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Historical Conflict and Gender Disparities ^{*}

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March, 2018

Abstract

This paper establishes the detrimental effect of historical conflict on contemporary gender disparities. Such effects appear to be absent when focusing on female labor participation, revealing that long-run determinants of women's positioning do not operate solely through labor outcomes. Further, a historical compilation of Mexican conflicts was digitized and geo-referenced to establish the persistence of such results at a subnational level. Causal estimates are achieved at this level by exploiting exogenous changes introduced by the Columbian exchange and by long-run reductions in precipitation. Finally, the document examines gender views of US respondents and of second-generation migrants in Europe to show that culture constitutes a mechanism through which gender biases emerge and consolidate.

JEL: J16, N30, Z10

Keywords: Historical conflict, Gender Disparities, Female Labor Force Participation

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One of the key development goals that has not been fully achieved -not even by industrialized economies- is gender equality. Whether considering objective positioning of women -i.e., health conditions, access to education, or formal labor participation- or subjective positioning -i.e., perceptions prioritizing men over women-, gender equality remains elusive throughout the entire globe. One of the key issues addressed by economists and social scientists has thus been understanding the determinants of such gaps. A robust strand of research has examined the proximate causes of this phenomenon, identifying self-selection of women into certain educational or occupational groups as a key driver; increased risk aversion (Dohmen et al, 2011), dislike for competition (Gneezy et al, 2003; Buser et al., 2014; Ruben et al, 2016) or pursue of flexibility (Goldin, 2014) have been identified as explanations behind women's choices, which then affect their remuneration and positioning vis-à-vis men. This literature hints at the importance of investigating the structural long-run determinants that explain the norms and preferences behind such choices.

A complementary and burgeoning strand of literature has thus focused on the ultimate motives of this phenomenon. Specific historical circumstances and dynamics have been set forth as reasonable explanations of gender outcomes by two seminal papers: Goldin (1991, 2013) shows the positive effect of World War II on women's engagement in the labor markets, while Alesina et. al. (2011, 2013) show that ancestral use of the plow led to a differential remuneration along gender lines, which then mapped into contemporary labor and fertility choices. The findings of the latter have been complemented by Hansen and Gensén (2018), who find a strong negative association between a longer history of agricultural praxis and female labor force participation. Additionally, Fernandez (2007) and Fernandez and Fogli (2009) have established a long-run cultural persistence of labor and fertility choices of women, demonstrating that second-generation migrant's decisions on such issues are strongly predicted by the structural outcomes in their countries of origin. This paper is situated in this last strand of literature, as it focuses on the long-term historical explanations of women's positioning.

The goal of this document is to examine the long-run effects of historical conflict on objective and subjective positioning of women in society. There is reason to believe that prevalent historical conflict may deteriorate women's social positioning: Participation in conflict has been historically asymmetrical along gender lines -with a disproportionate participation by men-, which entails a potential differential valuation of men vis-à-vis women when conflict is a prevalent feature of a

society. Men may acquire an increased social value relative to women due to the role they are required to play and the risks associated to such role. In this respect, historical persistence of conflict could operate along similar lines as the use of the plow: Continued exposure to war involves a constant need for combatants, a role primarily reserved to men due to their body strength, which could lead to a differential social valuation that could map into increased gender disparities in the long-run . However, this overall effect may be absent (or may even run in the opposite direction) when focusing on specific dimensions of gender disparities. As mentioned earlier, particular historical episodes of conflict have led to a higher engagement of women in the labor markets, which could have positively affected their positioning in the long-run. The evidence examined hereby thus seeks to establish whether there is a net negative (or positive) effect of historical conflict on overall gender disparities.

In order to provide a satisfactory answer to such deep question, this document makes a key distinction that prior long-run studies have not focused on: There is not necessarily a one-to-one mapping between female labor participation and gender disparities along other dimensions -health, education, perceptions, etc.-. Female labor participation is one of many dimensions of gender disparities, and a deterioration of overall disparities may occur despite observing no effects (or even improvements) in the labor participation of women. This distinction allows to assess the overall effects of conflict on women's positioning, and also to examine the heterogeneity of such effects along various dimensions of gender inequality. Empirically, the above entails examining an aggregate measure of gender disparities (i.e., the Gender Inequality Index), along with various dimensions of objective and subjective positioning of women (health, education, labor participation, and perceptions on women's role).

The examination of gender disparities - both along an aggregate measure, and along various dimensions - thus allows to empirically tackle two questions: I) What is the overall predominating effect of historical conflict on women's social positioning? and II) Is there a persistent effect of historical conflict on labor participation? The main finding of the paper is that historical conflict is robustly correlated with, and causally linked to, a deteriorated positioning of women in society. A second critical finding of the document is that the long-run effects on female labor participation are ambiguous and inconsistent across various layers of analysis. The empirical investigation of these issues rests upon an examination of various datasets that cover different geographies, different historical periods, and different units of observations, which enables to establish the persistence and the validity

of the findings across time and across geographies.

In answering the two questions above, this document speaks indirectly to several strands of literature. On the one hand, by identifying an additional social burden left on by conflict, this paper contributes to the literature assessing the socioeconomic costs of conflict, which include effects on human capital formation (Chamarbgwala and Morán, 2017), on infrastructure (Arya et al, 2013), and on fertility (Schindler et. al, 2011). Further, it connects to a strand of literature unveiling the short-run and medium-run association between conflict and intrahousehold violence (La Mattina, 2017; La Mattina and Shemyakina, 2018), complementing it by showing that the adverse effects of conflict extend to overall positioning of women in society, and are globally persistent in the long-run. Finally, by identifying one of the sources that hinders gender parity, this document provides evidence on yet another channel through which reductions of conflict may contribute to economic development, considering the evidence linking women’s empowerment and economic development (Doepke and Trilte, 2014; Chattopadhyay and Duflo, 2004).

The document is thus structured as follows: Section 1 examines the relation between conflict and gender disparities at an aggregate-level, examining both country-level and ethnic-level evidence. Section 2 shows the persistence of such relation at a subnational level in Mexico, exploiting responses from the World Value Survey along with a novel geocoded dataset of historical conflicts coming from a compilation of conflicts by military historian Michael Clodfelter (2002). Such section achieves causal estimates by exploiting historical exogenous variation at the state-level coming from the Columbian Exchange and from long-run changes in weather. Section 3 continues to exploit individual-level data to show that culture is a mechanism through which these biases emerge and persist. Evidence from US in the aftermath of 9/11 allows to establish a negative short-run effect of conflict on the perception of women’s, while evidence from second-generation migrants in Europe demonstrate that culture constitutes a mechanism through which such effects are transmitted and consolidated. Section 4 summarizes and concludes.

1 Aggregate-Level Results

The following two subsections focus on aggregate-level data to unveil the persistent, robust and prevalent inverse correlation between historical conflict and gender parity across geographies and

across time-periods. The first thus focuses on the link, at the country level, between historical civil conflict and gender inequality among various dimensions. The second in turn examines traditional societies contained in the Standard Cross-Cultural Survey, examining the robustness of the correlation between the prevalence of ethnic conflict and various ethnic-level proxies for women's positioning and empowerment . The results presented in both cases follow from the estimation of the following specification:

$$Y_i = \alpha + \beta HistConf_i + \theta' X_i + \varepsilon_i \quad (1)$$

With i being the unit of analysis -either the country or the ethnicity-, Y_i corresponding to various measures of disparity (critically, the Gender Inequality Index at the country level, and female labor participation), $HistConf_i$ being the measure of conflict at the country or the ethnic level, and X_i a vector of covariates including geographical and historical controls, and various contemporary controls when it comes to the country-level analysis.

Cross-Country Results

Examining the overall socioeconomic disparity between men and women at the country level requires an analysis that contemplates the various layers in which gender inequality may materialize. A central measure going forward is the UN's Gender Inequality Index (GII), which collapse most layers of disparities into a single dimension. The calculation of such number comes from two critical dimensions: economic status -as affected by labor force participation-, and empowerment -as affected by educational attainment and political representation-. The GII also incorporates a third layer that focuses on reproductive health, considering that such burden is disproportionately -if not exclusively- suffered by women, thus leading to a de facto inequality. The index is defined between 0 and 1, with 1 corresponding to a situation of perfect equality and 0 corresponding to a limit case of gender inequality -although in theory it could be above 1 if the gender disparities were reversed-. In addition to this, variables capturing the positioning of women on specific dimensions are also examined: Educational attainment of women, the ratio of educational attainment of men to that of women, life expectancy at 50, male-to-female wage ratio, and female labor force participation. These variables will thus be examined separately to disentangle the specific aspects that may be driving the strong negative association between conflict and the GII.

The focus on long-run experiences of violence limit the set of sources that can be examined at the country level. Specifically, the Correlates of War dataset is the only one that does a global recount of civil conflicts and interstate conflict in a long time-span. The results that follow examine prevalence of civil conflict, as measured by the percentage of years between 1816 and 2007 in which the country experienced a civil war. It is important to note, however, that the results presented hereby do not depend on such specific construction of conflict; Table A in the appendix shows that the results are qualitatively and quantitatively very similar if one focuses on alternatives measures (percentage of years under any type of war, or percentage of years under interstate conflict) on alternative constructions of the same measure (a similar measure as calculated by Alesina et. al. (2013)), or on alternative sources to construct such variable (as coming from PRIO/UCDP data for the shorter period between 1946-2007)¹.

The association between historical conflict and Gender Inequality is formally examined in Table 1. Column 1 examines the relation between the variables conditional only on continent fixed-effects. Column 2 then introduces an array of geographical controls, along the log value of contemporary income per capita, which constitutes a key confounder that could spuriously explain the correlation between conflict and gender inequality (provided the negative association between conflict and income, along with the potential positive association of the latter with gender equality). Column 3 then controls for critical historical variables that have been associated with disparities: It controls for ancestral use of plow (following Alesina et. al, 2013), for the ancestral practice of patrilocal systems (that is, the prevalence of rules dictating the movement of women into the village of the men after marriage, which has been identified as a potential driver of ancestral gender disparities according to Giuliano, 2018), and the ancestry-adjusted years since the Neolithic transition, which led to a prolonged experience with agriculture and thus to uneven gender norms (following Hansen and Jensen, 2018). Column 4 subsequently introduces contemporary controls for institutional quality (Polity IV index) and for religious composition, both of which could be spuriously driving the correlation between gender norms and conflict. Finally, column 5 introduces the full set of controls for the baseline specification by controlling for the GDP-composition of the country, which could also explain simultaneously higher proclivity towards conflict while leading to a gender differentiation

¹Summary statistics of all variables employed in the document are found in Tables E through H in the appendix, along with a detailed description of the meaning and sources of each variable

Table 1: Historical Conflict and Contemporary Gender Inequality

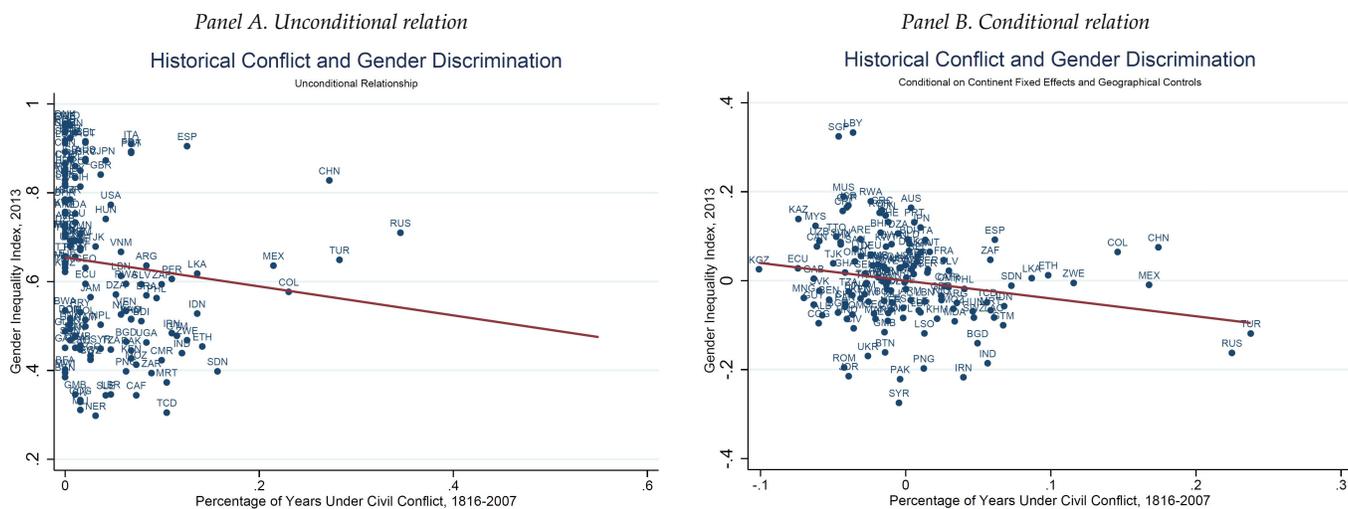
	(1)	(2)	(3)	(4)	(5)
	OLS	OLS	OLS	OLS	OLS
Dependent Variable: Gender Inequality Index, 2013 - Mean Val: 0.638					
Years Under Civil Conflict (%), 1816-2007	-0.381*** (0.081)	-0.219** (0.078)	-0.219** (0.074)	-0.227** (0.068)	-0.245** (0.063)
Log (GDP p.c. 2013)		0.076*** (0.012)	0.077*** (0.014)	0.077*** (0.012)	0.083*** (0.011)
Plow (Anc. Adjusted)			-0.002 (0.007)	0.018 (0.016)	0.019 (0.018)
Patrilocal (Anc. Adjusted)			0.020 (0.017)	0.021 (0.013)	0.020* (0.010)
Years Since Neolithic (1000s, Anc. Adj)			0.017 (0.012)	-0.001 (0.004)	-0.003 (0.005)
Democracy (Polity IV - Extent)				-0.001 (0.002)	-0.003 (0.002)
Continental FE	Yes	Yes	Yes	Yes	Yes
Geographical Controls	No	Yes	Yes	Yes	Yes
Religious Composition	No	No	Yes	Yes	Yes
GDP Composition	No	No	No	No	Yes
Observations	140	140	140	140	140
R-squared	0.646	0.863	0.864	0.874	0.878

Note: This table documents the robust association between historical conflict and contemporary gender disparities. Geographical Controls include Absolute Latitude, Precipitation, Temperature, Ruggedness and its square, and indicators for landlocked countries, and distance to coastline. Religious composition accounts for the share of the population that reports being Muslim, Catholic, Protestant, Hindu, or Christian of any other kind. GDP composition controls for the share of each economic activity out of total GDP. Heteroskedasticity-Robust Standard Errors Clustered at the Continent Level. ***p<.01, **p<.05, *p<.1

(for example, through a high dependence on agriculture). A causal interpretation of the Column 5 would indicate that a 10% increase in the number of share of years under civil conflict would lead to a 2.45% worsening of the aggregate contemporary measure of Gender Inequality. Overall, the coefficient of historical conflict maintains a strong statistical significance throughout, and it stabilizes around 2% after accounting for income and geographical factors. Figure 1 illustrates the conditional and unconditional relation between these variables, showing that it is not driven by any particular outlier.

A potential concern arising from these results comes from the fact that they could be driven by specific geographies plagued by endemic conflict and simultaneously with precarious conditions for its women. Table B in the appendix addresses such concern by sequentially excluding Africa, Latin America, and all the New World continents, showing that the results are not driven by regions plagued by conflict nor by the dynamics unleashed by the Columbian Experiment. Table B also repeats the estimation focusing only on countries that existed prior to 1900, and only on countries belonging to the OECD. The former demonstrates that the results are not driven by the potential

Figure 1: Relation Between Historical Conflict and Gender Inequality Index.



Note: These figures depict the unconditional and conditional relation between Historical Conflict between 1816 and 2007 (share of years under civil conflict) and the Gender Inequality Index of 2013.

measurement error associated with the countries that emerged throughout the twentieth century, while the latter demonstrates that the effect of historical conflict on gender disparities is even greater when focusing on advanced economies. Further, Table C in the appendix shows that the results reported in Table 1 are driven primarily by conflict in the distant past, as demonstrated by the fact that most of the effect comes from the exposure to violence in the periods 1800-1900 and 1900-1980, but not on the conflict experiences following 1980. All in all, these results show a robust and consistent picture of long-run historical violence being strongly associated with a deteriorated positioning of women in society.

In spite of the inability to achieve global (cross-country) causal estimates of conflict on gender parity, Table 2 documents the remarkable robustness of the association between these two variables by sequentially controlling for a significant array of potential confounders including more geographical, ethnic, historical, and contemporary controls that could affect the results. Not only is the level of significance stable, but the coefficient appears stable or if anything it appears to increase after all these alternative confounders are accounted for. The remaining issue lies in disentangling the specific dimension in which this association is operating, as it may very well be the case that conflict affect some but not all the dimensions of women's positioning. Specifically, it may be the case that labor participation in the long-run appears unrelated with historical conflict -in part due to the conflict-effect of an increased engagement of women at the time of the conflict- while other dimensions

Table 2: Robustness to Various Confounders

	(1)	(2)	(3)	(4)	(5)	(6)
	OLS	OLS	OLS	OLS	OLS	OLS
	Dependent Variable: Gender Inequality Index, 2013					
Years Under Civil Conflict (%), 1816-2007	-0.245**	-0.260**	-0.270**	-0.254**	-0.223**	-0.295**
	(0.085)	(0.071)	(0.093)	(0.078)	(0.072)	(0.091)
Population Diversity	Yes					Yes
Economic Complexity (Anc. Adjusted)		Yes				Yes
Political Hierarchies (Anc. Adjusted)		Yes				Yes
Intensity of Agriculture (Anc. Adjusted)		Yes				Yes
Large Animals (Anc. Adjusted)		Yes				Yes
Matrilocal (Anc. Adjusted)		Yes				Yes
log(GDP per capita) squared			Yes			Yes
Oil Share of GDP			Yes			Yes
OECD dummy			Yes			Yes
Gemstone Extraction (Carats, 1960-1990)			Yes			Yes
Trade Openness (Share of GDP)			Yes			Yes
Crop Yield Change (Post 1500)				Yes		Yes
Percentage of Population of Native Org.				Yes		Yes
Soil Quality					Yes	Yes
Desert (Share of total Land)					Yes	Yes
Terrain Slope					Yes	Yes
Malaria					Yes	Yes
Island Dummies					Yes	Yes
Observations	138	138	138	138	138	138
R-squared	0.878	0.888	0.886	0.878	0.881	0.902

Note: This table documents the robustness of the association between historical conflict and contemporary gender disparities to an array of historical, geographical, economic and social confounders. All regressions include the baseline covariates included in column (5) of Table 1, namely log(income), Plow, Patrilocal, Years since the Neolithic, Absolute Latitude, Precipitation, Temperature, Ruggedness and its square, indicators for landlocked countries, distance to coastline, and both religious and GDP composition. Heteroskedasticity-Robust Standard Errors Clustered at the Continent Level. ***p<.01, **p<.05, *p<.1

continue to deteriorate.

Table 3 tackles such issue by specifically addressing the correlation between conflict and health, empowerment, and labor participation of women. Column 1 starts by analyzing the effects of conflict on gender disparities as measured by the alternative Gender Development Index, which quantifies the wellbeing of women without taking fully into account the effect coming from health. Column 2 then focuses on female Expectancy at 50 as a proxy for women's health², showing that even after accounting for income and for institutional quality, higher exposure to historical conflict is robustly associated with deteriorated health conditions for women. Column 3 shows that the relation even maps into contemporary wage disparities, albeit not as robustly as in other dimensions. Columns 4 and 5 examine educational attainment of women and educational attainment relative to men, respectively, showing that historical experiences of conflict are strongly associated with lower access of women to absolute and relative education, thus limiting their access to opportunities and their overall empowerment. Critically, however, an examination of labor participation reveals that the ef-

²This variable is chosen because it avoids issues of child mortality, which can be hardly disentangled from prevalence of extreme poverty; by looking at the expectancy of women who have already reached the age of 50, one avoids the potential issue with nutrition, access to care during infancy and during birth, all of which affect the expectancy of life at birth but that could be driving the expectancy downwards due to extreme poverty instead of overt gender disparity.

Table 3: Conflict and Gender Disparities in Various Dimensions

	(1) OLS	(2) OLS	(3) OLS	(4) OLS	(5) OLS	(6) OLS
	Gender Development Index	Female Life Expectancy at 50	Wage Ratio (Female to Male)	Female Years of Education	Female to Male Education Ratio	Female Labor Force Participation
Years Under Civil Conflict (%), 1816-2007	-0.137** (0.037)	-0.032** (0.012)	-0.071* (0.033)	-7.939** (2.037)	-0.427** (0.132)	-0.208 (0.116)
Log (GDP p.c. 2013)	0.006 (0.007)	0.014*** (0.002)	0.002 (0.004)	0.791** (0.218)	0.001 (0.014)	0.005 (0.029)
Plow (Anc. Adjusted)	-0.017** (0.006)	0.010 (0.007)	-0.021 (0.013)	-0.604 (0.412)	-0.012 (0.030)	-0.084 (0.075)
Patrilocal (Anc. Adjusted)	-0.009 (0.015)	-0.001 (0.009)	-0.022** (0.007)	0.512** (0.148)	-0.028 (0.021)	-0.059 (0.035)
Years Since Neolithic (1000s, Anc. Adj)	-0.005* (0.002)	0.000 (0.000)	-0.007** (0.002)	0.163 (0.127)	0.001 (0.004)	-0.030*** (0.002)
Democracy (Polity IV - Extent)	-0.002** (0.001)	-0.000 (0.000)	0.001 (0.002)	0.002 (0.039)	-0.002 (0.002)	-0.003 (0.005)
Continental FE	Yes	Yes	Yes	Yes	Yes	Yes
Geographical Controls	Yes	Yes	Yes	Yes	Yes	Yes
Religious Composition	Yes	Yes	Yes	Yes	Yes	Yes
GDP Composition	Yes	Yes	Yes	Yes	Yes	Yes
Observations	140	146	128	142	142	144
R-squared	0.678	0.823	0.692	0.853	0.645	0.664

Note: This table documents the robust association between historical conflict and various measures of gender disparity, except for labor participation. Geographical Controls: Absolute Latitude, Precipitation, Temperature, Ruggedness and its square, and indicators for landlocked countries, and distance to coastline. Religious composition accounts for the share of the population that reports being Muslim, Catholic, Protestant, Hindu, or Christian of any other kind. GDP composition controls for the share of each economic activity out of total GDP. Heteroskedasticity-Robust Standard Errors Clustered at the Continent Level. ***p<.01, **p<.05, *p<.1

effects of historical conflict on women's positioning vanishes and is no longer statistically significant in this dimension. Combined with Tables 1 and 2, these results thus suggest that the pervasive effect of conflict on gender norms and gender inequality need not run through labor participation, and that the effects on the latter may in fact be contrary to the overall panorama.

Ethnic-Level Results

A key question that arises at this point is whether this result has a historical specificity (whether it applies only to modern and post-modern times). Indeed, the overall logic of argument should apply regardless of the historical period, as long as engagement in conflict is asymmetrical along gender lines. An examination of traditional societies should thus help in corroborating whether the envisioned relation holds in a different time-setting with a distinct socioeconomic logic. The results of this subsection are based on Murdoch's Standard Cross-Cultural Sample (SCCS). This survey contains a subsample of the Ethnographic Atlas that is representative of the different regions throughout the planet. The ethnicities contained in the SCCS were chosen so as to reduce the likelihood of cultural and phylogenetic relationship among the ethnicities -i.e., in order to focus on ethnicities arguably more independent from each other-, a concern that anthropologists have expressed over the Ethno-

Table 4: Conflict and Gender Disparities at the Ethnic-Level

	(1)	(2)	(3)	(4)	(5)	(6)
	OLS	OLS	OLS	OLS	OLS	OLS
	Women are Taught Achievement			Female Economic Indpc.		
Prevalent Conflict	-0.727**	-0.758**	-0.756**	-0.205**	-0.206**	-0.262***
	(0.310)	(0.308)	(0.336)	(0.092)	(0.091)	(0.094)
Plow			-0.682			-0.044
			(0.591)			(0.168)
Patrilocal			0.255			-1.007***
			(0.593)			(0.125)
Large Animals			-0.501			0.124
			(0.460)			(0.131)
Economic Complexity			0.080			-0.005
			(0.089)			(0.022)
Political Hierarchies			0.106			0.045
			(0.194)			(0.050)
Continental FE	Yes	Yes	Yes	Yes	Yes	Yes
Geographical Controls	No	Yes	Yes	No	Yes	Yes
Observations	105	105	105	107	107	107
R-squared	0.068	0.125	0.154	0.075	0.131	0.194

Note: Using information from the Standard Cross Cultural Survey, this table documents the negative association between prevalent conflict and positioning of women in traditional societies. Geographical Controls include Absolute Latitude, Precipitation, Temperature, Agrigultural Suitability and Elevation. Heteroskedasticity-Robust Standard Errors Clustered at the Continent Level Reported. ***p<.01, **p<.05, *p<.1

graphic Atlas. For the intent and purposes of this paper, the use of the SCCS comes from the fact that this dataset is the only one for traditional societies that contains a proxy that captures a generalized state of conflict: Prevalence of Conflict, which takes on the value of 1 if the ethnicity is characterized by its prevalent engagement in conflict, and 0 otherwise.

The outcome variables examined are proxies that capture gender disparity within the ethnicity. Specifically, two variables measure different dimensions of the disparity at the ethnic-level: Inculcation of Achievement in Female Education and Female Economic Independence. The Former is a dummy variable that takes on the value of one if ‘strive for achievement’ is an integral part of women’s education. The latter variable, which takes on values from 1 to 5, captures whether women have independence in making material decisions and if they own the fruits of their labor, with 1 being situations of stronger female dispossession. Table 4 examines the relation between these variables.

Columns 1 and 3 of Table 4 show the results when controlling for continental fixed effects, Columns 2 and 4 include an array of geographical controls, while Columns 3 and 6 show the results for the full ethnic-level specification after including controls that could independently affect positioning of women either directly (such as patrilocality, the use of the plow, or the availability of large animals) or indirectly (by proxying income or autocracy with economic complexity and political hierarchies). Prevalent conflict at the ethnic level appears to be robustly correlated to worse positioning of women both through the content of education that women receive, and through a lack of material empower-

Table 5: Conflict and Female Labor Participation at the Ethnic-Level

	(1)	(2)	(3)	(4)	(5)	(6)
	OLS	OLS	OLS	OLS	OLS	OLS
	Female Partcp. in Agriculture		Female Partcp. in Weaving		Female Partcp. in Hunting & Gathering	
Prevalent Conflict	0.051 (0.081)	0.019 (0.089)	0.017 (0.061)	0.062 (0.074)	0.103 (0.071)	0.120* (0.067)
Plow		0.202 (0.162)		0.262 (0.168)		-0.344*** (0.108)
Patrilocal		-0.044 (0.117)		-0.029 (0.081)		0.306** (0.118)
Large Animals		-0.053 (0.102)		-0.048 (0.072)		-0.034 (0.047)
Economic Complexity		0.019 (0.020)		-0.001 (0.015)		0.010 (0.009)
Political Hierarchies		0.127*** (0.048)		-0.014 (0.037)		-0.085*** (0.032)
Continental FE	Yes	Yes	Yes	Yes	Yes	Yes
Geographical Controls	No	Yes	No	Yes	No	Yes
Observations	115	115	122	122	122	122
R-squared	0.146	0.329	0.148	0.239	0.129	0.438

Note: Using information from the Standard Cross Cultural Survey, this table documents the lack of association between prevalent conflict and female labor participation across various activities in traditional societies. Geographical Controls: Absolute Latitude, Precipitation, Temperature, Agrigultural Suitability and Elevation. Heteroskedasticity-Robust Standard Errors Clustered at the Continent Level Reported. ***p<.01, **p<.05, *p<.1

ment, both of which impede female social empowerment.

A natural next step is to examine whether, at the ethnic level, the existence of conflict affects the participation of women in certain activities. The results of such analysis are reported in Table 5, which examines the correlation between prevalence of conflict in the ethnicity and the female participation in three types of activities: Agriculture, Weaving, and Hunting-Gathering. It is noteworthy that, just as in contemporary cross-country results, there is no strong association between conflict and female engagement in any of the activities. The results further corroborate that the negative association of gender disparity and conflict in the extensive margin is also present in traditional societies, and that such relation does not map onto the realms of female labor participation. This last conclusion suggests that engagement of women in labor markets is insufficient -and may even run along different dimensions- than the overall empowerment of women. Naturally, the results discussed thus far do not discard the possibility of an omitted variable issue, as societies that are more inclined towards violence could experience frequent conflict while at the same time consistently discriminating women, without a formal causal link between these variables. The next section engages in subnational-analysis to address such issue and achieve causal estimates.

2 Subnational Results

The former section established the prevalence and robustness of the association between historical conflict and gender disparities across geographies and historical periods. In this section the analysis transitions into a subnational level, exploiting individual-level and State-level data within Mexico to show that the effect is not only valid at a subnational level, but that in fact it is causal. The equation that will be estimated is as follows:

$$Y_{i,r,t} = \alpha + \beta HistConf_r + \vartheta' \mathbf{X}_{i,r,t} + \varphi' \mathbf{\Gamma}_r + \mu_t + \varepsilon_{i,r,t} \quad (2)$$

The main outcome variable in this instance will be taken from the World Value Survey, which surveyed people in all Mexican States in their fifth and sixth survey-round³. A key variable that captures subjective positioning of women vis-à-vis men is the response to the question “Should men have more priority than women when jobs are scarce?”, which is a dummy variable defined to take the value of 0 when the answer is yes and 1 otherwise. A high number of people within a state answering yes would capture a prevalent notion of women and their labor being of second order relative to men. A second critical outcome variable, which may not comove perfectly with the former, is female labor force participation. This variable is a dummy assumes the value of 1 if the respondent reports being employed either full or part-time and 0 otherwise. Only women between the ages of 18 and 64 are analyzed in this instance.

The key explanatory variable, *HistConf_r*, is defined at the state level and was constructed based on the work of military historian Michael Clodfelter (2002), who compiled and described all the major global battles between the years 1500 and 2000. The Mexican battles were hand-digitized and geolocated, which allowed a calculation of the number of major historical battles experienced at a state-level within said country over the past 400 years. The geographical distribution of these conflicts and of averages of the outcome variable are illustrated in Figure 2 (which also includes the geographical distribution of the instrument that will be exploited). $\mathbf{\Gamma}_r$ is a vector of controls for a handful of geographical characteristics, pre-colonial population density, and contemporary controls such as log state-GDP per capita and recent number of conflicts from the PRIO/UPCD dataset. $\mathbf{X}_{i,r,t}$

³Mexican subjects were surveyed in prior rounds, but the exact location of the survey was not consigned, as only vague references are included (North Mexico, South Mexico, etc.).

Table 6: Historical Conflict and Gender Biases Within Mexico

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
	OLS	OLS	OLS	OLS	OLS	Probit
Dependent Variable: Should Men Have Priority When Jobs are Scarce? (0 Yes, 1 No) - Mean: 0.43						
Historical Conflict (1600-2000)	-0.007*** (0.003)	-0.005** (0.002)	-0.007** (0.003)	-0.007** (0.003)	-0.006** (0.003)	-0.025** (0.010)
Pre-Colonial Population Density			0.006 (0.008)	0.004 (0.010)	0.002 (0.009)	0.007 (0.034)
Log (GDP per capita)				0.014 (0.062)	0.026 (0.057)	0.116 (0.234)
Recent Conflict (Post-1970)					-0.000 (0.000)	-0.000 (0.000)
Geographical Controls	Yes	Yes	Yes	Yes	Yes	Yes
Survey FE	No	Yes	Yes	Yes	Yes	Yes
Individual Controls	No	No	Yes	Yes	Yes	Yes
Observations	3,543	3,543	3,543	3,543	3,543	3,543
R-squared	0.007	0.413	0.421	0.421	0.421	
Marginal Effect						-0.009**

Note: This table documents the robust subnational association between historical conflict and gender biases in Mexico. Individual controls include age, marital status, education and gender. Geographical controls include precipitation, temperature, latitude, ruggedness, malaria suitability, altitude and navigable rivers. Heteroskedastic-robust standard errors clustered at the region level in parentheses. *** p<0.01, ** p<0.05, * p<0.1

account for individual-level characteristics such as age, gender, educational attainment and marital status. Finally, μ_t accounts for survey-year fixed effects. The results of this specification are presented in Table 6.

Column 1 accounts only for the geographical controls at the state level, while Column 2 accounts for these along with survey-year fixed effects. Pre-colonial population density, along with individual characteristics, are accounted for in Column 3, while contemporary controls of current income per capita and recent conflict-episodes are included sequentially in Columns 4 and 5, respectively. The estimated effect of historical conflict does not fluctuate as covariates are included, and the overall effects derived from Column 5 would indicate that an additional episode of major historical conflict would lead to a .6% lower probability of holding gender-equal notions. It is noteworthy that recent conflicts have a zero estimated effect on gender-notions once historical conflicts are accounted for, a pattern that corroborates a finding discussed at the country-level analysis. Column 6 introduces a Probit estimation of the effect (considering that the outcome variable is binary), showing that results are quantitatively identical and qualitatively very similar: there is a negative, strong, and robust association between experienced conflict and current biased notions on women, with an estimated effect of a .9% decrease in the likelihood of reporting gender-equal views when there is an increase of 1 unit of historical conflicts at the mean. Table D in the appendix shows that the results are almost identical when focusing only on Mexican states that existed by the time of independence, thereby discarding

the potential effect of measurement errors on conflict coming from those states that emerged long after independence.

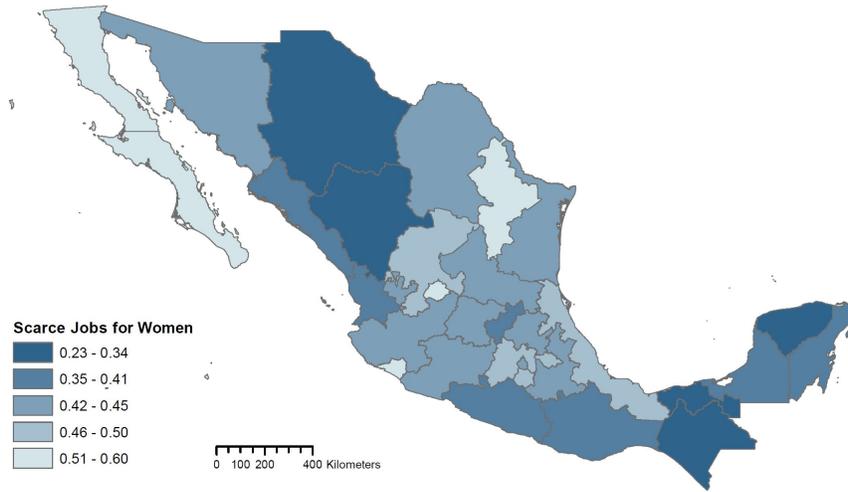
The above results corroborate the persistency of the main hypothesis of the paper: there is a strong effect of conflict on gender disparities across geographies, time-periods, and units of analysis. The question of causality, however, remains, as endogeneity issues has not been discarded. The transition into a subnational analysis enables a level of granularity that permits assessing exogenous variation coming from structural changes in the long-run. This section exploits the combination of two of those historical shocks: Long-run changes in weather along with changes induced by the introduction of Old World crops into the New World. Following Iyining et al. (2017), the introduction of the potato into the Old World lead to an increase in agricultural productivity, which in turn brought about a reduction in conflict in those areas that where suitable for the production of such crop. Similarly, the instrumental analysis that will be exploited in the Mexican setting entails an increase in agricultural productivity brought about by the Columbian Exchange. The agricultural landscape in Mexico changed dramatically with the introduction of various crops that would latter on be produced both for exporting and consumption. Therefore, the instrument will not focus on a single crop, but rather on the aggregate change induced by the novel crops in the New World. Further, the potential benefits from these crops varied geographically with exogenous reductions experienced in precipitation in the very-long-run: Regions that experienced reductions in precipitation could seize to a lesser extent the boost in agriculture from the Columbian experiment than those that did not. The instrument, Realizable Yield Increase, that will be used for historical conflict within Mexico is thus as follows:

$$RealizableIncr = \frac{PotentialPostcolonial}{PotentialPrecolonial} * \frac{CurrentPrecip.}{PastPrecip.} \quad (3)$$

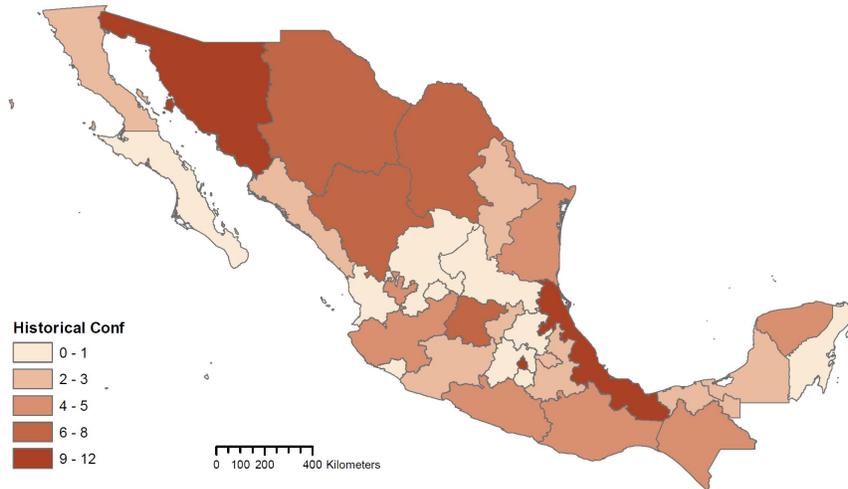
Notice that *PotentialPrecolonial* and *PotentialPoscolonial* are both potential caloric yields per hectare, the former based on the index of available crops before Columbian era and the latter based on the crops that existed after such era. The ratio thus captures the changes in agricultural potential within Mexico coming from the introduction of new crops. These yields are constructed based on projections for rain-fed agricultural production characterized by low level of inputs, thus capturing the sensitivity of potential gains from the Columbian-shock to changes in precipitation. The second ratio, which divides contemporary average precipitation by historical average precipitation, captures the long-run exogenous changes in precipitation that may differentially affect the ability of some re-

Figure 2: Geographical Distribution of Variables

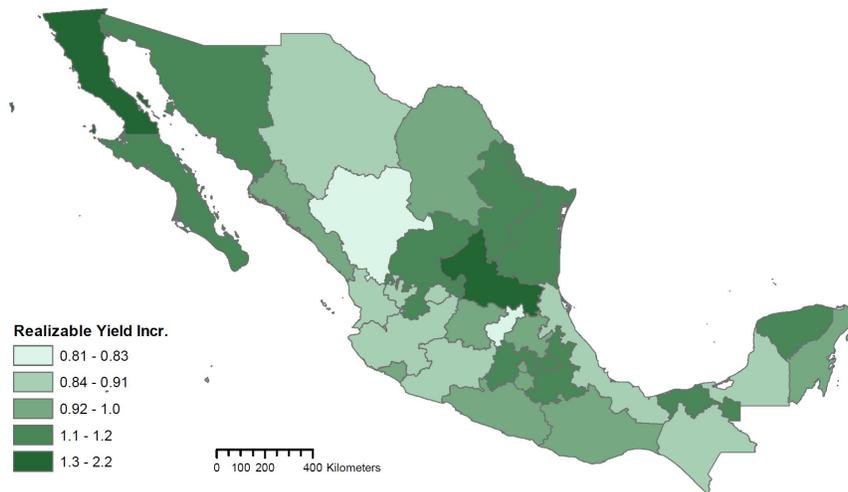
Panel A. Should Men Have Priority over Women? - Average Responses



Panel B. Historical Conflicts



Panel C. Realizable Yield Increase



Note: These figures depict the geographical distribution of the outcome variable, the independent variable of interest, and the instrument, respectively. The geographical unit depicted are states within Mexico.

Table 7: Instrumental Analysis - Mexico

	IV (1)	IV (2)	IV (3)	IV (4)	IV (5)	IV Probit (6)
Second Stage						
Dependent Variable: Should Men Have Priority for Jobs (0 Yes, 1 No) - Mean: 0.43						
Historical Conflict (1800-1990)	-0.024*** (0.008)	-0.018*** (0.006)	-0.022*** (0.006)	-0.022*** (0.006)	-0.021*** (0.006)	-0.081*** (0.026)
Pre-Colonial Population Density			0.038** (0.015)	0.042** (0.017)	0.040** (0.018)	0.148** (0.073)
Log (GDP per capita)				-0.063 (0.082)	-0.057 (0.079)	-0.193 (0.323)
Recent Conflict (Post-1990)					-0.000 (0.000)	-0.000 (0.000)
Geographical Controls	Yes	Yes	Yes	Yes	Yes	Yes
Survey FE	No	Yes	Yes	Yes	Yes	Yes
Individual Controls	No	No	Yes	Yes	Yes	Yes
Marginal Effect						-0.081***
Clusters	32	32	32	32	32	32
Observations	3,543	3,543	3,543	3,543	3,543	3,543
First Stage						
Instrumented Variable: Number of Historical Conflicts per region						
Realizable Yield Increase	-7.967*** (1.700)	-7.964*** (1.701)	-6.913*** (1.153)	-7.041*** (1.101)	-7.132*** (1.743)	-7.132*** (1.767)
F-Statistic	17.46	17.42	34.85	39.64	16.21	
Adjusted R-Squared	0.413	0.413	0.597	0.630	0.631	

Note: This table reports the results of instrumenting historical conflict in Mexico with realizable yield increase to attain causal estimates of historical conflict's effect on gender biases. Geographical Controls include latitude, navigable rivers, ruggedness, precipitation, altitude, malaria, and temperature. Individual control include age, marital status, education and gender. Heteroskedastic-robust standard errors clustered at the region level in parentheses. *** p<0.01, ** p<0.05, * p<0.1

regions to seize the shock in the Columbian era. The geographical distribution of the outcome variable, the main variable of interest, and the instrument are depicted in Figure 2.

By exogenously boosting actual agricultural productivity, the increases in Realizable Yield Increase should have had a strong negative effect on conflict. Another way of interpreting the effect of this variable comes from Dal Bó and Dal Bó (2011)'s analysis of shocks to opportunity costs of conflict: Increases in the Realizable Yield Increase entailed a shock to agriculture, which has historically been characterized in Mexico as a labor-intensive industry. A shock to a labor-intensive industry could have thus reduced the prevalence of conflict by increasing the opportunity costs faced by combatants to engage in armed confrontation. This effect is expected to be large in Mexico, as such country has been an agricultural economy for most of the period under scrutiny. The results of the estimation are contained in Table 7.

The first stage of the estimation reveals that realizable-yield increase is indeed economically and statistically strongly associated with a lower occurrence of historical conflicts, even after accounting

for geographical controls and historical population densities. Results from the second-stage reveal that the relation between historical conflict and biased gender-views are causally related. Both the point estimate and the statistical significance of historical conflict remain remarkably stable even after the inclusion of past and contemporary confounders. Column 5 would indicate that an additional episode of historical conflict would have led to a 2.1% lower likelihood of holding gender-equal views on labor participation. The fact that both contemporary income levels and historical population densities are accounted for discard the possibility that Realizable Yield Increase could have affected gender views through its long-run effect on income or in population settlement. However, this is not enough to ensure the plausibility of the exogeneity and the effect of said variable on gender-notions.

The falsification strategy demonstrating the validity of the instrumental approach rests on the construction of alternative (fictitious) Realizable Yield Increases. Exploiting changes in precipitation that either occurred or will occur in a time-span unrelated to the period under scrutiny, two alternative false measures of realizability of the agricultural shock in the Columbian era were constructed:

$$RealizableIncr(past) = \frac{PotentialPostcolonial}{PotentialPrecolonial} * \frac{PastPrecip}{GlacialPrecip} \quad (4)$$

$$RealizableIncr(future) = \frac{PotentialPostcolonial}{PotentialPrecolonial} * \frac{ProjectedPrecip.}{CurrentPrecip.} \quad (5)$$

Where *RealizableIncr(past)* is predicated on precipitation changes between the Last Glacial Maximum (20,000 years ago) and the Holocene, whereas the ratio of Future Realizable Yield increase is predicated on changes in precipitation that are expected to take place over the next 50 years. Results of the falsification are shown in Table 8. Column 1 corroborates the strong (positive) reduced-form effect of Realizable Yield Increase on gender views. Columns 2 and 3 show, however, that when the instrument is constructed using these imprecise changes in precipitation, there appears to be no significant relation between Realizable Yield Increase and gender-views.

Another set of falsifications comes from a set of outcome variables that are orthogonal to the argument constructed thus far. Critically, an almost identical question on job-perceptions was asked in the World Value Survey: “When jobs are scarce, should people from this country have priority over people from other Nationalities?” Answers to this question reveal biased-perceptions against

Table 8: Falsifications - Mexico

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	OLS	OLS	OLS	OLS	OLS	OLS	OLS
	Jobs: Priority Men			Jobs: Priority Conationals	Racism	LTO	Subj. Health
Realizable Yield Increase	0.151*** (0.036)			0.045 (0.032)	-0.029 (0.025)	0.006 (0.056)	0.005 (0.036)
Realizable Yield Increase (past)		0.084 (0.050)					
Realizable Yield Increase (future)			-0.001 (0.070)				
Pre-Colonial Population Density	-0.004 (0.004)	-0.014** (0.006)	-0.008 (0.008)	-0.024*** (0.008)	0.011** (0.005)	0.026*** (0.006)	-0.006 (0.005)
Geographical Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Survey FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Individual Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	3,543	3,543	3,543	3,521	2,129	3,560	3,554
R-squared	0.422	0.420	0.419	0.065	0.380	0.057	0.152

Note: This table shows that the constructed instrument, Realizable Yield Increase, appears unrelated with variables that although capturing intolerance, are orthogonal to the main argument. It also demonstrates that similar measures that use changes in precipitation in other timings are orthogonal to the outcome variable. Individual control include age, marital status, education and gender. Geographical Controls include latitude, temperature, precipitation, rivers, malaria, ruggedness, and altitude. Heteroskedastic-robust standard errors clustered at the region level in parentheses. *** p<0.01, ** p<0.05, * p<0.1

immigrants. However, to the extent that local conflict among people from the same nationality is unrelated to biases against people from other nationalities, one should expect realizable yield increase to be unrelated to it. Indeed, as shown in Column 4 of Table 8, no statistical relationship appears to hold between these two variables, and the point-estimate appears to be qualitatively smaller than the point estimate on gender-notions. Further, Columns 5-7 show that realizable yield increase is statistically unrelated to other outcome variables that could be associated to biased gender views, but that are orthogonal to the argument behind the instrument's rationale. Thus, they show that the instrumental variable is unrelated to other dimensions of tolerance with others (such as racism), to long-term orientation, or to revealed physical wellbeing of individuals (subjective health status of individuals).

It remains to be seen whether there is a causal relation to be found subnationally between historical conflict and female labor force participation. Table 9 shows results from OLS, Probit, IV and IV Probit estimations between these variables. Columns 1 through 3 show that, subnationally, there appears to be a strong correlation between historical conflict and higher rates of female labor participation for women between 18 and 64 years of age. However, the strength of the relation is reduced once the instrumental variable approach is implemented. This indicates that, at a subnational level, there may be a causal (albeit weak) effect on the engagement of women in labor markets, along

Table 9: Conflict and Female Labor Participation in Mexico

	(1)	(2)	(3)	(4)	(5)	(6)
	OLS	OLS	Probit	IV	IV	IV Probit
Second Stage						
Dep. Var: Current Labor Status Women 18 to 64 (0:Not Working 1: Working) - Mean: 0.33						
Historical Conflict (1800-1990)	0.005** (0.002)	0.007*** (0.002)	0.021*** (0.006)	0.008* (0.004)	0.006 (0.004)	0.020* (0.011)
Pre-Colonial Population Density		-0.017** (0.007)	-0.054*** (0.020)		-0.015 (0.011)	-0.052 (0.033)
Log (GDP per capita)		0.156*** (0.052)	0.463*** (0.154)		0.151*** (0.052)	0.458*** (0.154)
Recent Conflict (Post-1990)		0.000 (0.000)	0.000 (0.000)		0.000 (0.000)	0.000 (0.000)
Geographical Controls	Yes	Yes	Yes	Yes	Yes	Yes
Survey FE	No	Yes	Yes	No	Yes	Yes
Individual Controls	No	Yes	Yes	No	Yes	Yes
Marginal Effect						0.020*
Clusters	32	32	32	32	32	32
Observations	1,663	1,663	1,663	1,663	1,663	1,663
First Stage						
Instrumented Variable: Number of Historical Conflicts per region						
Realizable Yield Increase				-7.846*** (1.684)	-7.153*** (1.871)	-7.153*** (1.776)
F-Statistic				17.85	16.06	
Adjusted R-Squared				0.421	0.634	

Note: This table documents the weak effect of historical conflict on female labor participation on a subnational level.. Geographical Controls include latitude, navigable rivers, ruggedness, precipitation, altitude, malaria, and temperature Individual control include age, marital status, education and gender. Heteroskedastic-robust standard errors clustered at the region level in parentheses. *** p<0.01, ** p<0.05, * p<0.1

the lines of what has been found by Goldin (1991) and Acemoglu et. al. (2004). Critically, it further corroborates the fact that gender disparities may indeed operate through various dimensions other than labor participation, and that there may be even a dissonance between the latter and subjective positioning of women in society.

3 Mechanisms

Up until this point, the document has shown a strong, robust and causal effect of historical conflict on current positioning of women. A critical issue that remains to be addressed is the unveiling of mechanisms through which these effects emerge and consolidate. This section exploits survey evidence from the US and from Europe to show that culture appears as a channel through which these adverse gender notions coming from historical conflict become pervasive.

Short-run Effects

This subsection examines whether societies experience a deterioration of gender-views in the aftermath of a major historical episode of conflict. To that end, it exploits the exogenous timing of US involvement in international campaigns in the aftermath of 9/11. The international military campaigns that followed such attacks were the first episode since the Vietnam War in which active recruitment was done with the explicit purpose of deploying part of those recruited troops abroad. Further, the attacks experienced on 9/11 and the campaigns that followed left a feeling of generalized state of emergency on America's civil population (Schuster et. al., 2001), which made salient the existence of a state of conflict that required action from both the government and citizens (Huddy et. al., 2002).

The timing of troop-recruitment for its deployment abroad, which took place between the years 2002 and 2012, constitutes a window to investigate the short-run effects of a large military campaign and overall of a generalized state of conflict. This section thus examines questions in the General Social Survey assessing gender views. Particularly, it looks at answers to "Are women suited for politics?" which was asked for the years between 1974 and 2016⁴. Answers were defined to take on a value of 1 when the respondent disagreed (unbiased gender view) and to take the value of 0 when they agreed (biased gender view). A negative effect of the timing of such event on gender perceptions would reveal that a sudden and unexpected advent of a state of conflict would lead to a culture that belittles women's social role. The estimation that enables to examine such an effect is as follows:

$$Y_{i,r,t} = \alpha + \beta Recruitment_t + \vartheta' \mathbf{X}_{i,r,t} + f(t) + \mu_r + \varepsilon_{i,r,t} \quad (7)$$

With $Y_{i,r,t}$ corresponding to answers to the above question by individual i at region r and at time t , $Recruitment_t$ corresponding to a dummy-variable that takes on the value of 1 for the years in which troops were actively recruited for their deployment abroad (2002 through 2012), μ_r corresponding to region fixed-effects, $\mathbf{X}_{i,r,t}$ corresponding to individual characteristics of the respondent (age, marital status, education, gender, and even racial and religious affiliation), and $f(t)$ corresponding to a polynomial of the time-trend. Results of the estimation, which include linear, quadratic, and cubic polynomials of the time-trend, are contained in Table 10.

All columns of the specification account for a time trend. Region fixed-effects, standard individual controls (age, marital status, education and gender), and additional individual controls (religion

⁴The question was asked every two years after 1994.

Table 10: Conflict and Short-Run Bias Against Women

	(1)	(2)	(3)	(4)
	OLS	OLS	OLS	OLS
Dependent Variable: Women not Suited for Politics (0: Agree, 1: Disagree)				
Panel A: Linear Time Trend				
Recruitment of Troops	-0.041*** (0.006)	-0.040*** (0.005)	-0.038*** (0.006)	-0.035*** (0.006)
R-squared	0.030	0.040	0.081	0.085
Panel B: Quadratic Polynomial in Time Trend				
Recruitment of Troops	-0.049*** (0.007)	-0.049*** (0.005)	-0.046*** (0.006)	-0.043*** (0.006)
R-squared	0.035	0.045	0.085	0.089
Panel C: Cubic Polynomial in Time Trend				
Recruitment of Troops	-0.047*** (0.009)	-0.046*** (0.009)	-0.039*** (0.008)	-0.037*** (0.008)
R-squared	0.035	0.045	0.085	0.089
Region FE	No	Yes	Yes	Yes
Individual Controls	No	No	Yes	Yes
Religion FE	No	No	No	Yes
Race FE	No	No	No	Yes
Clusters	9	9	9	9
Observations	34,627	34,627	34,627	34,627

Note: This table documents the strong association between troop recruitment after engaging in large-scale conflict, and biases against women’s role as leaders. Recruitment of Troops is a dummy variable that assumes the value of 1 for those years following 9/11 in which troops were actively recruited for their deployment abroad. Individual Controls include Age, Gender, Marital Status, and Education. Heteroskedasticity-Robust Standard Errors Clustered at the Regional Level *p<0.1, **p<0.05, ***p<0.01

and race) were sequentially introduced in subsequent columns. The coefficient of Recruitment is not only statistically immune to the inclusion of such an ample array of individual controls, but appear to be unaffected by the inclusion of higher-order polynomials in time trend. Estimates on Column 4 indicate that, on average, the conflict-episode following 9/11 led to a decrease of approximately 4% in the share of people reporting biased views on women’s capacity to be political leaders. This result is even stronger once we take into account the fact that such episode coincides with the later period included in the survey, which should coincide with an increased prevalence of progressive views on gender equality considering the survey covers a long time-span (of more than 40 years). All in all, these results indicate that at the core of conflict’s effect on gender disparities lies a cultural mechanism that questions women’s capacity to lead political action in face of military confrontation. This corroborates the overall argument, according to which prevalent conflict is equivalent to a recurrent engagement in a social activity that has historically been reserved to men, thereby exacerbating their value vis-à-vis women’s and thus affecting the latter’s positioning. It remains to be shown, however, whether such differential short-run effect of conflict is culturally perpetuated over time.

Long-run Effects - The Epidemiological Approach

This subsection employs the epidemiological approach (Fernandez, 2007; Fernandez and Fogli, 2009) to show that cultural persistence constitutes a mechanism through which historical conflict affects gender views. To do so, it exploits information coming from the European Social Survey (ESS) to examine views reported by second generation migrants. Specifically, it examines the relation between the gender views of these individuals and the measure of historical conflict in their country of origin. By holding fixed any institutional characteristics to which these respondents were exposed, this approach allows to disentangle cultural mechanisms from potential confounding institutional mechanisms through which historical conflict may be affecting gender parity. To that end, the following specification is to be tested in this subsection:

$$Y_{i,c,o,t} = \alpha + \beta HistConf_o + \vartheta' \mathbf{X}_{i,c,o,t} + \varphi' \mathbf{\Gamma}_o + \gamma_t + \mu_c + \varepsilon_{i,c,o,t} \quad (6)$$

With $Y_{i,c,o,t}$ corresponding to answers to the question “Should men have priority over women when jobs are scarce?”, which is defined either as a categorical variable with values ranging from 1 to 5 (lower values corresponding to more gender-biased views), or as a dummy variable that takes on the value of 1 when the respondent reports either disagreeing or disagreeing strongly with such statement. $HistConf_o$ corresponds to the long-run conflict in the country of origin o , which coincides with the country-level measure of historical conflict constructed and employed in Section 1. $\mathbf{X}_{i,c,o,t}$ corresponds to a vector of individual controls, $\mathbf{\Gamma}_o$ corresponds to the same vector of historical and geographical controls employed in the baseline estimation at the country level, while γ_t corresponds to survey-year fixed-effects. Finally, μ_c corresponds to country fixed-effects, which allow to control for the institutional factors in the country of immigration. Results of such estimation are reported in Table 11. Further, analogous estimations were done using other responses that capture tolerance and empathy for others, thus testing whether the effects on gender views are a simply a part of a general pattern affecting overall human values. The results from these falsifications are reported in Table 12.

Long-run historical conflict in the country of origin appears to be strongly associated with biased views on gender. Even after accounting for individual controls, an array of country of origin controls, and after holding fixed all institutional factor in the country of destination, respondents coming from conflict-prone countries are significantly more likely to believe that women are less of a priority than

Table 11: Epidemiological Approach - Effect of Conflict on Second-Generation Migrants

Estimation	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	OLS	OLS	OLS	OLS	OLS	OLS	Probit
	Jobs Scarce (1-5 Scale) - Mean: 3.37			Jobs Scarce (Dummy) - Mean: 0.53			
Historical Conflict (Country of Origin)	-0.834*** (0.286)	-0.680*** (0.187)	-0.574** (0.221)	-0.294*** (0.104)	-0.266*** (0.065)	-0.232*** (0.074)	-0.718*** (0.205)
Country Origins Control	No	Yes	Yes	No	Yes	Yes	Yes
Country Destination FE	No	Yes	Yes	No	Yes	Yes	Yes
Survey FE	No	No	Yes	No	No	Yes	Yes
Individual Controls	No	No	Yes	No	No	Yes	Yes
Observations	11,218	11,218	11,218	11,218	11,218	11,218	11,218
R-squared	0.007	0.097	0.170	0.006	0.080	0.141	
Marginal Effect							-0.285***

Note: This table documents, through the examination of second-generation migrants in Europe, that historical violence in the country of origin is associated with a culture characterized by biases against women. Country Origins controls include absolute latitude, temperature, precipitation, landlock indicator, ruggedness and its square, plow, patrilocal ancestry, and years since the neolithic. Individual controls include age, gender, marital status, and years of education. Heteroskedastic-robust standard errors clustered at the country of origin level. *** p<0.01, ** p<0.05, * p<0.1

men when in times of scarcity. Columns 6 and 7 in Table 11 would indicate that a 10% increase in the share of years under civil conflict in the country of origin is associated with a reduction in the order of 2.3%-2.8% in the likelihood of reporting unbiased notions of gender. Further, results contained in Table 12 demonstrate that the effect of historical conflict is specific to gender, and does not in fact constitute an overall trend of intolerance and human apathy generated by conflict: Beliefs about others' altruism, reported views on tolerance, and prejudice towards immigrants reported by these second-generation migrants appear to be statistically and economically unrelated to historical experiences of conflict in their country of origin. Following Fernandez (2007) and Fernandez and Fogli (2009), these results indicate that culture constitutes a mechanism through which these biases are reproduced and consolidated beyond institutional and material factors in the long-run.

A natural follow-up question is whether historical conflict in the country of origin is affecting the actual decision of women to engage in the labor market. As noted earlier, it need not be the case that these variables are related, as the cultural mechanism leading to a worse positioning of women vis-à-vis men are not the same that compel them to refrain from engaging in the labor market. Responses on the ESS allow to evaluate such possibility, as women in the survey were asked whether they have ever had a paid job. The estimated effect of historical conflict on this answer for second-generation women migrants, reported in Table 13, allow to test the existence of this relationship.

Consistent with the estimated effect of historical conflict on female labor participation in other

Table 12: Falsifications - Second-Generation Migrants

Estimation	(1)	(2)	(3)	(4)	(5)	(6)
	OLS	OLS	OLS	OLS	OLS	OLS
	Belief in Others' Altruism		Tolerance towards others		Prejudice towards Immigrants	
	1-6 Scale	Dummy	1-6 Scale	Dummy	0-10	Dummy
Historical Conflict (Country of Origin)	0.045 (0.092)	0.026 (0.034)	0.073 (0.067)	-0.042 (0.030)	-0.701 (0.464)	-0.084 (0.072)
Country Origins Control	Yes	Yes	Yes	Yes	Yes	Yes
Country Destination FE	Yes	Yes	Yes	Yes	Yes	Yes
Survey FE	Yes	Yes	Yes	Yes	Yes	Yes
Individual Controls	Yes	Yes	Yes	Yes	Yes	Yes
Observations	21,368	21,368	21,344	21,344	20,931	20,931
R-squared	0.071	0.059	0.045	0.041	0.098	0.071

Note: This table documents the lack of statistical and economic association between conflict in the country of origin and a culture of intolerance and/or apathy in dimensions other than gender. Country Origins Controls include absolute latitude, temperature, precipitation, island indicator, ruggedness, plow, legal origins and population diversity. Individual control include age, gender, marital status, and years of education. Heteroskedastic-robust Standard Errors clustered at the country of origin level. *** p<0.01, ** p<0.05, * p<0.1

geographies and units of analysis, it appears that the decisions of women to work are not robustly related to the conflict-experiences in their country of origin. If anything, such variable appears to have a weak negative effect on the decision of women to engage with labor markets, demonstrating that there is no universal robust effect of historical conflict on female labor participation. Yet again, an examination of European second-generation migrants points to the fact that gender disparities and female labor participation do not operate in synchrony, and that effects on the latter are by no means a prerequisite to experience the former.

Table 13: Historical Conflict and Female Labor Participation - Second-Generation Migrants

Estimation	(1)	(2)	(3)	(4)	(5)	(6)
	OLS	OLS	OLS	OLS	OLS	OLS
	Belief in Others' Altruism		Tolerance towards others		Prejudice towards Immigrants	
	1-6 Scale	Dummy	1-6 Scale	Dummy	0-10	Dummy
Historical Conflict (Country of Origin)	0.045 (0.092)	0.026 (0.034)	0.073 (0.067)	-0.042 (0.030)	-0.701 (0.464)	-0.084 (0.072)
Country Origins Control	Yes	Yes	Yes	Yes	Yes	Yes
Country Destination FE	Yes	Yes	Yes	Yes	Yes	Yes
Survey FE	Yes	Yes	Yes	Yes	Yes	Yes
Individual Controls	Yes	Yes	Yes	Yes	Yes	Yes
Observations	21,368	21,368	21,344	21,344	20,931	20,931
R-squared	0.071	0.059	0.045	0.041	0.098	0.071

Note: This table documents the weak association between violence in the country or origin and the decisions of women of engaging in labor markets. Country Origins controls include absolute latitude, temperature, precipitation, island indicator, ruggedness, plow, legal origins and population diversity. Individual control include age, gender, marital status, and years of education. Heteroskedastic-robust Standard Errors clustered at the country of origin level. *** p<0.01, ** p<0.05, * p<0.1

4 Conclusion

This document has shown that historical conflict is robustly associated with worse positioning of women in society, both objectively and subjectively. This relationship holds when considering various dimensions of gender disparities, various geographies, units of analysis and time-periods. Further, an instrumental-variable approach that exploits the exogenous effect of the Columbian experiment and the long-run changes in precipitation reveal that such effects of historical conflict are causal. The mechanisms through which these changes come about are primarily cultural: Major episodes of conflict lead to a deterioration on perceptions of women's leadership, as revealed by the decline in the share of people believing that women are suited for politics in the aftermath of 9-11 in the US. These short-run cultural biases are then reproduced and transmitted in the long-run, as revealed by second-generation migrants in Europe.

The results presented in this document also indicate that conflict does not appear to be robustly associated to increases in labor participation in the long-run, albeit some evidence at a subnational level may support the thesis that some effects could exist at a subnational level. This suggests that the potential positive effects on female labor force participation from the vacuum left by men going to war, could be in many instances offset in the long-run by the gender biases and disparities brought about in other dimensions. Crucially, this reveals that female labor participation does not comove with -and, in some instance, may even move in an opposite direction to- female positioning along other dimension, which suggests that researches interested in unveiling the determinants of gender norms and overall gender discrimination must not focus exclusively in labor participation.

Further research could explore the long-run relationship between female labor participation and gender disparities. When and where can it be claimed that exogenous increases in female labor force participation indeed lead in the long-run to sustained subjective and objective empowerment of women? Thorough answers to such question would point towards relevant nuances that need to be incorporated in policy aimed at achieving gender parity in all other social dimensions.

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Appendix

Table A

	(1)	(2)	(3)	(4)
	OLS	OLS	OLS	OLS
Dependent Variable: Gender Inequality Index, 2013				
Years Civil Conflict (%), 1816-1900	-0.088*			
	(0.041)			
Years Civil Conflict (%), 1816-1900, Alesina et al 2013		-0.174**		
		(0.066)		
Years Interstate Conflict (%), 1816-1900			-0.144***	
			(0.027)	
Years Interstate Conflict (%), 1946-2007, PRIO				-0.074**
				(0.021)
Log (GDP p.c. 2013)	0.082***	0.083***	0.082***	0.087***
	(0.011)	(0.012)	(0.011)	(0.010)
Plow (Anc. Adjusted)	0.018	0.019	0.021	0.027
	(0.016)	(0.016)	(0.018)	(0.019)
Patrilocal (Anc. Adjusted)	0.016	0.016	0.015	0.007
	(0.008)	(0.009)	(0.008)	(0.006)
Years Since Neolithic (1000s, Anc. Adj)	-0.002	-0.001	-0.002	-0.003
	(0.005)	(0.006)	(0.005)	(0.005)
Continental FE	Yes	Yes	Yes	Yes
Geographical Controls	Yes	Yes	Yes	Yes
Observations	142	142	142	142
R-squared	0.873	0.873	0.875	0.879

This table documents the robustness of the country results to alternative definitions and sources of the main variable of interest. Geographical Controls: Absolute Latitude, Precipitation, Temperature, Ruggedness and its square, and indicators for landlocked countries, and distance to coastline. Heteroskedasticity-Robust Standard Errors Clustered at the Continent Level. ***p<.01, **p<.05, *p<.1

Table B

	(1)	(2)	(3)	(4)	(5)	(6)
	OLS	OLS	OLS	OLS	OLS	OLS
Dependent Variable: Gender Inequality Index, 2013						
	Whole World	No Africa	No South America	Old World	Pre 1900 Countries	OECD
Years Under Civil Conflict (%), 1816-2007	-0.245**	-0.235**	-0.242**	-0.236**	-0.158**	-0.337**
	(0.063)	(0.064)	(0.053)	(0.032)	(0.057)	(0.063)
Log (GDP p.c. 2013)	0.083***	0.086***	0.082***	0.081**	0.089***	0.054**
	(0.011)	(0.010)	(0.009)	(0.015)	(0.018)	(0.017)
Plow (Anc. Adjusted)	0.019	-0.002	-0.005	-0.008	-0.002	-0.001
	(0.018)	(0.005)	(0.005)	(0.003)	(0.061)	(0.002)
Patrilocal (Anc. Adjusted)	0.020*	-0.006	0.000	0.012	0.038	-0.090**
	(0.010)	(0.030)	(0.016)	(0.010)	(0.042)	(0.022)
Years Since Neolithic (1000s, Anc. Adj)	-0.003	0.019	0.014	0.020	0.003	-0.072*
	(0.005)	(0.016)	(0.012)	(0.020)	(0.005)	(0.029)
Democracy (Polity IV - Extent)	-0.003	-0.004*	-0.003	-0.002**	0.003	-0.017**
	(0.002)	(0.002)	(0.002)	(0.000)	(0.005)	(0.005)
Continental FE	Yes	Yes	Yes	Yes	Yes	Yes
Geographical Controls	Yes	Yes	Yes	Yes	Yes	Yes
Religious Composition	Yes	Yes	Yes	Yes	Yes	Yes
GDP Composition	Yes	Yes	Yes	Yes	Yes	Yes
Observations	140	100	129	113	73	29
R-squared	0.878	0.867	0.878	0.884	0.877	0.983

This table documents the robustness of the association between historical conflict and contemporary gender disparity across geographies. Geographical Controls: Absolute Latitude, Precipitation, Temperature, Ruggedness and its square, and indicators for landlocked countries, and distance to coastline. Heteroskedasticity-Robust Standard Errors Clustered at the Continent Level. ***p<.01, **p<.05, *p<.1

Table C

	(1)	(2)	(3)	(4)
	OLS	OLS	OLS	OLS
Dependent Variable: Gender Inequality Index, 2013				
Years Civil Conflict (%), 1816-1900	-0.197** (0.070)			-0.008 (0.117)
Years Civil Conflict (%), 1900-1980		-0.358*** (0.050)		-0.339*** (0.071)
Years of either Inter-State or Civil Conflict (%), 1816-2007			-0.115 (0.147)	-0.105 (0.144)
Plow	0.081 (0.042)	0.087 (0.044)	0.087* (0.039)	0.091* (0.039)
Patrilocal	-0.028 (0.026)	-0.026 (0.026)	-0.028 (0.022)	-0.027 (0.026)
Years Since Neolithic (1000s, Anc. Adjusted)	0.002 (0.007)	-0.001 (0.006)	-0.000 (0.008)	-0.002 (0.007)
Continental FE	Yes	Yes	Yes	Yes
Geographical Controls	Yes	Yes	Yes	Yes
Observations	140	140	140	140
R-squared	0.738	0.746	0.740	0.751

This table documents the timing of the effect of historical violence, showing that most of the effect comes from violence in the long-run. Geographical Controls: Absolute Latitude, Precipitation, Temperature, Ruggedness and its square, and indicators for landlocked countries, and distance to coastline. Heteroskedasticity-Robust Standard Errors Clustered at the Continent Level. ***p<.01, **p<.05, *p<.1

Table D

	(1)	(2)	(3)	(4)	(5)	(6)
	OLS	OLS	Probit	IV	IV	IV Probit
Second Stage						
Dep. Var: Should Men Have Priority over Women when Jobs are Scarce (0:Yes 1: No) - Mean: 0.428						
Historical Conflict (1800-1990)	-0.007*** (0.002)	-0.008*** (0.003)	-0.032*** (0.010)	-0.017*** (0.004)	-0.017*** (0.004)	-0.066*** (0.017)
Pre-Colonial Population Density		0.006 (0.010)	0.020 (0.037)		0.030** (0.012)	0.107** (0.048)
Log (GDP per capita)		0.044 (0.070)	0.176 (0.281)		-0.017 (0.059)	-0.055 (0.245)
Recent Conflict (Post-1990)		-0.000* (0.000)	-0.000* (0.000)		-0.000 (0.000)	-0.000 (0.000)
Geographical Controls	Yes	Yes	Yes	Yes	Yes	Yes
Survey FE	No	Yes	Yes	No	Yes	Yes
Individual Controls	No	Yes	Yes	No	Yes	Yes
Marginal Effect						-0.066*
Clusters	24	24	24	24	24	24
Observations	3,231	3,231	3,231	3,231	3,231	3,231
First Stage						
Instrumented Variable: Number of Historical Conflicts per region						
Realizable Yield Increase				-9.717*** (1.684)	-9.340*** (1.810)	-9.340*** (1.841)
F-Statistic				27.52	25.59	
Adjusted R-Squared				0.546	0.747	

This table documents the causal effect of historical conflict on biased perceptions against women at a subnational level, even when focusing only on states that historically existed since independence. Geographical Controls include latitude, navigable rivers, ruggedness, precipitation, altitude, malaria, and temperature. Individual control include age, marital status, education and gender. Heteroskedastic-robust standard errors clustered at the region level in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Table E

Summary Statistics - Country Level Data					
Variable	Obs	Mean	Std.	Min	Max
Gender Ineq Index, 2013	140	0.64	0.19	0.30	0.96
Gender Development Index, 2013	140	0.94	0.07	0.72	1.03
Female Life Expectancy at 50	147	0.29	0.04	0.20	0.38
Female to Male Wage Ratio	130	0.69	0.06	0.55	0.85
Education of Women (Years)	142	7.97	3.51	1.00	13.40
Female to Male Educ Ratio	142	0.87	0.19	0.33	1.33
Female Labor Force Part, 2013	144	0.54	0.16	0.14	0.88
Years Civil Conf, 1816-2007 (%)	147	0.04	0.06	0.00	0.35
Years Civil Conf, 1816-2007, Alesina et al. 2013, (%)	147	0.04	0.08	0.00	0.55
Years Interstate Conf, 1816-2007 (%)	147	0.03	0.04	0.00	0.21
Years Civil Conf - PRIO, 1946-2007 (%)	147	0.79	0.27	0.01	1.00
Years Civil or Interstate Conf, 1816-2007 (%)	147	0.07	0.09	0.00	0.53
Years Civil Conf, 1980-2007 (%)	147	0.09	0.14	0.00	0.89
Years Civil Conf, 1900-1980 (%)	147	0.04	0.06	0.00	0.41
Years Civil Conf, 1816-1900 (%)	147	0.02	0.07	0.00	0.40
Ruggedness	146	0.19	0.16	0.01	1.21
Ruggedness Sq.	146	0.06	0.14	0.00	1.46
Distance to Coast	146	0.37	0.43	0.00	2.21
Landlocked	146	0.24	0.43	0.00	1.00
Absolute Latitude	147	27.17	17.18	1.00	64.00
Mean Precipitation	146	1048.68	731.42	14.41	3063.01
Mean Temperature	146	290.71	8.39	266.17	301.46
Log Income, 2013	147	8.59	1.51	5.56	11.64
Catholic Population, %	147	0.28	0.33	0.00	0.94
Protestant Population, %	147	0.11	0.17	0.00	0.90
Muslim Population, %	147	0.24	0.34	0.00	0.99
Christian Population, %	147	0.03	0.11	0.00	0.77
Other Religious Affiliation Population, %	147	0.09	0.12	0.00	0.63
Years Since Neolithic - Ancestry Adjusted, 1000s	147	5.36	2.10	1.36	10.40
Plow	147	0.55	0.47	0.00	1.00
Patrilocal Ancestry	147	0.69	0.40	0.00	1.00
Hunting Ancestry	147	0.06	0.05	0.03	0.31
Services, % GDP	147	53.02	13.43	13.25	80.65
Agriculture % GDP	147	16.10	14.36	0.10	72.01
Industry % GDP	146	31.05	11.48	11.34	72.15
Democracy, Polity IV	147	5.89	3.77	0.00	10.00
Elevation Avg.	147	0.59	0.70	0.02	6.57
Soil Suitability	146	37.93	22.94	0.00	98.29
Terrain Slope	147	15.07	8.33	2.94	36.46
Island Dummy	146	0.11	0.31	0.00	1.00
Desert, % of total Land	146	4.17	12.42	0.00	77.28
Malaria Suitability	146	0.98	8.26	0.00	100.00
Predicted Genetic Diversity, Anc. Adjusted	146	0.73	0.03	0.63	0.77
Economic Complexity, Ancestry	147	6.24	1.41	1.00	8.00
Political Hierarchy, Ancestry	147	3.30	1.05	1.00	5.00
Intensity of Agriculture, Ancestry	147	0.59	0.43	0.00	1.00
Large Animals, Ancestry	147	0.94	0.18	0.00	1.00
Matrilocal, Ancestry	147	0.03	0.12	0.00	0.93
Oil Revenues, % GDP	147	0.04	0.14	0.00	1.07
Gemstone Extracted since 1960, Carrats	146	7.65	35.43	0.00	264.15
Trade Openness, % GDP	146	90.68	49.15	23.73	361.59
Crop Yield Change post 1500	146	1.40	1.75	-0.47	7.94
Percentage of Native Population	146	0.75	0.31	0.00	1.00

Table F

Summary Statistics - Standard Cross Cultural Survey					
Variable	Obs	Mean	Std.	Min	Max
Female Econ. Independence	129	0.71	0.45	0	1
Achievement Taught to Women	138	5.29	1.67	1	9
Prevalent Conflict	122	0.68	0.47	0	1
Plow	170	0.17	0.38	0	1
Hunting - Relevance	166	3.38	1.09	1	6
Patrilocal	169	0.01	0.11	0	1
Matrilocal	169	0.18	0.39	0	1
Large Animal - Presence	170	0.69	0.46	0	1
Economic Complexity	170	4.82	2.45	1	8
Political Hierarchies	170	2.05	1.24	1	5
Agricultural Suitability	170	0.39	0.36	0	1
Precipitation (Cubic Mm.)	170	1271.98	980.77	1	4819
Temperature (Celsius)	170	19.21	9.01	-8	29
Elevation Avg	170	457.06	636.95	0	3690
Absolute Latitude	170	23.41	17.65	0.333	68.7
Female Part- Agriculture	150	0.27	0.45	0	1
Female Part- Weaving	170	0.14	0.34	0	1
Female Part- Hunting	170	0.86	0.35	0	1

Table G

Summary Statistics - Mexican Data					
Variable	Obs	Mean	Std.	Min	Max
<i>Individual Level Data</i>					
Jobs Scarce - Men Priority	3543	0.43	0.50	0.00	1.00
Female Labor Force Part.	1663	0.33	0.47	0.00	1.00
Age	3560	38.45	15.46	18.00	93.00
Sex	3560	0.50	0.50	0.00	1.00
Primary Schooling	3560	0.76	0.43	0.00	1.00
Secondary Schooling	3560	0.54	0.50	0.00	1.00
Married	3560	0.69	0.46	0.00	1.00
Subjective Health	3554	0.69	0.46	0.00	1.00
Long-Term Orientation	3560	0.37	0.48	0.00	1.00
Racism Against Neighbors	2129	0.16	0.36	0.00	1.00
Jobs Scarce - Connationals No Priority	3521	0.15	0.36	0.00	1.00
<i>State Level Data</i>					
Historical Conflict	32	4.50	3.97	0.00	13.00
Realizable Yield Increase	32	1.05	0.26	0.81	2.17
Realizable Yield Increase (Glacial Max.)	32	1.28	0.30	0.84	2.10
Realizable Yield Increase (Future)	32	1.09	0.26	0.72	2.00
Recent Conflicts (Post 1990-PRIO)	32	68.25	115.67	0.00	594.00
Latitude	32	21.76	3.75	16.48	30.55
Temperature	32	205.15	35.64	137.30	262.88
Rainfall	32	0.88	0.48	0.18	2.43
Malaria Suitability	32	0.60	0.66	0.00	3.19
Ruggedness	32	17.66	9.54	0.43	36.43
Rivers	32	2.92	0.75	0.81	3.73
Elevation Avg	32	1.23	0.90	0.00	2.68
Precolonial Population Density	32	0.32	0.76	0.00	3.92
Log Income per Capita	32	9.36	0.29	8.82	9.94

Table H

Survey-Level Data (ESS and GSS)					
Variable	Obs	Mean	Std.	Min	Max
<i>European Social Survey</i>					
Jobs Scarce - Men Priority (1-5)	11,218	3.37	1.27	1	5
Jobs Scarce - Men Priority (0-1)	11,218	0.53	0.50	0	1
Female Labor Force Participation	5,180	0.81	0.40	0	1
People are Helpful (1-5)	10,851	2.12	1.00	1	6
People are Helpful (0-1)	10,851	0.71	0.45	0	1
Tolerance for Others (1-5)	10,845	2.23	1.05	1	6
Tolerance for Others (0-1)	10,845	0.68	0.46	0	1
Prejudice Immigrants (1-5)	10,681	5.58	2.53	0	10
Prejudice Immigrants (0-1)	10,681	0.71	0.45	0	1
Gender	11,218	0.55	0.50	0	1
Age	11,218	46.88	17.85	13	99
Marital Status	11,218	0.35	0.48	0	1
Education Years	11,218	12.23	4.19	0	40
<i>General Social Survey</i>					
Women Suited for Politics	34,627	0.67	0.47	0	1
Troop Recruitment	34,627	0.19	0.39	0	1
Years since 1972	34,627	21.02	12.47	0	42
Marital Status	34,627	2.33	1.62	1	5
Age	34,627	46.08	17.57	18	89
Education Years	34,627	12.91	3.15	0	20
Gender	34,627	0.56	0.50	0	1

Variable Description

Cross-Country and Cross-Ethnicities Variables

- Gender Inequality Index in 2013: An aggregate index that combines information on gender disparities coming from (i) health status, (ii) access to labor markets, (iii) education, and (iv) economic and political empowerment. Taken from the UN portal on gender.
- Gender Development Index, 2013: An alternative index that also combines information as the gender inequality index. Taken from the UN data portal on gender.
- Female Life Expectancy at 50: Measures the life expectancy of women taking as given that they have reached the age of 50. Taken from the UN data portal on gender.
- Education of Women (Years): Measures the number of years that, on average, women have in a given country. Taken from the UN data portal on gender.
- Female to Male Education Ratio: Divides the number of average years of schooling of women by the number of average years of schooling of men. Taken from the UN data portal on gender.
- Female Labor Force Participation: Percentage of women between 18 and 64 who are engaged in the labor markets. Taken from the UN data portal on gender.
- Years of Civil Conflict, 1816-2007, %: Divides the number of years in which a given country experienced civil conflict between 1816 and 2007 by the the number of years in such time-span (191). Taken from Correlates of War.
- Years of Interstate Conflict, 1816-2007, %: Divides the number of years in which a given country experienced interstate conflict by the the number of years in such time-span (191). Taken from Correlates of War.
- Years of Civil Conflict - Alesina et. al. (2013), 1816-2007, %: Divides the number of years in which a given country experienced civil conflict by the the number of years in such time-span (191), as compiled by Alesina et al. (2013). Taken from Alesina, Alberto, Paola Giuliano, and Nathan Nunn (2013), "On the Origins of Gender Roles: Women and the Plough", Quarterly Journal of Economics, 128(1), pp. 469-530.

- Years of Civil Conflict - PRIO, 1946-2007, %: Divides the number of years in which a given country experienced an internal conflict by the the number of years in such time-span (61). Taken from PRIO/UCDP.
- Years of Civil Conflict, 1816-1900, %: Divides the number of years in which a given country experienced civil conflict between 1816 and 1900 by the the number of years in such time-span (84). Taken from Correlates of War.
- Years of Civil Conflict, 1900-1980, %: Divides the number of years in which a given country experienced civil conflict between 1900 and 1980 by the the number of years in such time-span (80). Taken from Correlates of War.
- Years of Civil Conflict, 1980-2007, %: Divides the number of years in which a given country experienced civil conflict between 1980 and 2007 by the the number of years in such time-span (27). Taken from Correlates of War.
- Log(GDP pc in 2103): The log value of the per-capita value of the Gross Domestic Product, in current US Dollars, at a country level. Taken from the World Bank. State-level GDP for Mexico in the year 2000 is taken from William and Valencia-Caicedo, Felipe (2016), "The Persistence of (Subnational) Fortune", *Economic Journal*, 126(598), pp. 2363-2401.
- Predicted Diversity Ancestry Adjusted: Is the Expected Heterozygosity for each country that is predicted by the relation between migratory distance from East Africa (adjusted by composition of population by region of ancestry) and the observed population diversities for indigenous populations across the globe. Taken from Ashraf, Quamrul, and Oded Galor (2013), "The 'Out of Africa' Hypothesis, Human Genetic Diversity, and Comparative Economic Development," *American Economic Review*, 103(1), pp. 1-46.
- Oil Revenues (Share of GDP): Value of gains from national export of oil, net of all costs, as a share of Gross Domestic Product. Taken from the World Bank.
- Democracy (Polity IV – Extent): Score ranging from 0 to 10 capturing the strength of democracy in the country. Taken from the Polity IV Project (Marshall et., al, 2014).

- Trade (Share of GDP): Captures the value of imports and exports as a percentage of GDP. Taken from the World Bank.
- Ruggedness: Identifies topographic heterogeneity, averaging across grid cells that are not covered by water within a country. Taken from Nunn, Nathan, and Diego Puga (2012), "Ruggedness: The Blessing of Bad Geography in Africa." *Review of Economics and Statistics*, 94 (1), pp. 20–36.
- Temperature: Mean yearly temperature in countries for 1950–2000. Taken from WorldClim—Global Climate Data.
- Precipitation: Average precipitation within a country in millimeters for 1950–2000. Taken from WorldClim—Global Climate Data.
- Precipitation variability: Variation of yearly precipitation within the country for 1950–2000. Taken from WorldClim—Global Climate Data.
- Elevation: Average elevation of the country above sea level. Taken from WorldClim – Global Climate Data.
- Island dummy: Identifies whether a country shares a land border with another country or not. Taken from the CIA's World Factbook. Landlocked: Identifies whether a country shares a border with the ocean or not, as reported by the CIA's World Factbook.
- Predicted Genetic Diversity (Ancestry Adjusted): Measures the expected heterozygosity of genes that have no phenotypical representation of a country's population, adjusted by its ancestry of origin. Taken from Galor, Oded and Ashraf Q. (2013), "The 'Out of Africa' Hypothesis, Human Genetic Diversity, and Comparative Economic Development", *American Economic Review*, 103(1), pp. 1-46.
- Years since the Neolithic (Anc. Adjusted): The number of years (in thousands), adjusted by the population composition of a country, since a country's population began practicing sedentary agriculture as the primary mode of subsistence. Taken from Putterman, Louis (2008), "Agriculture, Diffusion, and Development: Ripple Effects of the Neolithic Revolution", *Economica*, 75 (300), pp. 729-748.

- Landlocked: Identifies whether a country shares a border with the ocean or not, as reported by the CIA's World Factbook.
- Religious Composition: Variables capturing the distribution of population among religious affiliation (Catholicism, Hinduism, Protestantism, Islam, and Other Christianisms). Taken from McCleary, Rachel M. and Robert J. Barro (2006), "Religion and Economy," *Journal of Economic Perspectives*, 20 (2), 49–72.
- GDP Composition: Variables capturing the sectorial composition (agriculture, industry, and services) of a country's economic activity. Taken from the World Bank.
- Plow: Measures the adjusted average of a country's ancestry that relied on the Plow as a means of cultivating the land. Taken from he variable takes on the values of 1 to 8, with 1 indicating fully nomadic groups and 8 groups with complex settlement. Taken from Alesina, Alberto, Paola Giuliano, and Nathan Nunn (2013), "On the Origins of Gender Roles: Women and the Plough", *Quarterly Journal of Economics*, 128(1), pp. 469-530. In the ethnic-level analysis, such variable is taken from the Standard Cross Cultural Survey.
- Economic Complexity: Measures the adjusted average of a country's ancestry according to its economic complexity (nomadic, fully migratory, semi-nomadic, semi-sedentary, compact, dispersed family homes, hamlets forming a single community, relatively permanent, and complex settlements). Taken from he variable takes on the values of 1 to 8, with 1 indicating fully nomadic groups and 8 groups with complex settlement. Taken from Alesina, Alberto, Paola Giuliano, and Nathan Nunn (2013), "On the Origins of Gender Roles: Women and the Plough", *Quarterly Journal of Economics*, 128(1), pp. 469-530. In the ethnic-level analysis, such variable is taken from the Standard Cross Cultural Survey.
- Hunting: Measures the adjusted average of a country's ancestry according to its dependence on hunting as a main source of food. Taken from he variable takes on the values of 1 to 8, with 1 indicating fully nomadic groups and 8 groups with complex settlement. Taken from Alesina, Alberto, Paola Giuliano, and Nathan Nunn (2013), "On the Origins of Gender Roles: Women and the Plough", *Quarterly Journal of Economics*, 128(1), pp. 469-530. In the ethnic-level analysis, such variable is taken from the Standard Cross Cultural Survey.

- **Percentage of Native Population:** Share of the contemporary population whose ancestors resided in the same location. Taken from Putterman, Louis and David N. Weil (2010), "Post-1500 Population Flows and the Long-Run Determinants of Economic Growth and Inequality," *Quarterly Journal of Economics*, 125 (4), 1627–1682.
- **Crop Yield Change, Post 1500:** Calculates change (in difference) between the pre-Colonial and the post-Colonial potential yield in agriculture according to the availability of plants before and after the Columbian experiment. Taken from Galor, Oded and Ozak, Omer (2016), "The Agricultural Origins of Time Preference", 106(10), pp. 3064-3103.
- **Hunting:** Measures the adjusted average of a country's ancestry according to the number of political hierarchies of said ancestry. Taken from the variable takes on the values of 1 to 8, with 1 indicating fully nomadic groups and 8 groups with complex settlement. Taken from Alesina, Alberto, Paola Giuliano, and Nathan Nunn (2013), "On the Origins of Gender Roles: Women and the Plough", *Quarterly Journal of Economics*, 128(1), pp. 469-530. In the ethnic-level analysis, such variable is taken from the Standard Cross Cultural Survey.
- **Patrilocal/Matrilocal:** Measures the average of a country's ancestry that followed a post-marital residence arrangement in which the couple moved into the male's/female's location. Taken from the variable takes on the values of 1 to 8, with 1 indicating fully nomadic groups and 8 groups with complex settlement. Taken from Alesina, Alberto, Paola Giuliano, and Nathan Nunn (2013), "On the Origins of Gender Roles: Women and the Plough", *Quarterly Journal of Economics*, 128(1), pp. 469-530. In the ethnic-level analysis, such variable is taken from the Standard Cross Cultural Survey.
- **Prevalent Conflict (Ethnic-level):** Variable that indicates whether the ethnicity has prevalent conflict as a characteristic feature. Taken from the Standard Cross Cultural Survey.
- **Women Taught Achievement (Ethnic-level):** Indicates the strength with which women were taught to strive for achievement as a part of their education. Taken from the Standard Cross Cultural Survey
- **Female Economic Independence (Ethnic-level):** Indicates whether women own the product of

their labor and effort, or whether in fact such product is owned by men. Taken from the Standard Cross Cultural Survey.

- Female Participation in Agriculture/Hunting/Weaving: Indicate whether women are actively engaged in agriculture/hunting/weaving. Taken from the Standard Cross Cultural Survey

Individual Level and Subnational Variables - WVS, ESS and GSS

- Job Scarce- Men Priority: Dummy variable that takes on the value of 1 if respondents do not believe that men should have priority over women when jobs are scarce. Taken from the World Value Survey in the Mexican-level analysis, and from the European Social Survey in the analysis on second-generation migrants.
- Female labor force participation: Dummy variable that takes on the value of 1 if the respondent is a women and has reported to ever have engaged in paid labor. Taken from the World Value Survey in the Mexican-level analysis, and from the European Social Survey in the analysis on second-generation migrants.
- Long -Term Orientation: Variable that captures whether the respondent believes it to be important to inculcate in children the importance of saving and of thinking in the future. Taken from the World Value Survey
- Racism against Neighbors: Variable that captures the degree to which a respondent dislikes having people from a different race as neighbors. Taken from the World Value Survey.
- Subjective Health: Dummy variable that takes on the value of one if the respondent reports enjoying from good health and nutrition. Taken from the World Value Survey.
- Jobs Scarce - Connationals Priority: Dummy variable that takes on the value of 1 if respondents do not believe that connationals should have priority over immigrants when jobs are scarce. Taken from the World Value Survey.
- People are Helpful: Categorical or dummy variable indicating whether the respondent believe that others are willing and able to help them. Taken from the European Social Survey.

- Tolerance for Others: Categorical or dummy variable that indicates how similar is a respondent to someone who believes tolerating others who are different is important. Taken from the European Social Survey.
- Prejudice Immigrants: Categorical or dummy variable that indicates whether the respondent believes that immigrants are bad for the economy and for the nation. Taken from the European Social Survey.
- Women Suited for Politics: Dummy variable that takes on the value of 1 if the respondent believes that women are indeed suited for politics and zero otherwise. Taken from the General Social Survey.
- Age, Gender, and Marital Status are taken directly from either the WVS, the ESS or the GSS, depending on whether the object of analysis is individuals within Mexico, second generation migrants, or individuals within the US, respectively.
- Primary and Secondary education, which are dummy variables indicating whether the respondent has such level of studies, are taken directly from either the WVS, the ESS or the GSS, depending on whether the object of analysis is individuals within Mexico, second generation migrants, or individuals within the US, respectively.
- Pre Colonial Population Density: Measures the population density before the Columbian Experiment at the state level within Mexico. Taken from Malloney, William and Valencia-Caicedo, Felipe (2016), "The Persistence of (Subnational) Fortune", *Economic Journal*, 126(598), pp. 2363-2401.
- Ruggedness, temperature, precipitation, latitude, malaria suitability elevation average, and rivers at the state-level in Mexico are taken from William and Valencia-Caicedo, Felipe (2016), "The Persistence of (Subnational) Fortune", *Economic Journal*, 126(598), pp. 2363-2401.
- Recent Conflicts: Counts the number of episodes of armed conflict at the Mexican state-level that resulted in at least a death. Information constructed using PRIO/UPC geolocated database.
- Log(GDP pc in 2000): The log value of the per-capita value of the Gross Domestic Product, in current US Dollars, at the state-level in Mexico. from William and Valencia-Caicedo, Felipe

(2016), "The Persistence of (Subnational) Fortune", *Economic Journal*, 126(598), pp. 2363-2401.

- Realizable Yield Increase: Multiplies two components: (1) A ratio of Post-Colonial to Pre-Colonial potential yield based on low level of inputs and rain-fed agriculture, and (2) Contemporary Precipitation (taken from Malloney and Valencia-Caicedo, 2016) to Historical Precipitation Average in the Holocene (taken from WorldClim—Global Climate Data)
- Realizable Yield Increase (Glacial Maximum): Multiplies two components: (1) A ratio of Post-Colonial to Pre-Colonial potential yield based on low level of inputs and rain-fed agriculture, and (2) Historical Precipitation Average in the Holocene to Historical Precipitation Average in the last Glacial Maximum (taken from WorldClim—Global Climate Data)
- Realizable Yield Increase (Future): Multiplies two components: (1) A ratio of Post-Colonial to Pre-Colonial potential yield based on low level of inputs and rain-fed agriculture, and (2) Projected Precipitation Average in 2050 (taken from WorldClim—Global Climate Data) to Contemporary Precipitation (taken from Malloney and Valencia-Caicedo, 2016)