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The effect of gender norms on gender-based sorting across occupations

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Abstract

Despite the notable progress that has been made in bridging the gap between women and men in the world of work, women are still underrepresented in several occupations. In this article, the effect of gender norms on whether women enter male-dominated occupations is analysed using differences in gender equality among early-arrival migrants. The variations in gender norms according to the cultural backgrounds of those migrants by country of origin are exploited to identify their impact on occupational choices. Using data from the American Community Survey, it is found that greater gender equality in the country of origin reduces the gender gap in male-dominated occupations. Suggestive evidence is further shown on the roles of job flexibility and women's relative preferences for family-friendly jobs in shaping gender-based sorting across occupations.

Keywords: culture, gender, occupation, remote work

JEL codes: J24, J16, Z13

1. Introduction

Gender equality has yet to be achieved in the world of work, and it is necessary to explore the reasons for this (Goldin, 2014, 2021). Progress in narrowing the gender gaps in labour market participation and earnings, especially in developed countries, has slowed or stalled during recent decades (England et al., 2020; Goldin, 2014, 2021). Long-lasting gender-based sorting across occupations can partly explain the persistence of the gender differences, accounting for 32.9% of the US gender wage gap in 2010 (Blau & Kahn, 2017; Perales, 2013). What the observational evidence reveals is that women are clearly underrepresented in more occupations than men, and that there have been no substantial changes in this over recent decades. Gender differences in occupations only fell by 1.1% in the 2000s on a ten-year basis in the US (Blau et al., 2013). Men still outnumber women by more than 70% in nine of the twenty-five occupational categories listed by the American Community Survey (ACS), including Computer and Mathematical, Architecture, Construction, Repair and Transportation occupations, among others (see Figure 1). This paper aims to unravel the way in which gender norms dissuade women from entering male-dominated occupations.

The existing literature points to some potential factors preventing the reduction of gender differences by occupation, but there are open questions. Main explanations for gender differences refer to attitudes towards risk and competition (DeLeire & Levy, 2004; Flory et al., 2015; Manning & Saidi, 2010). The extent to which such differentials can explain gender-based sorting into jobs remains unclear because of the lack of direct measures of risk aversion and the partial analysis of occupations. Gender norm arguments are based on penalizing those individuals with a behaviour that differs from the social norm (Akerlof & Kranton, 2000). There is only suggestive correlational evidence to show the possible importance of gender-equal attitudes in US occupational segregation at the regional level (Pan, 2015). A detailed analysis of the role of culture/gender norms is a challenge because of the interrelationships of culture with economic conditions and institutions, and concerns about reverse causality (Cortes & Pan, 2018). Our work here fills this gap, at least in part.

To isolate the effect of gender norms, an epidemiological approach is followed in which the occupational choices of early-arrival first-generation migrants is examined (Fernández, 2011). The identification strategy is based on the fact that all these young migrants became adults and spent most of their lives in the same host country, with the same institutions, laws, and economic conditions, but differ in their cultural backgrounds on gender norms. Country-of-origin variations in their occupational choices can then only be attributed to cultural differences, as opposed to institutional or economic differences. This strategy mitigates reverse causality concerns because the behaviour of early-arrival first-generation migrants is unlikely to influence the differences in gender norms among the countries of origin (Nollenberger et al., 2016).

This article estimates whether the probability of breaking gender stereotypes in occupational choices for each migrant group is explained by measures of gender equality in the country of origin. To do that, two datasets are merged. The article uses US data on early-arrival first-generation migrants from the American Community Survey (ACS) for the period 2006–2019 (Ruggles et al., 2021), and the World Economic Forum's Gender Gap Index to measure gender equality in a migrant's country of origin (Blau et al., 2020; González & Rodríguez-Planas, 2020; Nollenberger et al., 2016). It is found that, for early-arrival migrant women, norms in the country of origin that are more gender equal are associated with a higher probability of being employed in a male-dominated job. For those women originating from one country of origin, a one standard deviation increase in the gender equality index is associated with an increase of 20 per cent in the average proportion of women participating in male occupations relative to men. Our findings are quite robust to different specifications and samples, and to the inclusion of country of origin controls. These results suggest that women may increase their representation in male-dominated occupations through a change in social norms regarding gender equality.

Additionally, the article explores the traits that shape the culture on occupation-related gender issues. This analysis is based on the idea that a woman may opt not to choose a male occupation because she has had instilled in her, by her guardians or ethnic community, the preferred job traits for a woman. Recent research has shown that large workplace time

requirements explain the underrepresentation of women in some occupations (called greedy jobs) (Cortes & Pan, 2021; Herr & Wolfram, 2012; Pertold-Gebicka et al., 2021). Thus, a lack of workplace flexibility to combine career and family could be one of the reasons why more traditional women are not employed in male-dominated occupations. The article assesses this by exploring the impact of the following job traits at the country of origin level: (1) gender composition of the job, (2) hours of work (greedy job), (3) commuting time, and (4) non-standard schedules.

Moreover, this article pays attention in the analysis to another job trait, remote work, because, now more than ever as a result of the COVID-19 pandemic, there is an awareness of the importance of balancing employment and family through remote work (Amuedo-Dorantes et al., 2022; Kalenkoski & Pabilonia, 2021). Although the work is focused in the pre-COVID era, it is of interest to understand the extent to which, when women have to undertake household responsibilities, the possibility of remote work is also a trait that shapes the cultural impact on their occupational choices. This article considers three possible alternative combinations of teleworking and household/family tasks: (1) child care, (2) housework, and (3) adult care.

The article extends two strands of the literature: research on gender gaps in the world of work and the labour and cultural literature. First, despite the extensive literature on the determinants of gender gaps in labour market outcomes (Altonji et al., 2012; DeLeire & Levy, 2004; Gneezy et al., 2003; Goldin & Katz, 2016), the analyses of the factors explaining gender differences in occupational choices are mostly descriptive. This is especially true for studies of the importance of social norms/culture on gender-based sorting across occupations, because of the abovementioned difficulties in measuring culture. The article adds to this literature by providing a strategy for disentangling the effect of culture from that of institutions or economic conditions. The findings highlight the importance of gender norms on the gender gap in occupation segregation.

Secondly, the article contributes to the growing literature exploring the effect of social norms on socio-economic outcomes. Using methodologies quite similar to that of this article, it has been shown that migrants from countries where people place less importance on work are more sensitive to economic conditions than migrants from countries with stronger work norms (Furtado et al., 2021). Social norms/culture may also explain differences in searching for a job (Eugster et al., 2017), self-employment, gender commuting gaps, and female labour force participation (Contreras & Plaza, 2010; Fernández, 2007; Fernández & Fogli, 2006, 2009; Marcén, 2014; Marcén & Morales, 2021). Also related to this research are those studies that examine the impact of culture on living arrangements (Giuliano, 2007), fertility (Fernández, 2007; Fernández & Fogli, 2006, 2009), divorce (Furtado et al., 2013), the gender division of household labour (Blau et al., 2020), and the maths, reading and science gender gap (Nollenberger et al., 2016; Rodríguez-Planas & Nollenberger, 2018). Empirical evidence has been found on how the importance of job flexibility and family-friendly jobs in the home country shapes the culture.

2. Data

2.1. Sample and gender equality measures

Data from the American Community Survey (ACS) of Integrated Public Use Microdata Series (IPUMS) for the period 2006–2019 are used (Ruggles et al., 2021), which coincide temporally with the availability of the gender norms proxy. The sample consists of first-generation migrants, aged between 16 and 64 years old, who arrived in the United States when they were aged five or younger.[1] The sample is restricted to those individuals who live in identifiable metropolitan areas

[1] The sample is restricted to heads of household or householders, in order to have just one observation per household. This does not cause a considerable reduction in the number of women in the sample since women represent 47% of the total sample. The conclusions are maintained when a sample of heads and non-heads of household is used (see Table A1 in the Appendix). The estimates do not vary substantially when the age range is changed by using a sample of early-arrival migrants aged between 18 and 50 years old (see Table A2).

and reported information about their country of origin and occupation.[2] The main sample consists of 144,090 observations of early-arrival first-generation migrants, from 107 countries of origin.[3]

The standard sample used in the literature to examine the effect of culture on socio-economic variables, consisting of second-generation migrants, cannot be used in this analysis because of the lack of information in the ACS (Fernández, 2007; Fernández & Fogli, 2006, 2009; Giuliano, 2007). However, the use of a sample of early-arrival first-generation migrants satisfies the requirements of the identification strategy of this article because all these migrants have been exposed to US conditions while they were growing up, and have different cultural backgrounds (Furtado et al., 2013). Also, since they were early arrivals (arriving below the age of required school attendance in the US, which varies from 5 to 8 years old across US states), these migrants are not likely to have linguistic barriers (Furtado et al., 2013).[4]

To gauge the gender equality culture in a migrant's country of origin, the annual national-level Gender Gap Index (GGI) is used, which is available from 2006 (source: World Economic Forum, 2021). This index has recently been used in several pieces of research that apply a similar strategy to that presented here (Nollenberger et al., 2016; Rodríguez-Planas & Nollenberger, 2018). The GGI measures *the relative position of women in a society taking into account the gap between men and women in economic opportunities, economic participation, educational attainment, political achievements, health and well-being*.[5] The GGI is calculated as the average of four sub-indexes: *Economic Participation and Opportunity*, *Educational Attainment*, *Health and Survival,* and *Political Empowerment*. All the sub-indexes range from zero to one. Larger values indicate a better position of women in society (see Table B1 for a detailed description).[6]

[2] The sample is limited to those living in an identifiable metropolitan area in order to have the same sample as in the cultural transmission analysis (see below).
[3] Those countries of origin with fewer than 25 observations per country are eliminated, as in prior studies (Furtado et al., 2013).
[4] https://nces.ed.gov/programs/statereform/tab5_1.asp
[5] The GGI is not a direct measure of cultural beliefs and preferences. Therefore, cross-country differences in social outcomes that are not caused by cultural beliefs and preferences can cause bias in the results. To tackle this possible problem, country of origin fixed effects are included.
[6] The analysis is extended using each of those sub-indexes individually; see below.

2.2. Determining the male-dominated occupations

The ACS occupational classification system recorded in the IPUMS (variable OCC) is used.[7] This variable provides information on the person's primary occupation (the occupation from which he or she earns the most money or at which they spend the most time). Unemployed people report information on their most recent occupation.[8] For those individuals with more than one occupation, data on the first one listed is considered. A male-dominated occupation is defined for each year as one in which the percentage of men (over all individuals reporting that occupation) is greater than 70 per cent.[9] A national cut-off of 70 per cent is chosen as a conservative threshold in the main analysis, but the results are robust to the use of other thresholds.[10] Considering a national-level cut-off is a common strategy in the literature (Pope & Sydnor, 2010), but the results are also robust to the use of state-level cut-offs.[11]

Figure 1 presents the percentage of women and men reporting that belong in each occupational category. There is a clear occupational segregation by gender, with more occupations in which women are underrepresented. Almost half of the categories are clearly gender-dominated. Whereas women outnumber men in two occupational categories (Healthcare Support and Personal Care; Service Occupations), nine occupations are male-dominated (Management, Business, Science, and Arts; Computer and Mathematical; Architecture and Engineering; Protective Service; Farming, Fishing, and Forestry; Construction and Extraction; Extraction Workers; Installation, Maintenance, and Repair; Transportation and Material Moving).

[7] The occupations listed by ACS are the following: Management, Business, Science, and Arts; Business Operations Specialists; Financial Specialists; Computer and Mathematical; Architecture and Engineering; Life, Physical, and Social Science; Community and Social Services; Legal; Education, Training, and Library; Arts, Design, Entertainment, Sports; Healthcare Practitioners and Technical; Healthcare Support; Protective Service; Food Preparation and Serving; Building and Grounds Cleaning and Maintenance; Personal Care and Service; Sales and Related; Office and Administrative Support; Farming, Fishing, and Forestry; Construction and Extraction; Extraction Workers; Installation, Maintenance, and Repair; Production; Transportation and Material Moving; Military Specific. See https://usa.ipums.org/usa/volii/occ2018.shtml for a detailed description of each category.

[8] The results are robust to the use of a sample of early-arrival migrant workers (see Table A3 in the Appendix).

[9] The measure of a male-dominated occupation is similar to that used in the literature for female-dominated occupations (Pan, 2015).

[10] See columns (1) and (2) in Table A4 in the Appendix.

[11] See column (3) in Table A4 in the Appendix.

For the rest, there are eight for which women are slightly underrepresented and six with the number of men slightly below the number of women.

2.3. Summary statistics

Summary statistics by country of origin are reported in Table B2 (see the Appendix). The countries of origin are ordered from those with the smallest to those with the largest gender gap in US male-dominated occupations. The gender gap in column (1) is calculated as the difference between the percentage of early-arrival migrant women and the percentage of early-arrival migrant men who report a US male-dominated occupation as their main occupation. A negative gap means that early-arrival migrant men are more strongly represented than early-arrival migrant women in US male-dominated occupations. The raw data reveal that migrant women (versus migrant men) are underrepresented in US male-dominated occupations, regardless of their country of origin. On average, for this sample of early-arrival migrants, migrant men are more strongly represented than migrant women by 61 percentage points in US male-dominated occupations, with this varying from just 14 percentage points in the case of migrants from Barbados to 100 percentage points (zero women participating in male-dominated occupations) in the case of migrants from the United Arab Emirates. These large differences in the gender gap across countries of origin cannot be explained by biological differences between women and men, since these should be similar regardless of the country of origin. Other factors must then be driving the gender-based sorting in occupations.

The focus here is the analysis of culture/gender norms as determinants of the occupational segregation by gender. The cultural/gender norms proxy, the GGI, for each country of origin is shown in column (2) (Table B2). Higher values indicate greater gender equality. This variable presents a minimum of 0.44 in Afghanistan and a maximum of 0.85 in Iceland, averaging 0.69, with a standard deviation of 0.06. For ease of comparison, columns (1) and (2) are plotted in Figure 2. A positive relationship can be observed between them. It can be seen that the greater

the gender equality of the country of origin, the smaller the gender gap in US male-dominated occupations. This suggestive evidence is not conclusive, and further analysis is needed.

3. Empirical strategy

As mentioned above, an epidemiological approach is followed to capture the effect of cultural attitudes/gender norms on the choice of male-dominated occupations. The strategy exploits the variation in the cultural background of the sample of early-arrival first-generation migrants, who arrived in the US at the age of 5 or below and have grown up (and lived almost their entire life) in the same US conditions. Under the assumption that culture is transmitted (horizontally and/or vertically) to migrants by their guardians and/or inside their ethnic community, if gender norms matter in this setting, it would be expected that differences in the gender equality index across countries of origin could explain, at least in part, the occupational segregation by gender of the early-arrival first-generation migrants. Specifically, the following baseline specification is estimated:

$$Y_{ijkt} = \beta_0 + \beta_1 Female_i + \beta_2 (Female_i * GGI_{jt}) + GGI_{jt} + X'_{ijkt}\beta_3 + \delta_k + \eta_j +$$

$$+ (X'_{ijkt} * Female_i)\beta_4 + \mu(\delta_k * Female_i) + \varphi(\eta_j * Female_i) + \theta_t + \varepsilon_{ijkt} \qquad (1)$$

where Y_{ijkt} is a dummy variable that takes the value 1 when migrant *i* of cultural origin *j* living in state *k* in year *t* reports a US male-dominated occupation, and 0 otherwise. The variable $Female_i$ is an indicator variable that takes the value 1 if the individual is a women and 0 otherwise. GGI_{jt} is the cultural proxy in the country of origin *j* in year *t*.[12] A higher value of this index represents more gender-equal social norms. β_2 is the main coefficient of interest, and captures the effect of the interaction between the GGI_{jt} and the female indicator.[13] β_2 is expected to be positive. This would indicate that more gender-equal attitudes in the country of origin are

[12] For the cultural proxy, a contemporaneous measure is used, which is a standard strategy in the literature (Fernández & Fogli, 2009; Furtado et al., 2013). The effect of culture is still detected when one measure of culture by country of origin is included, and country of origin fixed effects are excluded in Section 4.4.
[13] Other works use a similar strategy (Nollenberger et al., 2016; Rodríguez-Planas & Nollenberger, 2018).

associated with a smaller gender-based sorting by occupation in the host country. The vector $\boldsymbol{X_{ijkt}}$ includes a set of individual characteristics of respondent *i* (Cortes & Pan, 2018). The individual-level controls include age, educational level (college or not), race (white or not), living with a married or unmarried partner, and the presence of children under 6 years old in the household (see Table B3 in the Appendix for a detailed description).[14] These individual characteristics are also interacted with the female indicator. δ_k represents the state fixed effects, and picks up unobserved characteristics of the place of residence.[15] To control for the characteristics of the country of origin that may be related to gender roles, country of origin fixed effects, η_j, are introduced, while, to capture time-variant unobserved characteristics, year fixed effects, θ_t, are added. The state and country of origin fixed effects are interacted with the female indicator to take into consideration variations in the gender gaps in occupations in the state and the country of origin that may arise from differentials across states and countries in institutional channels. Standard errors are clustered at the country of origin level to account for any within-ethnicity correlation in the error terms.[16]

To convince readers that the equation above is indeed estimating the effect of culture/gender norms, the analysis is extended to examine the transmission of culture and the possible factors shaping culture, using the job traits of flexibility and family-friendly characteristics; see subsections 4.2 to 4.4.

4. Results

4.1. Do cultural differences play a role?

Table 1 shows the coefficients for the main specification after estimating Equation (1).[17] On average, migrant women are 30 percentage points less likely to be employed in US male-

[14] The set of socio-demographic characteristics is enlarged by including job controls and the results are unchanged. See the results below.
[15] The analysis was re-run replacing the state fixed effects with Metropolitan Statistical Areas (MSA) fixed effects, and no substantial differences were found (see Table A5 in the Appendix).
[16] All the estimates were repeated with/without weights and clusters. The results do not vary.
[17] Table A6 in the Appendix shows all estimated coefficients included in Table 1.

dominated jobs than migrant men, see column (1). Once the cultural proxy is introduced in the next two columns ((2) and (3)) jointly with its interaction with the female indicator, the role of culture in explaining the male-dominated occupational choice of early-arrival first-generation migrant women relative to men is captured. As can be seen in all the specifications, the estimated coefficient for the interaction term is positive and statistically significant, suggesting that the gender gap in occupational segregation is smaller among those originating from more gender-equal countries. Focusing on the preferred specification reported in column (3), which also includes individual controls, it is found that for those women originating from a typical country of origin, a one standard deviation increase in the gender equality index is associated with an increase of 20 per cent in the average proportion of women participating in US male occupations relative to men.[18] These results are maintained after adding job controls in column (4) (Cha, 2013). Specifically, the logarithm of the weekly work hours, and the commuting time to/from work, are controlled for. Since the inclusion of some of the job controls could generate concerns because they are potentially related to the gender equality culture, the remaining analysis is run without them. In any case, it is reassuring that the results do not change in all the robustness tests presented here. All in all, these findings answer the main research question, and suggest that traditional gender norms may dissuade women from entering male-dominated jobs.

4.2. The transmission of culture

This subsection explores the horizontal transmission of culture, which is necessary for the identification strategy. Two main ways for the transmission of preferences and beliefs have been considered in the existing literature: vertical transmission, through parents/guardians who instil values in their children; and horizontal transmission, through neighbours, friends, and the ethnic community in which a migrant resides (Schmitz & Spiess, 2022). Unfortunately, the vertical

[18] With the typical country of origin having a GGI of 0.69 (Avg. GGI) and the one-standard deviation of the GGI being equal to 0.06 (S.D. GGI), this is calculated as follows: (0.69x0.782 (Coef. Female x GGI))/0.843 (Coef. Female)=0.64 (64%) and ((0.69+0.06(S.D. GGI))x0.782 (Coef. Female x GGI))/0.843 (Coef. Female)=0.696 (almost 70%). The difference between the two represents almost 20% of the average proportion of women participating in US male occupations (D.V.) (0.696-0.64)/0.28 (Avg. D.V.)=0.199 (or 20%).

transmission of culture cannot be examined here because there is no information on guardians' characteristics in the ACS (Furtado et al., 2013). What can be analysed is horizontal transmission, by exploring whether a migrant's sensitivity to their home country GGI varies depending on whether they live in a predominantly same-ethnicity area (Furtado et al., 2013). If culture is transmitted horizontally, a higher cultural impact should be detected among those migrants with a greater exposure to the cultural norms of the home country. As in the prior literature, the proportion of individuals from the same country of origin in each metropolitan statistical area (MSA) is measured (Rodríguez-Planas & Nollenberger, 2018). [19] Then, the main analysis is re-estimated by dividing the sample into those who are above and those who are below the average concentration of individuals with the same country of origin. The estimates are reported in columns (1) and (2) of Table 2. It can be seen that the effect of culture on the probability of women reporting that they have a US male-dominated job relative to men is larger for early-arrival first-generation migrants living in MSAs with a high concentration of individuals from the same country of origin (above the mean) than it is for those living in MSAs with a low concentration (below the mean). This can be interpreted as suggestive evidence on the existence of the horizontal transmission of culture.

Additionally, a separate analysis is run for those living with a partner from the same home country and those living with a partner who is not (see columns (3) and (4)). Again, if there is a peer effect, a stronger impact of gender norms among those whose cultural values are reinforced through the presence of a partner in the household from the same home country should be found. As expected, the results point to a larger effect of gender norms among those exposed to a stronger cultural environment at home, which reinforces the previous findings.

4.3. Channels shaping culture in the country of origin

This study further explores which GGI factors shape the gender norms in the home country that have an effect on occupational choices in the host country. The World Economic Forum provides

[19] The population threshold to be classified as an MSA is 100,000 inhabitants.

rich information that allows an examination of different aspects of culture. The estimates are re-run but with the cultural proxy, the GGI, replaced by each of the four sub-indexes that defined the GGI, taken separately: the Gender Gap Educational Attainment Sub-index, the Gender Gap Economic Participation and Opportunity Sub-index, the Global Gender Gap Health and Survival Sub-index, and the Gender Gap Political Empowerment Sub-index. The estimated coefficients are in Table 3. The results suggest that the beliefs transmitted to early-arrival first-generation migrants regarding women's political empowerment and economic participation appear to be driving the reluctance of women to enter US male-dominated occupations. These findings are expected, since economic participation and political empowerment may capture some independent cultural preferences about the role of women in the labour market (Rodríguez-Planas & Nollenberger, 2018).

4.4. Mechanisms: work flexibility to reach family–work balance

A thorough exploration has been made into which aspects related to the labour market in the home country can be responsible for gender-based sorting in occupations. As women traditionally assume greater household labour and childcare responsibilities, they may tend to choose occupations that offer a better work–family balance (Goldin & Katz, 2016), with job flexibility being positively valued by one-third of women (Flabbi & Moro, 2012). Women's preference for working fewer hours or having part-time vs full-time jobs and shorter commutes can also be related to the employment/family balance and their occupational choice (Cha, 2013; Cortes & Pan, 2018).

To explore this issue, the cross-country variation in women's representation in occupations with workplace time requirements is exploited using data from the Multinational Time Use Study (MTUS) (Fisher et al., 2019). Merging the MTUS information with the sample of early-arrival migrants in the US allows an estimation of the impact of several job traits in the country of origin on the choices of occupation among the sample of early-arrival migrants,

mitigating endogeneity concerns.[20] The job traits considered are: (1) the gender composition of the occupation; (2) the hours of work, (3) the commuting time, and (4) non-standard schedules.[21] The results are presented in Table 4. As can be seen, the higher the proportion of women in jobs with any of those four job traits in a country of origin, the higher the probability that early-arrival migrant women from that country, over men, will choose a US male-dominated job. Thus, improvements in any of these traits could attract more women to male-dominated jobs, which would ultimately lead to a change in the gender roles associated with those occupations (Pan, 2015).

Particular attention is now given to a job trait that more easily allows women to combine household responsibilities and employment: the availability of remote work (Powell & Craig, 2015). The MTUS contains information on work flexibility through the ability to telework, and also on the time spent on childcare, housework, and adult care. Using this information, the extent to which the possibility of remote work for women who have to undertake household responsibilities is also an influence on women's occupational choices can be studied. Table 5 displays the results. The cultural proxy in columns (1) to (3) measures the proportion of women teleworking in a male occupation and reporting spending some time on childcare, housework, and adult care, respectively. As before, by focusing on the interaction term, the findings point to achieving work flexibility through teleworking as a potential channel through which gender equality in occupational choices can be reached.

5. Conclusions

[20] The variation in the sample size is due to the availability of information on the countries of origin in MTUS. Out of the 107 countries of origin the MTUS provides data on the following seven countries of origin: Austria, Bulgaria, Canada, France, Hungary, Italy, Spain.

[21] An occupation is considered to require long work hours (commutes) if the average time reported by all women in that occupation is over the average work (commuting) time for women in all occupations in that country. Similarly, an occupation requires non-standard work schedules if the proportion of women working during non-standard hours in an occupation is over the national average for all women in all occupations (see Table B4 in the Appendix for a detailed description).

To make progress again in the movement towards gender equality in the world of work, a substantial cultural change in the occupational segregation by gender is surely required since, as is shown here, culture/gender norms matter in occupational choices. To our knowledge, this study is the first to identify a clear link between culture and occupational choices without reverse causality concerns. The article supplements the literature on gender differences in occupational choices by investigating how gender norms put women off male-dominated jobs, and how cultural change may be fostered.

An epidemiological approach is followed to disentangle the effect of culture from the effect of markets and economic conditions, through merging individual-level data from the ACS on early-arrival migrants with the GGI (which avoids reverse causality). It is observed that early-arrival migrant women are underrepresented in US male-dominated occupations, and that they seem to be daunted by gender norms since the probability of choosing US male-dominated jobs of women, over men, originating from more gender-equal countries is greater than the probability of those from less gender-equal countries. A supplementary analysis identifies possible peer effects in the transmission of these gender norms.

This article further explores the social factors that are shaping gender norms, which can shed some light on policies to address the remaining labour market gaps. One of the main reasons why women are traditionally not employed in male jobs may be their demand for work flexibility to allow them to combine career/employment and family. Male jobs may require employees to put in long hours of work, undertake long commutes, and work at non-standard times, which makes that combination difficult. Utilizing supplementary data from MTUS, the article shows that culture operates through the workplace time requirements mentioned above, and that work flexibility may be a key factor in boosting cultural change. Overall, the results partly explain why women are reluctant to enter male occupations, and suggest that policies attempting to increase workplace flexibility to enable a career–family balance may prove to be decisive in changing gender norms and therefore achieving gender equality in the labour market.

References

Akerlof, G. A., & Kranton, R. E. (2000). Economics and Identity. *Quarterly Journal of Economics*, *115*(3), 715–753. https://doi.org/10.1162/003355300554881

Altonji, J. G., Blom, E., & Meghir, C. (2012). Heterogeneity in human capital investments: High school curriculum, college major, and careers. *Annual Review of Economics*, *4*, 185–223. https://doi.org/10.1146/annurev-economics-080511-110908

Amuedo-Dorantes, C., Marcén, M., Morales, M., & Sevilla, A. (2022). Schooling and Parental Labor Supply: Evidence from COVID-19 School Closures in the United States. *ILR Review*, 001979392210991. https://doi.org/10.1177/00197939221099184

Blau, F. D., Brummund, P., & Liu, A. Y. H. (2013). Trends in occupational segregation by gender 1970–2009: Adjusting for the impact of changes in the occupational coding system. *Demography*, *50*(2), 471–492. https://doi.org/10.1007/s13524-012-0151-7

Blau, F. D., & Kahn, L. M. (2017). The gender wage gap: Extent, trends, & explanations. *Journal of Economic Literature*, *55*(3), 789–865. https://doi.org/10.1257/jel.20160995

Blau, F. D., Kahn, L. M., Comey, M., Eng, A., Meyerhofer, P., & Willén, A. (2020). Culture and gender allocation of tasks: source country characteristics and the division of non-market work among US immigrants. *Review of Economics of the Household*, *18*(4), 907–958. https://doi.org/10.1007/s11150-020-09501-2

Cha, Y. (2013). Overwork and the persistence of gender segregation in occupations. *Gender & Society*, *27*(2), 158–184. https://doi.org/10.1177/0891243212470510

Contreras, D., & Plaza, G. (2010). Cultural factors in women's labor force participation in Chile. *Feminist Economics*, *16*(2), 27–46. https://doi.org/10.1080/13545701003731815

Cortes, P., & Pan, J. (2018). Occupation and Gender. In S. L. Averett, L. M. Argys, & S. D. Hoffman (Eds.), *The Oxford Handbook of Women and the Economy* (pp. 424–452). Oxford University Press. https://doi.org/10.1093/oxfordhb/9780190628963.013.12

Cortes, P., & Pan, J. (2021). Prevalence of Long Hours and Skilled Women's Occupational Choices. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.2846316

DeLeire, T., & Levy, H. (2004). Worker sorting and the risk of death on the job. *Journal of Labor Economics*, *22*(4), 925–953. https://doi.org/10.1086/423159/ASSET/IMAGES/LARGE/FG2.JPEG

England, P., Levine, A., & Mishel, E. (2020). Progress toward gender equality in the United States has slowed or stalled. *Proceedings of the National Academy of Sciences of the United States of America*, *117*(13), 6990–6997. https://doi.org/10.1073/PNAS.1918891117/-/DCSUPPLEMENTAL

Eugster, B., Lalive, R., Steinhauer, A., & Zweimüller, J. (2017). Culture, work attitudes, and job search: Evidence from the swiss language border. *Journal of the European Economic Association*, *15*(5), 1056–1100. https://doi.org/10.1093/jeea/jvw024

Fernández, R. (2007). Women, work, and culture. *Journal of the European Economic Association*, *5*(2–3), 305–332.

Fernández, R. (2011). Does Culture Matter? In M. O. I n: Benhabib, J., Bisin, A., Jackson & (Eds.) (Eds.), *Handbook of Social Economics* (Vol. 1, Issue 11, pp. 481–510). Elsevier B.V. https://doi.org/10.1016/B978-0-444-53187-2.00011-5

Fernández, R., & Fogli, A. (2006). Fertility: The Role of Culture and Family Experience. *Journal of the European Economic Association*, *4*(2–3), 552–561. https://doi.org/10.1162/jeea.2006.4.2-3.552

Fernández, R., & Fogli, A. (2009). Culture: An Empirical Investigation of Beliefs, Work, and Fertility. *American Economic Journal: Macroeconomics*, *1*(1), 146–177. https://doi.org/10.1257/mac.1.1.146

Fisher, K., Gershuny, J., Flood, S. M., Roman, J. G., & Hofferth, S. L. (2019). *Multinational Time Use Study Extract System: Version 1.3 [dataset]*.

https://doi.org/https://doi.org/10.18128/D062.V1.3

Flabbi, L., & Moro, A. (2012). The effect of job flexibility on female labor market outcomes: Estimates from a search and bargaining model. *Journal of Econometrics*, *168*(1), 81–95. https://doi.org/10.1016/j.jeconom.2011.09.003

Flory, J. A., Leibbrandt, A., & List, J. A. (2015). Do Competitive Workplaces Deter Female Workers? A Large-Scale Natural Field Experiment on Job Entry Decisions. *The Review of Economic Studies*, *82*(1), 122–155. https://doi.org/10.1093/RESTUD/RDU030

Furtado, D., Marcén, M., & Sevilla, A. (2013). Does Culture Affect Divorce? Evidence From European Immigrants in the United States. *Demography*, *50*(3), 1013–1038. https://doi.org/10.1007/s13524-012-0180-2

Furtado, D., Papps, K. L., & Theodoropoulos, N. (2021). Who Goes on Disability when Times are Tough? The Role of Work Norms among Immigrants. *European Economic Review*, 103983. https://doi.org/10.1016/J.EUROECOREV.2021.103983

Giuliano, P. (2007). Living arrangements in Western Europe: Does cultural origin matter? *Journal of the European Economic Association*, *5*(5), 927–952. https://doi.org/10.1162/JEEA.2007.5.5.927

Gneezy, U., Niederle, M., & Rustichini, A. (2003). Performance in competitive environments: Gender differences. *Quarterly Journal of Economics*, *118*(3), 1049–1074. https://doi.org/10.1162/00335530360698496

Goldin, C. (2014). A grand gender convergence: Its last chapter. *American Economic Review*, *104*(4), 1091–1119. https://doi.org/10.1257/aer.104.4.1091

Goldin, C. (2021). Journey across a Century of Women. *Milken Institute Review*, *33*, 36–45.

Goldin, C., & Katz, L. F. (2016). A most egalitarian profession: Pharmacy and the evolution of a family-friendly occupation. *Journal of Labor Economics*, *34*(3), 705–746. https://doi.org/10.1086/685505

González, L., & Rodríguez-Planas, N. (2020). Gender norms and intimate partner violence. *Journal of Economic Behavior and Organization*, *178*, 223–248. https://doi.org/10.1016/j.jebo.2020.07.024

Herr, J. L., & Wolfram, C. D. (2012). Work environment and opt-out rates at motherhood across high-education career paths. *Industrial and Labor Relations Review*, *65*(4), 928–950. https://doi.org/10.1177/001979391206500407

Kalenkoski, C. M., & Pabilonia, S. W. (2021). Impacts of COVID-19 on the self-employed. *Small Business Economics*, *13443*. https://doi.org/10.1007/s11187-021-00522-4

Manning, A., & Saidi, F. (2010). Understanding the gender pay gap: What's competition got to do with it? *Industrial and Labor Relations Review*, *63*(4), 681–698. https://doi.org/10.1177/001979391006300407

Marcén, M. (2014). The role of culture on self-employment. *Economic Modelling*, *44*(S1), S20–S32. https://doi.org/10.1016/j.econmod.2013.12.008

Marcén, M., & Morales, M. (2021). Culture and the cross-country differences in the gender commuting gap. *Journal of Transport Geography*, *96*, 103184. https://doi.org/10.1016/j.jtrangeo.2021.103184

Nollenberger, N., Rodríguez-Planas, N., & Sevilla, A. (2016). The math gender gap: The role of culture. *American Economic Review*, *106*(5), 257–261. https://doi.org/10.1257/aer.p20161121

Pan, J. (2015). Gender segregation in occupations: The role of tipping and social interactions. *Journal of Labor Economics*, *33*(2), 365–408. https://doi.org/10.1086/678518

Perales, F. (2013). Occupational sex-segregation, specialized human capital and wages: evidence from Britain. *Work, Employment and Society*, *27*(4), 600–620. https://doi.org/10.1177/0950017012460305

Pertold-Gebicka, B., Pertold, F., & Datta Gupta, N. (2021). Employment Adjustments Around

Childbirth. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.2725046

Pope, D. G., & Sydnor, J. R. (2010). Geographic variation in the gender differences in test scores. *Journal of Economic Perspectives*, *24*(2), 95–108. https://doi.org/10.1257/jep.24.2.95

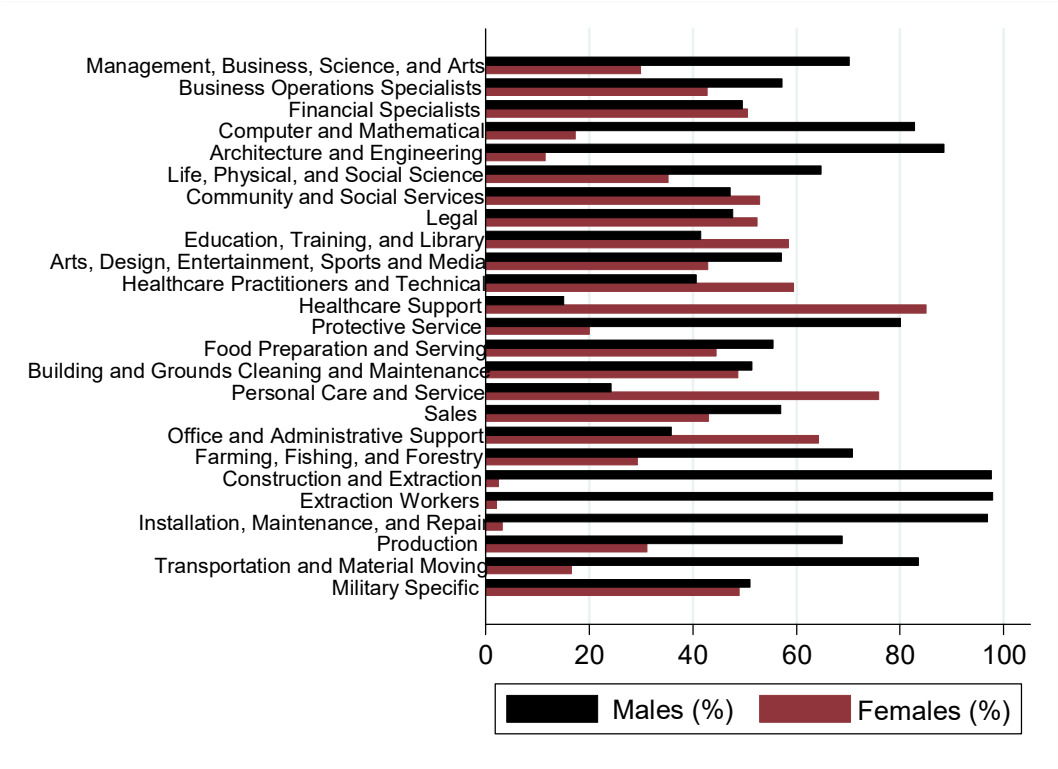
Powell, A., & Craig, L. (2015). Gender differences in working at home and time use patterns: evidence from Australia. *Work, Employment and Society*, *29*(4), 571–589. https://doi.org/10.1177/0950017014568140

Rodríguez-Planas, N., & Nollenberger, N. (2018). Let the girls learn! It is not only about math … it's about gender social norms. *Economics of Education Review*, *62*, 230–253. https://doi.org/10.1016/j.econedurev.2017.11.006

Ruggles, S., Flood, S., Foster, S., Goeken, R., Pacas, J., Schouweiler, M., & Sobek, M. (2021). *IPUMS USA: Version 11.0 [dataset]*. https://doi.org/https://doi.org/10.18128/D010.V11.0

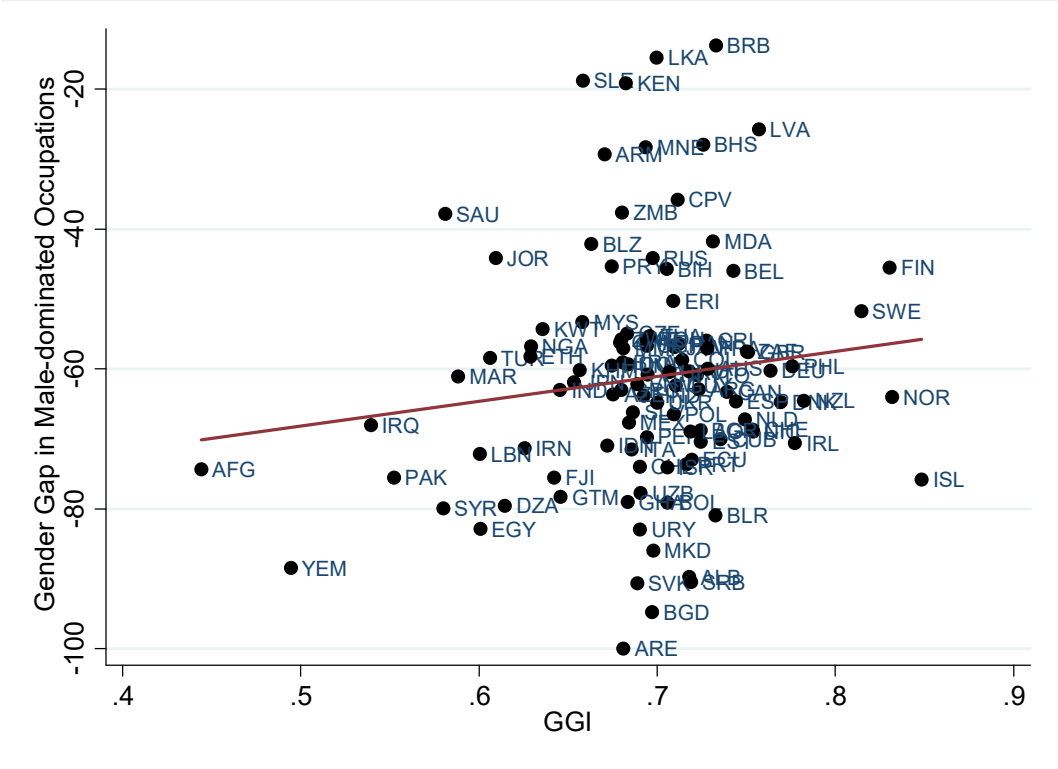
Schmitz, S., & Spiess, C. K. (2022). The intergenerational transmission of gender norms—why and how adolescent males with working mothers matter for female labour market outcomes. *Socio-Economic Review*, *20*(1), 281–322. https://doi.org/10.1093/SER/MWAB023

Figure 1: Percentage of females and males by occupation



Note: Data come from the American Community Survey (ACS) of Integrated Public Use Microdata Series (IPUMS) for the period 2006–2019. This figure shows the average percentage of females and males by occupation over the total number of individuals in each occupation during the analysed period. The percentages are calculated by occupation and year.

Figure 2: The relationship between the gender gap in US male-dominated occupations and the Gender Gap Index (GGI) by country of origin



Note: This figure displays the average gender gap for early-arrival migrants in US male-dominated jobs and the measure of culture in the country of origin. The gender gap is calculated as the percentage of women minus the percentage of men working in US male-dominated occupations.

Table 1: Main results

Dependent variable: Working in a US male occupation	(1)	(2)	(3)	(4)
Female	-0.305***	-0.905***	-0.843***	-0.938***
	(0.018)	(0.079)	(0.077)	(0.085)
GGI x Female		0.814***	0.782***	0.739***
		(0.122)	(0.124)	(0.122)
GGI		-0.170	-0.149	-0.088
		(0.151)	(0.160)	(0.147)
Year FE	Yes	Yes	Yes	Yes
Country of origin FE	Yes	Yes	Yes	Yes
State FE	Yes	Yes	Yes	Yes
State FE x Female	No	Yes	Yes	Yes
Country of origin FE x Female	No	Yes	Yes	Yes
Individual controls	No	No	Yes	Yes
Job controls	No	No	No	Yes
Observations	144,090	144,090	144,090	118,123
R-squared	0.147	0.152	0.153	0.156
D.V. Mean	0.28	0.28	0.28	0.29
D.V. Std. Dev.	0.45	0.45	0.45	0.45
GGI Std. Dev.		0.06	0.06	0.06

Notes: The sample in all columns is early-arrival migrants living in the US aged between 16 and 64 years old who reported their occupation and country of origin. Equation (1) is estimated. All regressions include a constant. The estimates in columns (3) and (4) include demographic controls for age, educational level (college or not), race (white or not), living with a married or unmarried partner, and the presence of children under 6 years old in the household (see Table B3 for a detailed description). Job characteristics are also controlled for in column (4). Controls are included for commuting time and the logarithm of weekly work hours. These individual characteristics are also interacted with the female indicator. The variation in the sample size is due to the lack of availability of some of these controls for all individuals in our sample. Estimates are weighted. Robust standard errors are clustered at the state level and reported in parentheses. *** Significant at the 1% level, ** Significant at the 5% level, * Significant at the 10% level.

Table 2: Transmission of culture

Dependent variable: Working in a US male occupation	(1) Concentration same-ethnicity above the mean	(2) Concentration same-ethnicity below the mean	(3) Same-ethnicity partner	(4) Different-ethnicity partner
Female	-0.911***	-0.824***	-1.207***	-0.810***
	(0.112)	(0.131)	(0.147)	(0.122)
GGI x Female	0.854***	0.683***	1.021***	0.735***
	(0.203)	(0.162)	(0.119)	(0.185)
GGI	0.222*	-0.319*	-0.424	-0.117
	(0.127)	(0.169)	(0.258)	(0.207)
Year FE	Yes	Yes	Yes	Yes
Country of origin FE	Yes	Yes	Yes	Yes
State FE	Yes	Yes	Yes	Yes
State FE x Female	Yes	Yes	Yes	Yes
Country of origin FE x Female	Yes	Yes	Yes	Yes
Individual controls	Yes	Yes	Yes	Yes
Observations	50,277	93,813	19,457	124,633
R-squared	0.178	0.140	0.216	0.145
D.V. Mean	0.29	0.27	0.31	0.28
D.V. Std. Dev.	0.46	0.44	0.46	0.45
GGI Std. Dev.	0.06	0.06	0.06	0.06

Notes: The sample in all columns is early-arrival migrants living in the US aged between 16 and 64 years old who reported their occupation and country of origin. Equation (1) is estimated. All regressions include a constant, and demographic controls for age, educational level (college or not), race (white or not), living with a married or unmarried partner, and the presence of children under 6 years old in the household (see Table B3 in the Appendix for a detailed description). The control for the presence of a partner is excluded in columns (3) and (4) for obvious reasons. These individual characteristics are also interacted with the female indicator. Estimates are weighted. Robust standard errors are clustered at the state level and reported in parentheses. *** Significant at the 1% level, ** Significant at the 5% level, * Significant at the 10% level.

Table 3: Channels shaping culture in the country of origin

Dependent variable: Working in a US male occupation	(1)	(2)	(3)	(4)
Female	-0.324***	-0.607***	-0.088	1.957*
	(0.036)	(0.079)	(0.326)	(1.064)
GGI Pol. Emp. x Female	0.258***			
	(0.044)			
GGI Pol. Emp.	-0.115			
	(0.070)			
GGI Ec. Opp. x Female		0.447***		
		(0.116)		
GGI Ec. Opp.		0.018		
		(0.071)		
GGI Educ. x Female			-0.184	
			(0.299)	
GGI Educ.			0.213	
			(0.218)	
GGI Health x Female				-2.285**
				(1.069)
GGI Health				2.056**
				(0.910)
Year FE	Yes	Yes	Yes	Yes
Country of origin FE	Yes	Yes	Yes	Yes
State FE	Yes	Yes	Yes	Yes
State FE x Female	Yes	Yes	Yes	Yes
Country of origin FE x Female	Yes	Yes	Yes	Yes
Observations	144,090	144,090	144,090	144,090
R-squared	0.153	0.153	0.153	0.153
D.V. Mean	0.28	0.28	0.28	0.28
D.V. Std. Dev.	0.45	0.45	0.45	0.45
GGI subindex Std. Dev.	0.06	0.06	0.06	0.06

Notes: The sample in all columns is early-arrival migrants living in the US aged between 16 and 64 years old who reported their occupation and country of origin. Equation (1) is estimated. All regressions include a constant, and demographic controls for age, educational level (college or not), race (white or not), living with a married or unmarried partner, and the presence of children under 6 years old in the household (see Table B3 for a detailed description). These individual characteristics are also interacted with the female indicator. Estimates are weighted. Robust standard errors are clustered at the state level and reported in parentheses. *** Significant at the 1% level, ** Significant at the 5% level, * Significant at the 10% level.

Table 4: Labour market factors shaping culture in the country of origin: The role of women's relative preference for a family-friendly job

Dependent variable: Working in a US male occupation	(1)	(2)	(3)	(4)
Female	-0.286**	-0.333***	-0.333**	-0.346***
	(0.078)	(0.080)	(0.095)	(0.053)
Prop. of females in a male occ in the home country x Female	0.068***			
	(0.011)			
Prop. of females in a male occ in the home country	-0.008			
	(0.012)			
Prop. of females in jobs requiring long work hours x Female		0.107***		
		(0.013)		
Prop. of females in jobs requiring long work hours		-0.017		
		(0.019)		
Prop. of females in jobs with non-standard schedules x Female			0.128**	
			(0.049)	
Prop. of females in jobs with non-standard schedules			0.006	
			(0.026)	
Prop. of females in jobs requiring long commutes x Female				0.065***
				(0.008)
Prop. of females in jobs requiring long commutes				-0.029*
				(0.014)
Year FE	Yes	Yes	Yes	Yes
Country of origin FE	No	No	No	No
State FE	Yes	Yes	Yes	Yes
State FE x Female	Yes	Yes	Yes	Yes
Country of origin FE x Female	No	No	No	No
Individual controls	Yes	Yes	Yes	Yes
Observations	17,844	17,844	17,844	17,185
R-squared	0.153	0.153	0.153	0.153
D.V. Mean	0.29	0.29	0.29	0.29
D.V. Std. Dev.	0.45	0.45	0.45	0.45
Home-country measure Std. Dev.	0.22	0.13	0.12	0.18

Notes: The sample in all columns is early-arrival migrants living in the US aged between 16 and 64 years old who reported their occupation and country of origin. All regressions include a constant, and demographic controls for age, educational level (college or not), race (white or not), living with a married or unmarried partner, and the presence of children under 6 years old in the household (see Table B3 for a detailed description). These individual characteristics are also interacted with the female indicator. The variation in the sample size is due to the lack of availability of MTUS data. Estimates are weighted. Robust standard errors are clustered at the state level and reported in parentheses. *** Significant at the 1% level, ** Significant at the 5% level, * Significant at the 10% level.

Table 5: Mechanisms: work flexibility as a key factor for cultural change

Dependent variable: Working in a US male occupation	(1)	(2)	(3)
Female	-0.336***	-0.335***	-0.334***
	(0.055)	(0.054)	(0.054)
Prop. of females teleworking in a male occ and spending time in childcare in the home country x Female	0.079***		
	(0.011)		
Prop. of females teleworking in a male occ and spending time in childcare in the home country	-0.012		
	(0.015)		
Prop. of females teleworking in a male occ and spending time in housework in the home country x Female		0.078***	
		(0.010)	
Prop. of females teleworking in a male occ and spending time in housework in the home country		-0.010	
		(0.014)	
Prop. of females teleworking in a male occ and spending time in adult care in the home country x Female[o]			0.093***
			(0.011)
Prop. of females teleworking in a male occ and spending time in adult care in the home country			-0.007
			(0.016)
Year FE	Yes	Yes	Yes
Country of origin FE	No	No	No
State FE	Yes	Yes	Yes
State FE x Female	Yes	Yes	Yes
Country of origin FE x Female	No	No	No
Individual controls	Yes	Yes	Yes
Observations	17,185	17,185	17,185
R-squared	0.153	0.153	0.153
D.V. Mean	0.29	0.27	0.31
D.V. Std. Dev.	0.46	0.44	0.46
GGI Std. Dev.	0.22	0.22	0.23

Notes: The sample in all columns is early-arrival migrants living in the US aged between 16 and 64 years old who reported their occupation and country of origin. All regressions include a constant, and demographic controls for age, educational level (college or not), race (white or not), living with a married or unmarried partner, and the presence of children under 6 years old in the household (see Table B3 for a detailed description). The control for the presence of a partner is excluded in columns (3) and (4) for obvious reasons. These individual characteristics are also interacted with the female indicator. The variation in the sample size is due to the lack of availability of MTUS data. Estimates are weighted. Robust standard errors are clustered at the state level and reported in parentheses. *** Significant at the 1% level, ** Significant at the 5% level, * Significant at the 10% level.

Supplementary Material (Not for publication)

Appendix A

Table A1: Robustness Check #1: Main results using a sample of heads and non-heads of household

Dependent variable: Working in a US male occupation	(1)	(2)	(3)	(4)
Female	-0.292***	-0.424***	-0.418***	-0.597***
	(0.020)	(0.064)	(0.069)	(0.064)
GGI x Female		0.230**	0.228**	0.225*
		(0.095)	(0.094)	(0.116)
GGI		-0.257***	-0.248***	-0.205**
		(0.082)	(0.079)	(0.088)
Year FE	Yes	Yes	Yes	Yes
Country of origin FE	Yes	Yes	Yes	Yes
State FE	Yes	Yes	Yes	Yes
State FE x Female	No	Yes	Yes	Yes
Country of origin FE x Female	No	Yes	Yes	Yes
Individual controls	No	No	Yes	Yes
Job controls	No	No	No	Yes
Observations	224,898	224,898	224,898	181,448
R-squared	0.137	0.143	0.145	0.147
D.V. Mean	0.21	0.21	0.21	0.22
D.V. Std. Dev.	0.40	0.40	0.40	0.41
GGI Std. Dev.		0.06	0.06	0.06

Notes: The sample in all columns is early-arrival migrants living in the US aged between 16 and 64 years old who reported their occupation and country of origin Equation (1) is estimated. All regressions include a constant. The estimates in columns (3) and (4) include demographic controls for age, educational level (college or not), race (white or not), living with a married or unmarried partner, and the presence of children under 6 years old in the household (see Table B3 in the Appendix for a detailed description). Job characteristics are also controlled for in column (4). Controls are included for commuting time and the logarithm of weekly work hours. These individual characteristics are also interacted with the female indicator. The variation in the sample size is due to the lack of availability of some of this controls for all individuals in our sample. Estimates are weighted. Robust standard errors are clustered at the state level and reported in parentheses. *** Significant at the 1% level, ** Significant at the 5% level, * Significant at the 10% level.

Table A2: Robustness Check #2: Main results using a sample of early-arrival migrants aged 18-50 years old

Dependent variable: Working in a US male occupation	(1)	(2)	(3)	(4)
Female	-0.309***	-0.861***	-0.775***	-0.855***
	(0.020)	(0.081)	(0.078)	(0.088)
GGI x Female		0.750***	0.717***	0.665***
		(0.110)	(0.109)	(0.116)
GGI		-0.163	-0.145	-0.079
		(0.135)	(0.135)	(0.128)
Year FE	Yes	Yes	Yes	Yes
Country of origin FE	Yes	Yes	Yes	Yes
State FE	Yes	Yes	Yes	Yes
State FE x Female	No	Yes	Yes	Yes
Country of origin FE x Female	No	Yes	Yes	Yes
Individual controls	No	No	Yes	Yes
Job controls	No	No	No	Yes
Observations	106,904	106,904	106,904	89,462
R-squared	0.151	0.157	0.159	0.161
D.V. Mean	0.28	0.28	0.28	0.29
D.V. Std. Dev.	0.45	0.45	0.45	0.45
GGI Std. Dev.		0.06	0.06	0.06

Notes: The sample in all columns is early-arrival migrants living in the US aged between 18 and 50 years old who reported their occupation and country of origin. Equation (1) is estimated. All regressions include a constant. The estimates in columns (3) and (4) include demographic controls for age, educational level (college or not), race (white or not), living with a married or unmarried partner, and the presence of children under 6 years old in the household (see Table B3 for a detailed description). Job characteristics are also controlled for in column (4). Controls are included for commuting time and the logarithm of weekly work hours. These individual characteristics are also interacted with the female indicator. The variation in the sample size is due to the lack of availability of some of these controls for all individuals in our sample. Estimates are weighted. Robust standard errors are clustered at the state level and reported in parentheses. *** Significant at the 1% level, ** Significant at the 5% level, * Significant at the 10% level.

Table A3: Robustness Check #2: Main results using a sample of early-arrival migrant workers

Dependent variable: Working in a US male occupation	(1)	(2)	(3)	(4)
Female	-0.303***	-0.853***	-0.800***	-0.937***
	(0.018)	(0.084)	(0.079)	(0.085)
GGI x Female		0.756***	0.710***	0.737***
		(0.130)	(0.132)	(0.122)
GGI		-0.073	-0.048	-0.088
		(0.152)	(0.160)	(0.147)
Year FE	Yes	Yes	Yes	Yes
Country of origin FE	Yes	Yes	Yes	Yes
State FE	Yes	Yes	Yes	Yes
State FE x Female	No	Yes	Yes	Yes
Country of origin FE x Female	No	Yes	Yes	Yes
Individual controls	No	No	Yes	Yes
Job controls	No	No	No	Yes
Observations	127,052	127,052	127,052	118,102
R-squared	0.145	0.150	0.151	0.156
D.V. Mean	0.28	0.28	0.28	0.29
D.V. Std. Dev.	0.45	0.45	0.45	0.45
GGI Std. Dev.		0.06	0.06	0.06

Notes: The sample in all columns is early-arrival migrant workers living in the US aged between 16 and 64 years old who reported their occupation and country of origin. Equation (1) is estimated. All regressions include a constant. The estimates in columns (3) and (4) include demographic controls for age, educational level (college or not), race (white or not), living with a married or unmarried partner, and the presence of children under 6 years old in the household (see Table B3 for a detailed description). Job characteristics are also controlled for in column (4). Controls are included for commuting time and the logarithm of weekly work hours. These individual characteristics are also interacted with the female indicator. The variation in the sample size is due to the lack of availability of some of these controls for all individuals in our sample. Estimates are weighted. Robust standard errors are clustered at the state level and reported in parentheses. *** Significant at the 1% level, ** Significant at the 5% level, * Significant at the 10% level.

Table A4: Robustness Check #2: Using other thresholds

Dependent variable: Working in a US male occupation	(1) 90 per cent national threshold	(2) 80 per cent national threshold	(4) 70 per cent state threshold
Female	-0.286***	-0.426***	-0.783***
	(0.042)	(0.075)	(0.076)
GGI x Female	0.247***	0.252**	0.609***
	(0.092)	(0.110)	(0.115)
GGI	-0.028	-0.182*	-0.386**
	(0.064)	(0.104)	(0.148)
Year FE	Yes	Yes	Yes
Country of origin FE	Yes	Yes	Yes
State FE	Yes	Yes	Yes
State FE x Female	Yes	Yes	Yes
Country of origin FE x Female	Yes	Yes	Yes
Individual controls	Yes	Yes	Yes
Observations	144,090	144,090	144,090
R-squared	0.094	0.125	0.163
D.V. Mean	0.07	0.20	0.31
D.V. Std. Dev.	0.26	0.40	0.46
GGI Std. Dev.	0.03	0.04	0.05

Notes: The sample in all columns is early-arrival migrants living in the US aged between 16 and 64 years old who reported their occupation and country of origin. Estimates are weighted. Robust standard errors are clustered at the state level and reported in parentheses. *** Significant at the 1% level, ** Significant at the 5% level, * Significant at the 10% level.

Table A5: Robustness Check #3: Including MSA fixed effects

Dependent variable: Working in a US male occupation	(1)	(2)	(3)	(4)
Female	-0.305***	-0.688***	-0.632***	-0.707***
	(0.018)	(0.088)	(0.085)	(0.100)
GGI x Female		0.798***	0.765***	0.729***
		(0.123)	(0.126)	(0.121)
GGI		-0.167	-0.146	-0.082
		(0.155)	(0.164)	(0.150)
Year FE	Yes	Yes	Yes	Yes
Country of origin FE	Yes	Yes	Yes	Yes
MSA FE	Yes	Yes	Yes	Yes
MSA FE x Female	No	Yes	Yes	Yes
Country of origin FE x Female	No	Yes	Yes	Yes
Individual controls	No	No	Yes	Yes
Job controls	No	No	No	Yes
Observations	144,090	144,090	144,090	117,994
R-squared	0.150	0.157	0.158	0.162
D.V. Mean	0.21	0.21	0.21	0.22
D.V. Std. Dev.	0.40	0.40	0.40	0.41
GGI Std. Dev.		0.06	0.06	0.06

Notes: The sample in all columns is early-arrival migrants living in the US aged between 16 and 64 years old who reported their occupation and country of origin. Equation (1) is estimated. All regressions include a constant. The estimates in columns (3) and (4) include demographic controls for age, educational level (college or not), race (white or not), living with a married or unmarried partner, and the presence of children under 6 years old in the household (see Table B3 for a detailed description). Job characteristics are also controlled for in column (4). Controls are included for commuting time and the logarithm of weekly work hours. These individual characteristics are also interacted with the female indicator. The variation in the sample size is due to the lack of availability of some of these controls for all individuals in our sample. Estimates are weighted. Robust standard errors are clustered at the state level and reported in parentheses. *** Significant at the 1% level, ** Significant at the 5% level, * Significant at the 10% level.

Table A6: Main results showing all coefficients

Dependent variable: Working in a US male occupation	(1)	(2)	(3)	(4)
Female	-0.305***	-0.905***	-0.843***	-0.938***
	(0.018)	(0.079)	(0.077)	(0.085)
GGI x Female		0.814***	0.782***	0.739***
		(0.122)	(0.124)	(0.122)
GGI		-0.170	-0.149	-0.088
		(0.151)	(0.160)	(0.147)
Age			0.001*	0.000
			(0.000)	(0.000)
Age x Female			-0.000	0.000
			(0.000)	(0.000)
College			0.022	0.025
			(0.014)	(0.017)
College x Female			-0.045***	-0.048***
			(0.014)	(0.016)
White			0.001	0.002
			(0.009)	(0.011)
White x Female			0.000	0.002
			(0.012)	(0.013)
Partner present in the HH			0.028***	0.020**
			(0.008)	(0.008)
Partner present in the HH x Female			-0.031***	-0.019*
			(0.011)	(0.012)
Children under 6 years old present in the HH			0.014	0.012
			(0.009)	(0.009)
Children under 6 years old present in the HH			-0.021***	-0.017**
x Female			(0.006)	(0.007)
Commuting time				0.001***
				(0.000)
Commuting time x Female				-0.001***
				(0.000)
Log (weekly work hours)				0.024***
				(0.007)
Log (weekly work hours) x Female				0.041***
				(0.011)
Year FE	Yes	Yes	Yes	Yes
Country of origin FE	Yes	Yes	Yes	Yes
State FE	Yes	Yes	Yes	Yes
State FE x Female	No	Yes	Yes	Yes
Country of origin FE x Female	No	Yes	Yes	Yes
Individual controls	No	No	Yes	Yes
Job controls	No	No	No	Yes
Observations	144,090	144,090	144,090	118,123
R-squared	0.147	0.152	0.153	0.156
D.V. Mean	0.28	0.28	0.28	0.29
D.V. Std. Dev.	0.45	0.45	0.45	0.45
GGI Std. Dev.		0.06	0.06	0.06

Notes: The sample in all columns is early-arrival migrants living in the US aged between 16 and 64 years old who reported their occupation and country of origin. Equation (1) is estimated. All regressions include a constant. The estimates in columns (3) and (4) include demographic controls for age, educational level (college or not), race (white or not), living with a married or unmarried partner, and the presence of children under 6 years old in the household (see Table B3 for a detailed description). Job characteristics are also controlled for in column (4). Controls are included for commuting time and the logarithm of weekly work hours. These individual characteristics are also interacted with the female indicator. The variation in the sample size is due to the lack of availability of some of these controls for all individuals in our sample. Estimates are weighted. Robust standard errors are clustered at the state level and reported in parentheses. *** Significant at the 1% level, ** Significant at the 5% level, * Significant at the 10% level.

Data Appendix

Table B1: Gender Equality Measures

Name	Definition	Source
Gender Gap Index (GGI)	Measures the gap between men and women in four fundamental categories: economic opportunities, economic participation, educational attainment, political achievements, health and survival. The highest possible score is 1 (equality) and the lowest possible score is 0 (inequality).	World Economic Forum, 2021 Report
Economic Participation and Opportunity Subindex	Index based upon gender differences in the participation in labor markets, wage equality and the gap between the advancement of women and men captured through the ratio of women to men among legislators, senior officials and managers, and the ratio of women to men among technical and professional workers. The highest possible score is 1 (equality) and the lowest possible score is 0 (inequality). This index is also elaborated for the World Economic Forum as part of the Gender Gap Index.	World Economic Forum, 2021 Report
Educational Attainment Subindex	Index based upon the gap between women's and men's current access to education through ratios of women to men in primary, secondary and tertiary level of education. The highest possible score is 1 (equality) and the lowest possible score is 0 (inequality). This index is also elaborated for the World Economic Forum as part of the Gender Gap Index.	World Economic Forum, 2021 Report
Health and Survival Subindex	Index based upon the differences between women's and men's health through the use of the sex ratio at birth and the gap between women's and men's healthy life expectancy. The highest possible score is 1 (equality) and the lowest possible score is 0 (inequality). This index is also elaborated for the World Economic Forum as part of the Gender Gap Index.	World Economic Forum, 2021 Report
Political Empowerment Subindex	Index based upon the gap between men and women at the highest level of political decision-making by using the ratio of women to men in positions of minister and the ratio of women to men in parliamentary positions. The highest possible score is 1 (equality) and the lowest possible score is 0 (inequality). This index is also elaborated for the World Economic Forum as part of the Gender Gap Index.	World Economic Forum, 2021 Report

Table B2: Summary statistics by country of origin

Country of Origin	Gender Gap in Male Occupations	GGI	Female	Age	College	White	Partner in the HH	Children under 6 years old in the HH
Barbados	-13.79	0.73	0.59	40.20	0.28	0.21	0.46	0.17
Sri Lanka	-15.52	0.70	0.52	38.77	0.15	0.14	0.54	0.18
Sierra Leone	-18.80	0.66	0.76	36.86	0.43	0.16	0.30	0.19
Kenya	-19.20	0.68	0.54	37.03	0.18	0.41	0.50	0.18
Lithuania	-25.75	0.76	0.46	36.77	0.14	1.00	0.54	0.14
Bahamas	-27.96	0.73	0.58	39.60	0.33	0.27	0.46	0.18
Montenegro	-28.27	0.69	0.45	43.48	0.29	0.94	0.74	0.23
Armenia	-29.31	0.67	0.50	32.15	0.33	0.97	0.56	0.30
Cape Verde	-35.84	0.71	0.59	37.84	0.39	0.13	0.47	0.30
Zambia	-37.62	0.68	0.48	36.30	0.21	0.18	0.52	0.21
Saudi Arabia	-37.87	0.58	0.45	35.94	0.17	0.76	0.51	0.20
Moldavia	-41.81	0.73	0.57	31.41	0.18	0.97	0.49	0.22
Belize	-42.17	0.66	0.52	40.15	0.41	0.22	0.56	0.24
Russia	-44.15	0.70	0.48	31.33	0.26	0.98	0.51	0.19
Jordan	-44.18	0.61	0.41	40.80	0.20	0.94	0.63	0.18
Paraguay	-45.36	0.67	0.45	32.87	0.27	0.67	0.55	0.24
Finland	-45.51	0.83	0.49	44.51	0.22	0.97	0.57	0.14
Bosnia	-45.71	0.71	0.54	35.37	0.22	0.99	0.52	0.18
Belgium	-46.01	0.74	0.49	43.59	0.24	0.91	0.59	0.15
Eritrea	-50.27	0.71	0.44	40.76	0.29	0.33	0.58	0.11
Sweden	-51.74	0.81	0.40	44.75	0.20	0.93	0.59	0.12
Malaysia	-53.35	0.66	0.50	35.08	0.11	0.17	0.59	0.28
Kuwait	-54.30	0.64	0.42	36.24	0.23	0.73	0.51	0.20
Czech Republic	-54.93	0.68	0.53	43.27	0.23	0.99	0.62	0.13
Thailand	-55.32	0.70	0.53	34.33	0.31	0.09	0.60	0.34
Romania	-55.74	0.69	0.47	34.55	0.26	0.98	0.57	0.25
Zimbabwe	-55.80	0.68	0.45	42.27	0.22	0.75	0.57	0.25
Costa Rica	-55.94	0.73	0.47	40.01	0.30	0.70	0.63	0.20
China	-56.25	0.68	0.47	34.46	0.15	0.04	0.45	0.13
Panama	-56.44	0.71	0.47	44.06	0.30	0.67	0.57	0.15
Singapore	-56.66	0.69	0.48	35.98	0.17	0.61	0.61	0.18
Nigeria	-56.75	0.63	0.44	36.59	0.13	0.15	0.42	0.21
Jamaica	-56.88	0.71	0.59	37.98	0.30	0.05	0.43	0.21
Burma	-57.06	0.68	0.41	41.99	0.13	0.09	0.69	0.21
France	-57.08	0.73	0.43	49.88	0.25	0.89	0.61	0.07
South Africa	-57.57	0.75	0.46	37.15	0.19	0.88	0.57	0.20
United Kingdom	-57.63	0.75	0.43	43.62	0.21	0.86	0.60	0.14
Ethiopia	-58.25	0.63	0.42	41.01	0.27	0.43	0.47	0.17
Turkey	-58.40	0.61	0.47	43.86	0.28	0.91	0.60	0.16
Colombia	-58.71	0.71	0.48	39.35	0.28	0.75	0.59	0.20
Brazil	-59.12	0.68	0.48	41.03	0.23	0.82	0.58	0.16
Dominican Republic	-59.39	0.68	0.59	37.08	0.33	0.38	0.50	0.29
Hungary	-59.58	0.67	0.42	50.07	0.26	0.98	0.55	0.09
Philippines	-59.62	0.78	0.46	39.40	0.30	0.14	0.62	0.22
Australia	-59.95	0.73	0.45	40.61	0.20	0.90	0.60	0.16
Cambodia	-60.18	0.66	0.47	35.60	0.28	0.00	0.60	0.32
Germany	-60.29	0.76	0.45	45.35	0.28	0.87	0.61	0.13
Austria	-60.32	0.72	0.44	53.93	0.23	0.96	0.62	0.04
Croatia	-60.49	0.71	0.46	44.71	0.23	0.99	0.65	0.08

Venezuela	-60.84	0.69	0.45	40.43	0.26	0.83	0.59	0.19
Trinidad and Tobago	-60.87	0.72	0.54	39.57	0.30	0.13	0.43	0.17
Morocco	-61.13	0.59	0.45	49.90	0.28	0.92	0.61	0.05
Japan	-61.94	0.65	0.45	46.45	0.28	0.60	0.61	0.10
Vietnam	-62.20	0.69	0.45	36.93	0.20	0.02	0.58	0.29
Guyana	-62.40	0.71	0.53	36.67	0.26	0.05	0.50	0.24
Argentina	-62.94	0.72	0.44	43.35	0.23	0.91	0.65	0.17
India	-62.98	0.65	0.41	36.73	0.10	0.05	0.61	0.25
Greece	-62.99	0.68	0.43	45.84	0.22	0.96	0.65	0.14
Canada	-63.27	0.74	0.45	46.42	0.25	0.91	0.61	0.12
Azerbaijan	-63.64	0.68	0.31	32.69	0.17	1.00	0.69	0.17
Honduras	-63.84	0.69	0.50	35.76	0.28	0.56	0.51	0.25
Norway	-64.00	0.83	0.46	45.69	0.21	0.98	0.63	0.15
New Zealand	-64.57	0.78	0.42	42.71	0.29	0.85	0.61	0.22
Spain	-64.67	0.74	0.46	42.01	0.27	0.86	0.63	0.17
Denmark	-64.76	0.77	0.41	47.13	0.18	0.96	0.65	0.15
Ukraine	-64.88	0.70	0.48	31.10	0.25	0.99	0.58	0.26
El Salvador	-66.20	0.69	0.49	35.04	0.29	0.51	0.59	0.32
Poland	-66.50	0.71	0.49	41.15	0.22	0.99	0.61	0.15
Netherlands	-67.23	0.75	0.42	48.04	0.28	0.85	0.63	0.10
Mexico	-67.70	0.68	0.50	38.23	0.28	0.61	0.63	0.29
Iraq	-68.03	0.54	0.40	39.54	0.24	0.94	0.60	0.26
Switzerland	-68.70	0.75	0.44	44.48	0.17	0.96	0.61	0.14
Bulgaria	-68.75	0.72	0.40	31.50	0.25	0.98	0.37	0.06
Laos	-68.97	0.72	0.49	36.17	0.32	0.01	0.64	0.39
Nicaragua	-68.98	0.75	0.52	35.05	0.32	0.66	0.58	0.29
Peru	-69.74	0.69	0.46	39.49	0.30	0.66	0.55	0.18
Cuba	-70.03	0.74	0.44	48.02	0.28	0.91	0.65	0.09
Latvia	-70.43	0.72	0.52	35.50	0.26	1.00	0.46	0.06
Ireland	-70.60	0.78	0.44	48.15	0.26	0.98	0.59	0.10
Indonesia	-70.96	0.67	0.43	39.21	0.24	0.22	0.57	0.18
Iran	-71.35	0.63	0.43	38.39	0.18	0.90	0.57	0.21
Italy	-71.50	0.69	0.42	47.81	0.24	0.95	0.66	0.11
Lebanon	-72.14	0.60	0.39	41.39	0.22	0.95	0.63	0.23
Ecuador	-73.01	0.72	0.44	41.14	0.29	0.65	0.60	0.19
Portugal	-73.60	0.72	0.44	43.48	0.22	0.97	0.69	0.16
Chile	-73.99	0.69	0.52	40.04	0.28	0.80	0.58	0.17
Israel	-74.07	0.71	0.40	40.96	0.19	0.99	0.66	0.28
Afghanistan	-74.36	0.44	0.46	34.57	0.24	0.63	0.58	0.37
Fiji	-75.53	0.64	0.53	36.70	0.25	0.10	0.70	0.25
Pakistan	-75.56	0.55	0.38	35.03	0.18	0.14	0.59	0.26
Iceland	-75.83	0.85	0.41	39.08	0.26	0.96	0.70	0.22
Uzbekistan	-77.78	0.69	0.53	30.95	0.30	0.95	0.59	0.34
Guatemala	-78.34	0.65	0.46	35.38	0.30	0.52	0.59	0.28
Ghana	-79.04	0.68	0.47	38.18	0.20	0.19	0.42	0.11
Bolivia	-79.10	0.71	0.50	38.67	0.20	0.72	0.58	0.26
Algeria	-79.61	0.61	0.33	43.73	0.20	0.83	0.60	0.20
Syria	-79.97	0.58	0.34	40.43	0.25	0.95	0.59	0.24
Byelorussia	-80.99	0.73	0.54	31.30	0.19	0.99	0.56	0.22
Egypt	-82.90	0.60	0.37	41.31	0.18	0.91	0.63	0.23
Uruguay	-82.94	0.69	0.38	41.60	0.32	0.86	0.58	0.18
Macedonia	-86.02	0.70	0.41	40.00	0.23	0.99	0.72	0.20
Yemen Arab Republic	-88.44	0.49	0.33	36.84	0.26	0.80	0.64	0.34

Albania	-89.74	0.72	0.44	33.56	0.20	0.94	0.46	0.06
Serbia	-90.51	0.72	0.57	43.29	0.25	1.00	0.59	0.11
Slovakia	-90.70	0.69	0.38	41.59	0.18	0.94	0.62	0.18
Bangladesh	-94.76	0.70	0.35	32.60	0.19	0.04	0.56	0.26
United Arab Emirates	-100.00	0.68	0.42	29.95	0.16	0.60	0.37	0.16
Average	-61.36	0.69	0.47	41.64	0.26	0.66	0.61	0.20
Std. Dev.	16.68	0.06	0.50	11.46	0.44	0.47	0.49	0.40

Notes: Data come from American Community Survey (ACS) of Integrated Public Use Microdata Series (IPUMS) for the period 2006-2019 (Ruggles et al. 2021). The sample contains 144,090 observations early-arrival migrants aged 16–64 coming from 107 countries of origin. The gender gap is calculated as the percentage of women's minus the percentage men's working in US male-dominated occupations by country of origin.

Table B3: Sum stats and definitions of ACS variables

Name	CPS variable		Definition	Mean	S.D.
Working in a male occupation	OCC reports the person's primary occupation, coded into a contemporary census classification scheme (some non-occupational activities are also recorded in the pre-1940 samples). Generally, the primary occupation is the one from which the person earns the most money; if respondents were not sure about this, they were to report the one at which they spent the most time. Unemployed persons were to give their most recent occupation. For persons listing more than one occupation, the samples use the first one listed.		Dummy variable equal to 1 if the proportion males working in an occupation category is at or over 70 per cent, and 0 otherwise.	0.28	0.45
	Management, Business, Science, and Arts Occupations	0010-0500			
	Business Operations Specialists	0500-0800			
	Financial Specialists	0800-1000			
	Computer and Mathematical Occupations	1000-1240			
	Architecture and Engineering Occupations	1300-1560			
	Life, Physical, and Social Science Occupations	1600-1980			
	Community and Social Services Occupations	2000-2060			
	Legal Occupations	2100-2180			
	Education, Training, and Library Occupations	2200-2555			
	Arts, Design, Entertainment, Sports, and Media Occupations	2600-2920			
	Healthcare Practitioners and Technical Occupations	3000-3550			
	Healthcare Support Occupations	3600-3655			
	Protective Service Occupations	3700-3960			
	Food Preparation and Serving Occupations	4000-4160			
	Building and Grounds Cleaning and Maintenance Occupations	4200-4255			
	Personal Care and Service Occupations	4300-4655			
	Sales and Related Occupations	4700-4965			
	Office and Administrative Support Occupations	5000-5940			
	Farming, Fishing, and Forestry Occupations	6000-6130			
	Construction and Extraction Occupations	6200-6765			
	Extraction Workers	6800-6950			
	Installation, Maintenance, and Repair Workers	7000-7640			
	Production Occupations	7700-8990			
	Transportation and Material Moving Occupations	9000-9760			
	Military Specific Occupations	9800-9920			
Female	SEX gives each person's sex. Values of this variable:		Dummy variable equal to 1 if SEX==2	0.47	0.50
	Male	1			
	Female	2			
Age	AGE gives each person's age at last birthday		Years	41.64	11.46

College	EDUC indicates respondents' educational attainment, as measured by the highest year of school or degree completed.		Dummy variable equal to 1 if EDUC>=7 & EDUC<=9	0.26	0.44
	N/A or no schooling	0			
	Nursery school to grade 4	1			
	Grade 5, 6, 7, or 8	2			
	Grade 9	3			
	Grade 10	4			
	Grade 11	5			
	Grade 12	6			
	1 year of college	7			
	2 years of college	8			
	3 years of college	9			
	4 years of college	10			
	5+ years of college	11			
White	RACE reports the racial category		Dummy variable equal to 1 if RACE=1	0.66	0.47
	White	1			
	Black/African American/Negro	2			
	American Indian or Alaska Native	3			
	Chinese	4			
	Japanese	5			
	Other Asian or Pacific Islander	6			
	Other race	7			
	Two major races	8			
	Three or more major races	9			
Partner present in the HH	RELATE describes an individual's relationship to the head of household or householder.		Dummy variable equal to 1 if we identify a (married or unmarried) partner living in the HH	0.61	0.49
	Head/Householder	1			
	Spouse	2			
	Child	3			
	Child-in-law	4			
	Parent	5			
	Parent-in-Law	6			
	Sibling	7			
	Sibling-in-Law	8			
	Grandchild	9			
	Other relatives	10			
	Partner, friend, visitor	11			
	Other non-relatives	12			
	Institutional inmates	13			
Children under 6 years old in the HH	See variables AGE and RELATE above		Dummy variable equal to 1 if we identify a child under the age of 6 years old in the HH	0.20	0.40
Commuting time	TRANTIME reports the total amount of time, in minutes, that it usually took the respondent to get from home to work last week.			28.93	22.98

Log (weekly work hours)	UHRSWORK reports the number of hours per week that the respondent usually worked, if the person worked during the previous year.	Logarithm of usually hours worked per week	3.69	0.33

Table B4: Sum stats and definitions of MTUS variables

Name	CPS variable		Definition	Mean	S.D.
Prop. of females in a male occ in the home country	ISCO1 is the occupation reported by the respondent in the original sample		Dummy variable equal to 1 if the proportion males working in an occupation category is at or over 70 per cent, and 0 otherwise.	0.24	0.22
	Missing	-8			
	Not applicable/not asked	-7			
	Armed forces and security	0			
	Managers, senior officials and legislators	1			
	Professionals	2			
	Technicians and associate professionals	3			
	Clerical workers	4			
	Service and sales workers	5			
	Skilled agriculture, fishery, forestry	6			
	Craft and related trades workers	7			
	Plant and machine operators and assemblers	8			
	Elementary occupations	9			
Prop. of females in jobs requiring long work hours	ACT_WORK reports the total time in minutes per day spent in the following activities: Paid work-main job (not at home) (0207), Paid work at home (0208), Second or other job not at home (0209), Unpaid work to generate household income (0210), Travel as a part of work (0211), Work breaks (0212), Other time at workplace (0213), Look for work (0214)		An occupation requires long work hours if the average working time reported by all women in that occupation is over the average women working time in all occupations in a country. The proportion of females working in occupations requiring long hours of work is calculated as the total number of females occupied in jobs requiring long work hours over the total number of female workers in a country.	0.56	0.13
Prop. of females in jobs with non-standard schedules	CLOCKST represents the time on the 24-hour clock when the episode started. See also ACT_WORK above		An occupation has non-standard work schedules if the proportion of females reporting working during non-standard hours (start working from 8pm to midnight) in an occupation is over the proportion of women in all occupations in a country. The proportion of females working in occupations with non-standard schedules is calculated as the total number of females occupied in jobs with non-standard schedules over the total number of female workers in a country.	0.43	0.12
Prop. of females in jobs requiring long commutes	MAIN reports the respondent's main activity during a given episode in the time diary and codes activities into one of 69 harmonized activity categories. A code of "63" a code reports the time spent in travelling to/from work.		An occupation requires long commutes if the average commuting time reported by all women in that occupation is over the average women commuting time in all occupations in a country. The proportion of females working in occupations requiring long commutes is calculated as the total number of females occupied in jobs requiring long commutes over the total number of female workers in a country.	0.38	0.17

Prop. of females teleworking in a male occ and spending time in childcare in the home country	See MAIN above. A code of "8" means the diarist performed paid work at home. ACT_CHCARE reports the total time in minutes per day spent in the following activities: Physical, medical child care (0528), Teach, help with homework (0529), Read to, talk or play with child (0530), Supervise, accompany, other child care (0531).	A sample of women reporting some time in ACT_CHCARE and MAIN code as 8 is selected. The Prop. of females has been explained above.	0.19	0.22
Prop. of females teleworking in a male occ and spending time in housework in the home country	See MAIN above. A code of "8" means the diarist performed paid work at home. ACT_UNDOM reports the total time in minutes per day spent in the following activities: Food preparation, cooking (0418), Set table, wash/put away dishes (0419), Cleaning (0420), Laundry, ironing, clothing repair (0421), Maintain home/vehicle, including collect fuel (0422), Other domestic work (0423), Purchase goods (0424), Consume personal care services (0425), Consume other services (0426), Pet care (not walk dog) (0427).	A sample of women reporting some time in ACT_UNDOM and MAIN code as 8 is selected. The Prop. of females has been explained above.	0.17	0.22
Prop. of females teleworking in a male occ and spending time in adult care in the home country	See MAIN above. A code of "8" means the diarist performed paid work at home and a code of "32" means the diarist performed adult care	A sample of women reporting some time in MAIN code as 8 and 32. The Prop. of females has been explained above.	0.2	0.23