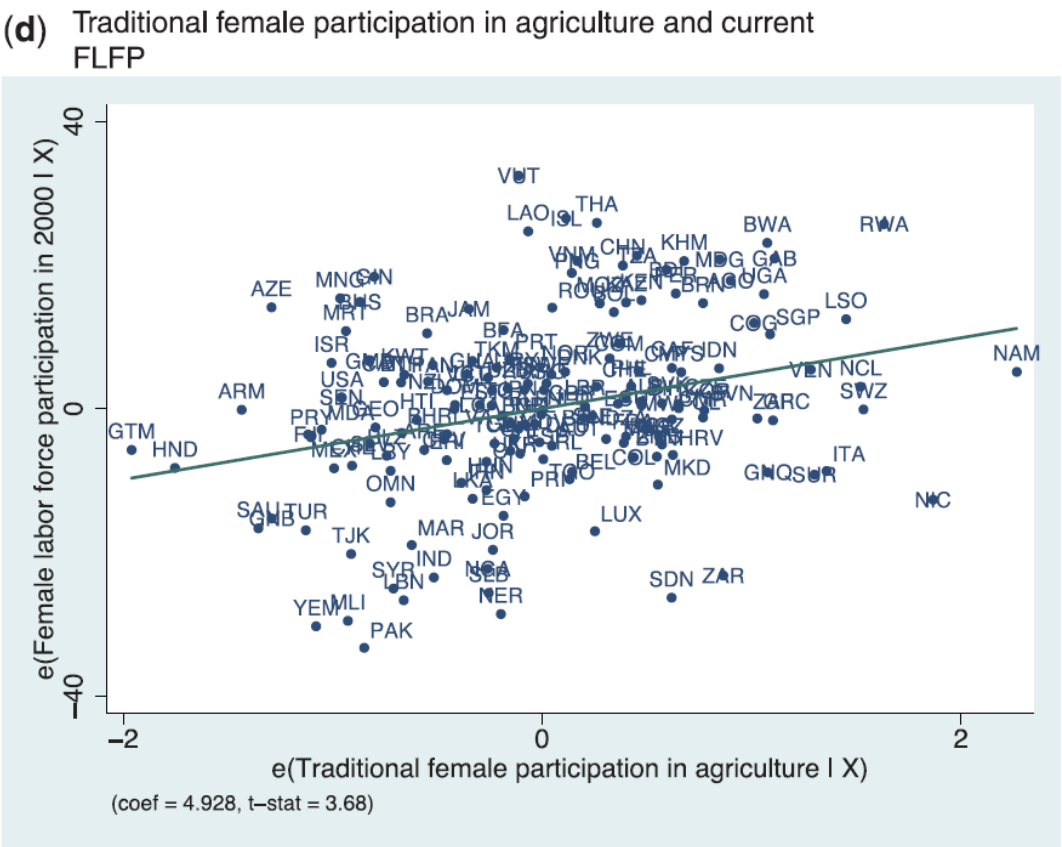
- Participate in national politics (only when controlling for per capital income)

The Persistence of Female Labor Force Participation

- Historical plough use's association with less female participation in agriculture historically and in the labor force today suggests persistence



Subnational Estimates Using WVS

- Employ variables that measure the values that underlie the objective outcomes examined in cross-country analysis
- "When jobs are scarce, men should have more right to a job than women"
  - Disagree=0, Agree=1
- "On the whole, men make better political leaders than women"
  - Strongly disagree=1, disagree=2, agree=3, strongly agree=4

Subnational Estimates Using WVS

$$y_{i,d,c} = \alpha_c + \beta Plough_d + X_d^H \prod + X_i \Phi + \varepsilon_{i,d,c}$$

- Level of measure is now at the district level

TABLE V
INDIVIDUAL-LEVEL OLS ESTIMATES USING WVS DATA

	(1)	(2)	(3)	(4)	(5)	(6)
	Dependent variable:					
	Female labor force participation, 1995–2007		When jobs are scarce, 1995–2007		Men better political leaders, 1995–2007	
Mean of dep. var.	0.55	0.55	0.46	0.47	2.62	2.64
Traditional plough use	−0.177***	−0.002	0.193***	0.100*	0.224***	0.304***
	(0.035)	(0.031)	(0.033)	(0.059)	(0.069)	(0.117)
Individual & district controls	yes	yes	yes	yes	yes	yes
Contemporary country controls	yes	n/a	yes	n/a	yes	n/a
Fixed effects	continent	country	continent	country	continent	country
Number of countries	73	78	74	79	50	55
Number of districts	672	698	674	700	453	479
Observations	43,801	47,587	80,303	87,528	64,215	72,152
Adjusted R-squared	0.17	0.27	0.21	0.28	0.19	0.26
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Number of countries	73	78	74	79	50	55
Number of districts	672	698	674	700	453	479
Observations	43,801	47,587	80,303	87,528	64,215	72,152
Adjusted R-squared	0.17	0.27	0.21	0.28	0.19	0.26
R-squared	0.17	0.27	0.21	0.28	0.19	0.26

Subnational Estimates Using WVS

$$y_{i,d,c} = \alpha_c + \beta Plough_d + X_d^H \prod + X_i \Phi + \varepsilon_{i,d,c}$$

- Level of measure is now at the district level

TABLE V
INDIVIDUAL-LEVEL OLS ESTIMATES USING WVS DATA

	(1)	(2)	(3)	(4)	(5)	(6)
	Dependent variable:					
	Female labor force participation, 1995–2007		When jobs are scarce, 1995–2007		Men better political leaders, 1995–2007	
Mean of dep. var.	0.55	0.55	0.46	0.47	2.62	2.64
Traditional plough use	−0.177***	−0.002	0.193***	0.100*	0.224***	0.304***
	(0.035)	(0.031)	(0.033)	(0.059)	(0.069)	(0.117)
Individual & district controls	yes	yes	yes	yes	yes	yes
Contemporary country controls	yes	n/a	yes	n/a	yes	n/a
Fixed effects	continent	country	continent	country	continent	country
Number of countries	73	78	74	79	50	55
Number of districts	672	698	674	700	453	479
Observations	43,801	47,587	80,303	87,528	64,215	72,152
Adjusted R-squared	0.17	0.27	0.21	0.28	0.19	0.26
R-squared	0.17	0.27	0.21	0.28	0.19	0.26

Addressing Causality

- Locations historically had less equal gender-role attitudes may have had a higher likelihood of inventing or adopting the plough
  - Bias the OLS estimates away from zero
- Locations economically more developed were more likely to have adopted the plough
  - Bias the OLS estimates toward zero

Adding More Controls

- Practices intensive agriculture (hoe)
- Proportion of subsistence from herding and hunting
- Absence of private property and family structures (e.g., patrilocal marriages and nuclear family)
- Warfare (frequency since 1816) and terrain ruggedness
- Communism
- European descent
- Natural resources (oil)
- Economic structure (share of GDP in different sectors)
- Religion (plough leads to seclusion)

Adding More Controls

TABLE VII

ROBUSTNESS OF OLS ESTIMATES TO ADDITIONAL COVARIATES

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Dependent variable: Female labor force participation in 2000							
Mean of dep. var.	51.35	51.55	51.35	51.48	51.26	52.09	51.48	52.13
Traditional plough use	−10.892***	−12.714***	−12.356***	−12.336***	−12.721***	−14.618***	−9.913***	−9.234**
	(3.848)	(3.255)	(2.993)	(3.019)	(3.364)	(3.482)	(3.160)	(4.301)
Historical controls:								
Practices intensive agriculture	yes							yes
Prop. of subsist. from herding	yes							yes
Prop. of subsist. from hunting	yes							yes
Absence of private property		yes						yes
Patrilocal marriages		yes						yes
Matrilocal marriages		yes						yes
Nuclear family structure		yes						yes
Extended family structure		yes						yes
Year ethnicity sampled			yes					yes
Contemporary controls:								
Years of civil conflicts (1816–2007)				yes				yes
Years of interstate conflicts (1816–2007)				yes				yes
Ruggedness				yes				yes
Communism indicator					yes			yes
Fraction of European descent					yes			yes
Oil production per capita						yes		yes
Agricultural share of GDP						yes		yes
Manufacturing share of GDP						yes		yes
Services share of GDP						yes		yes
Fraction of pop. Catholic							yes	yes
Fraction of pop. Protestant							yes	yes
Fraction of pop. Christian (other)							yes	yes
Fraction of pop. Muslim							yes	yes
Fraction of pop. Hindu							yes	yes
Baseline controls	yes	yes	yes	yes	yes	yes	yes	yes
Observations	165	163	165	163	153	154	163	142
Adjusted R-squared	0.39	0.38	0.36	0.35	0.42	0.35	0.51	0.54
R-squared	0.43	0.43	0.40	0.40	0.46	0.40	0.55	0.64

Ancestral Geo-Climatic Conditions as Instrument

- Primary benefit of the plough: it facilitates the cultivation of larger amounts of land over a short period of time
- Such benefit is reduced for crops grown in swampy, sloped, rocky, or shallow soils (Pryor, 1985)
- Instrument measures average suitability of the ancestral environment for cultivating each type of crop (wheat, barley, and rye vis-à-vis foxtail millet, pearl millet, and sorghum)

First Stage

TABLE VIII

COUNTRY-LEVEL 2SLS AND REDUCED-FORM ESTIMATES

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Panel A. First stage 2SLS estimates. Dependent variable: Traditional plough use							
Mean of dep. var.	0.53		0.44		0.54		0.51	
Plough-positive environment	0.744***	0.629***	0.861***	0.673***	0.820***	0.685***	0.874***	0.717***
	(0.084)	(0.089)	(0.078)	(0.103)	(0.082)	(0.104)	(0.089)	(0.118)
Plough-negative environment	0.119	0.185	0.100	0.115	0.132	0.187	0.129	0.142
	(0.122)	(0.133)	(0.166)	(0.171)	(0.130)	(0.141)	(0.181)	(0.188)
Equality of coefficients (p-value)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
F-stat (plough variables)	40.21	25.06	66.80	21.88	51.96	21.88	49.54	18.52

- First Stage
  - Plough adoption is positively correlated with an environment suitable for the cultivation of plough-positive cereals, but not with plough-negative cereals (Panel A)

Reduced Form

	Dependent variable (panels B & C):							
	Female labor force participation in 2000		Share of firms with female ownership, 2005–2011		Share of political positions held by women in 2000		Average effect size (AES)	
Mean of dep. var.	51.10		35.04		11.86		2.31	
	Panel B. Reduced-form estimates							
Plough-positive environment	−10.644***	−11.299***	−13.164**	−12.692**	−5.800**	−6.840**	−0.639***	−0.774***
	(3.816)	(4.285)	(5.610)	(6.214)	(2.534)	(2.790)	(0.214)	(0.288)
Plough-negative environment	18.928***	19.571***	6.072	9.134	−2.975	−2.868	0.607	0.653*
	(6.506)	(6.329)	(9.926)	(10.401)	(6.093)	(6.258)	(0.391)	(0.393)
Equality of coefficients (p-value)	0.00	0.00	0.02	0.02	0.56	0.47	0.00	0.00
F-stat (plough variables)	14.87	12.49	5.41	4.46	3.44	3.40	9.19	7.11

- Relationship between crop suitability and current gender roles (reduced-form estimates)
  - An ancestral environment more suited to cultivating plough-positive crops is always associated with less-equal gender roles today (Panel B)

IV Estimates

	Dependent variable (panels B & C):							
	Female labor force participation in 2000		Share of firms with female ownership, 2005–2011		Share of political positions held by women in 2000		Average effect size (AES)	
	Panel C. Second-stage 2SLS estimates							
Traditional plough use	−21.630***	−25.013***	−17.486***	−22.689***	−6.460***	−9.726***	−0.918***	−1.313***
	(5.252)	(7.513)	(5.533)	(7.620)	(2.334)	(3.750)	(0.225)	(0.388)
Hausman test (p-value)	0.02	0.04	0.56	0.40	0.22	0.10	0.33	0.16
Hansen J	0.00	0.00	0.41	0.31	0.72	0.86	0.05	0.06
Historical & contemporary controls	yes	yes	yes	yes	yes	yes	yes	yes
Continent FEs	no	yes	no	yes	no	yes	no	yes
Observations	160	160	122	122	140	140	104	104

- IV estimates
  - Historical plough use is associated with less female labor force participation, less female ownership, and less female participation in politics (Panel C)

Why TSLS estimates are larger?

- Plough adoption is endogenous: historically advanced societies were more likely to adopt the plough
- Plough using societies are more likely to be advanced today, with higher per capita income and more female participation in the labor market
- Selection introduces a positive relationship between historical plough use and FLFP today, biasing the negative OLS estimates toward zero

Exclusion Restrictions

- Type of crops grown in a location impacts long-term gender attitudes only through past adoption of the plough
- But difference between plough-positive and plough-negative environments may be correlated with geographic features that affect gender attitudes today through other channels

Cultural Transmission

- Long-term impacts of plough may be due to a different channel
  - Development of institutions, policies, laws, and markets less conducive to women's participation in activities outside the domestic sphere
  - Less FLFP is due to the costs and benefits of activities but not because it affects individuals' beliefs about whether these are appropriate activities for women

Empirical Strategy

- Examine behavior and attitudes of children of immigrants living in the U.S. and Europe but whose parents were born abroad
- Respondents thus face the same external environment, including markets, institutions, laws, and policies

$$y_{i,s,c} = \alpha_s + \beta Plough_c + X_c^C \Gamma + X_c^H \prod + X_c \Phi + \varepsilon_{i,s,c}$$

Findings

TABLE IX

DETERMINANTS OF FEMALE LABOR FORCE PARTICIPATION FOR US CHILDREN OF IMMIGRANTS

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Dependent variable: Labor force participation indicator, 1994–2011								
	All women			Married women					
	Woman's ancestry			Woman's ancestry			Husband's ancestry		
	Father's country	Mother's country	Parents same country	Father's country	Mother's country	Parents same country	Father's country	Mother's country	Parents same country
Mean of dep. var.	0.63	0.63	0.60	0.68	0.69	0.69	0.70	0.71	0.70
Traditional plough use	−0.044***	−0.043**	−0.062***	−0.094**	−0.118***	−0.136**	−0.065***	−0.045**	−0.058**
	(0.015)	(0.018)	(0.020)	(0.046)	(0.043)	(0.054)	(0.024)	(0.022)	(0.024)
Observations	57,138	55,341	32,776	10,206	9,508	6,835	35,393	35,158	23,124
Adjusted R-squared	0.23	0.23	0.25	0.10	0.10	0.11	0.08	0.08	0.08
R-squared	0.23	0.23	0.26	0.11	0.11	0.12	0.09	0.08	0.09

- Full sample (columns 1-3): negative relationship between a tradition of plough use in the home country and participation in the labor force

Findings

TABLE IX

DETERMINANTS OF FEMALE LABOR FORCE PARTICIPATION FOR US CHILDREN OF IMMIGRANTS

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Dependent variable: Labor force participation indicator, 1994–2011								
	All women			Married women					
	Woman's ancestry			Woman's ancestry			Husband's ancestry		
	Father's country	Mother's country	Parents same country	Father's country	Mother's country	Parents same country	Father's country	Mother's country	Parents same country
Mean of dep. var.	0.63	0.63	0.60	0.68	0.69	0.69	0.70	0.71	0.70
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Adjusted R-squared	0.23	0.23	0.25	0.10	0.10	0.11	0.08	0.08	0.08
R-squared	0.23	0.23	0.26	0.11	0.11	0.12	0.09	0.08	0.09

- Married women, women's ancestry (columns 4-6): same

Findings

TABLE IX

DETERMINANTS OF FEMALE LABOR FORCE PARTICIPATION FOR US CHILDREN OF IMMIGRANTS

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Dependent variable: Labor force participation indicator, 1994–2011								
	All women			Married women					
	Woman's ancestry			Woman's ancestry			Husband's ancestry		
	Father's country	Mother's country	Parents same country	Father's country	Mother's country	Parents same country	Father's country	Mother's country	Parents same country
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Adjusted R-squared	0.23	0.23	0.25	0.10	0.10	0.11	0.08	0.08	0.08
R-squared	0.23	0.23	0.26	0.11	0.11	0.12	0.09	0.08	0.09

- Married woman's participation may be influenced by her husband's beliefs and values transmitted from his parents (columns 7-9)
  - A tradition of plough use among the husband's ancestors also affects the wife's participation in the labor market

Importance of Cultural Transmission Relative to Other Channels

- Compare the magnitudes of the children-of-immigrant estimates (4.3-6.2%) to the country-level estimates (12.4%), the transmission of internal norms accounts for roughly 35-50% of the total effect
- The magnitude is between 36-49% in the case of Europe

Conclusion

- Provide evidence that current differences in gender attitudes and female behavior are shaped by differences in traditional agricultural practices
- In societies in which ancestors engaged in plough agriculture have beliefs that exhibit greater gender inequality today and hence less FLP in employment, ownership, and politics
- Use children of immigrants to identify cultural persistence