



You can't be what you can't see: The role of gender in the intergenerational transmission of entrepreneurship

Noemi Oggero, Francesco Devicienti, Mariacristina Rossi,
Davide Vannoni

No. 675
May 2022

Carlo Alberto Notebooks

www.carloalberto.org/research/working-papers

You can't be what you can't see: The role of gender in the intergenerational transmission of entrepreneurship

Noemi Oggero^{a,d}, Francesco Devicienti^{b,c}, Mariacristina Rossi^{a,d,e}, Davide Vannoni^{b,c}

^aDepartment of Management, University of Torino

^bESOMAS Department, University of Torino

^cCollegio Carlo Alberto

^dCeRP, Collegio Carlo Alberto

^eCommissione di Vigilanza sui Fondi Pensione

Abstract

In this paper, we investigate how the intergenerational transmission of entrepreneurship varies between sons and daughters, and whether such a process depends on living in a country characterized by a high gender gap. Using the SHARE dataset, we find that the effect on daughters' entrepreneurial choices of having an entrepreneur as father is lower than the one on sons only in countries with a high gender gap. Moreover, it is just in countries with high gender inequality that the effect of having an entrepreneurial mother is different between sons and daughters, with the impact being positive for daughters only. We also develop an individual-level indicator of gender gap within countries that corroborates our findings, which we interpret as evidence of the presence of a role modeling mechanism. However, we find evidence of convergence across time of the intergenerational transmission process to the gender-independent transfer typical of more gender equal countries.

Keywords: Entrepreneurship, Gender, Parents, Intergenerational transmission

JEL codes: L26, J16, J24

1. Introduction

What affects selection into entrepreneurship? As enterprises have a positive impact on both new job creation and innovation, a wide strand of literature has investigated the factors influencing the decision to become an entrepreneur. Having parents who were entrepreneurs themselves is certainly a crucial one, but children's gender can strengthen or weaken this relationship. Indeed, the effect of having entrepreneurial parents may not be the same for all children.

In this paper, we investigate the intergenerational transmission of entrepreneurship and the extent to which it is affected by the environment where an individual was born and grows up. We first study the impact of having entrepreneurial fathers and mothers on children's probability of being entrepreneurs themselves, and how it varies between daughters and sons. Second, we test whether this effect is similar across countries or whether it depends on being born and living in a country with high or low gender inequality. The few previous studies that touched upon gender differences in the intergenerational transmission process focused on one country only. To the best of our knowledge, we are the first to exploit cross-country data.

We address these questions using more than one data set. The most important one is the Survey of Health, Ageing, and Retirement in Europe (SHARE), a representative sample of individuals aged more than 50 living in 12 countries. Besides including information on a rich set of socio-demographics, this survey contains unique data on both respondents and their parents' occupations. To add country-level information on the gap between women and men in their access to opportunities, we also collect macroeconomic data. In particular, we use data on the Gender Inequality Index, on the dates women were first granted suffrage, and on female labor force participation, to account for the presence of gender inequality in the several countries covered by this study. The Gender Inequality Index is a time series provided by the International Monetary Fund aiming at capturing the size of the gap between women and men in different crucial areas. While this gender gap index allows us to go back in time up to 1990, the dates women were first granted suffrage range from 1915 to

1971 for the countries in our sample. Finally, the information on female labor force participation is available for the 1960s for several countries.

Our cross-country estimates show a strong same-sex parental transmission of entrepreneurship. We find that children of entrepreneurs are substantially more likely than other children to enter entrepreneurship, but the effect is gender-dependent. Specifically, when considering several countries together, the overall effect of having an entrepreneurial father is positive for both male and female children, but the impact is significantly bigger for sons than daughters. On the contrary, having an entrepreneurial mother increases the probability of daughters becoming entrepreneurs, while it does not affect the choices of sons.

However, the above finding does not hold for all the countries analyzed. The effect of fathers on daughters is lower than the one on sons only in countries where a high gender gap persists, while it is the same in more gender-equal countries. Furthermore, in countries with low gender inequality, having an entrepreneur as a mother has the same (null) effect on the probability to be entrepreneurs of both sons and daughters. It is just in countries with high gender inequality that the effect of having an entrepreneurial mother is different between sons and daughters, with the impact being positive for daughters only. We interpret this result as evidence of the role model that mothers play in countries where the gap between women and men in having access to resources and opportunities is extremely large.

Finally, we develop an individual-level indicator of the gender gap *within* countries that corroborates our findings. We indeed show that women who experienced a higher gender gap in their country, being born before or immediately after the year female voting was granted, are more affected by mothers and less affected by fathers in their entrepreneurial choices. Also, we find evidence of a convergence of the intergenerational transmission process toward the transfer typical of less unequal countries. Indeed, for younger individuals in more unequal countries, a strong same-sex parental transmission is not in place anymore.

The rest of the paper is organized as follows. Section 2 discusses the background literature and Section 3 introduces the data and provides some relevant descriptive statistics. Section 4 describes the estimation strategy and Section 5 presents the main estimation results. Section 6 adds on robustness and the convergence process of intergenerational transmission. Section 7 concludes the paper.

2. Literature Review

As it seems to be frequent that children follow in their parents' footsteps, several studies have investigated the intergenerational transfer of occupations. While some authors interpreted occupational inheritance as the result of the existence of cultural barriers to occupational entry and exit (DeJong, Brawer, and Robin, 1971), others argued that children choose voluntarily to remain in their parents' occupations (Laband and Lentz, 1983). Following this occupational inheritance debate, a growing strand of the literature has focused on the family background of entrepreneurs and self-employed. Hout (1984) was the first one to prove that men whose fathers were entrepreneurs are more likely to be in positions that provide autonomy. Several studies have then shown that having a parent who is a business owner or self-employed is associated with a higher probability of children becoming self-employed or entrepreneurs themselves (Lentz and Laband, 1990; Fairlie, 1999; Dunn and Holtz-Eakin, 2000; Hout and Rosen, 2000; Colombier and Masclet, 2008).

While the earliest studies just looked at the intergenerational transfer of self-employment (only a few focused specifically on entrepreneurship) from fathers to sons, some more recent research has taken into account the gender dimension. In particular, Lindquist, Sol, and Van Praag (2015) and Hoffmann, Junge, and Malchow-Møller (2015) found some same-sex associations in the intergenerational transfer of entrepreneurship and self-employment. However, while these studies were a first attempt to understand whether entrepreneurship is transmitted more strongly from parents to children of the same gender, they just considered one country at a time, Sweden and Denmark,

respectively. Moreover, they focused their analysis on restricted samples: adoptive children (Lindquist, Sol, and Van Praag, 2015) and young individuals (Hoffmann, Junge, and Malchow-Møller, 2015). Looking instead at the United States, Mishkin (2021) investigated the transmission of self-employment from fathers to daughters when there are other siblings in the family. Considering only father-daughter pairs, the author found that the intergenerational transfer is reduced when there are sons in the family, but she did not investigate the effect of mothers. Along this line, Oguzoglu and Ozbeklik (2016) focused on the American youth aged between 14 and 22 and suggested that fathers are more likely to transmit occupation-specific tastes to their daughters in the absence of a son. Other studies have highlighted the importance of gender in the transmission of entrepreneurship across generations, yet focusing only on subgroups of the populations, such as immigrants (Andersson and Hammarstedt, 2011).

Accordingly, some research touched upon the gender perspective but only focused on part of the story. No study has investigated the relevance of gender in the transmission of entrepreneurship using nationally representative data, nor were exploited international data to eventually detect differences across countries. Moreover, several studies limited their analysis to the self-employed and, differently than us, they did not specifically look at entrepreneurs (e.g., Hoffmann, Junge, and Malchow-Møller, 2015; Dunn and Holtz-Eakin, 2000). In addition, the above-mentioned papers focused only on the transition from wage employment to self-employment of young people: the average age of individuals was 30 in Hoffmann, Junge, and Malchow-Møller (2015), while Dunn and Holtz-Eakin (2000) worked with a sample of men aged 14-24. We notice that focusing on the youth only can be misleading, as very young people are more easily influenced and are more likely to change their occupations later in life. Instead, if the intergenerational transmission is proved when focusing on adulthood and old age, it exhibits a strong and long-term persistence.

There is a consensus that the mechanism underlining the intergenerational transmission of entrepreneurship is role modeling. Using Swedish adoption data, Lindquist, Sol, and Van Praag (2015)

found a strong influence of adoptive parents, while they did not find any evidence supporting the hypotheses of inheritance of the family business, access to cheap capital, and transfer of industry-specific skills or tastes. Similarly, Hoffmann, Junge, and Malchow-Møller (2015) ruled out other possible explanations different from the role modeling, as their results held after disregarding cases where the offspring inherit the family business and after controlling for work experience in the parents' firms. Along this line, Fairlie and Robb (2007) showed that the intergenerational link in self-employment is not primarily due to the acquisition of general and specific business human capital.

While the intergenerational transmission of entrepreneurship does not seem to be primarily related to human capital formation, Mishkin (2021) argued that human capital investments are likely to play an important role in the transmission of self-employment. Using American data drawn from the Panel Study of Income Dynamics, the author claimed that human capital transmission from fathers to daughters is crowded out by brothers. However, Lindquist, Sol, and Van Praag (2015) did not find evidence supporting the hypothesis that parents invest more in their children of the same gender and that the transmission is driven by differential parenting efforts.

While all the studies reviewed here focused on a single country at a time, the intergenerational transmission of entrepreneurship is not necessarily similar in different contexts. For example, looking at university students' entrepreneurial intentions, Laspita et al. (2012) showed that the impact of parents is not the same in all countries, as the influences are particularly strong in cultures with high in-group collectivism such as Hungary, intended as cohesiveness in organizations or families. However, Laspita et al. (2012) focused on the youth only: the average age of their sample is 24. Value orientations of entrepreneurial parents could play a role in the transmission process too. Wyrwich (2015) showed that the children of self-employed parents who faced resistance in the socialist German Democratic Republic due to their self-employment are much more likely to run a business because of their taste for challenging existing conditions. Finally, it is worth mentioning that selection into entrepreneurship can be affected by the environment itself, besides the parental channel of

transmission. For example, Niittykangas and Tervo (2005) analyzed the importance of the local environment for self-employment, and Guiso, Pistaferri, and Schivardi (2021) showed that individuals who grew up in a location with a higher firm density are more likely to become entrepreneurs. Hence, not only parents can serve as role models, but wider networks can also have this function.

3. Data

The microdata used in our empirical analysis is drawn from the Survey of Health, Ageing, and Retirement in Europe (SHARE), a data set that is representative of people aged 50 and over in several countries. The survey was conducted for the first time in 2004 to collect comparable information about the socio-economic and health status of European older individuals and their households. The 2004 baseline study covered eleven European countries representing different regions, ranging from Scandinavia (Denmark and Sweden) through Central Europe (Austria, Belgium, France, Germany, the Netherlands, and Switzerland) to Mediterranean countries like Spain, Italy, and Greece (Börsch-Supan et al., 2005). Also, Israel participated in the first wave of the SHARE.

In the 2004 wave, the questionnaire was asked to all household members born in 1954 or earlier, i.e., older than fifty. In addition, for households with at least a member older than fifty, living-in partners were interviewed regardless of their age. A unique feature of the 2004 survey is that respondents were asked about their parents, allowing us to observe two generations at the same time. More specifically, respondents reported the current job or the last job their mothers and fathers had. Hence, in the first wave only, SHARE provides the classification of occupations for respondents and their parents, thus we will exploit this wave. The classification used by SHARE is the 1988 International Standard Classification of Occupations (ISCO-88) by the International Labour Organization. As per this classification, we consider entrepreneurs those who are identified as

proprietors of small businesses that they manage on their own behalf.¹ For respondents and their parents, our entrepreneurship variable is a dummy taking value 1 if they are or have been (before they retired or became unemployed) entrepreneurs according to this ISCO-88 classification. Hence, the definition of parental entrepreneurship is the same as the one used for offspring's entrepreneurship, i.e., being owners of small enterprises. Our final sample includes 24,252 respondents for whom we have complete information on both their parents' occupations.

The variables used in the empirical analysis are defined in Table 1.

Table 1 here

Panel A of Table 2 summarizes the descriptive statistics for our sample of adult children. The sample is gender-balanced, with 51% of female respondents, and the average sample age is 64 years. Concerning educational attainment, the SHARE harmonizes internationally different levels using the International Standard Classification of Education (ISCED-97). According to this classification, 18% of respondents report a lower secondary level of education, almost one third (31%) hold an upper secondary level of education, and one fifth (20%) exhibit tertiary education. Panel A of Table 2 also shows that 6% of respondents have a father who was an entrepreneur, compared to 2% of respondents' mothers. Finally, 5% of adult children in our sample are entrepreneurs. Panel B of Table 2 shows the composition of respondents by country of residence. The countries in which there is more parental entrepreneurship are Denmark (entrepreneurial fathers), Belgium, and France (entrepreneurial mothers). Israel, Austria, and Sweden are the countries with the lowest shares of respondents who declare to be entrepreneurs. Overall, however, we do not observe remarkable differences across countries.

Table 2 here

¹ Tasks performed usually include: planning, formulating and implementing policies; managing daily operations and reviewing results; negotiating with suppliers, customers and other enterprises; planning and controlling the use of resources and the selection of staff; supervising other workers.

4. Estimation Strategy

Our estimation strategy aims at exploring parents' transmission of entrepreneurship and the extent to which it depends on the gender of their children. To do so, we assume that being an entrepreneur is a linear function of socio-demographic characteristics. Hence, we regress our measure of children's entrepreneurship on the entrepreneurship status of both parents, which are our explanatory variables of interest. Using individual-level data, we estimate the following regression model:

$$\begin{aligned} Entrepreneur_i = & \beta_0 + \beta_1 X_i + \beta_2 Entrepreneur\ father_i + \beta_3 Entrepreneur\ mother_i + \beta_4 Female_i * \\ & Entrepreneur\ father_i + \beta_5 Female_i * Entrepreneur\ mother_i + \varepsilon_i \end{aligned}$$

where i is the individual identifier. *Entrepreneur* is our dichotomous measure of entrepreneurship and it is defined in the same way for our unit of analysis and his/her parents (i.e., the variables *Entrepreneur mother* and *Entrepreneur father* are defined likewise). X_i is a set of controls for individual i including a gender dummy, age, and educational dummies; ε_i is an idiosyncratic error term.

Coefficients β_2 and β_3 account for paternal and maternal transmission in entrepreneurship, but β_4 and β_5 measure what we are interested in, i.e., whether the transmission is different for female children compared to male offspring. We estimate linear probability models, as a nonzero coefficient on product terms is not necessary for meaningful interaction to be present in a binary logit or probit model (Berry, DeMeritt, and Esarey, 2010). However, in Appendix B we re-do all our estimates through probit models for robustness. We adjust standard errors for clustering at the household level.

Then, we test whether fathers' and mothers' entrepreneurial transmission is different depending on the country where an individual was born and lives. To this end, we split up the countries covered by our data set according to their ranking in indicators of gender inequality. We first consider a comprehensive index that allows us to specifically quantify the gender gap within critical areas like economics, politics, education, and health. Even though this indicator is based on

1990 data and the transmission process likely took place during the childhood or adolescence of our respondents, this does not represent a problem as the gender gap is persistent and processes of change occur very slowly. We then exploit a second and innovative indicator that allows us to go back several years from the time of sampling of the respondents, i.e., the year when all women in a country obtained the right to vote in a major election. Finally, we consider the labor force participation rate of women, computed with reference to the female population older than 15 in each country during the 1960s.

5. Results

The results of our baseline regression are provided in Table 3. In the first column, we only include socio-demographics and we notice that women are less likely to be entrepreneurs even after controlling for age and education, which is consistent with the literature (e.g., Gneezy, Leonard, and List, 2009; Shurchkov and Eckel, 2018; Oggero, Rossi, and Ughetto, 2020). In the second column of Table 3, we introduce the explanatory variables of interest that indicate whether parents are or have been entrepreneurs. We find evidence of the intergenerational transfer of entrepreneurship, but the estimates also show that the impact of fathers is greater than the one of mothers.

It is in the third column of Table 3 that we investigate the potentially different impact of the family background on men's and women's probability of being an entrepreneur. Indeed, we allow the effects of parental entrepreneurship to vary between sons and daughters. Our estimates show that the father's entrepreneurship raises the likelihood that the offspring become entrepreneurs, but the effect is significantly greater for sons. This finding is consistent with Niittykangas and Tervo (2005), who nevertheless only focused on self-employment in Finland. Conversely, having an entrepreneur as a mother raises the likelihood that daughters are entrepreneurs, while it does not affect the probability

of sons experiencing entrepreneurship.² This is in line with Lindquist, Sol, and Van Praag (2015), who found that in Sweden the effect of the mother is significantly larger for daughters. Yet, we do not find evidence of a positive effect of mothers on sons.

Table 3 here

In Table A.1 in the Appendix, we also performed a multivariate regression analysis including the information on whether a respondent has any brother or sister still alive. In contrast with Mishkin (2021) who considered father-daughter pairs only in the United States, we do not find evidence that the presence of brothers reduces the intergenerational transmission of entrepreneurship from fathers to daughters. We however recognize that our result could be affected by the fact that we only have information on alive brothers. In another specification, we also observe that for daughters, the increase in probability due to the father's entrepreneurship is even lower for the last born.³ Moreover, to investigate what happens in households in which there are only daughters,⁴ in the first two columns of Table A.2 we focus on women who do not have any brothers (still alive). However, we do not observe relevant differences from our previous specification considering the full sample (Table 3). Indeed, the second column of Table A.2 shows that, in households with only daughters, having an entrepreneur as a mother raises the likelihood that daughters are entrepreneurs, and the effect is similar in magnitude to the one estimated in Table 3. On the other hand, although some previous literature has shown that fathers of daughters are altruistic toward their female children (Doepke and Tertilt, 2009) and have positive gender attitudes (Ronchi and Smith, 2021), the effect of having an entrepreneurial father is not relevant in families with daughters only. For comparison, in the last two columns of Table A.2, we focus on men who do not have any sisters (alive). Once again, as already observed in the full sample analyzed in Table 3, the estimates show that the father's entrepreneurship

² The main results do not change when including a proxy for income, even though we lose many observations because of several missing values.

³ For brevity, results are not reported here in detail, but they are available from the authors upon request.

⁴ We are indebted to an anonymous referee for having suggested us to explore this issue.

raises the likelihood that sons become entrepreneurs, while having an entrepreneurial mother does not affect the probability of sons experiencing entrepreneurship.

Next, we exploit the cross-country dimension of our data set to investigate whether the intergenerational transfer of entrepreneurship happens in the way we described independently of the gender gap at the national level. To do so, we split up the countries according to their ranking in indicators of gender inequality. The first and most comprehensive measure of the gender gap we use is the Gender Inequality Index provided by the International Monetary Fund for more than 140 countries worldwide. The Gender Inequality Index is based on a rich set of indicators: the share of female seats in national parliaments, female educational attainment at secondary and tertiary levels, labor force participation rate, maternal mortality ratio, and adolescent fertility rate (Stotsky et al., 2016).⁵

This time series goes back in time several years, hence it allows us to include in our analysis data collected well before the sampling of our respondents. While it is likely that the intergenerational transfer of entrepreneurship happened when our respondents were young, the Gender Inequality Index goes back up to 1990 only. Even though the parental transmission of entrepreneurship happened many years before the time in which our sample was interviewed, we are confident in using the 1990 data as a proxy for older ones because processes to narrow the gender gap occur only in the long term.⁶

On the one hand, the Gender Inequality Index shows that some countries have a narrow gap. Specifically, among the countries with low gender inequality, we find Sweden, Denmark, the Netherlands, Germany, and Switzerland.⁷ On the other hand, Belgium, Austria, Greece, France, Italy, Spain, and Israel have the lowest rankings in gender equality among the countries in our sample.

⁵ The Gender Inequality Index data are available at:

https://www.imf.org/external/datamapper/GII_TC@GD/gbtier_1/gbtier_2/gb_othersource.

⁶ See Nifo and Vecchione (2014) for a similar argument.

⁷ Germany's Gender Inequality Index refers to 1997, which is the first year for which data are available for this country.

Following this classification, in the first two columns of Table 4, we split the sample of respondents between low and high gender inequality countries. Also, we focus on individuals who were born in the country where they currently live (who are approximately 90% of the sample for a total of 21,525 observations), so that we are certain that they faced that country-specific gender gap.

The estimates reported in the first two columns of Table 4 confirm that the father's entrepreneurship raises the likelihood that the offspring are entrepreneurs. However, only in countries where a high gender gap persists, the effect of the father on daughters is lower than the one on sons. When looking at mother's entrepreneurship, we find that, in countries with low gender inequality, having an entrepreneur as a mother does not affect the probability of both sons and daughters being entrepreneurs. Instead, in countries with high gender inequality, the effect of having an entrepreneurial mother is positive, but for daughters only. Hence, our evidence only partially confirms the results from Lindquist, Sol, and Van Praag (2015) and Hoffmann, Junge, and Malchow-Møller (2015), since we show that stronger same-sex parental transmission of entrepreneurship is verified only in countries with high gender inequality. Moreover, we notice that Hoffmann, Junge, and Malchow-Møller (2015) did not focus on entrepreneurs, but on the self-employed and, specifically, on the transition to self-employment of young people.

When partitioning our sample of different countries, we notice another change as compared to Table 3, which regards the educational attainments. Specifically, tertiary education is negatively related to the probability of being an entrepreneur in countries characterized by high gender inequality. Along this line are the findings by Niittykangas and Tervo (2005), who reported that the likelihood increases if an individual has only basic education (or specific education in the field of commerce). Education is instead a predictor of entrepreneurship in more gender-equal states, where access to economic opportunities is greater for women and other minority or discriminated groups. A possible explanation is that, in more equal and inclusive societies, educated women and other highly

educated members of disadvantaged groups might be more attracted by the private sector, as they do not have to turn to the public sector in search of equal opportunities.

Table 4 here

Even though gender gaps are persistent and processes of change occur very slowly, we exploit an alternative indicator of gender disparities that goes back to the years when our respondents were very young or even before, namely the year women were first granted suffrage. Looking at when all women obtained the right to vote in a major election, local or national, we can distinguish between two major groups of countries. On the one hand, countries like Denmark, Austria, Germany, the Netherlands, and Sweden granted the right in the years around the First World War (Denmark in 1915, Austria in 1918, and the others in 1919). On the other hand, other countries waited several years before doing so: Spain did it in 1931, even though women lost the right from 1936 to 1976, France in 1944, Italy in 1945, Belgium and Israel in 1948, Greece in 1949, and Switzerland in 1971.⁸

Based on these historical data, in the third and fourth columns of Table 4, we divide the sample of respondents in two. Again, we focus on individuals who were born in the country where they currently live, so that we can safely attribute them to the country-specific gender gap indicator. If we compare this partition with the one applied in the first two columns of Table 4, we notice that two countries went from one grouping to the other. Indeed, when we consider the year women were first granted suffrage, Switzerland is classified among the high gender inequality countries, while Austria is among the low inequality ones. Notwithstanding these changes, our previous findings are thoroughly confirmed.

The results displayed in the third and fourth columns of Table 4 corroborate the importance of fathers' entrepreneurial experience on their children, but fathers affect sons more strongly in countries with a large gender gap. In more gender-equal countries, we confirm that there is no

⁸ Data on when women were first granted suffrage were retrieved from:
https://www.europarl.europa.eu/enlargement/briefings/26a3_it.htm.

difference between sons and daughters in the consequence of having a mother who is an entrepreneur. Most importantly, we still show that the effect of having an entrepreneur as a mother is different for sons and daughters only in countries with a high gender gap. In particular, in highly gender unequal countries, the probability of daughters entering entrepreneurship significantly increases by having an entrepreneurial mother. Conversely, the probability of sons is not affected.

We next turn to a third and last indicator of the country-specific gender gap that measures women's economic participation. In particular, we consider the female labor force participation rate, computed as the percentage of the female population older than 15 in each country. This indicator, retrieved from the Gender Statistics database of the World Bank, goes back in time up to 1960.⁹ However, the data are provided for the year 1960 only for four countries: Denmark, the Netherlands, Spain, and Switzerland. We have 1961 data for Austria, Belgium, and Italy, and 1962 information for France. The first available record for Sweden dates back to 1965, 1972 for Israel, and 1983 for Germany. Given all these differences, the country subdivision according to this indicator may be less reliable as compared to the previous two.

Female labor force participation ranges from 36% to 45% in countries like Austria, Germany, Sweden, France, and Denmark, and from 18% to 35% in Greece, Switzerland, Israel, Belgium, Italy, the Netherlands, and Spain. Based on female labor force participation across countries (mostly in the 1960s), in the last two columns of Table 4, we divide the sample of respondents into two groupings.¹⁰ As compared to the previous partition, we now have France among the low gender inequality countries, in place of the Netherlands. Once again, our main results are confirmed, with the only

⁹ Data are available at: <https://databank.worldbank.org/reports.aspx?source=global-financial-development>.

¹⁰ Data on female labor force participation in Germany refer to West Germany and, based on this information, Germany is among low gender inequality countries. East Germany, due to its economic policies, was a very equal country. Therefore, if we had information on East Germany to match with the available data for West Germany, we believe that Germany would still end up belonging to this group of countries.

difference that in the last two columns of Table 4 the effect of the father on sons is greater than the one on daughters, independently of the gender gap that persists in the country.

Finally, as a robustness check, we re-do all our estimates in Table 3 and Table 4 through probit models. All of our findings are confirmed and reported in Table B.1 and Table B.2 in the Appendix. Thus, we have shown that in more gender unequal countries, the probability of daughters entering entrepreneurship significantly increases by having an entrepreneurial mother (while the effect is not significant on sons). We interpret this result as evidence of the role modeling mechanism: the presence and influence of role models are crucial for daughters when they live in contexts characterized by a big gap between women and men in their access to opportunities. As women are more likely to have female role models (Baskaran and Hessami, 2018), their mother is likely to serve as the main role model when deciding to become entrepreneurs in countries with high gender gaps.

6. Robustness and convergence process of intergenerational transmission

In the previous section, we have learned that the effect of having an entrepreneur as a mother is different for sons and daughters only in countries with a high gender gap, with the probability of daughters entering entrepreneurship being raised by having an entrepreneurial mother. We now go one step further and develop an indicator of the gender gap *within* countries to investigate whether our findings on inequalities still hold. Specifically, we do not propose a breakdown by country, but one based on an individual measure of “distance” to gender equality. We compute such a distance as the difference between the year of birth of the respondent and the year female voting was granted in the country of birth.

In this way, we can exploit a variation in the gender gap at the individual level, i.e., within countries. Respondents born before the year of suffrage display a negative distance (e.g., if the respondent was born in 1940 and the female voting in that country was granted in 1944, the distance is -4). Conversely, the distance is higher and positive for those born after the year of suffrage in their

country. Hence, we split the sample into two based on the magnitude of such distance. Respondents with a distance from gender equality (proxied by the year of female suffrage) higher than the median distance (7 years) are defined as “low gender gap individuals” in the first column of Table 5, meaning that they were born at least 8 years after the suffrage, thus they faced a lower gender inequality in the country where they were born and raised. On the other hand, the second column of Table 5 includes the respondents more distant from gender equality. Indeed, the sample analyzed in the second column is made up of individuals with a distance from gender equality lower or equal to the median distance, i.e., born before or only a few years after suffrage.¹¹

Table 5 here

The results reported in Table 5 confirm our interpretation in the previous section. Indeed, the estimates show that a stronger same-sex parental transmission only holds for individuals who experienced in their life a greater gender gap, proxied by the difference between the year they were born and the year of female voting in their country. Specifically, the effects of having entrepreneurial parents do not depend on the gender of the offspring when they experienced a lower gender gap in their country. Conversely, women who experienced a higher gender gap are more affected by mothers and less affected by fathers in their entrepreneurial choices.¹²

Finally, we dig more deeply into the age dimension. Up to now, we have indeed not taken advantage of the great variability in terms of age that our data set offers. Since the age in our sample ranges from 25 (partners of people aged 50+) to 103 years old, we can investigate whether convergence over time is verified between high and low gender unequal countries. To do so, we perform our multivariate regression for high and low-inequality countries on different subsamples

¹¹ The difference between the year of birth of the respondent and the year female voting was granted in the country of birth is computed with respect to 1931 for Spain. However, the main estimation results do not change if we consider the year 1976. Indeed, women's right to vote, initially earned in 1931, was subsequently constrained during the decades of Francoist Spain.

¹² Our results are confirmed by estimates through probit models (Table B.3 in the Appendix).

based on three age groups: lower than 60, 60-69, and higher than 69 years old. In Table 6 we report the estimates with a breakdown by country based on the Gender Inequality Index, but the results are confirmed when we use the other two indicators, namely, the year women were first granted suffrage and the female labor force participation rate in the 1960s (the results are available upon request).

Table 6 here

As shown in Table 6, we find evidence of a convergence of the intergenerational transmission process in high gender unequal countries toward the process typical of less unequal countries. Indeed, from columns 4 to 6 we notice that the coefficients on interaction terms not only are lower in magnitude for younger individuals but also progressively lose statistical significance. This means that for younger individuals in more gender unequal countries, a stronger same-sex parental transmission is not in place anymore. We also highlight that this result cannot be driven by the number of observations, as the younger subgroup is the most numerous one. Also, the third column of Table 6 shows that, for the oldest women in more gender-equal countries, the asymmetry in the role of the father was in place. Hence, it seems that most gender unequal countries are converging to the intergenerational transmission path of more equal countries.

7. Conclusions

Many studies have investigated the factors influencing the decision to become an entrepreneur, including having entrepreneurial parents. However, only a few focused on the different effects of both entrepreneurial parents on sons and daughters. In this paper, we study the intergenerational transmission of entrepreneurship and how the effect of having entrepreneurial fathers and mothers varies between women and men. As we are the first to exploit cross-country data, we investigate whether such impact depends on being born and living in a country characterized by a high or low gap between women and men.

Using the SHARE data, we find that the effect of fathers on daughters is lower than the one on sons only in countries with a high gender gap, while it is the same in more gender-equal countries. Moreover, it is just in countries with high gender inequality that the effect of having an entrepreneurial mother is different between sons and daughters, with the impact being positive for daughters only. We also develop an individual-level indicator of the gender gap within countries that corroborates our findings. Finally, we find evidence of a convergence of the intergenerational transmission process in high gender unequal countries toward the process that typically takes place in more gender equal countries.

In this paper, we highlight the importance of parental role models for individuals' entrepreneurial choices. Indeed, we interpret our findings as evidence of the role modeling mechanism: the presence and influence of role models are crucial for daughters when they live in contexts characterized by a big gap between women and men in their access to opportunities. Since women usually have female role models, their mothers are likely to play an important role in the choice of becoming an entrepreneur in countries with high gender gaps.

Our findings also suggest that women are more likely to be left behind when it comes to entrepreneurship. Not only women are less likely to be entrepreneurs, but they are also less likely to be influenced by their fathers' entrepreneurial status in countries where the gap between women and men in their access to resources and opportunities is extremely large. Even though entrepreneurial mothers have an impact on daughters' choice of becoming an entrepreneur in such countries, we recall that the percentage of entrepreneurial mothers is still relatively low. However, it seems that this asymmetry in the intergenerational transfer of entrepreneurship is disappearing over time and pointing to convergence to the gender-independent process typical of more gender-equal countries.

Our findings offer important implications for policymakers who aim at adopting measures to stimulate entrepreneurship. If women are less likely to become entrepreneurs because they are not exposed to role models, then they should become aware of this possible occupational choice in school.

Women's interest in entrepreneurship could be strengthened from the early levels of education to university courses, by teaching entrepreneurial concepts and offering practice-oriented training. A better understanding of the different factors related to the gender gap in entrepreneurship can move the discussion forward and foster the knowledge on women's selection into entrepreneurship, to eventually reduce the gap in the long run.

References

- Andersson, L., & Hammarstedt, M. (2011). Transmission of self-employment across immigrant generations: the importance of ethnic background and gender. *Review of Economics of the Household*, 9(4), 555-577.
- Baskaran, T., & Hessami, Z. (2018). Does the election of a female leader clear the way for more women in politics?. *American Economic Journal: Economic Policy*, 10(3), 95-121.
- Berry, W. D., DeMeritt, J. H., & Esarey, J. (2010). Testing for interaction in binary logit and probit models: is a product term essential?. *American Journal of Political Science*, 54(1), 248-266.
- Börsch-Supan, A., Brugiavini, A., Jürges, H., Mackenbach, J., Siegrist, J., & Weber, G. (eds.) (2005). *Health, ageing and retirement in Europe – First results from the Survey of Health, Ageing and Retirement in Europe*. MEA: Mannheim.
- Colombier, N., & Masclet, D. (2008). Intergenerational correlation in self employment: some further evidence from French ECHP data. *Small Business Economics*, 30(4), 423-437.
- DeJong, P. Y., Brawer, M. J., & Robin, S. S. (1971). Patterns of female intergenerational occupational mobility: A comparison with male patterns of intergenerational occupational mobility. *American Sociological Review*, 1033-1042.
- Doepke, M., & Tertilt, M. (2009). Women's Liberation: What's in it for Men?. *Quarterly Journal of Economics*, 124(4), 1541-1591.

- Dunn, T., & Holtz-Eakin, D. (2000). Financial capital, human capital, and the transition to self-employment: Evidence from intergenerational links. *Journal of Labor Economics*, 18(2), 282-305.
- Fairlie, R. W. (1999). The absence of the African-American owned business: An analysis of the dynamics of self-employment. *Journal of Labor Economics*, 17(1), 80-108.
- Fairlie, R. W., & Robb, A. (2007). Families, human capital, and small business: Evidence from the characteristics of business owners survey. *Industrial and Labor Relations Review*, 60(2), 225-245.
- Gneezy, U., Leonard, K. L., & List, J. A. (2009). Gender differences in competition: Evidence from a matrilineal and a patriarchal society. *Econometrica*, 77(5), 1637-1664.
- Guiso, L., Pistaferri, L., & Schivardi, F. (2021). Learning entrepreneurship from other entrepreneurs?. *Journal of Labor Economics*, 39(1), 135-191.
- Hoffmann, A., Junge, M., & Malchow-Møller, N. (2015). Running in the family: parental role models in entrepreneurship. *Small Business Economics*, 44(1), 79-104.
- Hout, M. (1984). Status, autonomy, and training in occupational mobility. *American Journal of Sociology*, 89(6), 1379-1409.
- Hout, M., & Rosen, H. (2000). Self-Employment, Family Background, and Race. *Journal of Human Resources*, 35(4), 670-692.
- Laband, D. N., & Lentz, B. F. (1983). Like father, like son: Toward an economic theory of occupational following. *Southern Economic Journal*, 474-493.
- Laspita, S., Breugst, N., Heblich, S., & Patzelt, H. (2012). Intergenerational transmission of entrepreneurial intentions. *Journal of Business Venturing*, 27(4), 414-435.
- Lentz, B. F., & Laband, D. N. (1990). Entrepreneurial success and occupational inheritance among proprietors. *Canadian Journal of Economics*, 23(3), 563-579.

- Lindquist, M. J., Sol, J., & Van Praag, M. (2015). Why do entrepreneurial parents have entrepreneurial children?. *Journal of Labor Economics*, 33(2), 269-296.
- Mishkin, E. (2021). Gender and sibling dynamics in the intergenerational transmission of entrepreneurship. *Management Science*, 67, 10, 6116-6135.
- Nifo, A., & Vecchione, G. (2014). Do institutions play a role in skilled migration? The case of Italy. *Regional Studies*, 48(10), 1628-1649.
- Niittykangas, H., & Tervo, H. (2005). Spatial variations in intergenerational transmission of self-employment. *Regional Studies*, 39(3), 319-332.
- Oggero, N., Rossi, M. C., & Ughetto, E. (2020). Entrepreneurial spirits in women and men. The role of financial literacy and digital skills. *Small Business Economics*, 55(2), 313-327.
- Oguzoglu, U., & Ozbeklik, S. (2016). Like father, like daughter (unless there is a son): Sibling sex composition and women's STEM major choice in college. IZA Discussion Papers 10052.
- Ronchi, M., & Smith, N. (2021). Daddy's girl: Daughters, managerial decisions, and gender inequality. Available at https://csef.it/wp-content/uploads/M_Ronchi.pdf
- Shurchkov, O., & Eckel, C. C. (2018). Gender differences in behavioral traits and labor market outcomes. In *The Oxford Handbook of Women and the Economy*, Averett, S. L., Argys, L. M., & Hoffman, S. D. (eds.) Oxford, UK: Oxford University Press.
- Stotsky, M. J. G., Shibuya, S., Kolovich, M. L., & Kebhaj, S. (2016). *Trends in gender equality and women's advancement*. International Monetary Fund.
- Wyrwich, M. (2015). Entrepreneurship and the intergenerational transmission of values. *Small Business Economics*, 45(1), 191-213.

Table 1. Variable Descriptions.

Variable	Description
Female	Dummy variable: 1 if female, 0 if male.
Age	Discrete variable: age.
Lower secondary education	Dummy variable: 1 if the respondent's educational attainment corresponds to the educational level ISCED 2 (lower secondary level of education), 0 otherwise.
Upper secondary education	Dummy variable: 1 if the respondent's educational attainment corresponds to the educational level ISCED 3 (upper secondary level of education) or ISCED 4 (post-secondary, non-tertiary education), 0 otherwise.
Tertiary education	Dummy variable: 1 if the respondent's educational attainment corresponds to the educational level ISCED 5 (first stage of tertiary education) or ISCED 6 (second stage of tertiary education, leading to an advanced research qualification), 0 otherwise.
Entrepreneur father	Dummy variable: 1 if the respondent's father is or was (in his last job) the owner of a small business, 0 otherwise.
Entrepreneur mother	Dummy variable: 1 if the respondent's mother is or was (in her last job) the owner of a small business, 0 otherwise.
Entrepreneur	Dummy variable: 1 if the respondent is or was (before retirement or unemployment) the owner of a small business, 0 otherwise.

Table 2. Descriptive statistics.**Panel A: Full sample of adult children**

	<i>Mean</i>	<i>Std. Dev.</i>	<i>Min</i>	<i>Max</i>
Female	0.51	0.50	0	1
Age	63.77	10.41	25	103
Lower secondary education	0.18	0.38	0	1
Upper secondary education	0.31	0.46	0	1
Tertiary education	0.20	0.40	0	1
Entrepreneur father	0.06	0.23	0	1
Entrepreneur mother	0.02	0.14	0	1
Entrepreneur	0.05	0.21	0	1

Panel B: Breakdown of the sample by country

	<i>Sweden</i>	<i>Denmark</i>	<i>Netherlands</i>	<i>Germany</i>	<i>Switzerland</i>	<i>Belgium</i>	<i>Austria</i>	<i>Greece</i>	<i>France</i>	<i>Italy</i>	<i>Spain</i>	<i>Israel</i>
Female	0.54	0.55	0.51	0.52	0.54	0.50	0.56	0.46	0.58	0.47	0.45	0.50
Age	64.56	63.17	62.31	63.48	64.47	63.11	64.41	63.15	64.95	64.06	65.68	63.46
Lower secondary education	0.17	0.08	0.40	0.15	0.31	0.24	0.11	0.09	0.08	0.19	0.18	0.08
Upper secondary education	0.26	0.44	0.24	0.57	0.39	0.26	0.51	0.24	0.28	0.19	0.09	0.36
Tertiary education	0.21	0.32	0.21	0.27	0.08	0.24	0.20	0.18	0.19	0.06	0.08	0.28
Entrepreneur father	0.06	0.12	0.05	0.02	0.08	0.07	0.02	0.08	0.06	0.08	0.05	0.02
Entrepreneur mother	0.02	0.02	0.02	0.01	0.03	0.05	0.01	0.01	0.05	0.02	0.01	0.003
Entrepreneur	0.02	0.03	0.05	0.03	0.06	0.06	0.02	0.12	0.03	0.06	0.07	0.01

Note: Descriptive statistics for our sample of 24,252 observations. Data are drawn from the 2004 SHARE. Panel A refers to the full sample and Panel B reports mean values by country.

Table 3. Multivariate regression model of being an entrepreneur.

	Entrepreneur	Entrepreneur	Entrepreneur
Female	-0.016*** (0.003)	-0.017*** (0.003)	-0.014*** (0.003)
Age	-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)
Lower secondary education	0.012*** (0.005)	0.009** (0.005)	0.009* (0.005)
Upper secondary education	0.016*** (0.004)	0.013*** (0.004)	0.013*** (0.004)
Tertiary education	0.001 (0.004)	-0.005 (0.004)	-0.005 (0.004)
Entrepreneur father		0.079*** (0.009)	0.121*** (0.015)
Entrepreneur mother		0.033** (0.014)	-0.010 (0.020)
Female*Entrepreneur father			-0.083*** (0.018)
Female*Entrepreneur mother			0.081*** (0.028)
Constant	0.068*** (0.013)	0.066*** (0.013)	0.065*** (0.013)
Observations	24,252	24,252	24,252

Note: Coefficient estimates from OLS regressions, robust standard errors in parentheses. Controls include country dummies. Data are drawn from the 2004 SHARE. * p<0.10, ** p<0.05, *** p<0.01

Table 4. Multivariate regression model of being an entrepreneur, with a breakdown by country based on the Gender Inequality Index (1990), the year women were first granted suffrage, and female labor force participation rate in the 1960s.

	Gender Inequality Index (1990)		Year women were first granted suffrage		Female labor force participation rate in the 1960s	
	Low gender inequality countries	High gender inequality countries	Low gender inequality countries	High gender inequality countries	Low gender inequality countries	High gender inequality countries
	Entrepreneur	Entrepreneur	Entrepreneur	Entrepreneur	Entrepreneur	Entrepreneur
Female	-0.021*** (0.004)	-0.008* (0.004)	-0.017*** (0.003)	-0.010** (0.004)	-0.008** (0.003)	-0.019*** (0.004)
Age	-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)	0.000 (0.000)	-0.000 (0.000)
Lower sec.education	0.005 (0.006)	0.017** (0.008)	0.006 (0.005)	0.016** (0.008)	0.002 (0.005)	0.011 (0.007)
Upper sec.education	0.016*** (0.006)	0.007 (0.006)	0.018*** (0.005)	0.007 (0.007)	0.011** (0.005)	0.010 (0.007)
Tertiary education	0.011* (0.006)	-0.025*** (0.006)	0.015*** (0.005)	-0.031*** (0.007)	0.003 (0.005)	-0.018** (0.007)
Entrepreneur father	0.061*** (0.020)	0.168*** (0.022)	0.062*** (0.020)	0.165*** (0.022)	0.073*** (0.022)	0.149*** (0.020)
Entrepreneur mother	0.016 (0.038)	-0.025 (0.026)	0.025 (0.040)	-0.026 (0.025)	0.028 (0.038)	-0.022 (0.026)
Female*Entrepr.father	-0.038 (0.023)	-0.105*** (0.029)	-0.038 (0.024)	-0.104*** (0.029)	-0.059** (0.025)	-0.084*** (0.027)
Female*Entrepr.mother	0.028 (0.048)	0.103*** (0.038)	0.014 (0.049)	0.105*** (0.037)	0.029 (0.047)	0.098** (0.038)
Sweden	-0.039*** (0.010)		-0.001 (0.005)		-0.003 (0.005)	
Denmark	-0.030*** (0.011)		0.007 (0.007)		0.008 (0.007)	
Netherlands	-0.010 (0.010)		0.028*** (0.006)			0.034*** (0.006)
Germany	-0.028*** (0.010)		0.009 (0.006)		0.011* (0.006)	
Switzerland	-			0.035*** (0.010)		0.040*** (0.010)
Belgium		0.042*** (0.006)		0.042*** (0.006)		0.045*** (0.006)
Austria		0.010* (0.006)	-		-	
Greece		0.107*** (0.009)		0.106*** (0.009)		0.109*** (0.009)
France		0.017*** (0.006)		0.017*** (0.006)	0.010 (0.006)	
Italy		0.040*** (0.007)		0.039*** (0.007)		0.044*** (0.007)
Spain		0.055*** (0.008)		0.054*** (0.008)		0.060*** (0.008)
Constant	0.065*** (0.017)	0.024 (0.016)	0.023* (0.014)	0.030* (0.017)	0.012 (0.014)	0.039** (0.017)
Observations	9,734	11,791	10,251	11,274	9,129	12,396

Note: Coefficient estimates from OLS regression, robust standard errors in parentheses. Data are drawn from the 2004 SHARE. Israel is the omitted country among high gender inequality countries (columns 2, 4, and 6). Switzerland is the omitted country in column 1 and Austria is the omitted country in columns 3 and 5. * p<0.10, ** p<0.05, *** p<0.01

Table 5. Multivariate regression model of being an entrepreneur, with a breakdown based on the distance between the year of birth and the year of female voting.

	Low gender gap individuals Entrepreneur	High gender gap individuals Entrepreneur
Female	-0.016*** (0.004)	-0.012*** (0.004)
Age	-0.000 (0.000)	-0.000 (0.000)
Lower secondary education	0.002 (0.006)	0.019** (0.007)
Upper secondary education	0.011* (0.005)	0.013* (0.007)
Tertiary education	0.008 (0.006)	-0.027*** (0.007)
Entrepreneur father	0.071*** (0.021)	0.161*** (0.022)
Entrepreneur mother	0.044 (0.043)	-0.033 (0.024)
Female*Entrepreneur father	-0.035 (0.025)	-0.111*** (0.028)
Female*Entrepreneur mother	-0.018 (0.051)	0.125*** (0.037)
Sweden	0.013*** (0.005)	0.003 (0.009)
Denmark	0.020*** (0.006)	0.030 (0.023)
Netherlands	0.044*** (0.006)	0.022 (0.014)
Germany	0.028*** (0.006)	0.005 (0.011)
Belgium	0.096*** (0.032)	0.041*** (0.006)
Austria	0.017*** (0.006)	0.002 (0.011)
Greece	0.112*** (0.040)	0.107*** (0.009)
France	0.018 (0.013)	0.019*** (0.006)
Italy	0.045** (0.020)	0.041*** (0.007)
Spain	0.064*** (0.009)	0.064*** (0.011)
Switzerland		0.035*** (0.010)
Constant	0.012 (0.014)	0.029 (0.018)
Observations	10,452	11,073

Note: Coefficient estimates from OLS regression, robust standard errors in parentheses. Data are drawn from the 2004 SHARE. Switzerland is omitted when considering “Low gender gap individuals” because all observations from Switzerland belong to the second column on “High gender gap individuals”. * p<0.10, ** p<0.05, *** p<0.01

Table 6. Multivariate regression model of being an entrepreneur, with a breakdown by age group and country (based on the 1990 Gender Inequality Index).

	Low gender inequality countries			High gender inequality countries		
	Entrepreneur Age<60	Entrepreneur Age 60-69	Entrepreneur Age ≥70	Entrepreneur Age<60	Entrepreneur Age 60-69	Entrepreneur Age ≥70
Female	-0.031*** (0.006)	-0.022*** (0.006)	-0.002 (0.006)	-0.017** (0.007)	0.001 (0.008)	-0.004 (0.007)
Age	-0.000 (0.001)	0.001 (0.001)	0.000 (0.001)	-0.001 (0.001)	-0.001 (0.001)	-0.000 (0.001)
Lower secondary education	0.007 (0.010)	-0.001 (0.011)	0.010 (0.009)	-0.007 (0.011)	0.029** (0.014)	0.035** (0.015)
Upper secondary education	0.024** (0.010)	0.001 (0.011)	0.025** (0.010)	-0.000 (0.010)	0.013 (0.011)	0.000 (0.011)
Tertiary education	0.017* (0.010)	-0.006 (0.011)	0.030*** (0.011)	-0.035*** (0.010)	-0.016 (0.012)	-0.030** (0.012)
Entrepreneur father	0.062* (0.033)	0.032 (0.033)	0.082** (0.038)	0.133*** (0.033)	0.173*** (0.038)	0.219*** (0.047)
Entrepreneur mother	-0.028 (0.052)	0.050 (0.070)	0.022 (0.075)	-0.024 (0.036)	-0.050 (0.049)	0.001 (0.057)
Female*Entrepreneur father	-0.025 (0.037)	0.020 (0.043)	-0.110*** (0.040)	-0.065 (0.043)	-0.122** (0.052)	-0.156** (0.061)
Female*Entrepreneur mother	0.061 (0.066)	-0.000 (0.095)	0.023 (0.089)	0.008 (0.045)	0.115* (0.069)	0.265*** (0.093)
Sweden	-0.028** (0.014)	-0.062*** (0.023)	-0.033** (0.016)			
Denmark	-0.026* (0.014)	-0.053** (0.024)	-0.012 (0.018)			
Netherlands	0.003 (0.014)	-0.027 (0.024)	-0.014 (0.017)			
Germany	-0.014 (0.014)	-0.046* (0.024)	-0.032* (0.017)			
Belgium				0.037*** (0.009)	0.062*** (0.009)	0.026* (0.015)
Austria				0.009 (0.009)	0.025*** (0.008)	-0.010 (0.014)
Greece				0.122*** (0.013)	0.123*** (0.015)	0.063*** (0.018)
France				0.005 (0.008)	0.028*** (0.010)	0.011 (0.015)
Italy				0.041*** (0.011)	0.047*** (0.009)	0.030* (0.016)
Spain				0.052*** (0.013)	0.073*** (0.014)	0.040** (0.017)
Constant	0.061 (0.047)	0.054 (0.076)	0.008 (0.046)	0.085 (0.056)	0.069 (0.090)	0.034 (0.054)
Observations	3,989	3,036	2,709	4,733	3,560	3,498

Note: Coefficient estimates from OLS regression, robust standard errors in parentheses. Data are drawn from the 2004 SHARE. Switzerland is the omitted country among low gender inequality countries and Israel is the omitted country among high gender inequality countries. * p<0.10, ** p<0.05, *** p<0.01

Appendix A.

Table A.1. Multivariate regression model of being an entrepreneur, including the presence of brothers and sisters.

	Entrepreneur
Female	-0.013*** (0.003)
Age	-0.000 (0.000)
Lower secondary education	0.010** (0.005)
Upper secondary education	0.014*** (0.004)
Tertiary education	-0.005 (0.004)
Entrepreneur father	0.122*** (0.016)
Entrepreneur mother	-0.004 (0.023)
Female*Entrepreneur father	-0.074** (0.030)
Female*Entrepreneur mother	0.061** (0.030)
Having brothers	-0.000 (0.003)
Having sisters	0.001 (0.003)
Female*Entrepreneur father*Having brothers	-0.005 (0.023)
Female*Entrepreneur father*Having sisters	-0.009 (0.023)
Constant	0.065*** (0.016)
Observations	21,761

Note: Coefficient estimates from OLS regressions, robust standard errors in parentheses. Controls include country dummies. Data are drawn from the 2004 SHARE. * p<0.10, ** p<0.05, *** p<0.01

Table A.2. Multivariate regression model of being an entrepreneur in households with only daughters or only sons.

	Women without brothers Entrepreneur	Women without brothers Entrepreneur	Men without sisters Entrepreneur	Men without sisters Entrepreneur
Age	0.000 (0.000)	0.000 (0.000)	-0.001** (0.000)	-0.001** (0.000)
Lower secondary education	0.023** (0.011)	0.019* (0.011)	0.015 (0.015)	0.009 (0.015)
Upper secondary education	0.025** (0.010)	0.022** (0.010)	0.012 (0.012)	0.007 (0.012)
Tertiary education	-0.000 (0.010)	-0.005 (0.010)	-0.010 (0.012)	-0.020* (0.012)
Entrepreneur father		0.032 (0.020)		0.156*** (0.030)
Entrepreneur mother		0.086** (0.036)		0.035 (0.047)
Constant	0.004 (0.026)	0.004 (0.026)	0.113*** (0.039)	0.113*** (0.038)
Observations	3,654	3,654	3,166	3,166

Note: Coefficient estimates from OLS regressions, robust standard errors in parentheses. Controls include country dummies. Data are drawn from the 2004 SHARE. * p<0.10, ** p<0.05, *** p<0.01

Appendix B.

Table B.1. Multivariate regression model of being an entrepreneur (Probit).

	Entrepreneur	Entrepreneur	Entrepreneur
Female	-0.016*** (0.003)	-0.016*** (0.003)	-0.015*** (0.003)
Age	-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)
Lower secondary education	0.010** (0.004)	0.007* (0.004)	0.007 (0.004)
Upper secondary education	0.016*** (0.004)	0.012*** (0.004)	0.012*** (0.004)
Tertiary education	-0.000 (0.005)	-0.005 (0.005)	-0.006 (0.005)
Entrepreneur father		0.049*** (0.005)	0.062*** (0.006)
Entrepreneur mother		0.025*** (0.008)	-0.001 (0.012)
Female*Entrepreneur father			-0.031*** (0.009)
Female*Entrepreneur mother			0.048*** (0.016)
Observations	24,252	24,252	24,252

Note: Probit average marginal effects, standard errors in parentheses. Controls include country dummies. Data are drawn from the 2004 SHARE. * p<0.10, ** p<0.05, *** p<0.01

Table B.2. Multivariate regression model of being an entrepreneur, with a breakdown by country based on the Gender Inequality Index (1990), the year women were first granted suffrage, and female labor force participation rate in the 1960s (Probit).

	Gender Inequality Index (1990)		Year women were first granted suffrage		Female labor force participation rate in the 1960s	
	Low gender inequality countries	High gender inequality countries	Low gender inequality countries	High gender inequality countries	Low gender inequality countries	High gender inequality countries
	Entrepreneur	Entrepreneur	Entrepreneur	Entrepreneur	Entrepreneur	Entrepreneur
Female	-0.022*** (0.004)	-0.008* (0.004)	-0.018*** (0.004)	-0.010** (0.005)	-0.008** (0.003)	-0.020*** (0.005)
Age	-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)	0.000 (0.000)	-0.000 (0.000)
Lower sec. education	0.008 (0.007)	0.014** (0.006)	0.011 (0.007)	0.013** (0.007)	0.003 (0.007)	0.009 (0.006)
Upper sec. education	0.018*** (0.007)	0.007 (0.006)	0.022*** (0.006)	0.006 (0.007)	0.011** (0.005)	0.009 (0.006)
Tertiary education	0.014* (0.007)	-0.028*** (0.008)	0.019*** (0.007)	-0.036*** (0.009)	0.004 (0.006)	-0.018** (0.008)
Entrepreneur father	0.034*** (0.009)	0.092*** (0.009)	0.034*** (0.008)	0.096*** (0.010)	0.038*** (0.008)	0.086*** (0.009)
Entrepreneur mother	0.012 (0.019)	-0.006 (0.018)	0.015 (0.018)	-0.009 (0.019)	0.013 (0.015)	-0.012 (0.020)
Female*Entrepreneur. father	-0.011 (0.013)	-0.046*** (0.015)	-0.012 (0.012)	-0.048*** (0.015)	-0.025** (0.012)	-0.033** (0.015)
Female*Entrepr. mother	0.021 (0.025)	0.060** (0.024)	0.013 (0.023)	0.067*** (0.025)	0.020 (0.019)	0.067*** (0.026)
Sweden	-0.038*** (0.008)		-0.002 (0.007)		-0.003 (0.007)	
Denmark	-0.025*** (0.008)		0.009 (0.008)		0.008 (0.007)	
Netherlands	-0.007 (0.007)		0.026*** (0.007)			0.089*** (0.019)
Germany	-0.023*** (0.008)		0.010 (0.007)		0.011* (0.006)	
Switzerland	-			0.090*** (0.021)		0.097*** (0.021)
Belgium		0.091*** (0.018)		0.097*** (0.019)		0.102*** (0.019)
Austria		0.042** (0.020)	-		-	
Greece		0.138*** (0.018)		0.146*** (0.019)		0.151*** (0.019)
France		0.058*** (0.019)		0.062*** (0.020)	0.011 (0.007)	
Italy		0.089*** (0.018)		0.093*** (0.019)		0.100*** (0.020)
Spain		0.103*** (0.018)		0.109*** (0.020)		0.116*** (0.020)
Observations	9,734	11,791	10,251	11,274	9,129	12,396

Note: Probit average marginal effects, standard errors in parentheses. Data are drawn from the 2004 SHARE. Israel is the omitted country among high gender inequality countries (columns 2, 4, and 6). Switzerland is the omitted country in column 1 and Austria is the omitted country in columns 3 and 5. * p<0.10, ** p<0.05, *** p<0.01.

Table B.3. Multivariate regression model of being an entrepreneur, with a breakdown based on the distance between the year of birth and the year of female voting (Probit).

	Low gender inequality countries Entrepreneur	High gender inequality countries Entrepreneur
Female	-0.017*** (0.004)	-0.013*** (0.005)
Age	-0.000 (0.000)	-0.000 (0.000)
Lower secondary education	0.003 (0.006)	0.017** (0.007)
Upper secondary education	0.013** (0.006)	0.011* (0.006)
Tertiary education	0.010 (0.006)	-0.031*** (0.008)
Entrepreneur father	0.040*** (0.009)	0.089*** (0.009)
Entrepreneur mother	0.025 (0.018)	-0.016 (0.019)
Female*Entrepreneur father	-0.009 (0.013)	-0.050*** (0.015)
Female*Entrepreneur mother	-0.007 (0.024)	0.080*** (0.024)
Sweden	0.240*** (0.014)	0.021 (0.026)
Denmark	0.252*** (0.014)	0.076** (0.030)
Netherlands	0.273*** (0.014)	0.067*** (0.025)
Germany	0.259*** (0.014)	0.026 (0.032)
Belgium	0.303*** (0.020)	0.088*** (0.018)
Austria	0.246*** (0.015)	-0.000 (0.046)
Greece	0.313*** (0.022)	0.137*** (0.018)
France	0.248*** (0.020)	0.059*** (0.019)
Italy	0.275*** (0.020)	0.088*** (0.019)
Spain	0.288*** (0.016)	0.109*** (0.020)
Switzerland		0.082*** (0.020)
Observations	10,452	11,073

Note: Probit average marginal effects, robust standard errors in parentheses. Data are drawn from the 2004 SHARE. * p<0.10, ** p<0.05, *** p<0.01