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Agri-Culture of the Motherland. The effect of Land Inequality on Gender Equality Beliefs

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Abstract

Contemporary beliefs about gender equality differ across countries. Beliefs towards gender equality focus on the position and role of women in society, which include beliefs for women's participation in the labor market, higher education, and politics. I explore how historical differences in land ownership affected gender equality beliefs. Historical land inequality has a negative effect on beliefs about gender equality. I also trace historical land inequality on the beliefs of second generation immigrants. The mother's country of origin appears to drive the effect. This finding is consistent with similar findings from cultural transmission literature.

Keywords: Culture; Beliefs; Land Inequality; Gender Equality; Immigrants

JEL Classification: Q15, Z10, J16

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1 Introduction

Cultural norms are increasingly gaining the attention of economists (Bowles, 1998; Akerlof and Kranton, 2000; Guiso et al., 2006). While traditionally, due to its vague nature, culture is understood by economists as an interesting but complicated matter, the undeniable effects it has on most outcomes of organized economic activity has reinvigorated attempts to incorporate it in economic frameworks (Bisin and Verdier, 2001; Alesina and Angeletos, 2005). Whether it is understood as an autonomous system of ideas, in the Weberian sense of protestant work ethic that shaped modern capitalism (Weber, 1930; Becker and Woessmann, 2009), or as an optimal response to environmental factors that are then systematized by each society (Piketty, 1995; Benabou and Tirole, 2005), economists agree that there is an important effect of culture (Gorodnichenko and Roland, 2011; Nunn, 2012).

Ideas such as equality are certainly not foreign to economists, and are central in policy debates regarding taxation and redistribution, as well as its effects on long term growth. Nonetheless, equality is related to moral rather than normative principles, thus different societies have given different weight and definitions to it. Nowdays, equality is becoming increasingly associated with gender equality, and the perspectives towards women in general. Specifically, attitudes towards the role of women in activities such as participating in the workforce, in politics or attending higher education, characterize the dominant culture of a society. While there are many aspects of social life that may define perceptions on such beliefs, in this paper I will concentrate on understanding the effect that historical economic parameters have on shaping these cultural norms.

My focus will be centered on inequality in land ownership and how it may have affected beliefs towards gender equality. Historically, land was one of the main means of earning a livelihood, at least until industrialization. Post-industrialization naturally has lessened the importance of land agriculture, however the effect of land ownership inequality - in earlier stages of development - may have shaped attitudes towards the role and position of women in different societies, due to its effect on economic autonomy of women. In this paper I will try to determine whether earlier land inequality played a role in shaping such cultural attitudes, and if traces of this historical economic factor can be found on contemporary beliefs.

The rest of the paper is organized as follows: Section 2 goes through literature related to culture and development, then focuses on gender equality beliefs and land inequality. Section 3 elaborates on the relevant literature and provides the theoretical argument. Section 4 presents and describes the main data used. Section 5 includes the macroeconomic cross-country anal-

ysis, with the empirical strategy and findings. Section 6 extends the baseline analysis to the individual level, and checks whether the effect of historical land inequality can be found in second generation immigrants. Section 7 concludes.

2 Literature Review

2.1 Development and persistence of Culture

The historical determinants of culture, its persistence, and effects on development are increasingly being studied by economists (Nunn, 2012). While usually culture as a concept is still debated among economists, there is a growing consensus pointing to the direction of an evolutionary process, as those "decision making heuristics, which typically manifest themselves as values, beliefs and social norms" [page 1 (Nunn, 2012)]. Following literature from anthropologists, culture is defined essentially as those "rules of thumb" that evolved over time to help individuals make decisions in uncertain environment, if acquiring information is costly or imperfect (Richerson and Boyd, 1985, 2005). The benefits of employing such "fast-and-frugal" heuristics often outweigh costs of imprecision in many environments (Gigerenzer and Goldstein, 1996).

Historical events, and more generally history, played a role shaping cultural traits and long term development. For instance, Transatlantic and Indian Ocean slave trade routes had a long-term impact on distrust levels amongst individuals in Africa (Nunn and Wantchekon, 2011). Individuals whose ancestors belonged to ethnic groups residing closer to those routes, which were heavily raided by slave traders, are less trusting today, even though these events took place more than 400 years ago. In a European historical context, Italian city states that became independent during the 12th century, developed a higher level of social capital and trust that can be traced even today (Guiso et al., 2016). These cities had a form of participatory democracy, which generated a feeling of belonging to the polity, guaranteeing property rights as well as public goods provision, ending up creating a deep sense of civic and cooperative behaviour (Putnam et al., 1993). Similarly, comparisons of medieval European populations, such as the Genoese and Maghribis, reveal that their collectivist or individualist culture was shaped by different strategies undertaken (by their ancestors) to prevent opportunistic behavior (Greif, 1993). Depending on whether a punishment was enforced collectively or not among merchants engaged with long-distance trade, the respectable cultural trajectories of each society differed, creating different cultural traits that persisted over the long run (Greif, 1994).

Historical migrations within different parts of the U.S. provide further evidence regarding the persistence of culture. The "culture of honour" that still exists in parts of Southern U.S., where one's honour and reputation is highly valued and defended even by violent means, can be explained by different histories of settlements between the North and South U.S. (Nisbett and Cohen, 1996). While the North was settled primarily by groups with a farming background, where protection of property rights was a primary concern, the South was mainly settled by Celts, which historically organized in herding cultures, thus characterized by low population densities and weaker protection of property. Hence, a culture of aggressiveness prevailed and persists even today, as relevant studies have shown (Cohen et al., 1996). Furthermore, while the identity of the settlement group may have been important, the prevalence or not of cultural traits depended on the interaction between culture and institutions. For example, counties in the U.S. South with more Scottish and Irish immigration prior to the 1800s, have higher homicide rates today compared to similar neighbouring counties (Grosjean, 2014). Nevertheless, this relation only exists in the South, highlighting the presence of weaker enforcement of the rule of law and in general weaker formal institutions. In the North, stronger formal institutions made this culture of honour detrimental, therefore this trait did not persist.

The interaction between the organizational forms of every society (i.e. institutions) and its prevalent culture have shaped different societies accordingly. The most well-known example is the colonial origins hypothesis examining the prevalence of European settlements in different regions around the world during the Age of Exploration (15th to 18th century). The mortality rates of early settlers affected the type of institutions that were implemented in different regions, setting up inclusive institutions that provided rule of law and protection of property rights where mortality rates were low, and extractive institutions otherwise (Acemoglu et al., 2001). These European settlers did not just established such growth-promoting institutions though, they also brought "themselves, their know-how and human capital", or in other words their cultural traits (Glaeser et al., 2004). Similar examples can be found by comparing early migration waves of different religious groups to North America, such as the Puritans, the Cavaliers or the Quakers (Fischer, 1989). For instance, the Cavaliers believed that inequality was a natural outcome that should be maintained in society, thus focused on existing hierarchies. Hence, they emphasized institutions providing limited education, lower taxes and an informal judicial system based on such hierarchical structures.

The role of historical events and organizational forms of every society on cultural traits is therefore significant. Nonetheless, in order to better understand the persistence of historical factors on cultural traits across societies, comparisons between societies have to go beyond

analysing specific historic instances and their effect on cultural traits, and focus on the relation of historical phases with cultural traits. In general, cross-country comparisons of cultural characteristics originated from cross-cultural psychology, and specifically from studies of Hofstede in the 1980s, with thousands of interviews that took place across IBM employees in thirty countries (Hofstede, 2001). The individual responses on a range of questions, were used to create different dimensions of culture across countries (Heine, 2008), and have been used by economists interested in culture and its effects. For instance, the dichotomy between individualism and collectivism has been used to explain long-term growth (Gorodnichenko and Roland, 2017). However, this literature focuses on comparisons without analysing the role of history determining cultural traits. Since this could be a complicated matter, I will only focus on a specific cultural trait (gender equality), and analyse the role of historical economic factors related to it.

Attitudes regarding gender equality have been used in order to understand the reasons behind the cultural differences across societies. Measuring gender equality can be a multidimensional phenomenon (Baxter, 1997), and feminist philosophy has deep divisions amongst socialist, liberal and cultural strands of thought (Maynard, 1995). Specific attitudes regarding the importance of equal participation in activities relating to the public sphere (right to work, education, vote) are usually the focus of such measurements (Fischer et al., 2000). Coming from an extensive social psychology literature, reliable multidimensional scales measuring attitudes towards the division of sex roles both in home and workplace have been created already from the 1970s and 1980s (Downing and Roush, 1985; Gerstmann and Kramer, 1997; Frieze and McHugh, 1998). However, these scales were quite comprehensive, and therefore usually only tested on smaller samples of college students, primarily in the United States (Bargad and Hyde, 1991; Liss et al., 2001). In order to make cross-national comparisons of such attitudes more appropriate, measurements from various sources started to be used by political scientists, like the Eurobarometer and the International Social Survey Programme (Wilcox, 1991; Banaszak and Plutzer, 1993). The creation of the World Values Survey (WVS) in the 1980s (and European Values Survey in the 1990s), provided an important tool for those interested in social attitudes across different countries and has been used extensively among social scientists during the last twenty years (e.g. Alesina and Angeletos, 2005; Benabou and Tirole, 2005; Guiso et al., 2006). While the WVS takes place every few years, and has an evolving design, the core battery of questions regarding attitudes towards gender equality is usually present. By combining some of the most focused questions regarding attitudes towards female labor participation, female political representativeness and female education importance, gender equality scales were cre-

ated and have been used to analyze determinants of culture across and within countries due to industrialization and post-industrialization (Inglehart and Norris, 2003).

2.2 Agriculture and Beliefs

In societies transitioning from agricultural to industrialized, a notable shift occurred in cultural norms and values related to gender equality, and has been even more pronounced in post-industrial societies (Iversen and Rosenbluth, 2011). A major factor explaining this shift has been the impact of economic growth on the type of labour – and human capital – typically found in those societies. For instance, in agricultural societies there is a lower demand for high-skilled workers, therefore a lower need for human capital development (i.e. through education) which has been documented extensively in the economics literature (e.g. Galor et al., 2009). In such societies, one of the main responsibilities allocated to women is childbearing, ensuring that a higher number of healthy children will assist – either as adults or as children – in agricultural production. Accordingly, food production and preparation is allocated to women, and jobs are usually predominately male (Nanda, 2000).

By contrast, in industrial societies, there are increasing opportunities for women to join the labour force, and supplement the family income (Geddes and Lueck, 2002), even though this effect is stronger for later phases of industrialization rather than the early stages, due to the nature of early industrial jobs (Goldin, 1988). Similarly, the earlier phases of industrialization required lower levels of human capital, compared to the later phases in which specialization became more prevalent, allowing for the creation of different types of occupations. Post-industrial societies expand these opportunities even further, due to the increasing "availability of general skills jobs not characterized by increasing returns to specific human capital, and that therefore do not penalize women for career interruption on account of child bearing and rearing" [page 36 (Iversen and Rosenbluth, 2011)]. In these societies, gender roles have converged in female labour participation, educational opportunities and characteristics of the family structure in general (Pasternak et al., 1997; Bonvillain, 1998), leading to a transformation from "male breadwinner" to "dual earning" families (Blossfeld and Drobnic, 2003).

The impact of different types of labour on beliefs regarding the role of women in society, is not an exclusively recent concern. One of the seminal works from Boserup (1970), argued that the type of technology that could be used in different types of agricultural land, ultimately laid the foundations for the role of women in each society. The main difference she pointed out was the type of agriculture practiced across societies, specifically whether they used plough

or shifting agriculture. Shifting agriculture is labor-intensive and requires women to actively participate in farm work. Plough agriculture is more capital-intensive and requires upper body strength (along with grip strength and burst of power), needed to pull the plough or control the animals pulling it. Furthermore, plough agricultures' difficulty to practice simultaneous childcare led to women exclusively assuming that responsibility. These differences in type of agriculture generated different norms about the natural role of women in society (Giuliano, 2015), which are observed across countries with similar institutions or economic development (Giuliano, 2017) and include beliefs towards labor market participation, entrepreneurship, politics, education, polygamy, and marital payments (Aberle, 1961; Goody, 1976), and actual female labor force participation (Alesina, Giuliano, and Nunn, 2013).

Changes in the agricultural production can affect gender differences in the short-term as well. Agricultural policy reforms in China during the late 1970s affected gender differences, through their impact on labour productivity (Qian, 2008). In the Maoist era, central planning focused on achieving production targets. However, a series of reforms during the early reform era (1978-1980), increased the returns on various cash crops, including tea and orchards. Women and men had a comparative advantage on different types of those crops. Men – due to height and strength – could pick fruit easier from trees, while women had a comparative advantage in picking tea leaves, a more delicate procedure. Comparing regions affected by these reforms, tea-growing regions showed an increase in average female earnings, which was translated in higher weight in household decision making, measured by fewer sex-selective abortions, less infanticide of girls, and better educational outcomes for girls.

Studies on the impact of variations of agricultural production, and their compatibility with specific crops, have showcased that there are important parameters connecting gender beliefs with land agriculture and land ownership. Differences in characteristics of the soil (e.g. slope and depth) or the amount of land required for cultivation, affected agricultural productivity and the distribution of land ownership (Engerman and Sokoloff, 1994). For instance, depending on the type of crop that could be cultivated, there is evidence that plough agriculture had an impact on the formation on beliefs about gender equality, even after accounting for geographic and environmental characteristics (e.g. terrain slope, soil depth, average temperature and precipitation) (Pryor, 1985). Empirically, this effect was documented after separating plough positive (i.e. cultivation benefits greatly from the plough) and plough negative (cultivation benefits less from the plough), and analyzing the impact of different agricultural methods (Pryor, 1985). Nonetheless, variations on the type of agricultural methods and specific crops that could be grown in different regions have been linked to differences in land inequality and

subsequent different levels of economic growth, institutional outcomes, and in general different organizational forms of each society (Sokoloff and Engerman, 2000). Specifically, cash crops (e.g. sugar, tobacco, coffee, rubber and bananas) were subject to economies of scale, while the production of food crops (wheat, maize), at least in the pre-modern period, was subject to constant returns of scale. The latter crop types were generally best suited for temperate climates, while the former for tropical areas (Easterly, 2007; Frankema, 2010). These differences had an impact on the type of crop selected by farmers, while at the same time had an impact on the average farm size and more generally land inequality (Cinnirella and Hornung, 2016). In regions characterized by economies of scale, land ownership concentration was higher, while regions where agriculture was only subject to constant returns of scale had lower levels of land inequality (Easterly, 2007). For instance, societies with a legacy of wheat agriculture (a crop from the latter category) tend to have weaker family ties, hence a more egalitarian distribution of household work (Ang and Fredriksson, 2017). Accordingly, societies characherized by weaker family ties, have higher levels of female labour participation (Alesina and Giuliano, 2010). Overall, the type of agricultural production had a significant effect on the distribution of land holdings, female labour force pariticipation, as well as gender beliefs, leaving open the possibility that these different effects can be connected.

3 Theoretical Mechanism

The previous section described the determinants of culture and their interplay with organizational forms of society (i.e. institutions). It focused on how beliefs towards gender equality have been linked to variations in the type of society (agricultural, industrial, post-industrial), primarily due to their disparate effect on labour productivity of women, and therefore their economic autonomy. Moreover, it analysed how agriculture affects beliefs towards gender equality, and how variations in agricultural production are linked to land ownership inequality and female labour force participation. I argue that these separate effects can be connected, and proceed to analyse the effect of land inequality on contemporary beliefs towards gender equality.

The main argument can be summarized as follows. Societies characterized by higher levels of earlier land inequality, were less likely to move early towards industrialization, due to higher returns on land productivity, thus making a late transition towards an industrialized economy. Land inequality is usually higher in agricultural societies[1] and, apart from historical instances

[1]For instance, the correlation between land inequality around 1960 and the contemporaneous share of population working in the agricultural sector is relatively strong (around 0.4)

of abrupt reforms (e.g. after revolutions), changes relatively slowly over time[2]. Industrialized and post-industrial economies tend to have higher levels of human capital and female labour force participation, as well as more favorable attitudes towards gender equality, compared to agricultural (Inglehart and Norris, 2003). The main reason for these different attitudes, is the economic independence of women, which was greatly enhanced as an outcome of this process. This argument follows the mechanism outlined in Galor et al. (2009), however I am more interested in the direct effect that different types of agricultural production had, on female labour force participation. In other words, increasing the economic autonomy of women should have a direct effect on beliefs towards gender equality regardless of the type of society. This is in line with arguments from Iversen and Rosenbluth (2011), in the sense that womens' skills in agricultural societies were not transferable making them less able to control their own livelihood (as opposed to post-industrial societies giving them that transferability of skills), as well as Qian (2008) who argues that when women in regions of China were given a comparative advantage in agriculture related field (tea picking), this led to "higher weight in household decision making" i.e. higher autonomy.

The historical presence of wheat agriculture and its long run effects, highlights the importance that differences in agricultural production can have on female labour force participation and beliefs towards gender equality. Wheat production historically required lower labour input requirements compared to other food crops (e.g. rice). Furthermore, it did not require as much coordination with neighbouring farms, since it did not depend on irrigation networks, but mainly relied on natural rainfall (Talhelm et al., 2014). Apart from periods of sowing and harvesting, the growing season was relatively short (spring to fall), which led to periods of extended absence for the male members of a household. Hence, women were (and most of the time required to be) able to cultivate the crops themselves, since men would spend a seasonal nomadic life, in order to take care of the cattle - securing food and access to water for it (Bates and Lees, 1977; Moran, 1982). Wheat agriculture did not require a large amount of manpower (apart from sowing and harvesting), therefore families in societies with wheat agriculture were not highly dependent to each other (Ang and Fredriksson, 2017) and used to be more egalitarian in their allocation of household tasks. This allowed smaller families to be able to produce enough food on their own, since food crops (such as wheat) in general were subject to constant returns of scale, and such regions (with constant returns of scale) were characterized by lower levels of land inequality (Easterly, 2007). Similarly, food crops were best suited for temperate

[2]For example, correlations between values of land inequality from the 1960s and 1970s, with measures prior to 1950 are high (around 0.65).

climates, and such regions were characterized by lower land inequality (Frankema, 2010). Combining the effects that differences in agricultural production had on land ownership inequality, with the effect that such inequality had on female labour productivity, one can argue that differences in agricultural production played a significant role on the economic independence of women, leading to higher female labour force participation, as well as relative beliefs in favour of such participation (Alesina and Giuliano, 2010).

The transition from agricultural to industrial and mainly post-industrial societies dramatically increased the ability of women to join the labour force, and become economically independent. Hence, societies characterized by lower levels of historical land inequality should have a more favorable view towards gender equality beliefs, since women were more likely to become economically independent from an earlier stage. On the other hand, in societies with higher levels of historical land inequality that industrialized on a later stage, views towards gender equality should be less favorable, due to the relevant – or entire – absence of jobs available for women (outside of the household) that provided economic independency. Overall, I expect that higher levels of historical land inequality have a negative effect on beliefs towards gender equality, even after agriculture ceases to be the main driving force of economic growth, in line with arguments made by both economists Nunn (2012) and anthropologists (Richerson and Boyd, 2005) defining culture as a – mostly – slowly changing variable.

The indirect effect that historical land inequality had on gender equality through education and human capital, should be mentioned as well. Societies that experienced higher levels of land inequality, were less likely to invest earlier in education, due to lower demand for high productivity workers. In other words, industrialization and early investment in education were positively correlated (Galor and Tsiddon, 1997), thus societies with lower levels of land inequality – therefore lower amount of land elites able to influence educational reforms – were able to invest earlier in education, since they were not depended as much on land productivity. This early investment in education has been linked to early development of human capital promoting institutions (Galor et al., 2009), leading to a divergence between societies and their growth path. For instance, in regions where land ownership concentration was higher, enrollment rates historically have been lower, in other words the expansion of primary schooling provided by the state took longer, and empirical findings document this result either across countries (Kourtellos et al., 2013) or counties in nineteenth-century Prussia (Cinnirella and Hornung, 2016). The need for a larger number of educated workers, in an increasingly diversified number of sectors, allowed the higher participation of women in the labour force, thereby strengething their economic autonomy, and consequently shifting beliefs towards gender equality in the long run.

To sum up, historical differences in agricultural production played an important role determining female labour participation and beliefs towards gender equality. Depending on geographical parameters, such as the type of crops that could be cultivated and whether only constant returns of scale could be implemented, regions were characterized by different levels of land (ownership) inequality. These differences in agricultural production affected female labour force participation and their economic independence, specifically by increasing such participation in regions with constant returns of scale (and lower land inequality). Earlier land inequality affected the transition from agricultural to industrial societies, a transition that increased the opportunities for women's economic independency either directly, due to the shift in the type and number of occupations available to them, or indirectly, through the increased investment in education resulting to higher levels of human capital. Therefore, one would expect that higher levels of historical land inequality should have a negative effect on contemporaneous beliefs towards gender equality, across different societies.

4 Data Description

4.1 Beliefs about Gender Equality

The data used for gender equality beliefs comes from the World Values Survey Longitudinal data (WVS, 2014), and includes information from the fourth wave (1999) until the 6th wave (2014). The sample includes 40 countries from the 4th wave, 58 from the 5th wave, and 60 countries for the 6th, for a total of 99 different countries. The main variable of interest is the equality sub-index index (Y022), a variable created by averaging three variables related to gender equality. The three variables measure beliefs towards female labour market participation (C001), female political participation (D059), and female higher education (D060). In cases of either one missing, the equality variable is a linear transformation of the two available components. The exact formula is obtained by regressing the average of the three components on the other two. A more detailed description of the formula can be found on the WVS database site.[3]

For all questions, respondents are asked whether they (strongly) agree or disagree with a given following statement. The questions are worded in such a way, that the more someone disagrees with the statement, the higher the response scores in the gender equality index. Analytical definitions are provided in the appendix (Table A1).

[3]Link for further details: http://www.worldvaluessurvey.org/WVSContents.jsp

The first variable related to gender equality (C001) is concerned with attitudes towards female labour market participation. Specifically, respondents have to state whether they agree/disagree with the following statement: *"When jobs are scarce, men should have more right to a job than women."*. Higher values of the variable C001, indicate higher levels of beliefs in favour of gender equality related to labour market participation.

The second variable related to gender equality (D059) is concerned with attitudes towards female political participation. Similarly, respondents have to state whether they agree/disagree with the following statement: *"On the whole, men make better political leaders than women do."*. Higher values of the variable D059, indicate higher levels of beliefs in favour of gender equality related to political participation.

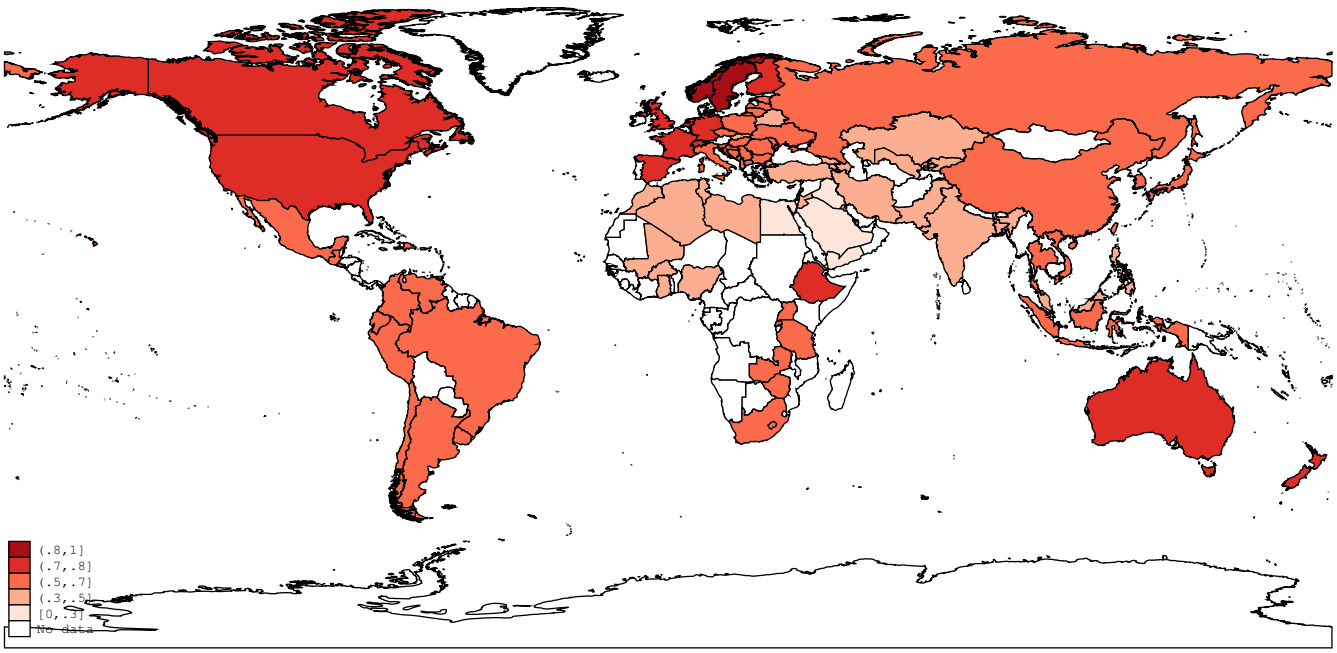
The third variable related to gender equality (D060) is concerned with attitudes towards female education. Specifically, respondents have to state whether they agree/disagree with the following statement: *"A university education is more important for a boy than for a girl."*. Higher values of the variable D060, indicate higher levels of beliefs in favour of gender equality related to education.

For all questions, I average the responses by country, for all available waves (4 to 6). The original weight provided by each survey was used, and negative or null scores (indicating whether the question was not asked or unwillingness of individual to respond), were not taken into account. The final scale for each of the three variables (C001, D059, D060) is a ratio (i.e. from 0 to 1), describing the percentage of population supporting a view in favor of gender equality. The correlation between these three variables that create the Gender Equality Scale (Y022), is strongly positive and very high (above 0.8 and 0.9 as can be seen in Table A2 of the appendix[4].

A global mapping of beliefs towards gender equality is reported in Figure 1. Higher values are coded in deep red, while lower values have a less pronounced colour. Similar to findings from the relevant literature, it is evident that a high degree of variation regarding gender equality beliefs exists across countries. For instance, countries in Western Europe and Scandinavia (e.g. Norway), along with North American ones (e.g. Canada) and Australia score higher in their respective beliefs towards gender equality. The next section explores whether land gini scores are related to this variation.

[4]Other correlations are reported in the appendix as well, for instance Table A3 reports correlations between main variables over waves, and Table A4 only between different waves.

Figure 1: Gender Equality around the World



Notes: Data taken from the Longitudinal World Values Survey database (2015). The Gender Equality Index (Y022) is a combined Scale of the following three variables: **C001** *"When jobs are scarce, men should have more right to a job than women"* (agreement coded low - higher values indicate equality). **D059** *"On the whole, men make better political leaders than women do"* (agreement coded low - higher values indicate equality). **D060** *"A university education is more important for a boy than for a girl"* (agreement coded low - higher values indicate equality).

4.2 Land Inequality

The measurement of land ownership concentration (i.e. land inequality) is of central importance to understand whether this form of inequality led to different beliefs about gender equality that can be traced even after the transition from agricultural to industrial and post-industrial societies. One of the first detailed datasets used in growth literature, comes from Deininger and Squire (1998) (hereafter, DS), who employ data taken from The Food and Agriculture Organization (FAO), a specialized agency of the United Nations focused on defeating hunger globally. In general, FAO data are based on official 'Agricultural Censuses', conducted at the beginning of each decade. Their dataset is based on the statistical Yearbook for the 1990 World Census (FAO, 1997) and contains information about the distribution of land holdings. The focus on land holdings is due to their ability to determine an individual's productive capacity as well as ability to invest, mainly in agricultural economies where land ownership is a major asset. Similar measurements of land holdings defined as *"all agricultural land assigned to a holder, that is one or two persons, rather than a group, community, state, or distinct management unit (in other words a farm)"* (Frankema, 2010), have been used by economic historians. The data

sources include both FAO reports on world census (with data from 1950 to 1990), as well as the Institut International d' Agriculture (IIA)'s International yearbook (IIA, 1936).

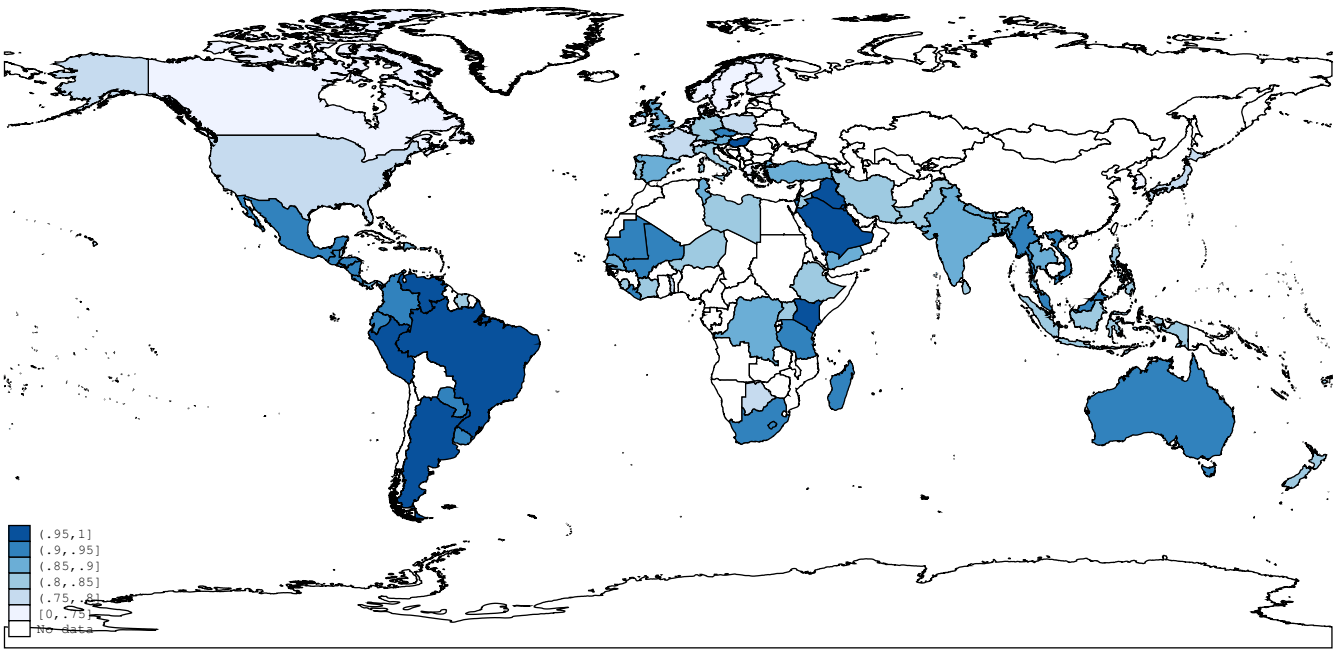
In these datasets (DS & Frankema), land is measured in size (either acres or hectares), and the total agricultural area measured includes *"all land that is part of a holding, i.e. arable land, land under permanent crops, land under permanent meadows and pastures, wood and forest land, and other land"* (Table A1, Frankema, 2010). However, there is no correction for the quality or type of land. Other shortcomings of these datasets, such as referring only to operational rather than ownership distribution of the land, or not taking into account landlessness, should be taken into account when it comes to the measurement of land ownership inequality.

An important contribution regarding the measurement of land ownership inequality comes from (Erickson and Vollrath, 2004). While other measurements focused on inequality within the group of landowners for each country (Deininger and Squire, 1998), they proposed a new measurement, accounting for the total agricultural population, which focuses on the inequality within the landholders as well as across the general population. The final measurement used in this dataset is essentially combining data from DS with their measurement accounting for landlessness. Once again, data from FAO are utilized, but instead of focusing on the land holdings, this measurement divides the total agricultural population by the number of total number of land holdings. Hence, by using this method it takes into account both inequality within land owners and across the agricultural population, providing a more nuanced picture of land ownership inequality, labelled overall Land Gini. This measurement has been used extensively (e.g. Galor et al., 2006; Vollrath and Erickson, 2007; Vollrath, 2008) and, by including landlessness, certainly provides a better description of land ownership inequality.

The main variable used for the analysis is a Land Gini (Vollrath_Land_Gini), and measures the inequality in land ownership, similar to the gini coeffiecient used to describe income inequality across 99 countries, primarily from 1960s and 1970s (up to 1990), taken from (Vollrath and Erickson, 2007). Hence, for higher values of Land Gini, there is a less equal distribution of land holdings in each country (i.e. inequality). The final measurement used contains values from 0 to 1, similar to income Gini measurements. It should be noted that the vast majority of values is higher than 0.6, due to certain methodologies followed by the authors [5]. A global mapping of land inequality is reported in Figure 2. Higher scores of land inequality are coloured in deep blue, while lower scores are coloured in ligher shades. Apart from the variation, one can observe the mismatch between data available for gender beliefs, and data for land inequality.

[5]More information regarding the exact methodology can be found in Vollrath (2007), or in the following link: https://sites.google.com/site/dietrichvollrath/landdistfinance

Figure 2: Land Inequality around the World

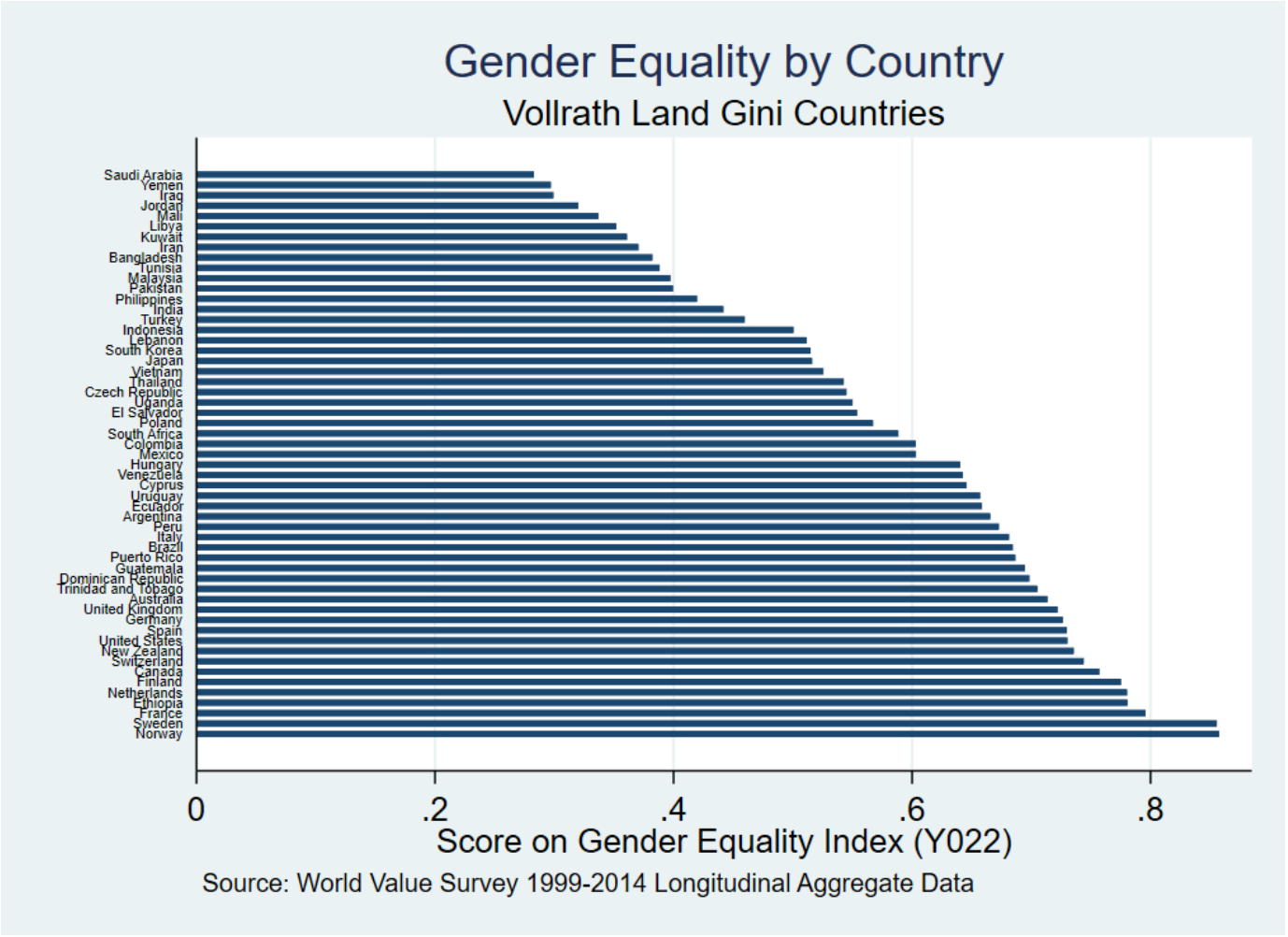


Notes: Data taken from Vollrath 2007, originally from Food and Agricultural Organization (FAO) database. FAO is a specialized agency of the United Nations focused on defeating hunger globally, and their data comes from official agricultural censuses, conducted on the beginning of each decade. Higher scores indicate higher levels of land ownership concentration, i.e. land inequality.

The variation of beliefs towards gender equality across countries from the Vollrath sample is reported in Figure 3. While both samples before merge happen to have 99 different countries, the overlap between the two samples is not as significant as one would expect, leading to a final sample of 55 countries. Only countries with available information from both the WVS and the Land Gini measurement from Vollrath and Erickson (2007) are reported. Once again, a high degree of variation exists across countries. For instance, Saudi Arabia and Yemen have the lowest scores on the Gender Equality Scale (below 0.4), while countries like Sweden or Norway are at the top of the distribution with scores above 0.8.

The correlations between Vollrath_Land_Gini and Gender Equality variables are reported in Figure 4. The upper left panel describes the relationship between the Gender Equality Scale (Y022) from WVS and Land Gini. As described earlier, the Gender Equality Scale consists of three variables measuring beliefs towards female labour participation (C001), female political participation (D059), and female educational attainment (D060). The relationship of each of those variables is reported in the other three diagrams. The upper right panel describes the relationship between the belief in female labour participation (C001) and land inequality, the bottom left between the belief in female political participation (D059) and land inequality, and

Figure 3: Gender Equality Index by Country

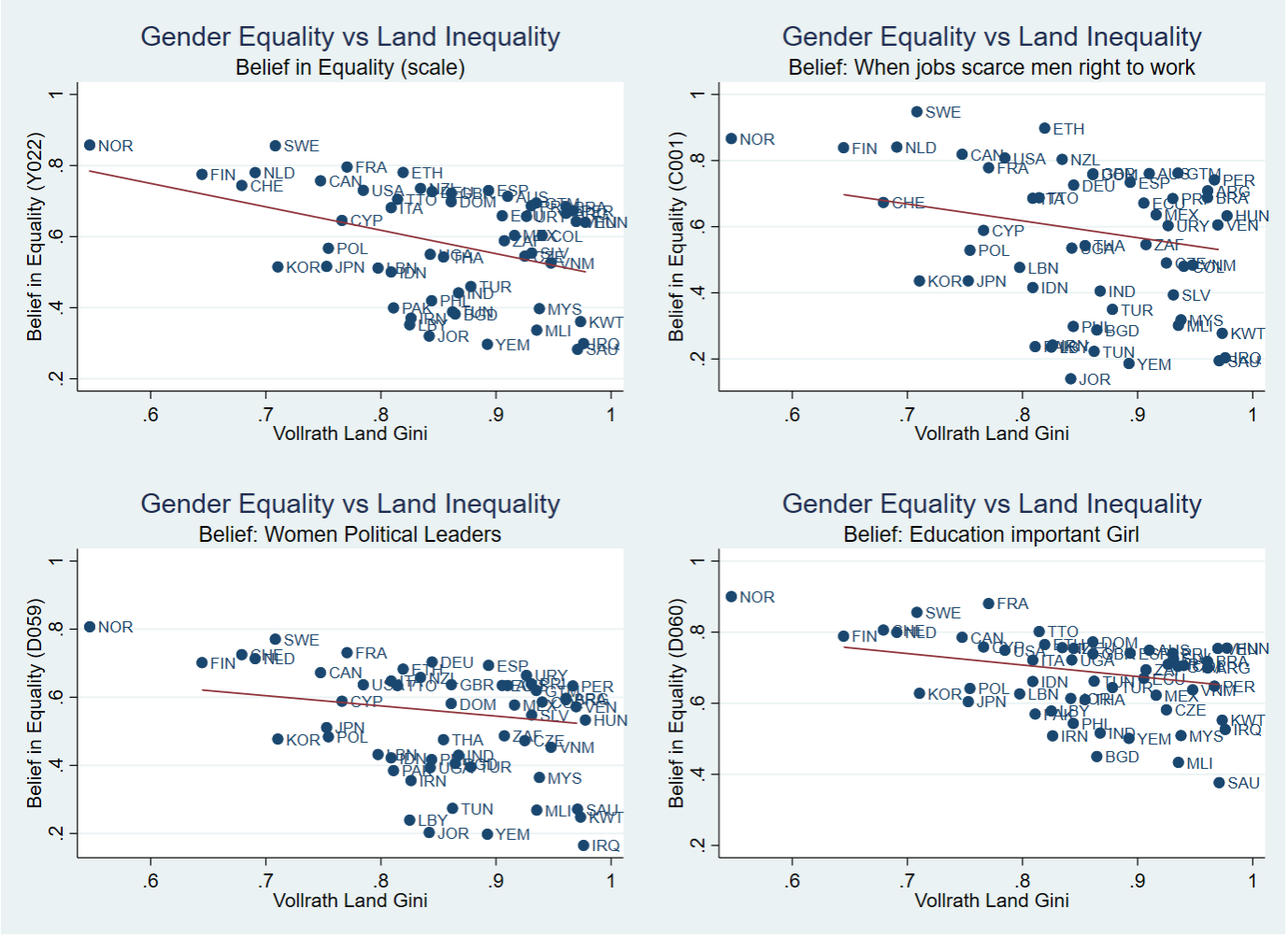


Notes: Data taken from the Longitudinal World Values Survey database (2015). The Gender Equality Index (Y022) is a combined Scale of the following three variables: **C001** *"When jobs are scarce, men should have more right to a job than women"* (agreement coded low - higher values indicate equality). **D059** *"On the whole, men make better political leaders than women do"* (agreement coded low - higher values indicate equality). **D060** *"A university education is more important for a boy than for a girl"* (agreement coded low - higher values indicate equality).

the bottom right between belief in female educational attainment (D060) and land inequality. The relationship between each of the variables measuring beliefs towards Gender Equality and Land Inequality is negative, indicating that for higher levels of land inequality during the earlier years (1960-1970), a lower level of support towards gender equality beliefs exists in latter periods (1990-2014). To further analyze this relationship, other factors should be taken into account, which is done in the next section.

Before that however, two additional measurements of land inequality are described below, to be used for robustness checks later on. The first is once again a land gini (Frank_Land_Gini), which comes from Frankema (2010), and includes data on land holdings from 1950 to 1990

Figure 4: Correlations between Gender Equality and Land Inequality



Notes: Land Gini Measurements from Vollrath (2007), measuring Land inequality, taking into account Landlessness. Higher values of Land Gini indicate inequality of land ownership. Gender Equality Index is a combined scale from the World Values Survey, consisting of the following three variables: **C001** *"When jobs are scarce, men should have more right to a job than women"* (agreement coded low - higher values indicate equality); **D059** *"On the whole, men make better political leaders than women do"* (agreement coded low - higher values indicate equality); **D060** *"A university education is more important for a boy than for a girl"* (agreement coded low - higher values indicate equality). The correlation of the three variables (C001, D059 and D060) ranges from 0.83 to 0.93.

for a few more countries (101). While this variable has a few more observations and is very similar to the main variable (Vollrath_Land_Gini), the land inequality measured is only focused on within land owners rather than across the population. Hence, it is not reflecting inequality in the distribution of land holdings as well as the main variable, but similar effects should be expected on beliefs towards gender equality.

The second complimentary measurement, comes from the extensive work of Vanhanen (2009) on measurements of Democracy. This dataset includes a variable measuring the percentage of family farms in different countries. On the one hand, it includes data that goes all the way back to the 1850s, and for later years (1950+), there are more countries (177) in this sample from the

FAO data. On the other hand, the measurement comes from combining evidence from country censuses accounting for ownership by family, rather than farm size i.e. depending on the size of the country, the median family farm size differs. This contrasts the data from FAO, which measure actual size of the land holdings, in detailed censuses focused exclusively on agricultural measurements. The measurement is weaker than the land gini measurements analyzed earlier for a couple of reasons. First, the information is obtained from general censuses that had a broad focus measuring variables unrelated to land agriculture (e.g. political institutions across time) therefore measurement errors are more likely. Second, it compares average farm size across different countries, instead of taking into account inequality within them, in other words reports whether fewer family farms existed in a country, rather than how the land size was distributed (like in the land gini measurements).

Overall, percentage of family farms is included as an additional complimentary proxy of land ownership inequality, along with the main measurement from Vollrath (Vollrath_Land_Gini - Land Gini accounting for landlessness) and the additional from Frankema (Frank_Land_Gini - Land holdings Gini). Higher values of this variable (Family_Farms) indicate a higher level of equality (i.e. less inequality). Like the other land inequality variables, it takes values from 0 to 1. Even if this measurement may not be as consistent as land gini measures, it's conceptual similarity provides an additional proxy for land inequality nonetheless.

5 Empirical Analysis - Macro Sample

5.1 Empirical Strategy

This section analyzes the empirical strategy used to describe the relationship between historical Land Inequality and contemporary beliefs towards Gender Equality. In order to further explore the relationship, the following ordinary least squares empirical specification is estimated:

$$Belief_i = \beta_1 Vollrath\_Gini_i + \beta_2 Plow_i + \beta_3 GDP_i + \beta_4 X_i + \epsilon_i \quad (1)$$

where $Belief_i$ is one of the four measurements of Gender Equality taken from the World Values Survey (i.e. Belief in Gender Equality, Belief towards female labour force participation, higher education attendance, political participation), in country i, averaged for the period between 1999-2014[6]. $Vollrath\_Gini_i$ is the Gini coefficient measuring Land ownership concentration in country i, and is taken from Vollrath and Erickson (2007). Following their approach,

[6]The distribution of this variable is reported at Figure A1

only the earliest value of each country's Land Gini is used, and for the vast majority of countries the Gini coefficient is from the 1960s and 1970s. A negative sign of the coefficient β_1 should be expected, indicating that for higher values of historical Land Inequality (in the 1960s and 70s), there is a lower average contemporary belief in favor of Gender Equality in country i.

The main control variables are historical usage of plough agriculture and GDP per capita. Plough measurements are taken from Alesina, Giuliano, and Nunn (2013), and originally come from the Ethnographic Atlas, an ethnicity-level database containing information for 1265 ethnic groups around the world, which was subsequently simplified in order to provide cultural measurements for 186 cultural provinces, referred to as the Standard Cross-Cultural Sample (Murdock, 1967)[7]. The measurement used is constructed by assigning the value of 1 if plough agriculture was exercised during the time that an ethnic group was firstly observed, and zero otherwise. Afterwards, the scores from each ethnic group are matched with corresponding presence of the groups in modern countries. The final $Plow_i$ variable takes values from 0 to 1, where a higher score indicates earlier historical usage of plough from ethnic groups present in country i. Results from relevant literature (Alesina, Giuliano, and Nunn, 2013), indicate that the presence of historical plough agriculture had a negative effect on beliefs towards gender equality. Controlling for it will ensure that such effects have been taken into account. GDP per capita measurements are taken from the Quality of Governance 2018 database (QOG et al., 2018). The GDP_i variable is averaging for the period 1990 to 2014, for country i, and is measured in gross domestic product converted to International Dollars using purchasing power parity rates, for constant prices of 2011 International Dollars. GDP per capita has a positive effect on beliefs towards gender equality (Inglehart and Norris, 2003), at least on average, hence controlling for is necessary. Other controls include continental and geographical controls, such as whether a country is landlocked, which is taken from Michalopoulos (2012), originally taken from the Global Development Network Growth Database, and information on latitude and longtitude taken from Nunn (2012).

Table 1 summarizes the information for countries used in the baseline analysis, from the Vollrath dataset. Information relevant to subsequent analysis (i.e. instrumental variables and complimentary measurements of land inequality), is included as well. The five columns report the number of observations, the mean of the variable, the standard deviation, as well as the minimum and maximum value of each.

One can easily observe, that while land Gini measurements from Vollrath are available for 99 countries, only 55 of those countries match with data from the World Values Survey. The

[7]More information about the atlas can be found on: http://eclectic.ss.uci.edu/ drwhite/worldcul/atlas.htm

Table 1: Descriptive Statistics for Macro Sample (Vollrath Dataset)

	n	mean	sd	min	max
Equality - (Y022)	55	0.583	0.159	0.283	0.858
JSC - (C001)	55	0.552	0.221	0.140	0.948
WPL - (D059)	55	0.521	0.163	0.165	0.807
UIG - (D060)	55	0.672	0.114	0.377	0.900
Vollrath_Gini	99	0.832	0.130	0.229	0.996
Frank_Land_Gini	101	0.601	0.152	0.291	0.865
Family_Farms	177	0.409	0.221	0.002	0.934
Plough	96	0.549	0.471	0.000	1.000
Landlocked	91	0.165	0.373	0.000	1.000
Latitude	97	19.133	24.427	-41.806	64.481
Longitude	97	7.297	66.616	-112.982	171.478
Log_GDP	92	9.457	1.172	6.512	11.406
Terrain_Rugged_Slope	97	3.826	3.414	0.108	17.595

Notes: Gender Equality Index (Y022) is a combined scale from the World Values Survey, consisting of the following three variables: **C001** *"When jobs are scarce, men should have more right to a job than women"* (agreement coded low - higher values indicate equality); **D059** *"On the whole, men make better political leaders than women do"* (agreement coded low - higher values indicate equality) ; **D060** *"A university education is more important for a boy than for a girl"* (agreement coded low - higher values indicate equality). Land Gini Measurements from Vollrath and Erickson (2007), measuring Land inequality, taking into account Landlessness. Land Gini from Frankema from Frankema (2010), measuring Land inequality. Both Measurements originally taken from FAO database (Food and Agricultural Organization of the United Nations), and measure Land Holdings by size in acres. Family Farms measurements taken from Vanhanen (2009) and measure the ratio of family farms in each country. Plough measurement is taken from Alesina, Giuliano and Nunn (2013), and measures the degree of Plough usage across countries. Continental Dummies are taken from Galor et al. (2009). Landlock indicators are taken from Michalopoulos (2012), source: Global Development Network Growth Database. Latitude and Longtitude variables are taken from Nunn (2012). GDP per Capita, ppp (constant 2011 international U.S. Dollars) is taken from Quality of Governence Database (2018). Terrain_Rugged_Slope is a measure of terrain ruggedness (average slope, %) for each country, and is taken from Nunn (2012).

variables measuring beliefs towards Gender Equality are named after their respective descriptions. For the belief relating to female labour participation (i.e. question on whether when jobs are scarce men should be given priority over women), the variable is named JSC (original WVS code in parenthesis - C001). The belief related to political participation (i.e. question on whether men make better political leaders than women), the variable is named WPL (original WVS code in parenthesis - D059). Finally, the belief related to university attainment (i.e. question on whether a university education is more important for a boy than a girl) the variable is named UIG (original WVS code in parenthesis - D060).

5.2 Baseline Results

The baseline results from the empirical OLS specification, describing the effect of Land Inequality on contemporary beliefs towards Gender Equality across countries are reported in

Table 2. For each case, only the β_1 coefficient of interest is reported, in order to fit all results in one table[8]. Each line reports the effect of the same independent variable (i.e. Vollrath_Gini), on a different belief towards Gender Equality. The first line is the Gender Equality Index that is computed as an average of the other three variables. The second line is the belief towards female labour force participation, namely the variable JSC. The third line is the belief towards female political participation, namely the variable WPL. The fourth line is the belief towards female higher education attendance, namely the variable UIG. Column (1) shows the negative effect of Land Ownership Inequality on all 4 contemporary beliefs towards Gender Equality, after controlling for continental fixed effects. Specifically, for the first line of column (1), an increase of one standard deviation of Vollrath Land Gini coefficient (i.e. an historical presence of higher land inequality), results in a roughly 0.56 standard deviation decrease in the average belief in favor of Gender Equality. The effect is significant at the 1% level, and has a t-value above 5. Similar results across all three variables are reported in the second, third and fourth line of column (1), documenting the negative effect of historical Land inequality on contemporary beliefs towards Gender Equality - variables JSC, WPL and UIG respectively.

Column (2) adds controls for Geographical characteristics of each country. In particular, dummies for being landlocked, and the absolute longtitude and latitude are added alongside the Continental controls. The effect of Land Inequality on all beliefs towards Gender Equality remains negative and statistically significant on the 1% level, albeit with a lower t-value, even after taking into account geographical characteristics. All three remaining variables measuring beliefs towards Gender Equality (i.e. JSC, WPL and UIG) are affected by the additional controls in the same way, thus a small derease in magnitude of the effect, but no change in statistical significance, other than a lower t-value.

Column (3) adds GDP per capita measurements as an additional control. This is an important control since it has been shown in political science literature (Inglehart and Norris, 2003) that there is a positive correlation between GDP per capita and beliefs in favour of Gender Equality, therefore it is important to see whether controlling for GDP affects the results. Reassuringly, the effect of Land Inequality on beliefs towards Gender Equality remains negative and statistically significant at the 1% level, while being very similar in magnitude, with an almost identical t-value like the earlier column. The effect is the same for the rest of the three variables, as all remain negative and statistically significant at the 1% level.

Finally, column (4) adds the historical presence of plough agriculture to the list of controls. The effect of Land Inequality on beliefs towards Gender Equality remains similarly negative

[8]Regressions with all the variables can be found in the appendix, TablesA5, A6, A7, and A8

Table 2: OLS Estimates of Land Inequality on Beliefs about Gender Equality - Macro Sample

	(1) Continental	(2) Geographical	(3) GDP	(4) All Controls
		Equality (Y022)		
Vollrath_Gini	-0.564***	-0.533***	-0.536***	-0.511***
	(-5.86)	(-4.45)	(-4.44)	(-4.05)
Adjusted R^2	0.743	0.764	0.760	0.760
		JSC (C001)		
Vollrath_Gini	-0.682***	-0.606***	-0.613***	-0.582***
	(-4.72)	(-3.08)	(-3.13)	(-2.90)
Adjusted R^2	0.658	0.664	0.659	0.656
		WPL (D059)		
Vollrath_Gini	-0.594***	-0.567***	-0.573***	-0.564***
	(-5.47)	(-4.52)	(-4.44)	(-4.17)
Adjusted R^2	0.721	0.769	0.767	0.762
		UIG (D060)		
Vollrath_Gini	-0.486***	-0.484***	-0.481***	-0.443***
	(-4.59)	(-3.66)	(-3.55)	(-3.25)
Adjusted R^2	0.664	0.659	0.653	0.671
Observations	55	55	55	55
Continetal	Yes	Yes	Yes	Yes
Geographical	No	Yes	Yes	Yes
GDP/capita	No	No	Yes	Yes
PloughAgriculture	No	No	No	Yes

Notes: T-values in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Land Gini is a ratio measuring the Inequality in Land ownership taking into account Landlessness, and the variable is from Vollrath and Erickson (2007). Originally taken from FAO database (Food and Agricultural Organization of the United Nations), and measures Land Holdings by size in acres. **Y022** is the Gender Equality Index, a combined scale from the World Values Survey, consisting of the following three variables: **JSC (C001)** *"When jobs are scarce, men should have more right to a job than women"* (agreement coded low - higher values indicate equality). **WPL (D059)** *"On the whole, men make better political leaders than women do"* (agreement coded low - higher values indicate equality). **UIG (D060)** *"A university education is more important for a boy than for a girl"* (agreement coded low - higher values indicate equality). GDP is measured in log GDP per capita, ppp (constant 2011 international U.S. Dollars) and is taken from Quality of Governence Database (2018). Plough measures the degree of historical Plough usage, and is taken from Alesina, Giuliano and Nunn (2013).

and statistically significant at the 1% level, even though both the magnitude and the t-values decrease. An increase of one standard deviation of the Gini coeffiecient, results in a 0.51 standard deviation decrease in the average belief in favor of Gender Equality. The other three variables (JSC, WPL and UIG) are affected in the same way, but all remain negative and statistically significant at the 1% level. [9]

[9]I checked for Income Inequality by adding the Gini coefficient from the World Bank Indicators as an

Overall, the effect of historical Land Inequality (land ownership concentration) on contemporary beliefs in favour of Gender Equality, appears to be negative. Since there is a time gap between the measurements of Land Inequality across countries (early 1960s and 1970s), and the data from the World Values Survey (after 1980s and until early 2010s), one may argue that reverse causality concerns are mitigated. Nonetheless, I proceed by exploiting a possible instrument, in order to establish that Land Inequality has a direct effect on beliefs about Gender Equality, and that this effect is more than a correlation.

5.3 Baseline Results - Instrumental Variable Approach

In this section I analyze a possible instrument used to explain the effect of Land Inequality on beliefs towards Gender Equality, and report the relevant results. In general, instrumental variables try to mediate problems that arise with OLS estimation, primarily issues such as reverse causality, measurement errors and biased estimates. While such endogeneity concerns can not be completely eradicated, instruments that arguably affect the dependent variable (in this case cultural norms), only through their effect on the main independent variable (in this case land inequality), and are not correlated with the error term of the explanatory equation, satisfy the exclusion restriction. In other words, parameters that can plausibly provide an exogenous variation (therefore reducing endogeneity concerns), are utilized in instrumental variable analysis. For instance, such exogeneity can be provided by geographical realities, especially since the main dependent variable of the analysis is related with agriculture.

Geographical parameters have been used in relevant literature, in order to analyze the impact of agricultural factors on cultural norms. For instance, (Alesina, Giuliano, and Nunn, 2013), use a distinction between the type of crops suitable for plough agriculture. They show that in plough-positive agricultural environments, the usage of plough agriculture was (somewhat unsurprisingly) greater than other environments. In other words, they document the effect of a change on cultural norms (e.g. belief towards female labour participation) due to the usage of plough agriculture, through an exogenous environmental parameter that satisfies the exclusion restriction (i.e. plough-positive soil only affects the cultural norms through its impact on the adoptation of plough agriculture in a society). Following a similar approach, the instrument I propose is that of terrain ruggedness and specifically whether the average slope of the each country can be used as an exogenous instrument.

additional control, and the results remain significant. However, since its inclusion severely limits the sample from 55 to 41 countries, it is excluded from the reported results.

Terrain ruggedness has been used by economists and political scientists studying various topics ranging from financial diversification (Ramcharan, 2006), civil war and conflict (Fearon and Laitin, 2003) , to social capital (Olken, 2009) and development (Nunn and Puga, 2012). Our particular interest lies in its adverse effects on cultivation, specifically through the effect of ruggedness on irrigation (FAO, 1993), as well as increasing transportation costs (Bryant, Michael, and John, Bryant et al.). One recent study by Baten and Hippe (2018) , finds a positive, though weak effect, of ruggedness on land ownership concentration, for regional Europe in the early 1900s. However, studies have shown that terrain ruggedness may have disparate effects, depending on regional and historical parameters. For instance Nunn and Puga (2012), find that while terrain ruggedness has a negative direct effect on income for most countries around the world, when analyzing development in African countries there is positive effect on income, due to historical events. Specifically, the presence of many hills, caves and cliff walls provided hiding places for those fleeing from slave traders. In a similar manner, analyzing the effect of different levels of terrain ruggedness within regions, may be different than comparing the average level within countries, and their effect on land inequality. In other words, depending on the unit of comparison, findings that seem counterintuitive may provide a meaningful tool.

The data on terrain ruggedness is taken from Nunn (2008), and originally comes from the US (1996) Geological Survey and Riley et al. (1999). It comprises of the average grid cells in a country and the difference in altitude they have with corresponding neighbouring 30-arc-second cells. In essence, the calculation averages the distance from 8 different grid cells (and their altitude), and takes the square root of all differences to create the measurement for each cell. The distance between two adjacent grid points is half a nautical mile or 926 meters. The final measurement for each country averages all cells within the country, taking into account only those not covered in water, to create a comparable cross country variable.

Table 3 summarizes the results from the IV model. The controls are added in the same order as in the OLS model[10]. Column (1) controls for continental effects. Column (2) adds geographical effects. Column (3) adds GDP per capita measurements, and finally, column (4) adds historical usage of plough agriculture. The results are similar with the OLS model, at least for the effect of Land Gini on the average belief towards Gender Equality, reported in the first line. The effect of Land Gini on beliefs towards Gender Equality is negative and statistically significant on the 1% level, albeit with a larger effect than the OLS estimation. The effect is similar on the other two beliefs towards female political participation (WPL) and belief towards female higher education attendance (UIG). As reported in the third and fourth line, the effect

[10]Regressions with additional controls can be found in the appendix, Table A9

is negative and statistically significant at the 1% level. The only exception comes from the effect of Land Gini on the belief towards female labour participation (JSC), where the effects becomes marginally insignificant and significant, depending on the controls added. However it still remains negative throught all specifications, and column (4), which includes all controls, is marginally statistically significant at the 10% level.

The first stage estimates are reported on the lower part of Table 3. Terrain ruggedness, in particular the average slope index measurements, has a negative effect on the Land Gini coefficient. This may seem counterintuitive at first, but going back to findings from literature may provide an argument explaining this finding. Rather than comparing regions of a few countries as in Baten and Hippe (2018), the unit of comparison here is countries, and terrain ruggedness has been shown to have different effects depending on historical differences Nunn and Puga (2012) [11]. Furthermore, certain geographical constraints, such as the frequent presence of mountains and hills, made the practical aspects of organizing and implementing economies of scale harder (e.g. irrigation networks), hence leading to lower levels of land inequality distribution.

Finally, it seems like a reasonable assumption - in line with the exclusion restriction, that ruggedness affects agriculture directly, and is not connected with comtemporary beliefs, other than through its effect on Land Inequality. Concerning the statistical significance of the instrument, the F-test value is reported for all columns, in the first line of the lower part of the table. While in the first column it starts around 7, it moves above 10 for the rest of the specifications, and remains above 10, even after adding historical usage of plough agriculture as a control in column (4). This satisfies the criteria of relevance of the instrument, meaning that terrain ruggedness (slope) is an relatively strong instrument for the effect of Land Gini on beliefs towards Gender Equality. In conclusion, terrain ruggedness appears to be a viable instrument connecting the negative effect of land inequality on beliefs towards gender equality. To further strengthen the baseline findings, I employ alternative measurements of land inequality in the next section, to further analyze its effect on beliefs towards gender equality.

5.4 Robustness Analysis - Alternative measurements

In this section I provide results from complimentary measurements of Land Inequality. Specifically, I employ measurements of land gini from Frankema (2010), and family farms from

[11] Another aspect that should be taken into account is that the correlation of terrain ruggedness and Land Gini (while always negative) varies significantly amongst different continents.

Table 3: IV Estimates of Land Inequality on Gender Equality - Instrument is ruggedness

	(1) Continental	(2) Geographical	(3) GDP	(4) All Controls
		Equality (Y022)		
Vollrath_Gini	-0.820***	-0.902***	-0.910***	-0.893***
	(-2.613)	(-2.979)	(-2.950)	(-2.903)
R^2	0.210	0.295	0.295	0.309
		JSC (C001)		
Vollrath_Gini	-0.684	-0.817*	-0.832*	-0.806*
	(-1.349)	(-1.770)	(-1.778)	(-1.712)
R^2	0.170	0.223	0.229	0.239
		WPL (D059)		
Vollrath_Gini	-1.055***	-1.149***	-1.163***	-1.167***
	(-3.240)	(-3.771)	(-3.784)	(-3.735)
R^2	0.102	0.265	0.268	0.266
		UIG (D060)		
Vollrath_Gini	-0.766***	-0.796***	-0.791***	-0.761***
	(-2.640)	(-2.870)	(-2.873)	(-2.868)
R^2	0.190	0.244	0.248	0.295
Continetal	Yes	Yes	Yes	Yes
Geographical	No	Yes	Yes	Yes
GDP	No	No	Yes	Yes
PloughAgriculture	No	No	No	Yes
First stage estimates			Vollrath_Gini	
Terrain_Rugged_Slope	-0.010***	-0.011***	-0.011***	-0.011***
	(-2.784)	(-3.617)	(-3.570)	(-3.395)
First stage F-stat	7.753	13.080	12.741	11.525
Underidentification test: Kleibergen-Paap rk LMstatistic	0.027	0.027	0.025	0.028
Observations	55	55	55	55

Notes: T-values in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Terrain_Rugged_Slope is a measure of terrain ruggedness (average slope, %) for each country, and is taken from Nunn (2012). Land Gini is a ratio measuring the Inequality in Land ownership taking into account Landlessness, and the variable is from Vollrath and Erickson (2007). Originally taken from FAO database (Food and Agricultural Organization of the United Nations), and measures Land Holdings by size in acres. **Y022** is the Gender Equality Index, a combined scale from the World Values Survey, consisting of the following three variables: **JSC (C001)** *"When jobs are scarce, men should have more right to a job than women"* (agreement coded low - higher values indicate equality). **WPL (D059)** *"On the whole, men make better political leaders than women do"* (agreement coded low - higher values indicate equality). **UIG (D060)** *"A university education is more important for a boy than for a girl"* (agreement coded low - higher values indicate equality). GDP is measured in log GDP per capita, ppp (constant 2011 international U.S. Dollars) and is taken from Quality of Governence Database (2018). Plough measures the degree of historical Plough usage, and is taken from Alesina, Giuliano and Nunn (2013).

Vanhanen (2009), and analyze their impact on beliefs towards Gender Equality.

Table 4 reports the results for the Frankema Land Gini measurement. Like Vollrath Gini,

Table 4: OLS Estimates of Land Inequality (II) on Beliefs about Gender Equality WVS (Macro Sample)

	(1) Continental	(2) Geographical	(3) GDP	(4) All Controls
		Equality (Y022)		
Frank_Land_Gini	-0.275**	-0.283**	-0.287**	-0.287**
	(-2.57)	(-2.18)	(-2.24)	(-2.21)
Adjusted R^2	0.675	0.695	0.689	0.683
		JSC (C001)		
Frank_Land_Gini	-0.412***	-0.465**	-0.464**	-0.464**
	(-2.71)	(-2.38)	(-2.42)	(-2.39)
Adjusted R^2	0.600	0.611	0.603	0.595
		WPL (D059)		
Frank_Land_Gini	-0.331***	-0.333**	-0.329**	-0.330**
	(-2.83)	(-2.54)	(-2.56)	(-2.53)
Adjusted R^2	0.691	0.728	0.723	0.718
		UIG (D060)		
Frank_Land_Gini	-0.105	-0.0669	-0.0809	-0.0812
	(-1.27)	(-0.68)	(-0.85)	(-0.84)
Adjusted R^2	0.541	0.544	0.555	0.546
Observations	58	58	58	58
Continetal	Yes	Yes	Yes	Yes
Geographical	No	Yes	Yes	Yes
GDP/capita	No	No	Yes	Yes
PloughAgriculture	No	No	No	Yes

Notes: T-values in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Frank Land Gini is a ratio measuring the Inequality in Land owernship, for the period from 1950 to 1990, and is taken from Frankema (2010). Originally taken from FAO database (Food and Agricultural Organization of the United Nations), and measures Land Holdings by size in acres. **Y022** is the Gender Equality Index, a combined scale from the World Values Survey, consisting of the following three variables: **C001** *"When jobs are scarce, men should have more right to a job than women"* (agreement coded low - higher values indicate equality). **D059** *"On the whole, men make better political leaders than women do"* (agreement coded low - higher values indicate equality). **D060** *"A university education is more important for a boy than for a girl"* (agreement coded low - higher values indicate equality). GDP is measured in log GDP per capita, ppp (constant 2011 international U.S. Dollars) and is taken from Quality of Governence Database (2018). Plough measures the degree of historical Plough usage, and is taken from Alesina, Giuliano and Nunn (2013).

this variable measures the land inequality within each country in terms of land ownership of arable land, but focuses only the inequality amongst landowners. The analysis is identical to the baseline, therefore similar negative effects of Land Inequality on beliefs towards Gender Equality are expected.

Each column adds the same controls as with the baseline results, and each row describes

the effect of land inequality on a different variable of beliefs towards gender equality. The order of the rows describing beliefs is the following: index of Beliefs regarding Gender Equality, beliefs towards female labour participation, beliefs towards female political participation, and beliefs towards female higher education attendance. The four columns add controls in the same way as in the baseline measurement, hence column (1) for continental controls, column (2) for geographical controls, column (3) for GDP per capita, and column (4) adds the historical presence of plough agriculture as a control variable. For all specifications and all variables (apart from beliefs towards female higher education attendance - UIG), the effect of Land Inequality on beliefs towards Gender Equality is negative and statistically significant at the 5% level. These findings are in line with the baseline results reported in the previous section, describing a negative effect of land inequality on beliefs towards Gender Equality.

Table 5 reports the results for the complimetary measurement of family farms from Vanhanen (2009). This measurement differs from the land gini utilized earlier, in the sense that higher values of family farms indicate lower levels of land inequality. Hence, a reserve effect (positive) of family farms on beliefs towards Gender Equality is expected.

The order of the results is identical to the previous measurement (and baseline results), with each row reporting a different belief (index of Gender Equality, beliefs towards female labour participation, female political participation and female higher education attendance), and each column adding an additional control (continental, geographical, GDP, and historical plough usage) to each specification. As reported earlier, data for family farms are available for more countries, increasing the total sample to 88 countries. The effect of higher percentage of family farms on beliefs towards Gender Equality (as well as each other belief), is positive and statistically significant on the 1% level. This result further reinforces the baseline findings, showing that even alternative measurements of land distribution appear to have an effect on beliefs towards Gender Equality.

5.5 Robustness Analysis - OLS extended

In this section I provide further robustness checks, to see how the baseline results are affected when more controls are added in the OLS specification. Table 6 summarizes the results from this process[12]. Columns (1) and (2) repeat the analysis in the baseline macro sample, using the same Continental and Geographical controls respectively. Column (3) now adds the religious fractionalization of a country as an additional control. In general, more tolerant and free

[12]Regressions with all the variables can be found in the appendix, Tables A10, A11, A12, and A13

Table 5: OLS Estimates of Family Farms on Beliefs about Gender Equality WVS (Macro Sample)

	(1) Continental	(2) Geographical	(3) GDP	(4) All Controls
		Equality (Y022)		
Family Farms	0.158***	0.173***	0.171***	0.175***
	(4.09)	(4.01)	(3.78)	(3.90)
Adjusted R^2	0.586	0.597	0.592	0.590
		JSC (C001)		
Family Farms	0.156***	0.173***	0.174***	0.183***
	(2.92)	(2.86)	(2.80)	(2.97)
Adjusted R^2	0.519	0.523	0.517	0.517
		WPL (D059)		
Family Farms	0.208***	0.231***	0.236***	0.243***
	(4.86)	(4.79)	(4.53)	(4.79)
Adjusted R^2	0.570	0.601	0.597	0.600
		UIG (D060)		
Family Farms	0.121***	0.122***	0.116***	0.113***
	(3.79)	(3.62)	(3.17)	(3.05)
Adjusted R^2	0.482	0.470	0.468	0.463
Observations	88	88	88	88
Continetal	Yes	Yes	Yes	Yes
Geographical	No	Yes	Yes	Yes
GDP/capita	No	No	Yes	Yes
PloughAgriculture	No	No	No	Yes

Notes: T-values in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Family Farms measurements taken from Vanhanen (2009) and measure the ratio of family farms in each country for the period 1950-1998. A higher value of the variable indicates a higher percentage of population owns property (existence of more family farms) , which translates to lower inequality in land ownership. **Y022** is the Gender Equality Index, a combined scale from the World Values Survey, consisting of the following three variables: **C001** *"When jobs are scarce, men should have more right to a job than women"* (agreement coded low - higher values indicate equality). **D059** *"On the whole, men make better political leaders than women do"* (agreement coded low - higher values indicate equality). **D060** *"A university education is more important for a boy than for a girl"* (agreement coded low - higher values indicate equality). GDP is measured in log GDP per capita, ppp (constant 2011 international U.S. Dollars) and is taken from Quality of Governence Database (2018). Plough measures the degree of historical Plough usage, and is taken from Alesina, Giuliano and Nunn (2013).

societies have a higher score of religious fractionalization (Alesina et al., 2003), which may affect beliefs towards Gender Equality, and alter the robustness of the baseline specification. The measurement is taken from (Michalopoulos, 2012), and does not match the total sample perfectly, leading to a decline from 55 to 53 countries. However, the results are still similar with the earlier columns, showing a negative efffect of Land Gini on the average beliefs towards

Gender Equality (reported in the first line), and statistically significant at the 1% level. An increase of one standard deviation in the Land Gini coefficient, results in a 0.53 standard deviation decrease in the average belief towards Gender Equality. The same negative effect remains for the rest of the beliefs regarding female labour force participation (JSC), female political participation (WPL), and female higher education attendance (UIG), which are all negative and statistically significant at the 1% level.

Column (4) adds Legal origins of the country as an additional control. Arguably, the legal norms that characterize each country, have an effect on social norms and are important determinants of cultural beliefs (Nunn, 2012). The measurements are taken from (Nunn, 2012), and include whether a country has a history of French, Socialist, German or Scandinavian law origin, keeping English law as the reference point. Adding Legal origins affects the strength of the results, even though the effect of Land Gini on beliefs towards Gender Equality (first line), remain negative and statistically significant at the 1% level. The t-value is smaller though, dropping below 3 points. In other words, now an increase of one standard deviation in the Gini coefficient, leads to a 0.40 standard deviation decrease in the average beliefs towards Gender Equality score. Furthermore, the other three variables measuring the effect of Land Gini on specific beliefs towards Gender Equality, have a more pronounced effect after the inclusion of Legal origins. For one, regarding the belief towards female labour force participation (JSC), the variable of Land Gini is now only significant on the 10% level, and the magnitude of the effect is almost reduced in half. The effect on the belief towards female political participation (WPL), is significant at the 5% level, while the effect on the belief towards female higher education attainment is the only one that remains statistically significant on the 1% level. Overall, the inclusion of Legal origins weakens the effect, even though the main variable (belief towards Gender Equality) remains negative and statistically significant in the 1% level.

Column (5) adds Colonial origins of the country as an additional control, to take into account the effect of colonial rule in institutional settings of different societies, which have been central in the development of institutions (Acemoglu et al., 2001). The interplay between institutions and cultural norms has been established in relevant literature as well (Nunn, 2012). Hence, measurements regarding the colonial origins of each country are included, in order to ensure that the results are not driven by such factors. Specifically, controls measuring British, French, Portuguese and other European colonial rule are added, keeping Spanish colonial rule as a reference point. The effect of Land Gini on average beliefs towards Gender Equality remains negative and statistically significant at the 1% level, while the magnitude slightly increases, along with the t-value. An increase of one standard deviation in the Gini coefficient

Table 6: OLS Estimates of Land Inequality on Beliefs about Gender Equality - More Controls

	(1) Continental	(2) Geographical	(3) Fractional	(4) Legal	(5) Colonial	(6) GDP	(7) All Controls
			Equality (Y022)				
Vollrath_Gini	-0.564***	-0.533***	-0.539***	-0.409***	-0.463***	-0.437***	-0.363**
	(-5.86)	(-4.45)	(-4.72)	(-2.79)	(-2.89)	(-2.78)	(-2.49)
Adjusted R^2	0.743	0.764	0.794	0.795	0.818	0.832	0.844
			JSC (C001)				
Vollrath_Gini	-0.682***	-0.606***	-0.597***	-0.378*	-0.459**	-0.417*	-0.310
	(-4.72)	(-3.08)	(-3.26)	(-1.82)	(-2.13)	(-1.99)	(-1.69)
Adjusted R^2	0.658	0.664	0.696	0.703	0.738	0.758	0.768
			WPL (D059)				
Vollrath_Gini	-0.594***	-0.567***	-0.596***	-0.420**	-0.484***	-0.450**	-0.392**
	(-5.47)	(-4.52)	(-4.80)	(-2.33)	(-2.83)	(-2.62)	(-2.25)
Adjusted R^2	0.721	0.769	0.781	0.777	0.833	0.862	0.868
			UIG (D060)				
Vollrath_Gini	-0.486***	-0.484***	-0.482***	-0.447***	-0.440**	-0.438**	-0.375**
	(-4.59)	(-3.66)	(-3.47)	(-2.80)	(-2.46)	(-2.43)	(-2.11)
Adjusted R^2	0.664	0.659	0.672	0.668	0.632	0.622	0.632
Observations	55	55	53	53	53	53	53
Continetal	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Geographical	No	Yes	Yes	Yes	Yes	Yes	Yes
Relig_Fractionalization	No	No	Yes	Yes	Yes	Yes	Yes
Legal_Origins	No	No	No	Yes	Yes	Yes	Yes
ColonialOrigins	No	No	No	No	Yes	Yes	Yes
GDP/capita	No	No	No	No	No	Yes	Yes
PloughAgriculture	No	No	No	No	No	No	Yes

Notes: T-values in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Land Gini is a ratio measuring the Inequality in Land ownership taking into account Landlessness, and the variable is from Vollrath and Erickson (2007). Originally taken from FAO database (Food and Agricultural Organization of the United Nations), and measures Land Holdings by size in acres. **Y022** is the Gender Equality Index, a combined scale from the World Values Survey, consisting of the following three variables: **JSC (C001)** *"When jobs are scarce, men should have more right to a job than women"* (agreement coded low - higher values indicate equality). **WPL (D059)** *"On the whole, men make better political leaders than women do"* (agreement coded low - higher values indicate equality). **UIG (D060)** *"A university education is more important for a boy than for a girl"* (agreement coded low - higher values indicate equality). Fractionalization measures the amount of ethnic, religious and linguistic homogeneity in a country, and is taken from Alesina (2001). Legal origins is an indicator, taking different values with respect to the legal tradition that influenced a given country (e.g. British, French, Socialist etc.) and is taken from Nunn (2012). Colonial origins is an indicator, taking different values with respect to the country that may had colonized a given country (e.g. Spanish, British etc.) and is taken from Acemoglu (2001). GDP is measured in log GDP per capita, ppp (constant 2011 international U.S. Dollars) and is taken from Quality of Governence Database (2018). Plough measures the degree of historical Plough usage, and is taken from Alesina, Giuliano and Nunn (2013).

now leads to a 0.46 standard deviation decrease of the average beliefs towards Gender Equality. Similar slight readjustments take place on the other three variables measuring Gender Equality.

Specifically, the effect on the belief towards female labour participation (JSC) is now significant on the 5% level, while the effect on the belief towards female political participation is significant on the 1% level. Finally, the effect on the belief towards higher education attainment (UIG), is now significant at the 5% level, while maintaining a similar magnitude to prior specifications. Thus, the inclusion of colonial origins as an additional control, has a mixed effect on the results on different variables measuring beliefs about Gender Equality, but the baseline measurement (Y022), remains negative and statistically significant at the 1% level.

Column (6) and (7) add the same controls used in the baseline model's columns (3) and (4), i.e. GDP and historical Plough agricultural usage. The effect of Land Gini on average beliefs towards Gender Equality (first line) remain almost identical to the previous column, at least for the inclusion of GDP per capita in column (6). The only exception is the effect of Land Gini on the belief towards female labour participation (JSC), which is now statistically significant only on the 10% level. The effect on the other two beliefs (WPL and UIG), remain statistically significant on the 5% level. However, the inclusion of historical Plough usage in agriculture (column 7), has a more pronounced impact on the results. Now the effect of Land Gini on the average beliefs towards Gender Equality is still negative and statistically significant, but only on the 5% level. The magnitude of the effect is decreased as well, since now am increase of one standard deviation of Land Gini leads to a 0.36 standard deviation decrease in average belief towards Gender Equality. Moreover, the effect of Land Gini on the other beliefs towards gender equality are weakened as well. The effect of Land Gini on the belief towards female labour participation now becomes statistically not significant (albeit with a t-value very close to the 10% level). The effect on the other two variables (WPL and UIG), remains statistically significant on the 5% level, though the magnitude of the effect is decreased. Overall, the inclusion of historical Plough agriculture has a bigger effect in the full controls specification, but the main result still hold, even though only on the 5% level.

To sum up, the effect of Land Gini on the beliefs towards Gender Equality is negative and statistically significant, even after including controls such as Religious Fractionalization, Legal and Colonial origins. The next section proceeds to investigate whether these macro effects can be found on sample of individuals, i.e. as microeconomic effects.

6 Empirical Analysis - Individual Level

6.1 World Values Survey - Empirical Strategy

I now take a complimentary approach, investigating whether the macroeconomic effects that were analyzed in the previous section can be traced in individual level beliefs towards Gender Equality. The same hypothesis, that Land Gini has an effect on the beliefs towards Gender Equality, is reexamined, only now the analysis will not just include country controls, but add individual level controls, such as age, gender, and education.

For this section, I utilize the same dataset from the previous section (World Values Survey Longditutional Dataset, 1999-2014), only now the individual beliefs are not averaged in order to be compared with country scores, rather the average score of each country is assigned to every individual as an additional control. The analysis takes place with 119.309 individuals from the 55 countries of the baseline sample reported in section 5.2. The empirical specification is given by the following equation:

$$Belief_{ijt} = \beta_1 \overline{\text{Vollrath\_Gini}}_i + \beta_2 \overline{\text{Plow}}_i + \beta_3 \overline{\text{GDP}}_i + \beta_4 X_i + \beta_5 Z_{ijt} + \epsilon_{ijt} \tag{2}$$

where, like before, $Belief_{ijt}$ is one of the four measurements of Gender Equality taken from the World Values Survey (i.e. Belief in Gender Equality, Belief towards female labour force participation, higher education attendance, political participation), only now for an individual j from country i, for the period t between 1999-2014 [13]. $Vollrath\_Gini_i$ is the Gini coeffiecient measuring Land ownership concentration in country i but is now assigned to every individual j from that country. Data for this variable is again taken from Vollrath and Erickson (2007), with only the earliest value of each country's Land Gini being used, and for the majority of individuals (from the 55 countries) the Gini coefficient is from the 1960s and 1970s. The two main controls from before are matched for each individual j in the same way, thus $Plow_i$ is the average historical usage in the country i assigned to every individual j from that country, and GDP_i is the relevant GDP per capita, matched to every individual j from country i. X_i is a vector of continental and geographic controls, similar to the ones in the previous section (continental fixed effects, latitude, longtitude, landlocked). Z_{ijt} is a set of individual level controls that are established in relevant literature (Fernández and Fogli, 2009; Luttmer and Singhal, 2011). Specifically, the controls include age, age squared, gender, highest education,

[13] It should be noted that the time subscription is not entirely accurate, given the fact that these are not the observations of the same individuals over this period. Rather, they are repeated cross-section datasets, from the same countries.

employment status, and current income. All the specifications have been weighted using the original weights provided from the WVS database. Like before, a negative sign of the coefficient β_1 is expected, indicating that for higher values of historical Land Inequality (in the 1960s and 70s), individuals j have lower average contemporary beliefs in favor of Gender Equality.

6.2 World Values Survey - Results

Table 7 summarizes the results from the individual level analysis. The format is the same as in the baseline results from section 5.2. The first line reports the effect of Land Gini on the individual's belief in favour of Gender Equality. The second, third and fourth lines report the effect of Land Gini on the individuals' belief towards female labour participation (JSC), female political participation (WPL), and female higher education attendance (UIG), respectively[14].

Column (1) includes both the individual level controls (age, age squared, gender, education, employment, and income), along the country continental fixed effects. The effect of Land Gini on the beliefs of the individual in favour of Gender Equality is negative, and statistically significant on the 1% level, in accordance with the findings from the macro analysis. However, the effect seems to be mainly driven by the last belief (UIG). Specifically, only the effect of Land Gini on the belief towards female higher education attendance (UIG) remains both negative and statistically significant at the 1% level. The effect of Land Gini on the belief towards female political participation (WPL) is negative, but not statistically significant, and the same holds for the effect of Land Gini on the belief towards female labour participation (JSC), which again is negative and not statistically significant (even though very close to the 10% level).

The rest of the columns (2-4) add the controls in the same way as in the baseline results, i.e. column (2) Geographical, column (3) GDP per capita and column (4) historical plough usage in agriculture. For each specification the individual controls are always included. Focusing on the final column (4), one can observe that the effect of Land Gini on belief in favour of Gender Equality remains negative and statistically significant in the 5% level. Similar to the first column, the effect is driven by the two last beliefs. Specifically, the effect of Land Gini on the belief towards female higher education attendance (UIG) and the belief towards female political participation (WPL) is negative and statistically significant on the 5% and 10% level respectively, while the effect of Land Gini on the beliefs towards female labour participation is negative but not statistically significant (even though once again it is close to the 10% level).

[14]Regressions with all variables are reported in the appendix, Tables A14, A15, A16, and A17,

Table 7: OLS Estimates of Land Inequality on Beliefs about Gender Equality - WVS (Micro Sample)

	(1) Continental	(2) Geographical	(3) GDP	(4) All Controls
		Equality (Y022)		
Vollrath_Gini	-0.358***	-0.385**	-0.396***	-0.324**
	(-3.12)	(-2.61)	(-2.68)	(-2.06)
Adjusted R^2	0.299	0.307	0.307	0.310
		JSC (C001)		
Vollrath_Gini	-1.203	-1.611	-1.495	-1.045
	(-1.40)	(-1.31)	(-1.34)	(-1.33)
Adjusted R^2	0.077	0.079	0.082	0.096
		WPL (D059)		
Vollrath_Gini	-0.874	-1.145*	-1.289**	-1.208*
	(-1.66)	(-1.83)	(-2.06)	(-1.78)
Adjusted R^2	0.139	0.144	0.146	0.146
		UIG (D060)		
Vollrath_Gini	-0.777**	-1.099***	-1.098**	-0.894**
	(-2.57)	(-2.70)	(-2.68)	(-2.19)
Adjusted R^2	0.098	0.099	0.099	0.101
Observations	119309	119309	119309	119309
Individual	Yes	Yes	Yes	Yes
Continetal	Yes	Yes	Yes	Yes
Geographical	No	Yes	Yes	Yes
GDP/capita	No	No	Yes	Yes
PloughAgriculture	No	No	No	Yes

Notes: T-values in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Land Gini is a ratio measuring the Inequality in Land ownership taking into account Landlessness, and the variable is from Vollrath and Erickson (2007). Originally taken from FAO database (Food and Agricultural Organization of the United Nations), and measures Land Holdings by size in acres. **Y022** is the Gender Equality Index, a combined scale from the World Values Survey (Longitudinal data from 1999 to 2014), consisting of the following three variables: **JSC (C001)** *"When jobs are scarce, men should have more right to a job than women"* (agreement coded low - higher values indicate equality). **WPL (D059)** *"On the whole, men make better political leaders than women do"* (agreement coded low - higher values indicate equality). **UIG (D060)** *"A university education is more important for a boy than for a girl"* (agreement coded low - higher values indicate equality). GDP is measured in log GDP per capita, ppp (constant 2011 international U.S. Dollars) and is taken from Quality of Governence Database (2018). Plough measures the degree of historical Plough usage, and is taken from Alesina, Giuliano and Nunn (2013). All specifications include Individual controls, such as age, age squared, gender, highest education, employment status, income, and are weighted using the original weights provided from the WVS database.

6.3 2nd Generation Immigrants - European Social Survey

Certain issues exist with the methodology and results outlined in sections 6.1 and 6.2. To begin with, there is the problem that since the data are pseudo-panel (i.e. not same individuals

in all waves), it is hard to argue that the effect of Land Gini on beliefs in favour of Gender Equality is captured successfully. The main reason is that the dependent variable (beliefs) changes over time - albeit slowly - due to other unobservable factors (e.g. institutions). Furthermore, the time period (1999 to 2014), is approximately 15 years[15], making comparisons between individuals from different generations even harder. Focusing on a different sample, as well as methodology, could provide a reasonable alternative.

There is a strand of literature trying to establish economic effects on cultural norms, by focusing on immigrants. The main reason for using samples of immigrants in order to understand how cultural norms are affected by economic parameters is due to the fact that it's an easier way to capture the differences clearly. Whether it is for investigating how the fertility rates affect beliefs of second generation women in the U.S. (Fernández and Fogli, 2009), or how redistribution levels in the home country affect the beliefs towards redistribution and political behavior of second generation immigrants (Luttmer and Singhal, 2011), the use of second generation immigrants allows a better disentaglement of what can be attributed on the persistance and trasmission cultural norms. The approach I follow is similar with Michalopoulos (2012), and closer to Litina (2016), where she uses the land suitability of the country of origin, to show its effect on the trust levels of immigrants. My approach is focused solely on the second generation of immigrants, in order to bypass issues of selective migration that may influence the decision for the country of destination.

Since the longitudinal dataset from WVS does not provide enough information for this exercise, I turn on data from the European Social Survey (ESS, 2016). Unfortunately, only one of the questions measuring beliefs towards Gender Equality has been asked in this survey, and it is identitical to the question from the World Values Survey regarding female labour participation. Specifically, the question asked was: *"When jobs are scarce, men should have more right to a job than women."*, which I already have coded earlier as JSC. Once again, higher values of this variable indicate positive view towards Gender Equality. By combining this dataset with the information on the historical Land Inequality, I try to establish the effect of Land Gini on contemporary beliefs towards female labour participation in the next section.

6.4 2nd Generation Immigrants - Empirical Methodology

The data on second generation immigrants comes from the 8th wave of the European Social Survey, and took place in 2016, across 23 European countries. My interest lies on the country

[15]Regressions including additional waves are reported in Table A18

of origin of the parents, for those who were born in the current country of residence (and can be considered natives). In other words, I focus only on second generation immigrants, and analyze how the historical Land Inequality in the country of origin of their parents may have affected their beliefs towards female labour participation.

Ideally, it would be preferable to use a measure that went further back in time, i.e. before the 1950s, since that would be closely related to the relevant literature. The land gini measurements utilized are primarily from the 1960s and 1970s, while the data for beliefs of individuals are from 2016. The main concern is whether the ancestors of the second generation immigrants resided in their respective country of origin during that period. Since the survey only includes adults, even the youngest respondent was born prior to 2000. Land inequality is a slowly changing variable, and the correlation between values from the 1960s and 1970s, going into the 1990s is very high (above 0.8). The same applies for periods earlier than the 1960s, as correlations for either one of the alternative measurements (Frankema Gini or Family Farms) between measurements from 1960s and prior to 1950 are high as well (around 0.8). Hence, even in extreme cases such as parents moving into the country in the early 1950s (i.e. second generation immigrants older than or around 65 years old), the land inequality in their country of origin was not substantially different than the measurement from the 1960s and 1970s.

Similarly, second generation immigrants born in late 1990s, had parents that were likely born in the their country of origin during the 1970s. Anecdotally, the author himself happens to be a second generation immigrant (even though not currently residing in either country of origin or country of birth), whose parents were born during the 1960s in their country of origin, before moving to a different country during the 1980s. Overall, in both cases (very young or very old respondents), I argue that parents of second generation immigrants likely resided in their respective country of origin during a period with similar characteristics (regarding land inequality) with the measurements from the 1960s and 1970s.

I split the sample of second generation immigrants to three different but overlapping samples. Those who only their mother is a first generation immigrant, only father immigrant, and either one of their parents is a first generation immigrant. The reason for this is to distinguish whether there is a difference, in accordance to findings from relevant literature [Fernández and Fogli (2009); Luttmer and Singhal (2011) etc.] showing that such transmission effects usually can be attributed to the mother's side. Unsurprisingly, the sample of either parents being an immigrant is larger, and consists of 2075 individuals. The other two samples are smaler, and consist of 1312 individuals for the father's effect, and 1299 for the mother's effect. Information on countries of birth and ancestral origin, as well as the percentages of each in the relevant

samples, are reported in the appendix (Table A19).

The empirical specification analyzing the impact of historical land inequality on the contemporary beliefs of second generation immigrants, is given from the following equation:

$$Belief_{ij} = \beta_1 \overline{\text{Vollrath\_Gini}}_i + \beta_2 \overline{\text{Plow}}_i + \beta_3 \overline{\text{GDP}}_i + \beta_4 X_k + \beta_5 Z_{ij} + \epsilon_{ij} \quad (3)$$

where $Belief_{ij}$ is the belief towards female labour force participation (JSC), for an second generation immigrant individual j, from parent's country of origin i. $Vollrath\_Gini_i$ is the Gini coefficient measuring Land ownership concentration in country of ancestral origin i and is assigned to every individual j depending on the country of origin of the parent. Data for this variable is taken from Vollrath and Erickson (2007), with only the earliest value of each country's Land Gini is used (from the 1960s and 1970s).

The two main controls from the country-level analysis are matched for each individual j in the same way, thus $Plow_i$ is the average historical usage in the country of origin i of the parent and assigned to every individual j responding to the survey. GDP_i is the relevant GDP per capita, matched to every individual j again according to the ancestral country of origin i. X_k is a vector of country fixed effects for country of residence k. Z_{ij} is a set of individual level controls and include age, age squared, gender, highest education, employment status, religion and current income. All the specifications have been weighted using the original weights provided from the ESS database, and the standard errors are clustered at the respective country of origin level. Like before, a negative sign of the coefficient β_1 is expected, indicating that for higher values of historical Land Inequality in the parental country of origin (in the 1960s and 70s), individuals j have lower contemporary beliefs in favor of Gender Equality.

6.5 2nd Generation Immigrants - Results

The results for the 2nd Generation Immigrants for the European Social Survey are reported at Table 8. The only belief regarding Gender Equality is towards the female labour participation, JSC, which is identical to the one previously used in the World Values Survey sample. Three subsamples are reported, on different lines. Specifically, the first line reports the results for the sample of 2nd Generation immigrants that have either a father or mother who was a 1st Generation immigrant, but were born in the country of current residence (where the survey took place). The second line reports just the effect of the father's country of origin, on a subsample of the 2nd Generation immigrants. Similarly, the third line reports the effect of Land Gini in the country of mother's side, on the beliefs towards female labour participation

of 2nd Generation immigrants. While overlapping, these samples are not the summary of each others, since it is possible that a second generation immigrant may only have one immigrant parent. However, in order to distinguish the effects between the ancestral country of origin, this sampling took place.

Column (1) is the baseline specification, and includes only country fixed effects. The effect of historical Land Gini in the ancestral country of origin appears to have a negative and statistically significant effect on contemporary beliefs towards female labour participation. While the effect is negative and statistically significant for all specifications, it is only significant on the 10% level for the first and second line (effect of either parents being an immigrant, or father only being an immigrant), while it is strognly significant (1% level) for the effect of Land Gini in the mother's country of origin, on second generation immigrant's beliefs towards female labour participation. Hence, in line with results from the cross-country sample, individuals that are descended by mothers from countries experiencing higher levels of land inequality in the early 1960s and 1970s are less likely to be in favour of female labour participation, all else being equal.

Column (2) begins adding relevant controls to the baseline specification. For this column, personal characteristics such as age, age squared and gender are added as controls. The effect of land gini in the ancestral country remains similar across the different lines, with the only difference being a slight increase for father's efffect, which now is negative and statistically significant on the 5% level (instead of 10%). However the effect of having either one parent being a first generation immigrant remains negative but only statistically significant on the 10% level, while the efffect of land gini in the mother's country of origin has a negative and statistically significant effect (on the 1% level) on the beliefs towards female labour market participation.

Column (3) adds various questions regarding religion in all the specifications. Specifically, the questions asked are the following three: *"How religious are you?" "How often do you attend religious services apart from special occasions?" "How often do you pray apart from at religious services?"*. As with the cross-country sample, measuring the importance of religion attributes towards a cultural norm is imporant, in order to be certain that such choices are not affected by these factors. It is in this specification that the effect of either parents becomes insignificant, while remaining negative and close to the 10% level. Reassuringly, the other two lines have similar results, namely the effect from the father's side is still negative and statistically significant on the 5% level, while the effect of land gini from the mother's country of origin has a negative and statistically significant effect (at 1% level) on the beliefs towards

Table 8: OLS Estimates of Land Inequality on Gender Equality Belief: When Jobs Scarce, Right to Work (C001) - ESS Sample (2nd Generation Immigrants)

	(1) Baseline	(2) Personal	(3) Religion	(4) Education	(5) Income	(6) GDP	(7) All Controls
Either Parent Sample							
p_Vollrath_Gini	-1.071*	-1.061*	-0.913	-0.849	-0.830	-1.287	-1.307
	(-1.73)	(-1.71)	(-1.50)	(-1.54)	(-1.40)	(-1.63)	(-1.65)
Observations	2075	2075	2075	2075	1747	1747	1747
Adjusted R^2	0.097	0.101	0.137	0.172	0.175	0.175	0.175
Father's Origin Sample							
fs_Vollrath_Gini	-0.952*	-1.053**	-0.912**	-0.846**	-0.765	0.281	0.207
	(-1.82)	(-2.05)	(-2.15)	(-2.15)	(-1.40)	(0.39)	(0.28)
Observations	1312	1312	1312	1312	1097	1097	1097
Adjusted R^2	0.100	0.108	0.144	0.176	0.183	0.183	0.183
Mother's Origin Sample							
ms_Vollrath_Gini	-2.377***	-2.340***	-2.122***	-1.972***	-2.365***	-2.365***	-2.420***
	(-3.53)	(-3.47)	(-3.50)	(-3.52)	(-4.04)	(-4.92)	(-5.05)
Observations	1299	1299	1299	1299	1082	1082	1082
Adjusted R^2	0.095	0.101	0.160	0.184	0.189	0.188	0.188
CountryFE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Personal	No	Yes	Yes	Yes	Yes	Yes	Yes
Religion	No	No	Yes	Yes	Yes	Yes	Yes
Education	No	No	No	Yes	Yes	Yes	Yes
Income	No	No	No	No	Yes	Yes	Yes
GDP/capita	No	No	No	No	No	Yes	Yes
PloughAgriculture	No	No	No	No	No	No	Yes

Notes: T-values in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Land Gini is a ratio measuring the Inequality in Land ownership taking into account Landlessness, and the variable is from Vollrath and Erickson (2007). Originally taken from FAO database (Food and Agricultural Organization of the United Nations), and measures Land Holdings by size in acres. The dependent variable is taken from the European Social Survey (Wave 8), and matches the WVS question measuring Gender Equality: **C001** *"When jobs are scarce, men should have more right to a job than women"* (agreement coded low - higher values indicate equality). There are three subsamples, depending on the respondents: p_Vollrath_Gini captures the average Land Gini of the two parents birth country, in case either of them is an immigrant. The other two variables (fs_Vollrath_Gini and ms_Vollrath_Gini) capture the average Land Gini on the Birth Country of Father and Mother respectively (i.e. only Father's/Mother's effect). GDP is measured in log GDP per capita, ppp (constant 2011 international U.S. Dollars) and is taken from Quality of Governence Database (2018). Plough measures the degree of historical Plough usage, and is taken from Alesina, Giuliano and Nunn (2013). Religious controls include answers to the following questions: *"How religious are you?" "How often do you attend religious services apart from special occasions?" "How often do you pray apart from at religious services?"*. Other individual controls include age, gender, highest education, employment status, income, and are weighted using the original weights provided from the ESS database.

female labour participation.

Column (4) adds higher education as a control variable to the regressions. The effects remain similar with the previous column even though they have lower t-values than before. Once again, the effect of land gini of the mother's country of origin on beliefs towards female

labour partcipation is negative and statistically significant on the 1% level, while the effect from the father's land gini is negative and statistically significant on the 5% level. The effect of having either one parent being a first generation immigrant is negative but not signifcant.

Column (5) adds self reported level of income as a control variable. Unfortunately this variable isn't available across all countries, leading to a decline in the number of participants by roughly 300 (depending on the sample). Furthermore, the inclusion of self-reported income changes the effect from the father's country of origin, making it not statistically significant. Like before, the effect from having either parent as a first generation immigrant is negative but not significant as well. The only effect that remains negative and statistically significant on the 1% level is from the mother's country of origin. Interestingly, the effect becomes even stronger (increased t-values), which is probably due to the change of sample size. Overall, after adding all individual controls, the only effect that seems to be signifcant is that of the land gini on the mother's country during the 1960s and 1970s on the beliefs towards female labour participation (in 2016).

Column (6) adds the average GDP in the country of respective origin as a control. Regarding the fist line, i.e. whether an individual has either one immigrant parent, the GDP from the mother's country is matched as a control. The effect of land gini on the beliefs towards female labour participation remain negative and not statistically significant, for the first line (either parent immigrant). A somewhat different effect is now reported in the second line (effect from the father's country of origin). The coefficient actually turns positive, but is quite far away from being statistically significant. However, the effect of land gini from the mother's country of origin on the beliefs towards female labour participation remains negative and strongly statistically significant on the 1% level.

Finally, column (7) adds the presence of historical plough agriculture as a control variable. The results are almost identical to the previous column. Specifically, the only effect that remains negative and statistically significant (at 1% level) is that of the land gini in the mother's country of origin. In other words, for higher levels of land inequality in the mother's country of origin (during the 1960s and 1970s), there is a negative effect on the contemporary beliefs towards female labour participation of second generation immigrants born and raised in one of the country in the ESS sample.

To sum up, this section analyzed the impact that Land Inequality in the ancestral country of origin has in contemporary beliefs of second generation immigrants. While in the beginning it appeared that either side of the parents influence the development of this specific belief, adding a series of personal and ancestral country controls showcased that the effect is primarily driven

by the mother's country of origin. This finding is in line with relevant literature (Luttmer and Singhal, 2011), that cultural transmission through generations is dominated by the mother's side of the effect.

7 Conclusion

The determinants of cultural norms are still a relatively new interest to economists. Beliefs towards Gender Equality are increasingly receiving more attention in both the public sphere and research. In this study I tried to add to this growing literature by examining one factor that has shaped societies, namely the distribution of land holdings in each country. I show that on average, countries that have experienced higher levels of land inequality in the past, are less likely to be characterized by favourable views towards Gender Equality. In other words, land inequality in the past, had a negative effect to contemporary beliefs in favour of Gender Equality, such as views regarding female labour participation, higher education attendance and political participation. Using a measurement of terrain ruggedness (average slope of each country) as an instrument I tried to show that this relationship is more than a simple correlation. To further strengthen the baseline results, I showed that similar effects can be found when similar measurements of land inequality are utilized.

Moving beyond cross-country comparisons, the effect of land inequality can be traced to individuals as well. Using individual level data from the latest wave of the European Values Survey, I have shown that historical land inequality may have been a determinant factor shaping beliefs of second generation immigrants. The effect appears to be driven by the mother's country of origin, in line with relevant literature on cultural transmission.

In conclusion, the importance of historical economic factors in determining cultural norms, is a promising field of research. While it's undeniable that culture is shaped by various social and anthropological circumstances, the role of history and past economic realities should be highlighted, in order to understand the role of culture in economics.

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A Appendix

Table A1: Definition of variables from World Values Survey

C001 - When Jobs are scarce (JSC)	The exact wording of the question is as follows: *"When jobs are scarce, men should have more right to a job than women."* The original coding in the WVS database, has three answers. For agreeing, the response is coded as 1, disagreeing is coded as 2, and for neither agreeing nor disagreeing the response is coded as 3. Following the logic used to create the equality sub-index, this variable is re-coded in order to make the three main variables similar. Questions for which an respondent agrees with the statement, are re-coded as 0. Questions for which an respondent disagrees, are re-coded as 1. Finally, questions for which an respondent neither agrees nor disagrees, are re-coded as 0.5. Higher values indicate beliefs in favour of gender equality.
D059 - Women as Political Leaders (WPL)	The exact wording of the question is as follows: *"On the whole, men make better political leaders than women do."* The original coding in the WVS database, has four answers. When a respondent strongly agrees with the statement, the response is coded as 1, if the respondent only agrees it is coded as 2. When a respondent strongly disagrees with the statement is coded as 4, while disagreement is coded as 3, and no answer is coded as -1. Following a similar process with variable C001, this variable is re-coded in order to measure whether a response is in favour of gender equality. Higher values indicate beliefs in favour of gender equality.
D060 - University is Important for a Girl (UIG)	The exact wording of the question is as follows: *"A university education is more important for a boy than for a girl."* The original coding in the WVS database, has four answers, and is identical to variable (D059). When a respondent strongly agrees with the statement, the response is coded as 1, if the respondent only agrees it is coded as 2. When a respondent strongly disagrees with the statement is coded as 4, while disagreement is coded as 3, and no answer is coded as -1. Following a similar process with variable C001, this variable is re-coded in order to measure whether a response is in favour of gender equality. Higher values indicate beliefs in favour of gender equality.

Note: notes here.

Table A2: Correlations between WVS Variables - Vollrath Sample

	(1)
Y022	
Y022	1
C001	0.978***
D059	0.970***
D060	0.908***
C001	
C001	1
D059	0.934***
D060	0.837***
D059	
D059	1
D060	0.833***
N	55

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table A3: Correlations between Waves over time - main variables

	(1) Y002	(2) C001	(3) D059	(4) D060
main var. Y022	1			
wv4_Y022	0.973***			
wv5_Y022	0.988***			
wv6_Y022	0.972***			
C001		1		
wv4_C001		0.982***		
wv5_C001		0.982***		
wv6_C001		0.967***		
D059			1	
wv4_D059			0.976***	
wv5_D059			0.988***	
wv6_D059			0.974***	
D060				1
wv4_D060				0.928***
wv5_D060				0.971***
wv6_D060				0.901***
N	99	99	99	99

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table A4: Correlations between Waves over time - waves 4 to 6

	(1) Y002	(2) C001	(3) D059	(4) D060
wv4_Y022				
wv4_Y022	1			
wv5_Y022	0.945***			
wv6_Y022	0.924***			
wv5_Y022				
wv5_Y022	1			
wv6_Y022	0.960***			
wv4_C001				
wv4_C001		1		
wv5_C001		0.954***		
wv6_C001		0.962***		
wv5_C001				
wv5_C001		1		
wv6_C001		0.955***		
wv4_D059				
wv4_D059			1	
wv5_D059			0.958***	
wv6_D059			0.934***	
wv5_D059				
wv5_D059			1	
wv6_D059			0.948***	
wv4_D060				
wv4_D060				1
wv5_D060				0.824***
wv6_D060				0.594**
wv5_D060				
wv5_D060				1
wv6_D060				0.847***
N	99	99	99	99

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table A5: OLS Estimates of Land Inequality on Beliefs about Gender Equality - Macro Sample - All variables - Y022

	(1) Continental	(2) Geographical	(3) GDP	(4) All Controls
		Equality (Y022)		
Vollrath_Gini	-0.564***	-0.533***	-0.536***	-0.511***
	(-5.86)	(-4.45)	(-4.44)	(-4.05)
Africa dummy	-0.229***	-0.0818	-0.0980	-0.120
	(-3.50)	(-0.86)	(-1.09)	(-1.39)
Europe dummy	-0.0596**	0.116	0.110	0.0871
	(-2.45)	(1.60)	(1.57)	(1.26)
Asia dummy	-0.310***	-0.212***	-0.223***	-0.250***
	(-16.01)	(-4.88)	(-4.69)	(-5.02)
Oceania dummy	0	0	0	0
	(.)	(.)	(.)	(.)
Americas dummy	-0.0394***	0.172*	0.163*	0.150
	(-2.97)	(1.71)	(1.69)	(1.62)
Dummy for Landlocked countries		-0.0426	-0.0460	-0.0482
		(-1.29)	(-1.24)	(-1.30)
Latitude		-0.000612	-0.000547	-0.000730
		(-0.90)	(-0.76)	(-0.95)
Longitude		0.000799	0.000792	0.000775
		(1.63)	(1.62)	(1.63)
Log GDP per capita			-0.00635	-0.00968
			(-0.31)	(-0.48)
Usage of Plough Agriculture				0.0390
				(1.20)
Constant	1.217***	1.047***	1.119***	1.129***
	(14.42)	(7.09)	(4.33)	(4.36)
Adjusted R^2	0.743	0.764	0.760	0.760
Observations	55	55	55	55
Continetal	Yes	Yes	Yes	Yes
Geographical	No	Yes	Yes	Yes
GDP/capita	No	No	Yes	Yes
PloughAgriculture	No	No	No	Yes

Notes: T-values in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Land Gini is a ratio measuring the Inequality in Land ownership taking into account Landlessness, and the variable is from Vollrath and Erickson (2007). Originally taken from FAO database (Food and Agricultural Organization of the United Nations), and measures Land Holdings by size in acres. **Y022** is the Gender Equality Index, a combined scale from the World Values Survey, consisting of the following three variables: **JSC (C001)** *"When jobs are scarce, men should have more right to a job than women"* (agreement coded low - higher values indicate equality). **WPL (D059)** *"On the whole, men make better political leaders than women do"* (agreement coded low - higher values indicate equality). **UIG (D060)** *"A university education is more important for a boy than for a girl"* (agreement coded low - higher values indicate equality). GDP is measured in log GDP per capita, ppp (constant 2011 international U.S. Dollars) and is taken from Quality of Governence Database (2018). Plough measures the degree of historical Plough usage, and is taken from Alesina, Giuliano and Nunn (2013).

Table A6: OLS Estimates of Land Inequality on Beliefs about Gender Equality - Macro Sample - All variables - C001

	(1) Continental	(2) Geographical	(3) GDP	(4) All Controls
		JSC (C001)		
Vollrath_Gini	-0.682***	-0.606***	-0.613***	-0.582***
	(-4.72)	(-3.08)	(-3.13)	(-2.90)
Africa dummy	-0.330***	-0.154	-0.196	-0.223
	(-3.34)	(-1.02)	(-1.37)	(-1.65)
Europe dummy	-0.127***	0.0740	0.0577	0.0293
	(-3.84)	(0.65)	(0.52)	(0.26)
Asia dummy	-0.458***	-0.353***	-0.381***	-0.414***
	(-16.93)	(-5.23)	(-5.11)	(-5.13)
Oceania dummy	0	0	0	0
	(.)	(.)	(.)	(.)
Americas dummy	-0.0911***	0.166	0.142	0.126
	(-3.44)	(1.07)	(0.95)	(0.86)
Dummy for Landlocked countries		-0.0595	-0.0683	-0.0711
		(-1.22)	(-1.22)	(-1.27)
Latitude		-0.000419	-0.000249	-0.000475
		(-0.36)	(-0.21)	(-0.37)
Longitude		0.00103	0.00102	0.000995
		(1.35)	(1.32)	(1.32)
Log GDP per capita			-0.0165	-0.0206
			(-0.50)	(-0.62)
Usage of Plough Agriculture				0.0481
				(0.86)
Constant	1.377***	1.138***	1.327***	1.338***
	(10.92)	(4.79)	(3.15)	(3.13)
Adjusted R^2	0.658	0.664	0.659	0.656
Observations	55	55	55	55
Continetal	Yes	Yes	Yes	Yes
Geographical	No	Yes	Yes	Yes
GDP/capita	No	No	Yes	Yes
PloughAgriculture	No	No	No	Yes

Notes: T-values in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Land Gini is a ratio measuring the Inequality in Land ownership taking into account Landlessness, and the variable is from Vollrath and Erickson (2007). Originally taken from FAO database (Food and Agricultural Organization of the United Nations), and measures Land Holdings by size in acres. **JSC (C001)** *"When jobs are scarce, men should have more right to a job than women"* (agreement coded low - higher values indicate equality). GDP is measured in log GDP per capita, ppp (constant 2011 international U.S. Dollars) and is taken from Quality of Governence Database (2018). Plough measures the degree of historical Plough usage, and is taken from Alesina, Giuliano and Nunn (2013).

Table A7: OLS Estimates of Land Inequality on Beliefs about Gender Equality - Macro Sample - All variables - D059

	(1) Continental	(2) Geographical	(3) GDP	(4) All Controls
	WPL (D059)			
Vollrath_Gini	-0.594***	-0.567***	-0.573***	-0.564***
	(-5.47)	(-4.52)	(-4.44)	(-4.17)
Africa dummy	-0.260***	-0.0594	-0.0913	-0.0992
	(-3.97)	(-0.61)	(-0.96)	(-1.06)
Europe dummy	-0.0453*	0.197**	0.185**	0.177**
	(-1.69)	(2.61)	(2.49)	(2.26)
Asia dummy	-0.284***	-0.147***	-0.168***	-0.178***
	(-12.61)	(-3.31)	(-3.47)	(-3.20)
Oceania dummy	0	0	0	0
	(.)	(.)	(.)	(.)
Americas dummy	-0.0152	0.274**	0.256**	0.251**
	(-1.11)	(2.53)	(2.32)	(2.26)
Dummy for Landlocked countries		-0.0507	-0.0574	-0.0582
		(-1.40)	(-1.36)	(-1.37)
Latitude		-0.000929	-0.000800	-0.000866
		(-1.34)	(-1.09)	(-1.22)
Longitude		0.00107**	0.00106*	0.00105*
		(2.09)	(2.00)	(1.97)
Log GDP per capita			-0.0125	-0.0137
			(-0.66)	(-0.70)
Usage of Plough Agriculture				0.0140
				(0.47)
Constant	1.164***	0.945***	1.089***	1.092***
	(12.26)	(6.29)	(4.18)	(4.12)
Adjusted R^2	0.721	0.769	0.767	0.762
Observations	55	55	55	55
Continetal	Yes	Yes	Yes	Yes
Geographical	No	Yes	Yes	Yes
GDP/capita	No	No	Yes	Yes
PloughAgriculture	No	No	No	Yes

Notes: T-values in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Land Gini is a ratio measuring the Inequality in Land ownership taking into account Landlessness, and the variable is from Vollrath and Erickson (2007). Originally taken from FAO database (Food and Agricultural Organization of the United Nations), and measures Land Holdings by size in acres. **WPL (D059)** *"On the whole, men make better political leaders than women do"* (agreement coded low - higher values indicate equality). GDP is measured in log GDP per capita, ppp (constant 2011 international U.S. Dollars) and is taken from Quality of Governence Database (2018). Plough measures the degree of historical Plough usage, and is taken from Alesina, Giuliano and Nunn (2013).

Table A8: OLS Estimates of Land Inequality on Beliefs about Gender Equality - Macro Sample - All variables - D060

	(1) Continental	(2) Geographical	(3) GDP	(4) All Controls
	UIG (D060)			
Vollrath_Gini	-0.486***	-0.484***	-0.481***	-0.443***
	(-4.59)	(-3.66)	(-3.55)	(-3.25)
Africa dummy	-0.114**	-0.0551	-0.0387	-0.0714
	(-2.58)	(-0.91)	(-0.65)	(-1.14)
Europe dummy	-0.0334	0.0414	0.0478	0.0134
	(-1.29)	(0.68)	(0.80)	(0.25)
Asia dummy	-0.197***	-0.153***	-0.142***	-0.182***
	(-9.97)	(-4.35)	(-3.49)	(-4.41)
Oceania dummy	0	0	0	0
	(.)	(.)	(.)	(.)
Americas dummy	-0.0172	0.0563	0.0657	0.0467
	(-1.10)	(0.61)	(0.73)	(0.58)
Dummy for Landlocked countries		-0.0267	-0.0233	-0.0266
		(-0.81)	(-0.71)	(-0.82)
Latitude		-0.000430	-0.000496	-0.000769
		(-0.83)	(-0.89)	(-1.19)
Longitude		0.000232	0.000240	0.000214
		(0.52)	(0.53)	(0.53)
Log GDP per capita			0.00643	0.00147
			(0.39)	(0.09)
Usage of Plough Agriculture				0.0580
				(1.61)
Constant	1.177***	1.125***	1.051***	1.065***
	(12.65)	(7.67)	(4.48)	(4.84)
Adjusted R^2	0.664	0.659	0.653	0.671
Observations	55	55	55	55
Continetal	Yes	Yes	Yes	Yes
Geographical	No	Yes	Yes	Yes
GDP/capita	No	No	Yes	Yes
PloughAgriculture	No	No	No	Yes

Notes: T-values in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Land Gini is a ratio measuring the Inequality in Land ownership taking into account Landlessness, and the variable is from Vollrath and Erickson (2007). Originally taken from FAO database (Food and Agricultural Organization of the United Nations), and measures Land Holdings by size in acres. **UIG (D060)** *"A university education is more important for a boy than for a girl"* (agreement coded low - higher values indicate equality). GDP is measured in log GDP per capita, ppp (constant 2011 international U.S. Dollars) and is taken from Quality of Governence Database (2018). Plough measures the degree of historical Plough usage, and is taken from Alesina, Giuliano and Nunn (2013).

Table A9: IV Estimates of Land Inequality on Gender Equality - Instrument is ruggedness - Extended Controls

	(1) Continental	(2) Geographical	(3) Religion	(4) Fractional	(5) Colonial	(6) GDP	(7) All Controls
			Equality	(Y022)			
Vollrath_Gini	-0.820***	-0.902***	-0.525***	-0.508***	-0.466***	-0.502***	-0.452***
	(-2.613)	(-2.979)	(-2.628)	(-2.591)	(-2.905)	(-2.969)	(-2.777)
R^2	0.210	0.295	0.656	0.692	0.736	0.767	0.786
			JSC	(C001)			
Vollrath_Gini	-0.684	-0.817*	-0.220	-0.172	-0.091	-0.152	-0.075
	(-1.349)	(-1.770)	(-0.790)	(-0.619)	(-0.371)	(-0.616)	(-0.286)
R^2	0.170	0.223	0.573	0.611	0.644	0.690	0.702
			WPL	(D059)			
Vollrath_Gini	-1.055***	-1.149***	-0.838***	-0.849***	-0.750***	-0.791***	-0.786***
	(-3.240)	(-3.771)	(-3.257)	(-3.275)	(-4.352)	(-4.368)	(-4.105)
R^2	0.102	0.265	0.596	0.593	0.722	0.755	0.756
			UIG	(D060)			
Vollrath_Gini	-0.766***	-0.796***	-0.568***	-0.556***	-0.599***	-0.607***	-0.543***
	(-2.640)	(-2.870)	(-2.599)	(-2.621)	(-2.767)	(-2.770)	(-2.633)
R^2	0.190	0.244	0.444	0.499	0.500	0.501	0.555
Continetal	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Geographical	No	Yes	Yes	Yes	Yes	Yes	Yes
Religion	No	No	Yes	Yes	Yes	Yes	Yes
Fractionalization	No	No	No	Yes	Yes	Yes	Yes
ColonialOrigins	No	No	No	No	Yes	Yes	Yes
GDP	No	No	No	No	No	Yes	Yes
PloughAgriculture	No	No	No	No	No	No	Yes
First stage estimates			Vollrath_Gini				
nunn_rugged_slope	-0.010***	-0.011***	-0.012***	-0.012***	-0.012***	-0.012***	-0.012***
	(-2.784)	(-3.617)	(-4.243)	(-3.936)	(-3.514)	(-3.496)	(-3.359)
First stage F-stat	7.753	13.080	18.002	15.492	12.350	12.221	11.284
Underidentification test	0.027	0.027	0.010	0.018	0.014	0.012	0.012
Observations	55	55	54	53	53	53	53

Notes: T-values in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. The underidentification test reports the p-value of the Kleibergen-Paap rk LM statistic. Terrain_Rugged_Slope is a measure of terrain ruggedness (average slope, %) for each country, and is taken from Nunn (2012). Land Gini is a ratio measuring the Inequality in Land ownership taking into account Landlessness, and the variable is from Vollrath and Erickson (2007). Originally taken from FAO database (Food and Agricultural Organization of the United Nations), and measures Land Holdings by size in acres. **Y022** is the Gender Equality Index, a combined scale from the World Values Survey, consisting of the following three variables: **JSC (C001)** *"When jobs are scarce, men should have more right to a job than women"* (agreement coded low - higher values indicate equality). **WPL (D059)** *"On the whole, men make better political leaders than women do"* (agreement coded low - higher values indicate equality). **UIG (D060)** *"A university education is more important for a boy than for a girl"* (agreement coded low - higher values indicate equality). Fractionalization measures the amount of ethnic, religious and linguistic homogeneity in a country, and is taken from Alesina (2001). Legal origins is an indicator, taking different values with respect to the legal tradition that influenced a given country (e.g. British, French, Socialist etc.) and is taken from Nunn (2012). Colonial origins is an indicator, taking different values with respect to the country that may had colonized a given country (e.g. Spanish, British etc.) and is taken from Acemoglu (2001). GDP is measured in log GDP per capita, ppp (constant 2011 international U.S. Dollars) and is taken from Quality of Governence Database (2018). Plough measures the degree of historical Plough usage, and is taken from Alesina, Giuliano and Nunn (2013).

Table A10: OLS Estimates of Land Inequality on Beliefs about Gender Equality - More Controls - All variables - Y022

	(1) Continental	(2) Geographical	(3) Fractional	(4) Legal	(5) Colonial	(6) GDP	(7) All Controls
			Equality (Y022)				
Vollrath_Gini	-0.564***	-0.533***	-0.539***	-0.409***	-0.463***	-0.437***	-0.363**
	(-5.86)	(-4.45)	(-4.72)	(-2.79)	(-2.89)	(-2.78)	(-2.49)
Africa dummy	-0.229***	-0.0818	-0.211***	-0.221***	-0.180**	-0.177**	-0.196***
	(-3.50)	(-0.86)	(-3.80)	(-3.49)	(-2.11)	(-2.36)	(-3.03)
Europe dummy	-0.0596**	0.116	-0.0142	-0.0318	-0.0374	0.0122	-0.0141
	(-2.45)	(1.60)	(-0.28)	(-0.55)	(-0.54)	(0.18)	(-0.23)
Asia dummy	-0.310***	-0.212***	-0.320***	-0.328***	-0.281**	-0.234**	-0.256***
	(-16.01)	(-4.88)	(-4.16)	(-3.68)	(-2.64)	(-2.36)	(-3.00)
Oceania dummy	0	0	-0.165	-0.184	-0.126	-0.0232	0.00270
	(.)	(.)	(-1.62)	(-1.48)	(-0.88)	(-0.17)	(0.02)
Americas dummy	-0.0394***	0.172*	0	0	0	0	0
	(-2.97)	(1.71)	(.)	(.)	(.)	(.)	(.)
Dummy for Landlocked		-0.0426	-0.0667*	-0.0533	-0.0494	-0.0750	-0.0562
		(-1.29)	(-1.81)	(-1.22)	(-1.11)	(-1.59)	(-1.18)
Latitude		-0.000612	-0.000907*	-0.000797	-0.000781	-0.000683	-0.000937
		(-0.90)	(-1.72)	(-1.40)	(-1.22)	(-1.09)	(-1.15)
Longitude		0.000799	0.000483	0.000600	0.000442	0.0000774	0.0000551
		(1.63)	(1.07)	(1.10)	(0.69)	(0.13)	(0.11)
Religious fragmentation			0.133***	0.171***	0.218***	0.244***	0.237***
			(3.10)	(2.86)	(4.28)	(4.68)	(4.99)
French civil law				0.0203	-0.0162	-0.0238	-0.0352
				(0.68)	(-0.42)	(-0.70)	(-1.19)
Socialist law				-0.00674	-0.0452	-0.0473	-0.0745
				(-0.09)	(-0.62)	(-0.66)	(-1.12)
German civil law				0.00329	-0.0673	-0.0383	-0.0474
				(0.09)	(-1.39)	(-0.76)	(-1.07)
Scandinavian law				0.114*	0.0737	0.0915	0.100*
				(1.88)	(1.30)	(1.47)	(1.76)
Colonial origin: British					-0.0954**	-0.100***	-0.115***
					(-2.42)	(-2.78)	(-3.44)
Colonial origin: French					-0.0383	-0.0471	-0.0515
					(-0.63)	(-0.91)	(-1.04)
Colonial origin: Portuguese					-0.0493	-0.0464	-0.0344
					(-1.55)	(-1.55)	(-1.13)
Colonial origin: Other European					-0.0783	-0.0466	-0.0594
					(-1.04)	(-0.78)	(-0.97)
Log GDP per capita						-0.0312*	-0.0356**
						(-1.89)	(-2.28)
Usage of Plough Agriculture							0.0661
							(1.48)
Constant	1.217***	1.047***	1.146***	1.007***	1.077***	1.324***	1.294***
	(14.42)	(7.09)	(12.03)	(7.06)	(7.74)	(7.04)	(7.22)
Adjusted R^2	0.743	0.764	0.794	0.795	0.818	0.832	0.844
Observations	55	55	53	53	53	53	53
Continetal	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Geographical	No	Yes	Yes	Yes	Yes	Yes	Yes
Relig_Fractionalization	No	No	Yes	Yes	Yes	Yes	Yes
Legal_Origins	No	No	No	Yes	Yes	Yes	Yes
ColonialOrigins	No	No	No	No	Yes	Yes	Yes
GDP/capita	No	No	No	No	No	Yes	Yes
PloughAgriculture	No	No	No	No	No	No	Yes

Notes: T-values in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Land Gini is a ratio measuring the Inequality in Land ownership taking into account Landlessness, and the variable is from Vollrath and Erickson (2007). Originally taken from FAO database (Food and Agricultural Organization of the United Nations), and measures Land Holdings by size in acres. **Y022** is the Gender Equality Index, a combined scale from the World Values Survey, consisting of the following three variables: **JSC (C001)** *"When jobs are scarce, men should have more right to a job than women"* (agreement coded low - higher values indicate equality). **WPL (D059)** *"On the whole, men make better political leaders than women do"* (agreement coded low - higher values indicate equality). **UIG (D060)** *"A university education is more important for a boy than for a girl"* (agreement coded low - higher values indicate equality). Fractionalization measures the amount of ethnic, religious and linguistic homogeneity in a country, and is taken from Alesina (2001). Legal origins is an indicator, taking different values with respect to the legal tradition that influenced a given country (e.g. British, French, Socialist etc.) and is taken from Nunn (2012). Colonial origins is an indicator, taking different values with respect to the country that may had colonized a given country (e.g. Spanish, British etc.) and is taken from Acemoglu (2001). GDP is measured in log GDP per capita, ppp (constant 2011 international U.S. Dollars) and is taken from Quality of Governence Database (2018). Plough measures the degree of historical Plough usage, and is taken from Alesina, Giuliano and Nunn (2013).

Table A11: OLS Estimates of Land Inequality on Beliefs about Gender Equality - More Controls - All variables - C001

	(1) Continental	(2) Geographical	(3) Fractional	(4) Legal	(5) Colonial	(6) GDP	(7) All Controls
			JSC (C001)				
Vollrath_Gini	-0.682***	-0.606***	-0.597***	-0.378*	-0.459**	-0.417*	-0.310
	(-4.72)	(-3.08)	(-3.26)	(-1.82)	(-2.13)	(-1.99)	(-1.69)
Africa dummy	-0.330***	-0.154	-0.265***	-0.296***	-0.224*	-0.220**	-0.247***
	(-3.34)	(-1.02)	(-2.87)	(-2.80)	(-1.74)	(-2.05)	(-2.76)
Europe dummy	-0.127***	0.0740	-0.0419	-0.0847	-0.0920	-0.00886	-0.0464
	(-3.84)	(0.65)	(-0.50)	(-0.89)	(-0.83)	(-0.09)	(-0.50)
Asia dummy	-0.458***	-0.353***	-0.440***	-0.471***	-0.384**	-0.305**	-0.337**
	(-16.93)	(-5.23)	(-3.55)	(-3.28)	(-2.50)	(-2.14)	(-2.70)
Oceania dummy	0	0	-0.174	-0.240	-0.133	0.0385	0.0755
	(.)	(.)	(-1.15)	(-1.27)	(-0.68)	(0.19)	(0.43)
Americas dummy	-0.0911***	0.166	0	0	0	0	0
	(-3.44)	(1.07)	(.)	(.)	(.)	(.)	(.)
Dummy for Landlocked		-0.0595	-0.0988	-0.0701	-0.0627	-0.106	-0.0786
		(-1.22)	(-1.62)	(-1.15)	(-1.03)	(-1.68)	(-1.15)
Latitude		-0.000419	-0.000742	-0.000481	-0.000454	-0.000290	-0.000653
		(-0.36)	(-0.71)	(-0.44)	(-0.39)	(-0.26)	(-0.44)
Longitude		0.00103	0.000643	0.000951	0.000639	0.0000293	-0.00000249
		(1.35)	(0.90)	(1.09)	(0.68)	(0.03)	(-0.00)
Religious fragmentation			0.209***	0.274***	0.360***	0.402***	0.392***
			(2.95)	(2.86)	(4.32)	(4.79)	(4.77)
French civil law				0.0206	-0.0447	-0.0575	-0.0738
				(0.41)	(-0.79)	(-1.08)	(-1.45)
Socialist law				-0.0216	-0.0893	-0.0930	-0.132
				(-0.23)	(-0.97)	(-1.06)	(-1.54)
German civil law				-0.0371	-0.159**	-0.111	-0.124*
				(-0.64)	(-2.07)	(-1.39)	(-1.71)
Scandinavian law				0.191**	0.125	0.155*	0.167**
				(2.14)	(1.53)	(1.70)	(2.04)
Colonial origin: British					-0.167***	-0.175***	-0.196***
					(-2.80)	(-3.11)	(-3.64)
Colonial origin: French					-0.0684	-0.0831	-0.0893
					(-0.73)	(-1.12)	(-1.21)
Colonial origin: Portuguese					-0.0912	-0.0863	-0.0692
					(-1.53)	(-1.52)	(-1.14)
Colonial origin: Other European					-0.116	-0.0629	-0.0812
					(-1.04)	(-0.73)	(-0.89)
Log GDP per capita						-0.0522	-0.0584*
						(-1.61)	(-1.88)
Usage of Plough Agriculture							0.0943
							(1.22)
Constant	1.377***	1.138***	1.184***	0.966***	1.076***	1.490***	1.447***
	(10.92)	(4.79)	(7.94)	(4.78)	(5.65)	(4.84)	(4.66)
Adjusted R^2	0.658	0.664	0.696	0.703	0.738	0.758	0.768
Observations	55	55	53	53	53	53	53
Continetal	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Geographical	No	Yes	Yes	Yes	Yes	Yes	Yes
Relig_Fractionalization	No	No	Yes	Yes	Yes	Yes	Yes
Legal_Origins	No	No	No	Yes	Yes	Yes	Yes
ColonialOrigins	No	No	No	No	Yes	Yes	Yes
GDP/capita	No	No	No	No	No	Yes	Yes
PloughAgriculture	No	No	No	No	No	No	Yes

Notes: T-values in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Land Gini is a ratio measuring the Inequality in Land ownership taking into account Landlessness, and the variable is from Vollrath and Erickson (2007). Originally taken from FAO database (Food and Agricultural Organization of the United Nations), and measures Land Holdings by size in acres. **JSC (C001)** *"When jobs are scarce, men should have more right to a job than women"* (agreement coded low - higher values indicate equality). Fractionalization measures the amount of ethnic, religious and linguistic homogeneity in a country, and is taken from Alesina (2001). Legal origins is an indicator, taking different values with respect to the legal tradition that influenced a given country (e.g. British, French, Socialist etc.) and is taken from Nunn (2012). Colonial origins is an indicator, taking different values with respect to the country that may had colonized a given country (e.g. Spanish, British etc.) and is taken from Acemoglu (2001). GDP is measured in log GDP per capita, ppp (constant 2011 international U.S. Dollars) and is taken from Quality of Governence Database (2018). Plough measures the degree of historical Plough usage, and is taken from Alesina, Giuliano and Nunn (2013).

Table A12: OLS Estimates of Land Inequality on Beliefs about Gender Equality - More Controls - All variables - D059

	(1) Continental	(2) Geographical	(3) Fractional	(4) Legal	(5) Colonial	(6) GDP	(7) All Controls
				WPL (D059)			
Vollrath_Gini	-0.594***	-0.567***	-0.596***	-0.420**	-0.484***	-0.450**	-0.392**
	(-5.47)	(-4.52)	(-4.80)	(-2.33)	(-2.83)	(-2.62)	(-2.25)
Africa dummy	-0.260***	-0.0594	-0.288***	-0.287***	-0.250***	-0.246***	-0.261***
	(-3.97)	(-0.61)	(-4.83)	(-4.25)	(-3.11)	(-3.68)	(-4.09)
Europe dummy	-0.0453*	0.197**	-0.0271	-0.0261	-0.0399	0.0270	0.00641
	(-1.69)	(2.61)	(-0.47)	(-0.41)	(-0.58)	(0.41)	(0.09)
Asia dummy	-0.284***	-0.147***	-0.344***	-0.344***	-0.301***	-0.237**	-0.255***
	(-12.61)	(-3.31)	(-3.81)	(-3.30)	(-3.07)	(-2.69)	(-2.97)
Oceania dummy	0	0	-0.243**	-0.243*	-0.193	-0.0549	-0.0347
	(.)	(.)	(-2.14)	(-1.78)	(-1.50)	(-0.49)	(-0.34)
Americas dummy	-0.0152	0.274**	0	0	0	0	0
	(-1.11)	(2.53)	(.)	(.)	(.)	(.)	(.)
Dummy for Landlocked		-0.0507	-0.0646	-0.0550	-0.0502	-0.0846*	-0.0699
		(-1.40)	(-1.67)	(-1.27)	(-1.23)	(-1.95)	(-1.63)
Latitude		-0.000929	-0.00133**	-0.00123*	-0.00122*	-0.00109	-0.00129*
		(-1.34)	(-2.39)	(-1.94)	(-1.87)	(-1.65)	(-2.02)
Longitude		0.00107**	0.000703	0.000731	0.000622	0.000131	0.000113
		(2.09)	(1.41)	(1.23)	(1.08)	(0.26)	(0.25)
Religious fragmentation			0.0994**	0.111*	0.171***	0.205***	0.200***
			(2.15)	(1.69)	(2.96)	(3.91)	(4.10)
French civil law				0.00217	-0.0446	-0.0549*	-0.0638**
				(0.07)	(-1.20)	(-1.70)	(-2.06)
Socialist law				-0.0447	-0.102	-0.104	-0.126*
				(-0.57)	(-1.35)	(-1.41)	(-1.71)
German civil law				0.0373	-0.0560	-0.0169	-0.0240
				(1.05)	(-1.15)	(-0.37)	(-0.55)
Scandinavian law				0.0792	0.0257	0.0496	0.0564
				(1.21)	(0.46)	(0.83)	(0.96)
Colonial origin: British					-0.122***	-0.128***	-0.140***
					(-3.02)	(-3.64)	(-3.92)
Colonial origin: French					-0.0308	-0.0427	-0.0461
					(-0.50)	(-0.91)	(-1.01)
Colonial origin: Portuguese					-0.0887***	-0.0848***	-0.0754***
					(-2.99)	(-3.16)	(-3.04)
Colonial origin: Other European					-0.113*	-0.0706*	-0.0806*
					(-1.80)	(-1.75)	(-1.97)
Log GDP per capita						-0.0420***	-0.0454***
						(-2.98)	(-3.38)
Usage of Plough Agriculture							0.0516
							(1.48)
Constant	1.164***	0.945***	1.176***	1.012***	1.108***	1.440***	1.417***
	(12.26)	(6.29)	(10.48)	(5.65)	(7.27)	(7.87)	(8.15)
Adjusted R^2	0.721	0.769	0.781	0.777	0.833	0.862	0.868
Observations	55	55	53	53	53	53	53
Continetal	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Geographical	No	Yes	Yes	Yes	Yes	Yes	Yes
Relig_Fractionalization	No	No	Yes	Yes	Yes	Yes	Yes
Legal_Origins	No	No	No	Yes	Yes	Yes	Yes
ColonialOrigins	No	No	No	No	Yes	Yes	Yes
GDP/capita	No	No	No	No	No	Yes	Yes
PloughAgriculture	No	No	No	No	No	No	Yes

Notes: T-values in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Land Gini is a ratio measuring the Inequality in Land ownership taking into account Landlessness, and the variable is from Vollrath and Erickson (2007). Originally taken from FAO database (Food and Agricultural Organization of the United Nations), and measures Land Holdings by size in acres. **WPL (D059)** *"On the whole, men make better political leaders than women do"* (agreement coded low - higher values indicate equality). Fractionalization measures the amount of ethnic, religious and linguistic homogeneity in a country, and is taken from Alesina (2001). Legal origins is an indicator, taking different values with respect to the legal tradition that influenced a given country (e.g. British, French, Socialist etc.) and is taken from Nunn (2012). Colonial origins is an indicator, taking different values with respect to the country that may had colonized a given country (e.g. Spanish, British etc.) and is taken from Acemoglu (2001). GDP is measured in log GDP per capita, ppp (constant 2011 international U.S. Dollars) and is taken from Quality of Governence Database (2018). Plough measures the degree of historical Plough usage, and is taken from Alesina, Giuliano and Nunn (2013).

Table A13: OLS Estimates of Land Inequality on Beliefs about Gender Equality - More Controls - All variables - D060

	(1) Continental	(2) Geographical	(3) Fractional	(4) Legal	(5) Colonial	(6) GDP	(7) All Controls
			UIG (D060)				
Vollrath_Gini	-0.486***	-0.484***	-0.482***	-0.447***	-0.440**	-0.438**	-0.375**
	(-4.59)	(-3.66)	(-3.47)	(-2.80)	(-2.46)	(-2.43)	(-2.11)
Africa dummy	-0.114**	-0.0551	-0.0826	-0.0964	-0.102	-0.101	-0.117
	(-2.58)	(-0.91)	(-1.46)	(-1.48)	(-1.26)	(-1.25)	(-1.55)
Europe dummy	-0.0334	0.0414	0.0125	-0.00847	-0.0146	-0.00955	-0.0316
	(-1.29)	(0.68)	(0.24)	(-0.14)	(-0.22)	(-0.14)	(-0.49)
Asia dummy	-0.197***	-0.153***	-0.172**	-0.186*	-0.197*	-0.192	-0.211*
	(-9.97)	(-4.35)	(-2.02)	(-1.94)	(-1.70)	(-1.66)	(-2.01)
Oceania dummy	0	0	-0.0526	-0.0677	-0.0839	-0.0735	-0.0518
	(.)	(.)	(-0.50)	(-0.54)	(-0.55)	(-0.49)	(-0.36)
Americas dummy	-0.0172	0.0563	0	0	0	0	0
	(-1.10)	(0.61)	(.)	(.)	(.)	(.)	(.)
Dummy for Landlocked		-0.0267	-0.0496	-0.0391	-0.0396	-0.0422	-0.0264
		(-0.81)	(-1.11)	(-0.67)	(-0.65)	(-0.68)	(-0.43)
Latitude		-0.000430	-0.000597	-0.000458	-0.000444	-0.000434	-0.000647
		(-0.83)	(-1.13)	(-0.79)	(-0.74)	(-0.72)	(-0.88)
Longitude		0.000232	0.0000544	0.000212	0.000276	0.000239	0.000221
		(0.52)	(0.11)	(0.37)	(0.42)	(0.36)	(0.37)
Religious fragmentation			0.0800**	0.119**	0.119**	0.121**	0.115**
			(2.19)	(2.61)	(2.29)	(2.27)	(2.35)
French civil law				0.0401	0.0470	0.0462	0.0367
				(1.67)	(1.39)	(1.39)	(1.30)
Socialist law				0.0190	0.0249	0.0247	0.00192
				(0.28)	(0.30)	(0.30)	(0.03)
German civil law				0.00489	0.00993	0.0129	0.00529
				(0.15)	(0.22)	(0.26)	(0.12)
Scandinavian law				0.0724	0.0782	0.0800	0.0872
				(1.49)	(1.42)	(1.38)	(1.61)
Colonial origin: British					0.00749	0.00702	-0.00519
					(0.20)	(0.19)	(-0.15)
Colonial origin: French					-0.00450	-0.00538	-0.00905
					(-0.07)	(-0.09)	(-0.15)
Colonial origin: Portuguese					-0.0276	-0.0273	-0.0173
					(-0.93)	(-0.91)	(-0.55)
Colonial origin: Other European					-0.00773	-0.00453	-0.0153
					(-0.13)	(-0.08)	(-0.25)
Log GDP per capita						-0.00315	-0.00681
						(-0.21)	(-0.46)
Usage of Plough Agriculture							0.0554
							(1.26)
Constant	1.177***	1.125***	1.132***	1.065***	1.059***	1.084***	1.059***
	(12.65)	(7.67)	(10.27)	(8.15)	(7.31)	(5.42)	(5.46)
Adjusted R^2	0.664	0.659	0.672	0.668	0.632	0.622	0.632
Observations	55	55	53	53	53	53	53
Continetal	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Geographical	No	Yes	Yes	Yes	Yes	Yes	Yes
Relig_Fractionalization	No	No	Yes	Yes	Yes	Yes	Yes
Legal_Origins	No	No	No	Yes	Yes	Yes	Yes
ColonialOrigins	No	No	No	No	Yes	Yes	Yes
GDP/capita	No	No	No	No	No	Yes	Yes
PloughAgriculture	No	No	No	No	No	No	Yes

Notes: T-values in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Land Gini is a ratio measuring the Inequality in Land ownership taking into account Landlessness, and the variable is from Vollrath and Erickson (2007). Originally taken from FAO database (Food and Agricultural Organization of the United Nations), and measures Land Holdings by size in acres. **UIG (D060)** *"A university education is more important for a boy than for a girl"* (agreement coded low - higher values indicate equality). Fractionalization measures the amount of ethnic, religious and linguistic homogeneity in a country, and is taken from Alesina (2001). Legal origins is an indicator, taking different values with respect to the legal tradition that influenced a given country (e.g. British, French, Socialist etc.) and is taken from Nunn (2012). Colonial origins is an indicator, taking different values with respect to the country that may had colonized a given country (e.g. Spanish, British etc.) and is taken from Acemoglu (2001). GDP is measured in log GDP per capita, ppp (constant 2011 international U.S. Dollars) and is taken from Quality of Governence Database (2018). Plough measures the degree of historical Plough usage, and is taken from Alesina, Giuliano and Nunn (2013).

Table A14: OLS Estimates of Land Inequality on Beliefs about Gender Equality - WVS (Micro Sample) - All variables - Y022

	(1) Continental	(2) Geographical	(3) GDP	(4) All Controls
		Equality (Y022)		
Vollrath_Gini	-0.358***	-0.385**	-0.396***	-0.324**
	(-3.12)	(-2.61)	(-2.68)	(-2.06)
Sex	0.0863***	0.0852***	0.0855***	0.0856***
	(11.89)	(12.02)	(12.07)	(12.09)
Age	0.00198***	0.00176***	0.00178***	0.00173***
	(3.05)	(2.89)	(3.08)	(3.08)
Age squared	-0.0000278***	-0.0000266***	-0.0000264***	-0.0000267***
	(-3.94)	(-4.13)	(-4.04)	(-4.16)
Educational level	0.0154***	0.0154***	0.0156***	0.0159***
	(8.31)	(8.77)	(10.94)	(12.56)
Employment status	-0.0000710	-0.0000208	-0.000115	-0.000143
	(-0.04)	(-0.02)	(-0.09)	(-0.11)
Scale of incomes	0.00462***	0.00440***	0.00447***	0.00410***
	(3.12)	(2.91)	(2.86)	(2.78)
Africa dummy	0	-0.219***	-0.221***	-0.264***
	(.)	(-3.60)	(-3.50)	(-4.14)
Europe dummy	0.156***	-0.0239	-0.0206	-0.0582
	(2.70)	(-0.34)	(-0.30)	(-0.81)
Asia dummy	-0.131**	-0.365***	-0.366***	-0.420***
	(-2.44)	(-3.51)	(-3.47)	(-3.81)
Oceania dummy	0.179***	-0.127	-0.117	-0.130
	(3.52)	(-1.14)	(-1.09)	(-1.22)
Americas dummy	0.150***	0	0	0
	(3.03)	(.)	(.)	(.)
Dummy for Landlocked		-0.0486*	-0.0544	-0.0474
		(-1.69)	(-1.57)	(-1.50)
Latitude		-0.000542	-0.000492	-0.000741
		(-0.67)	(-0.59)	(-0.92)
Longitude		0.000576	0.000561	0.000683
		(1.03)	(1.01)	(1.23)
Log GDP per capita			-0.00736	-0.0121
			(-0.39)	(-0.67)
Usage of Plough Agriculture				0.0684**
				(2.52)
Constant	0.617***	0.854***	0.931***	0.908***
	(4.55)	(7.09)	(3.79)	(3.85)
Adjusted R^2	0.299	0.307	0.307	0.310
Observations	119309	119309	119309	119309
Individual	Yes	Yes	Yes	Yes
Continetal	Yes	Yes	Yes	Yes
Geographical	No	Yes	Yes	Yes
GDP/capita	No	No	Yes	Yes
PloughAgriculture	No	No	No	Yes

Notes: T-values in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Land Gini is a ratio measuring the Inequality in Land ownership taking into account Landlessness, and the variable is from Vollrath and Erickson (2007). Originally taken from FAO database (Food and Agricultural Organization of the United Nations), and measures Land Holdings by size in acres. **Y022** is the Gender Equality Index, a combined scale from the World Values Survey (Longitudinal data from 1999 to 2014), consisting of the following three variables: **JSC (C001)** *"When jobs are scarce, men should have more right to a job than women"* (agreement coded low - higher values indicate equality). **WPL (D059)** *"On the whole, men make better political leaders than women do"* (agreement coded low - higher values indicate equality). **UIG (D060)** *"A university education is more important for a boy than for a girl"* (agreement coded low - higher values indicate equality). GDP is measured in log GDP per capita, ppp (constant 2011 international U.S. Dollars) and is taken from Quality of Governence Database (2018). Plough measures the degree of historical Plough usage, and is taken from Alesina, Giuliano and Nunn (2013). All specifications include Individual controls, such as age, age squared, gender, highest education, employment status, income, and are weighted using the original weights provided from the WVS database.

Table A15: OLS Estimates of Land Inequality on Beliefs about Gender Equality - WVS (Micro Sample) - All variables - C001

	(1) Continental	(2) Geographical	(3) GDP	(4) All Controls
		JSC (C001)		
Vollrath_Gini	-1.203	-1.611	-1.495	-1.045
	(-1.40)	(-1.31)	(-1.34)	(-1.33)
Sex	0.102***	0.102***	0.0983***	0.0988***
	(7.57)	(7.80)	(7.58)	(7.55)
Age	-0.000438	0.000212	-0.0000745	-0.000391
	(-0.15)	(0.10)	(-0.03)	(-0.17)
Age squared	0.00000370	-0.00000122	-0.00000278	-0.00000418
	(0.09)	(-0.04)	(-0.08)	(-0.13)
Educational level	-0.00187	-0.00106	-0.00401	-0.00233
	(-0.09)	(-0.05)	(-0.17)	(-0.11)
Employment status	0.00122	0.00232	0.00339	0.00322
	(0.19)	(0.36)	(0.50)	(0.47)
Scale of incomes	0.0428	0.0430	0.0422	0.0398
	(1.35)	(1.35)	(1.36)	(1.37)
Africa dummy	0	0.286	0.312	0.0448
	(.)	(0.51)	(0.54)	(0.12)
Europe dummy	0.109	0.472	0.434	0.197
	(0.79)	(0.92)	(0.91)	(0.63)
Asia dummy	-0.229**	0.234	0.246	-0.0946
	(-2.53)	(0.31)	(0.33)	(-0.18)
Oceania dummy	0.251**	0.713	0.601	0.521
	(2.64)	(0.85)	(0.82)	(0.79)
Americas dummy	-0.142	0	0	0
	(-0.41)	(.)	(.)	(.)
Dummy for Landlocked		-0.0246	0.0409	0.0853
		(-0.19)	(0.23)	(0.46)
Latitude		-0.00238	-0.00295	-0.00451
		(-0.75)	(-0.83)	(-1.06)
Longitude		-0.00187	-0.00170	-0.000933
		(-0.67)	(-0.65)	(-0.44)
Log GDP per capita			0.0831	0.0530
			(0.88)	(0.72)
Usage of Plough Agriculture				0.431
				(1.29)
Constant	1.236*	1.308**	0.438	0.299
	(1.68)	(2.28)	(0.62)	(0.40)
Adjusted R^2	0.077	0.079	0.082	0.096
Observations	119309	119309	119309	119309
Individual	Yes	Yes	Yes	Yes
Continetal	Yes	Yes	Yes	Yes
Geographical	No	Yes	Yes	Yes
GDP/capita	No	No	Yes	Yes
PloughAgriculture	No	No	No	Yes

Notes: T-values in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Land Gini is a ratio measuring the Inequality in Land ownership taking into account Landlessness, and the variable is from Vollrath and Erickson (2007). Originally taken from FAO database (Food and Agricultural Organization of the United Nations), and measures Land Holdings by size in acres. Data about beliefs are taken from World Values Survey (Longitudinal data from 1999 to 2014). **JSC (C001)** *"When jobs are scarce, men should have more right to a job than women"* (agreement coded low - higher values indicate equality). GDP is measured in log GDP per capita, ppp (constant 2011 international U.S. Dollars) and is taken from Quality of Governence Database (2018). Plough measures the degree of historical Plough usage, and is taken from Alesina, Giuliano and Nunn (2013). All specifications include Individual controls, such as age, age squared, gender, highest education, employment status, income, and are weighted using the original weights provided from the WVS database.

Table A16: OLS Estimates of Land Inequality on Beliefs about Gender Equality - WVS (Micro Sample) - All variables - D059

	(1) Continental	(2) Geographical	(3) GDP	(4) All Controls
		WPL (D059)		
Vollrath_Gini	-0.874	-1.145*	-1.289**	-1.208*
	(-1.66)	(-1.83)	(-2.06)	(-1.78)
Sex	0.249***	0.245***	0.250***	0.250***
	(11.06)	(10.95)	(11.74)	(11.76)
Age	0.00744***	0.00695***	0.00731***	0.00725***
	(3.17)	(3.12)	(3.44)	(3.44)
Age squared	-0.0000939***	-0.0000919***	-0.0000900***	-0.0000902***
	(-3.86)	(-4.12)	(-3.88)	(-3.89)
Educational level	0.0362***	0.0362***	0.0398***	0.0401***
	(5.88)	(5.98)	(8.49)	(8.76)
Employment status	0.00413	0.00484	0.00352	0.00349
	(0.82)	(1.13)	(0.84)	(0.83)
Scale of incomes	0.0145***	0.0138***	0.0148***	0.0144***
	(3.08)	(2.93)	(3.04)	(2.96)
Africa dummy	0	-0.732***	-0.764***	-0.812***
	(.)	(-3.48)	(-3.64)	(-3.92)
Europe dummy	0.553***	-0.0107	0.0360	-0.00645
	(2.98)	(-0.04)	(0.13)	(-0.02)
Asia dummy	-0.267	-0.980**	-0.995**	-1.056***
	(-1.61)	(-2.54)	(-2.64)	(-2.75)
Oceania dummy	0.483**	-0.487	-0.349	-0.364
	(2.57)	(-1.07)	(-0.76)	(-0.80)
Americas dummy	0.534***	0	0	0
	(3.70)	(.)	(.)	(.)
Dummy for Landlocked		-0.132	-0.213	-0.205
		(-1.25)	(-1.48)	(-1.44)
Latitude		-0.00292	-0.00222	-0.00250
		(-0.98)	(-0.79)	(-0.92)
Longitude		0.00134	0.00113	0.00126
		(0.61)	(0.53)	(0.59)
Log GDP per capita			-0.102*	-0.108*
			(-1.79)	(-1.88)
Usage of Plough Agriculture				0.0771
				(0.91)
Constant	2.305***	3.246***	4.316***	4.291***
	(4.21)	(5.75)	(4.98)	(4.88)
Adjusted R^2	0.139	0.144	0.146	0.146
Observations	119309	119309	119309	119309
Individual	Yes	Yes	Yes	Yes
Continetal	Yes	Yes	Yes	Yes
Geographical	No	Yes	Yes	Yes
GDP/capita	No	No	Yes	Yes
PloughAgriculture	No	No	No	Yes

Notes: T-values in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Land Gini is a ratio measuring the Inequality in Land ownership taking into account Landlessness, and the variable is from Vollrath and Erickson (2007). Originally taken from FAO database (Food and Agricultural Organization of the United Nations), and measures Land Holdings by size in acres. Data about beliefs are taken from World Values Survey (Longitudinal data from 1999 to 2014). **WPL (D059)** *"On the whole, men make better political leaders than women do"* (agreement coded low - higher values indicate equality). GDP is measured in log GDP per capita, ppp (constant 2011 international U.S. Dollars) and is taken from Quality of Governence Database (2018). Plough measures the degree of historical Plough usage, and is taken from Alesina, Giuliano and Nunn (2013). All specifications include Individual controls, such as age, age squared, gender, highest education, employment status, income, and are weighted using the original weights provided from the WVS database.

Table A17: OLS Estimates of Land Inequality on Beliefs about Gender Equality - WVS (Micro Sample) - All variables - D060

	(1) Continental	(2) Geographical	(3) GDP	(4) All Controls
		UIG (D060)		
Vollrath_Gini	-0.777**	-1.099***	-1.098**	-0.894**
	(-2.57)	(-2.70)	(-2.68)	(-2.19)
Sex	0.229***	0.228***	0.228***	0.229***
	(10.83)	(10.87)	(10.82)	(10.86)
Age	0.00771***	0.00818***	0.00818***	0.00803***
	(4.31)	(4.10)	(4.09)	(4.14)
Age squared	-0.000102***	-0.000106***	-0.000106***	-0.000106***
	(-4.50)	(-4.49)	(-4.50)	(-4.62)
Educational level	0.0462***	0.0470***	0.0469***	0.0477***
	(7.71)	(7.76)	(8.98)	(9.13)
Employment status	-0.00120	-0.000410	-0.000405	-0.000483
	(-0.33)	(-0.11)	(-0.12)	(-0.14)
Scale of incomes	0.0101	0.0101	0.0101	0.00905
	(1.60)	(1.66)	(1.63)	(1.46)
Africa dummy	0	-0.0792	-0.0791	-0.201
	(.)	(-0.46)	(-0.45)	(-1.01)
Europe dummy	0.269***	0.258	0.257	0.149
	(2.86)	(1.23)	(1.24)	(0.67)
Asia dummy	-0.288***	-0.229	-0.229	-0.384
	(-2.99)	(-0.72)	(-0.72)	(-1.13)
Oceania dummy	0.305***	0.355	0.355	0.318
	(2.89)	(0.96)	(0.96)	(0.86)
Americas dummy	0.195**	0	0	0
	(2.39)	(.)	(.)	(.)
Dummy for Landlocked		-0.0913	-0.0910	-0.0707
		(-1.00)	(-0.91)	(-0.81)
Latitude		-0.00198	-0.00198	-0.00270
		(-1.08)	(-1.05)	(-1.47)
Longitude		-0.00146	-0.00146	-0.00111
		(-0.82)	(-0.82)	(-0.62)
Log GDP per capita			0.000417	-0.0133
			(0.01)	(-0.24)
Usage of Plough Agriculture				0.197
				(1.62)
Constant	2.923***	3.291***	3.286***	3.223***
	(8.83)	(9.13)	(4.77)	(5.25)
Adjusted R^2	0.098	0.099	0.099	0.101
Observations	119309	119309	119309	119309
Individual	Yes	Yes	Yes	Yes
Continetal	Yes	Yes	Yes	Yes
Geographical	No	Yes	Yes	Yes
GDP/capita	No	No	Yes	Yes
PloughAgriculture	No	No	No	Yes

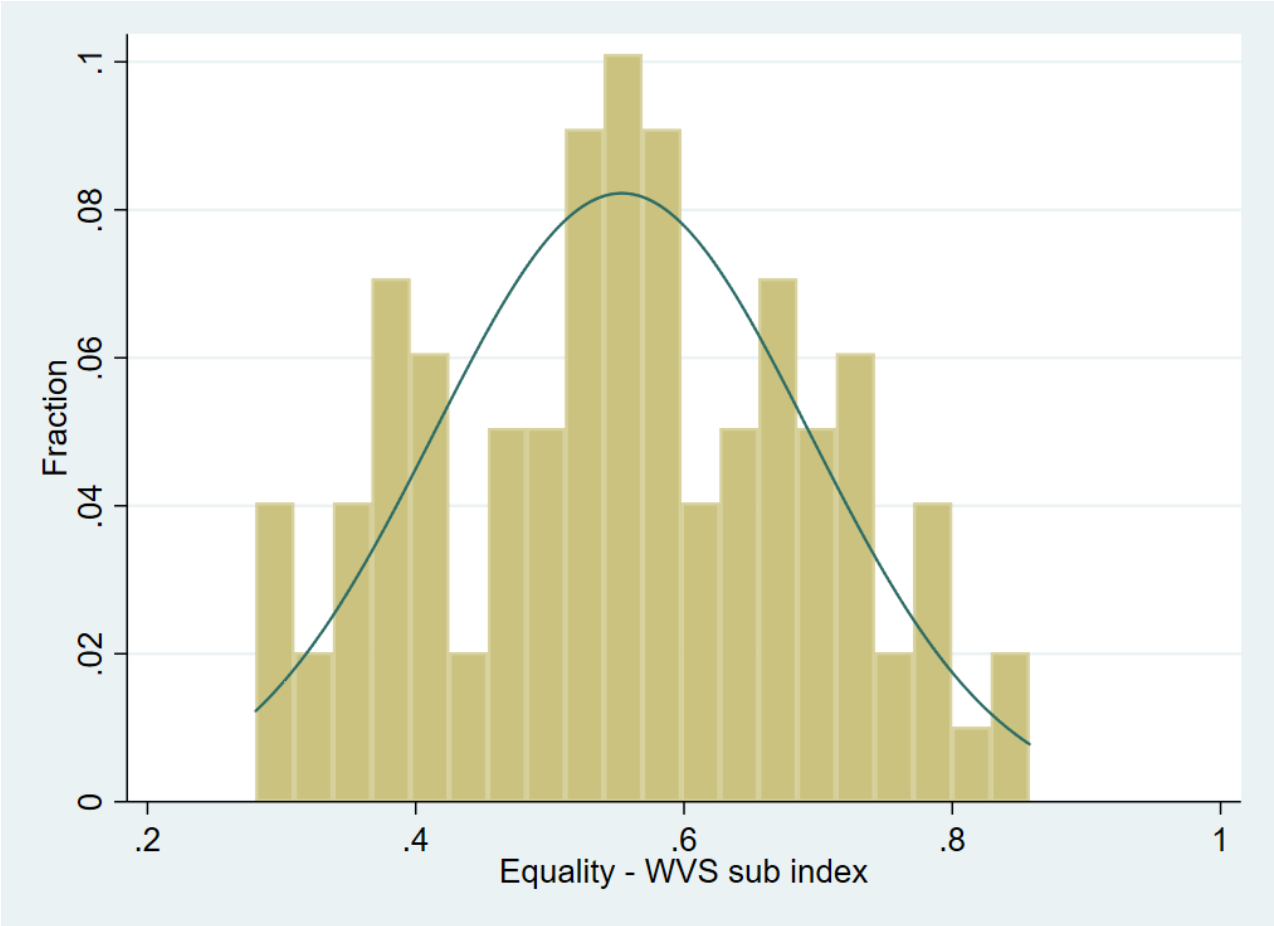
Notes: T-values in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Land Gini is a ratio measuring the Inequality in Land ownership taking into account Landlessness, and the variable is from Vollrath and Erickson (2007). Originally taken from FAO database (Food and Agricultural Organization of the United Nations), and measures Land Holdings by size in acres. Data about beliefs are taken from World Values Survey (Longitudinal data from 1999 to 2014). **UIG (D060)** *"A university education is more important for a boy than for a girl"* (agreement coded low - higher values indicate equality). GDP is measured in log GDP per capita, ppp (constant 2011 international U.S. Dollars) and is taken from Quality of Governence Database (2018). Plough measures the degree of historical Plough usage, and is taken from Alesina, Giuliano and Nunn (2013). All specifications include Individual controls, such as age, age squared, gender, highest education, employment status, income, and are weighted using the original weights provided from the WVS database.

Table A18: OLS Estimates of Land Inequality on Beliefs about Gender Equality - WVS (Micro Sample) - All waves

	(1) Continental	(2) Geographical	(3) GDP	(4) All Controls
		Equality (Y022)		
Vollrath_Gini	-0.397***	-0.445***	-0.447***	-0.387**
	(-3.97)	(-3.25)	(-3.25)	(-2.64)
Adjusted R^2	0.274	0.280	0.280	0.283
		JSC (C001)		
Vollrath_Gini	-1.009	-1.376	-1.261	-0.897
	(-1.66)	(-1.52)	(-1.57)	(-1.59)
Adjusted R^2	0.077	0.079	0.082	0.092
		WPL (D059)		
Vollrath_Gini	-1.045**	-1.256**	-1.400**	-1.370**
	(-2.32)	(-2.20)	(-2.42)	(-2.19)
Adjusted R^2	0.123	0.127	0.129	0.129
		UIG (D060)		
Vollrath_Gini	-0.841***	-1.268***	-1.243***	-1.094***
	(-3.07)	(-3.45)	(-3.33)	(-2.82)
Adjusted R^2	0.088	0.091	0.091	0.092
Observations	150060	150060	150060	150060
Individual	Yes	Yes	Yes	Yes
Continetal	Yes	Yes	Yes	Yes
Geographical	No	Yes	Yes	Yes
GDP/capita	No	No	Yes	Yes
PloughAgriculture	No	No	No	Yes

Notes: T-values in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Land Gini is a ratio measuring the Inequality in Land ownership taking into account Landlessness, and the variable is from Vollrath and Erickson (2007). Originally taken from FAO database (Food and Agricultural Organization of the United Nations), and measures Land Holdings by size in acres. **Y022** is the Gender Equality Index, a combined scale from the World Values Survey (Longitudinal data from 1981 to 2014), consisting of the following three variables: **JSC (C001)** *"When jobs are scarce, men should have more right to a job than women"* (agreement coded low - higher values indicate equality). **WPL (D059)** *"On the whole, men make better political leaders than women do"* (agreement coded low - higher values indicate equality). **UIG (D060)** *"A university education is more important for a boy than for a girl"* (agreement coded low - higher values indicate equality). GDP is measured in log GDP per capita, ppp (constant 2011 international U.S. Dollars) and is taken from Quality of Governence Database (2018). Plough measures the degree of historical Plough usage, and is taken from Alesina, Giuliano and Nunn (2013). All specifications include Individual controls, such as age, age squared, gender, highest education, employment status, income, and are weighted using the original weights provided from the WVS database.

Figure A1: Distribution of Beliefs towards Gender Equality (Y022)



Notes: Gender Equality Index is a combined scale from the World Values Survey, consisting of the following three variables: **C001** *"When jobs are scarce, men should have more right to a job than women"* (agreement coded low - higher values indicate equality); **D059** *"On the whole, men make better political leaders than women do"* (agreement coded low - higher values indicate equality); **D060** *"A university education is more important for a boy than for a girl"* (agreement coded low - higher values indicate equality). The correlation of the three variables (C001, D059 and D060) is higher than 0.8.

Table A19: Second Generation Immigrant Samples - Country of Birth and Parental Origin

Country of Birth	Number	Pct %	**Country of Origin, Mother**	Number	Pct %	**Country of Origin, Father**	Number	Pct %
Austria	126	6.1	Argentina	11	0.8	Argentina	8	0.6
Belgium	131	6.3	Australia	4	0.3	Australia	4	0.3
Czech Republic	91	4.4	Austria	32	2.5	Austria	37	2.8
Estonia	8	0.4	Bangladesh	7	0.5	Bangladesh	7	0.5
Finland	15	0.7	Belgium	18	1.4	Belgium	14	1.1
France	179	8.6	Brazil	15	1.2	Belize	1	0.1
Germany	225	10.8	Canada	7	0.5	Brazil	5	0.4
Hungary	15	0.7	Colombia	1	0.1	Brunei	1	0.1
Iceland	20	1.0	Cote d'Ivoire	1	0.1	Canada	5	0.4
Ireland	113	5.4	Cyprus	1	0.1	Congo, DR	2	0.2
Israel	506	24.4	Czech Republic	31	2.4	Cote d'Ivoire	2	0.2
Italy	19	0.9	Denmark	18	1.4	Cyprus	1	0.1
Lithuania	8	0.4	Ecuador	3	0.2	Czech Republic	38	2.9
Netherlands	114	5.5	Ethiopia	13	1.0	Denmark	23	1.8
Norway	32	1.5	Finland	35	2.7	Dominican Rep.	1	0.1
Poland	27	1.3	France	69	5.3	Ethiopia	13	1.0
Portugal	26	1.3	Germany	151	11.6	Finland	19	1.4
Russia	2	0.1	Greece	5	0.4	France	50	3.8
Slovenia	12	0.6	Hungary	30	2.3	Germany	107	8.2
Spain	29	1.4	India	32	2.5	Greece	9	0.7
Sweden	104	5.0	Indonesia	19	1.5	Honduras	1	0.1
Switzerland	162	7.8	Iran	25	1.9	Hungary	37	2.8
United Kingdom	111	5.3	Iraq	64	4.9	India	30	2.3
			Ireland	36	2.8	Indonesia	28	2.1
			Israel	1	0.1	Iran	30	2.3
			Italy	79	6.1	Iraq	69	5.3
			Jamaica	6	0.5	Ireland	35	2.7
			Japan	2	0.2	Israel	4	0.3
			Lebanon	10	0.8	Italy	103	7.9
			Libya	24	1.8	Jamaica	4	0.3
			Luxembourg	2	0.2	Kenya	1	0.1
			Madagascar	1	0.1	Lebanon	6	0.5
			Mali	2	0.2	Libya	17	1.3
			Mexico	1	0.1	Luxembourg	2	0.2
			Netherlands	14	1.1	Madagascar	3	0.2
			Norway	13	1.0	Mali	2	0.2
			Pakistan	11	0.8	Mexico	1	0.1
			Philippines	6	0.5	Netherlands	13	1.0
			Poland	135	10.4	Norway	13	1.0
			Portugal	20	1.5	Pakistan	13	1.0
			Senegal	3	0.2	Philippines	2	0.2
			South Africa	3	0.2	Poland	134	10.2
			South Korea	1	0.1	Portugal	22	1.7
			Spain	30	2.3	Senegal	3	0.2
			Sri Lanka	5	0.4	South Africa	5	0.4
			Suriname	6	0.5	South Korea	1	0.1
			Sweden	10	0.8	Spain	38	2.9
			Switzerland	8	0.6	Sri Lanka	4	0.3
			Thailand	3	0.2	Suriname	7	0.5
			Tunisia	41	3.2	Sweden	9	0.7
			Turkey	96	7.4	Switzerland	6	0.5
			United Kingdom	59	4.5	Togo	1	0.1
			United States	32	2.5	Tunisia	42	3.2
			Venezuela	1	0.1	Turkey	110	8.4
			Vietnam	5	0.4	Uganda	1	0.1
			Yemen	41	3.2	United Kingdom	75	5.7
						United States	31	2.4
						Uruguay	1	0.1
						Venezuela	2	0.2
						Vietnam	6	0.5
						Yemen	53	4.0
Total	2075	100.0	**Total**	1299	100.0	**Total**	1312	100.0
Sample size	2,075		**Sample size**	1,299		**Sample size**	1,312	

Source: ESS Wave 8 (2016)

Table A20: OLS Estimates of Land Inequality on Gender Equality Belief: When Jobs Scarce, Right to Work (C001) - ESS Sample (2nd Generation Immigrants) - All variables - Either Parent

	(1) Baseline	(2) Personal	(3) Religion	(4) Education	(5) Income	(6) GDP	(7) All Controls
Either Parent Sample							
p_Vollrath_Gini	-1.071*	-1.061*	-0.913	-0.849	-0.830	-1.287	-1.307
	(-1.73)	(-1.71)	(-1.50)	(-1.54)	(-1.40)	(-1.63)	(-1.65)
Austria	0	0	0	0	0	0	0
	(.)	(.)	(.)	(.)	(.)	(.)	(.)
Belgium	0.274*	0.271*	0.249*	0.219*	0.178*	0.157	0.155
	(1.90)	(1.91)	(1.84)	(1.75)	(1.67)	(1.44)	(1.44)
Czech Republic	-0.367*	-0.376*	-0.476**	-0.418**	-0.401**	-0.403**	-0.403**
	(-1.72)	(-1.77)	(-2.43)	(-2.32)	(-2.47)	(-2.48)	(-2.48)
Estonia	-0.908***	-0.931***	-0.922***	-1.036***	-1.156***	-1.223***	-1.226***
	(-3.67)	(-3.53)	(-3.71)	(-5.54)	(-4.82)	(-4.42)	(-4.42)
Finland	0.398**	0.385**	0.392**	0.326**	0.270*	0.234	0.232
	(2.29)	(2.33)	(2.40)	(2.05)	(1.82)	(1.48)	(1.47)
France	0.428**	0.425**	0.411**	0.393***	0.348***	0.330***	0.329***
	(2.52)	(2.55)	(2.49)	(2.84)	(3.06)	(2.88)	(2.89)
Germany	0.294*	0.281*	0.245*	0.199	0.155	0.152	0.151
	(1.96)	(1.92)	(1.76)	(1.55)	(1.53)	(1.52)	(1.53)
Hungary	-0.0393	-0.0464	-0.152	-0.122	-0.225	-0.234	-0.233
	(-0.15)	(-0.18)	(-0.63)	(-0.55)	(-0.84)	(-0.87)	(-0.86)
Iceland	0.561***	0.515**	0.510***	0.472***	0.443***	0.437***	0.456**
	(2.76)	(2.47)	(2.65)	(2.91)	(2.78)	(2.74)	(2.33)
Ireland	0.235	0.226	0.260	0.215	0.179	0.169	0.168
	(1.24)	(1.19)	(1.50)	(1.26)	(1.35)	(1.29)	(1.29)
Israel	-0.0819	-0.102	-0.0562	-0.123	-0.171	-0.210	-0.209
	(-0.40)	(-0.50)	(-0.32)	(-0.80)	(-1.29)	(-1.48)	(-1.46)
Italy	-0.131	-0.0963	0.0167	0.0540	0.214	0.198	0.196
	(-0.74)	(-0.55)	(0.10)	(0.35)	(1.44)	(1.32)	(1.32)
Lithuania	-0.758***	-0.784***	-0.653***	-0.705***	-1.033***	-1.079***	-1.080***
	(-4.61)	(-4.82)	(-4.27)	(-5.30)	(-9.03)	(-8.83)	(-8.88)
Netherlands	0.489***	0.484***	0.440**	0.430***	0.399***	0.392***	0.389***
	(2.91)	(2.93)	(2.61)	(2.86)	(3.33)	(3.26)	(3.25)
Norway	0.670***	0.645***	0.605***	0.523***	0.475***	0.468***	0.470***
	(3.97)	(3.91)	(4.10)	(4.12)	(4.08)	(4.05)	(4.01)
Poland	-0.482*	-0.484	-0.273	-0.254	-0.248	-0.267	-0.267
	(-1.67)	(-1.66)	(-1.02)	(-1.04)	(-0.91)	(-0.97)	(-0.97)
Portugal	0.591**	0.575**	0.556***	0.421**	0.501***	0.467***	0.466***
	(2.56)	(2.57)	(2.99)	(2.40)	(3.97)	(3.65)	(3.66)
Russia	-0.471	-0.524	-0.451	-0.580	0.687***	0.705***	0.705***
	(-0.45)	(-0.51)	(-0.46)	(-0.59)	(5.40)	(5.40)	(5.41)
Slovenia	0.0309	0.0219	0.0236	0.0678	0.109	0.0881	0.0867
	(0.10)	(0.07)	(0.09)	(0.26)	(0.41)	(0.34)	(0.34)
Spain	0.310	0.328	0.219	0.290	0.257	0.247	0.247
	(1.12)	(1.24)	(0.90)	(1.37)	(1.27)	(1.23)	(1.23)
Sweden	0.678***	0.657***	0.577***	0.531***	0.500***	0.484***	0.483***
	(4.40)	(4.30)	(4.12)	(4.24)	(4.71)	(4.57)	(4.59)
Switzerland	0.256	0.233	0.222	0.163	0.139	0.134	0.133
	(1.31)	(1.19)	(1.29)	(1.07)	(0.98)	(0.97)	(0.96)
United Kingdom	0.460***	0.459***	0.468***	0.429***	0.377***	0.376***	0.374***
	(2.78)	(2.84)	(3.16)	(3.20)	(3.43)	(3.44)	(3.50)
Age of respondent, calculated	0.00374	-0.00549	-0.00650	-0.0176**	-0.0159*	-0.0166**	-0.0166**
	(0.48)	(-0.55)	(-0.70)	(-2.01)	(-1.97)	(-2.12)	(-2.12)
Age of respondent, squared	-0.000100	0.00000747	0.0000160	0.000129	0.000105	0.000112	0.000112
	(-1.22)	(0.07)	(0.16)	(1.36)	(1.17)	(1.29)	(1.29)
Gender	0.234***	0.245***	0.267***	0.256***	0.277***	0.275***	0.275***
	(4.61)	(4.69)	(5.01)	(4.86)	(4.94)	(4.90)	(4.89)
Doing last 7 days: paid work		0.166***	0.147***	0.0647	0.0492	0.0492	0.0496
		(3.25)	(3.07)	(1.39)	(0.86)	(0.86)	(0.86)
How religious are you			-0.0291**	-0.0251**	-0.0241*	-0.0242*	-0.0241*
			(-2.44)	(-2.16)	(-1.89)	(-1.89)	(-1.89)
How often attend religious services			0.0889***	0.0922***	0.0898***	0.0897***	0.0897***
			(3.63)	(3.93)	(3.38)	(3.38)	(3.38)
How often pray apart from at religious services			0.00268	-0.0000551	0.00223	0.00227	0.00225
			(0.22)	(-0.00)	(0.15)	(0.16)	(0.15)
Highest level of education				0.00119***	0.00120***	0.00120***	0.00120***
				(11.86)	(10.98)	(10.99)	(10.98)
Level of income					-0.00214	-0.00180	-0.00197
					(-0.09)	(-0.08)	(-0.08)
GDP (parental country)						-0.213	-0.209
						(-0.88)	(-0.85)
Usage of Plough (parental country)							0.0763
							(0.21)
Constant	4.540***	4.591***	4.093***	3.869***	3.853***	6.459**	6.363**
	(8.98)	(9.16)	(7.37)	(7.51)	(6.54)	(2.14)	(2.05)
Adjusted R^2	0.097	0.101	0.137	0.172	0.175	0.175	0.175
Observations	2075	2075	2075	2075	1747	1747	1747
CountryFE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Personal	No	Yes	Yes	Yes	Yes	Yes	Yes
Religion	No	No	Yes	Yes	Yes	Yes	Yes
Education	No	No	No	Yes	Yes	Yes	Yes
Income	No	No	No	No	Yes	Yes	Yes
GDP/capita	No	No	No	No	No	Yes	Yes
PloughAgriculture	No	No	No	No	No	No	Yes

Notes: T-values in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Land Gini is a ratio measuring the Inequality in Land ownership taking into account Landlessness, and the variable is from Vollrath and Erickson (2007). Originally taken from FAO database (Food and Agricultural Organization of the United Nations), and measures Land Holdings by size in acres. The dependent variable is taken from the European Social Survey (Wave 8), and matches the WVS question measuring Gender Equality: **C001** *"When jobs are scarce, men should have more right to a job than women"* (agreement coded low - higher values indicate equality). There are three subsamples, depending on the respondents: p_Vollrath_Gini captures the average Land Gini of the two parents birth country, in case either of them is an immigrant. The other two variables (fs_Vollrath_Gini and ms_Vollrath_Gini) capture the average Land Gini on the Birth Country of Father and Mother respectively (i.e. only Father's/Mother's effect). GDP is measured in log GDP per capita, ppp (constant 2011 international U.S. Dollars) and is taken from Quality of Governence Database (2018). Plough measures the degree of historical Plough usage, and is taken from Alesina, Giuliano and Nunn (2013). Religious controls include answers to the following questions: *"How religious are you?" "How often do you attend religious services apart from special occasions?" "How often do you pray apart from at religious services?"*. Other individual controls include age, gender, highest education, employment status, income, and are weighted using the original weights provided from the ESS database.

Table A21: OLS Estimates of Land Inequality on Gender Equality Belief: When Jobs Scarce, Right to Work (C001) - ESS Sample (2nd Generation Immigrants) - All variables - Father Sample

	(1) Baseline	(2) Personal	(3) Religion	(4) Education	(5) Income	(6) GDP	(7) All Controls
Father's Origin Sample							
fs_Vollrath_Gini	-0.952*	-1.053**	-0.912**	-0.846**	-0.765	0.281	0.207
	(-1.82)	(-2.05)	(-2.15)	(-2.15)	(-1.40)	(0.39)	(0.28)
Austria	0	0	0	0	0	0	0
	(.)	(.)	(.)	(.)	(.)	(.)	(.)
Belgium	0.200	0.203	0.206	0.155	0.119	0.162	0.159
	(0.73)	(0.78)	(0.81)	(0.66)	(0.64)	(0.82)	(0.80)
Czech Republic	-0.602	-0.595	-0.724*	-0.674*	-0.703**	-0.707**	-0.705**
	(-1.53)	(-1.55)	(-1.97)	(-1.97)	(-2.49)	(-2.59)	(-2.58)
Estonia	-1.158*	-1.124*	-1.125	-1.205*	-1.263*	-1.209*	-1.203
	(-1.80)	(-1.68)	(-1.60)	(-1.74)	(-1.75)	(-1.68)	(-1.66)
Finland	0.450	0.438	0.497*	0.522**	0.440**	0.462***	0.477***
	(1.53)	(1.57)	(1.79)	(2.21)	(2.65)	(2.70)	(2.68)
France	0.246	0.246	0.255	0.253	0.175	0.213	0.210
	(0.79)	(0.84)	(0.91)	(1.04)	(1.02)	(1.15)	(1.14)
Germany	0.110	0.0997	0.0994	0.0668	0.0177	0.0337	0.0361
	(0.39)	(0.37)	(0.38)	(0.28)	(0.09)	(0.16)	(0.17)
Hungary	-0.0916	-0.0724	-0.203	-0.114	-0.196	-0.217	-0.216
	(-0.31)	(-0.24)	(-0.75)	(-0.48)	(-0.96)	(-1.13)	(-1.12)
Iceland	0.420	0.365	0.393	0.300	0.261	0.287	0.327
	(1.29)	(1.14)	(1.30)	(1.06)	(1.02)	(1.07)	(1.08)
Ireland	0.0278	0.0241	0.0689	0.0540	-0.00260	0.0290	0.0269
	(0.09)	(0.08)	(0.24)	(0.20)	(-0.01)	(0.13)	(0.12)
Israel	-0.162	-0.173	-0.112	-0.180	-0.284	-0.193	-0.191
	(-0.50)	(-0.55)	(-0.39)	(-0.72)	(-1.25)	(-0.75)	(-0.74)
Italy	0.0895	0.204	0.228	0.212	0.0873	0.119	0.120
	(0.14)	(0.33)	(0.39)	(0.42)	(0.18)	(0.24)	(0.24)
Lithuania	-0.679**	-0.697**	-0.539	-0.457	-0.272	-0.203	-0.204
	(-2.12)	(-2.42)	(-1.64)	(-1.64)	(-1.27)	(-0.84)	(-0.84)
Netherlands	0.529*	0.525*	0.522*	0.471*	0.417*	0.445**	0.440**
	(1.88)	(1.99)	(1.96)	(1.92)	(1.94)	(2.03)	(2.01)
Norway	0.612*	0.564*	0.539*	0.510*	0.465*	0.491**	0.512**
	(1.89)	(1.80)	(1.88)	(1.99)	(1.97)	(2.02)	(2.03)
Poland	-0.875**	-0.838**	-0.663*	-0.583*	-0.580	-0.586	-0.587
	(-2.22)	(-2.19)	(-1.80)	(-1.69)	(-1.43)	(-1.48)	(-1.48)
Portugal	0.687**	0.634**	0.600**	0.487*	0.401*	0.472*	0.470*
	(2.10)	(2.03)	(2.07)	(1.77)	(1.78)	(1.90)	(1.89)
Russia	-2.067***	-1.911***	-1.938***	-1.892***	-1.988***	-1.927***	-1.924***
	(-6.88)	(-6.81)	(-7.25)	(-7.95)	(-9.94)	(-8.68)	(-8.63)
Slovenia	0.343	0.378	0.414	0.360	0.261	0.243	0.245
	(1.03)	(1.17)	(1.35)	(1.34)	(1.22)	(1.22)	(1.22)
Spain	0.247	0.297	0.174	0.281	0.222	0.256	0.254
	(0.58)	(0.76)	(0.46)	(0.87)	(0.71)	(0.81)	(0.80)
Sweden	0.660**	0.623**	0.534*	0.478*	0.449**	0.492**	0.500**
	(2.17)	(2.10)	(1.87)	(1.86)	(2.06)	(2.21)	(2.19)
Switzerland	0.305	0.291	0.272	0.227	0.272	0.292	0.289
	(1.02)	(1.01)	(1.03)	(0.97)	(1.34)	(1.41)	(1.39)
United Kingdom	0.350	0.360	0.391	0.325	0.262	0.278	0.277
	(1.15)	(1.24)	(1.41)	(1.35)	(1.22)	(1.26)	(1.26)
Age of respondent, calculated	-0.00248	-0.0166*	-0.0182**	-0.0267***	-0.0239***	-0.0228***	-0.0228***
	(-0.29)	(-1.69)	(-2.25)	(-3.38)	(-3.07)	(-2.82)	(-2.82)
Age of respondent, squared	-0.0000281	0.000138	0.000146*	0.000226***	0.000190**	0.000179**	0.000180**
	(-0.36)	(1.41)	(1.77)	(2.85)	(2.44)	(2.23)	(2.24)
Gender	0.278***	0.294***	0.307***	0.296***	0.341***	0.344***	0.344***
	(5.17)	(5.45)	(5.42)	(5.54)	(5.40)	(5.56)	(5.57)
Doing last 7 days: paid work		0.257***	0.233***	0.147**	0.125	0.131	0.133
		(3.40)	(3.27)	(2.07)	(1.50)	(1.58)	(1.61)
How religious are you			-0.0293*	-0.0234	-0.0192	-0.0177	-0.0179
			(-1.82)	(-1.54)	(-1.17)	(-1.07)	(-1.08)
How often attend religious services			0.0880***	0.0916***	0.0852**	0.0856**	0.0853**
			(2.78)	(3.08)	(2.59)	(2.59)	(2.58)
How often pray apart from at religious services			0.00209	0.00322	0.0122	0.0134	0.0131
			(0.13)	(0.20)	(0.72)	(0.78)	(0.76)
Highest level of education				0.00118***	0.00120***	0.00117***	0.00117***
				(9.90)	(8.75)	(8.86)	(8.90)
Level of income					-0.00787	-0.01000	-0.00976
					(-0.29)	(-0.37)	(-0.36)
GDP (parental country)						0.395	0.387
						(1.50)	(1.49)
Usage of Plough (parental country)							0.260
							(0.47)
Constant	4.558***	4.716***	4.270***	3.987***	3.901***	-1.091	-1.209
	(8.75)	(9.33)	(8.42)	(8.36)	(6.69)	(-0.32)	(-0.35)
Adjusted R^2	0.100	0.108	0.144	0.176	0.183	0.183	0.183
Observations	1312	1312	1312	1312	1097	1097	1097
CountryFE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Personal	No	Yes	Yes	Yes	Yes	Yes	Yes
Religion	No	No	Yes	Yes	Yes	Yes	Yes
Education	No	No	No	Yes	Yes	Yes	Yes
Income	No	No	No	No	Yes	Yes	Yes
GDP/capita	No	No	No	No	No	Yes	Yes
PloughAgriculture	No	No	No	No	No	No	Yes

Notes: T-values in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Land Gini is a ratio measuring the Inequality in Land ownership taking into account Landlessness, and the variable is from Vollrath and Erickson (2007). Originally taken from FAO database (Food and Agricultural Organization of the United Nations), and measures Land Holdings by size in acres. The dependent variable is taken from the European Social Survey (Wave 8), and matches the WVS question measuring Gender Equality: **C001** *"When jobs are scarce, men should have more right to a job than women"* (agreement coded low - higher values indicate equality). There are three subsamples, depending on the respondents: p_Vollrath_Gini captures the average Land Gini of the two parents birth country, in case either of them is an immigrant. The other two variables (fs_Vollrath_Gini and ms_Vollrath_Gini) capture the average Land Gini on the Birth Country of Father and Mother respectively (i.e. only Father's/Mother's effect). GDP is measured in log GDP per capita, ppp (constant 2011 international U.S. Dollars) and is taken from Quality of Governence Database (2018). Plough measures the degree of historical Plough usage, and is taken from Alesina, Giuliano and Nunn (2013). Religious controls include answers to the following questions: *"How religious are you?"* *"How often do you attend religious services apart from special occasions?"* *"How often do you pray apart from at religious services?"*. Other individual controls include age, gender, highest education, employment status, income, and are weighted using the original weights provided from the ESS database.

Table A22: OLS Estimates of Land Inequality on Gender Equality Belief: When Jobs Scarce, Right to Work (C001) - ESS Sample (2nd Generation Immigrants) - All variables - Mother Sample

	(1) Baseline	(2) Personal	(3) Religion	(4) Education	(5) Income	(6) GDP	(7) All Controls
Mother's Origin Sample							
ms_Vollrath_Gini	-2.377***	-2.340***	-2.122***	-1.972***	-2.365***	-2.365***	-2.420***
	(-3.53)	(-3.47)	(-3.50)	(-3.52)	(-4.04)	(-4.92)	(-5.05)
Austria	0	0	0	0	0	0	0
	(.)	(.)	(.)	(.)	(.)	(.)	(.)
Belgium	0.258*	0.233*	0.229	0.202	0.0935	0.0935	0.0924
	(1.87)	(1.68)	(1.66)	(1.54)	(0.78)	(0.80)	(0.79)
Czech Republic	-0.366	-0.373	-0.495	-0.433	-0.378	-0.378	-0.380
	(-1.02)	(-1.05)	(-1.59)	(-1.38)	(-0.96)	(-0.96)	(-0.97)
Estonia	-0.998***	-1.028***	-1.018***	-1.113***	-1.311***	-1.311***	-1.321***
	(-3.43)	(-3.30)	(-3.50)	(-4.63)	(-4.29)	(-4.47)	(-4.51)
Finland	0.288	0.240	0.178	-0.0364	-0.108	-0.108	-0.111
	(1.39)	(1.17)	(0.93)	(-0.20)	(-0.68)	(-0.72)	(-0.74)
France	0.633***	0.624***	0.632***	0.600***	0.531***	0.531***	0.527***
	(3.27)	(3.30)	(3.20)	(3.32)	(3.43)	(3.58)	(3.53)
Germany	0.390**	0.381**	0.370***	0.296**	0.235	0.235	0.234
	(2.50)	(2.47)	(2.78)	(2.25)	(1.58)	(1.61)	(1.60)
Hungary	0.218	0.177	0.0619	-0.0101	-0.00651	-0.00651	-0.00968
	(1.17)	(0.99)	(0.29)	(-0.06)	(-0.05)	(-0.05)	(-0.07)
Iceland	0.533**	0.474**	0.466**	0.430**	0.357**	0.357**	0.428**
	(2.38)	(2.10)	(2.26)	(2.42)	(2.13)	(2.13)	(2.30)
Ireland	0.237	0.220	0.281	0.211	0.0999	0.0999	0.102
	(1.12)	(1.04)	(1.42)	(1.10)	(0.61)	(0.62)	(0.64)
Israel	0.0203	-0.0109	0.0541	-0.0186	-0.125	-0.125	-0.121
	(0.09)	(-0.05)	(0.29)	(-0.11)	(-0.81)	(-0.80)	(-0.77)
Italy	0.0302	0.0757	0.230	0.247	0.482*	0.482	0.477
	(0.11)	(0.30)	(0.82)	(0.90)	(1.69)	(1.64)	(1.62)
Lithuania	-0.620***	-0.656***	-0.493***	-0.563***	-0.897***	-0.897***	-0.897***
	(-3.27)	(-3.51)	(-2.87)	(-3.53)	(-6.69)	(-6.63)	(-6.64)
Netherlands	0.446**	0.445**	0.406*	0.398*	0.335*	0.335**	0.330*
	(2.01)	(2.04)	(1.73)	(1.85)	(1.97)	(2.01)	(1.98)
Norway	0.576***	0.547***	0.512***	0.373**	0.237	0.237	0.285
	(2.98)	(2.81)	(2.92)	(2.24)	(1.38)	(1.39)	(1.61)
Poland	-0.0496	-0.0608	0.195	0.182	0.0992	0.0992	0.0963
	(-0.26)	(-0.32)	(1.09)	(1.07)	(0.68)	(0.66)	(0.64)
Portugal	0.694	0.702*	0.704***	0.643***	0.586***	0.586***	0.587***
	(1.64)	(1.83)	(3.38)	(3.66)	(3.68)	(3.71)	(3.64)
Russia	-0.301	-0.372	-0.298	-0.428	0.871***	0.871***	0.871***
	(-0.28)	(-0.35)	(-0.29)	(-0.42)	(6.36)	(6.37)	(6.34)
Slovenia	0.0890	0.0753	0.0742	0.0981	0.115	0.115	0.108
	(0.28)	(0.25)	(0.27)	(0.36)	(0.40)	(0.40)	(0.38)
Spain	0.399	0.427	0.280	0.332	0.295	0.295	0.290
	(1.04)	(1.19)	(0.78)	(1.00)	(0.98)	(0.97)	(0.95)
Sweden	0.551***	0.526***	0.432**	0.402**	0.295*	0.295**	0.293*
	(2.98)	(2.91)	(2.53)	(2.46)	(1.92)	(2.03)	(2.00)
Switzerland	0.301	0.264	0.249	0.179	0.0731	0.0731	0.0715
	(1.27)	(1.12)	(1.19)	(0.92)	(0.37)	(0.37)	(0.36)
United Kingdom	0.536***	0.524***	0.559***	0.518***	0.391***	0.391***	0.386***
	(2.90)	(2.87)	(3.24)	(3.17)	(2.89)	(2.91)	(2.87)
Age of respondent, calculated	0.0115	0.000553	-0.00220	-0.0132	-0.0104	-0.0104	-0.0107
	(1.13)	(0.04)	(-0.19)	(-1.17)	(-0.97)	(-0.96)	(-1.00)
Age of respondent, squared	-0.000157	-0.0000290	-0.0000137	0.0000986	0.0000669	0.0000669	0.0000691
	(-1.36)	(-0.21)	(-0.11)	(0.79)	(0.55)	(0.54)	(0.57)
Gender	0.257***	0.271***	0.286***	0.273***	0.268***	0.268***	0.267***
	(3.55)	(3.58)	(3.74)	(3.64)	(3.61)	(3.62)	(3.61)
Doing last 7 days: paid work		0.204***	0.186***	0.107**	0.121*	0.121*	0.121*
		(3.62)	(3.63)	(2.04)	(1.69)	(1.70)	(1.70)
How religious are you			-0.0369**	-0.0315**	-0.0262	-0.0262	-0.0268
			(-2.48)	(-2.10)	(-1.51)	(-1.51)	(-1.53)
How often attend religious services			0.103***	0.105***	0.101***	0.101***	0.100***
			(3.68)	(3.83)	(3.00)	(3.00)	(2.96)
How often pray apart from at religious services			0.0105	0.00641	0.0139	0.0139	0.0140
			(0.71)	(0.41)	(0.61)	(0.61)	(0.62)
Highest level of education				0.00103***	0.00109***	0.00109***	0.00109***
				(8.04)	(6.76)	(6.74)	(6.76)
Level of income					-0.0295	-0.0295	-0.0295
					(-1.02)	(-1.02)	(-1.02)
GDP (parental country)						0.000145	0.00309
						(0.00)	(0.01)
Usage of Plough (parental country)							0.423
							(1.03)
Constant	5.267***	5.305***	4.742***	4.527***	5.072***	5.071**	4.687*
	(9.43)	(9.73)	(7.87)	(8.28)	(7.59)	(2.09)	(1.86)
Adjusted R^2	0.095	0.101	0.160	0.184	0.189	0.188	0.188
Observations	1299	1299	1299	1299	1082	1082	1082
CountryFE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Personal	No	Yes	Yes	Yes	Yes	Yes	Yes
Religion	No	No	Yes	Yes	Yes	Yes	Yes
Education	No	No	No	Yes	Yes	Yes	Yes
Income	No	No	No	No	Yes	Yes	Yes
GDP/capita	No	No	No	No	No	Yes	Yes
PloughAgriculture	No	No	No	No	No	No	Yes

Notes: T-values in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Land Gini is a ratio measuring the Inequality in Land ownership taking into account Landlessness, and the variable is from Vollrath and Erickson (2007). Originally taken from FAO database (Food and Agricultural Organization of the United Nations), and measures Land Holdings by size in acres. The dependent variable is taken from the European Social Survey (Wave 8), and matches the WVS question measuring Gender Equality: **C001** *"When jobs are scarce, men should have more right to a job than women"* (agreement coded low - higher values indicate equality). There are three subsamples, depending on the respondents: p_Vollrath_Gini captures the average Land Gini of the two parents birth country, in case either of them is an immigrant. The other two variables (fs_Vollrath_Gini and ms_Vollrath_Gini) capture the average Land Gini on the Birth Country of Father and Mother respectively (i.e. only Father's/Mother's effect). GDP is measured in log GDP per capita, ppp (constant 2011 international U.S. Dollars) and is taken from Quality of Governence Database (2018). Plough measures the degree of historical Plough usage, and is taken from Alesina, Giuliano and Nunn (2013). Religious controls include answers to the following questions: *"How religious are you?" "How often do you attend religious services apart from special occasions?" "How often do you pray apart from at religious services?"*. Other individual controls include age, gender, highest education, employment status, income, and are weighted using the original weights provided from the ESS database.