

#### DEMOGRAPHIC RESEARCH

# VOLUME 38, ARTICLE 35, PAGES 967–1016 PUBLISHED 15 MARCH 2018

http://www.demographic-research.org/Volumes/Vol38/35/DOI: 10.4054/DemRes.2018.38.35

Research Article

Navigating between two cultures: Immigrants' gender attitudes toward working women

Léa Pessin

Bruno Arpino

© 2018 Léa Pessin & Bruno Arpino.

This open-access work is published under the terms of the Creative Commons Attribution 3.0 Germany (CC BY 3.0 DE), which permits use, reproduction, and distribution in any medium, provided the original author(s) and source are given credit.

See https://creativecommons.org/licenses/by/3.0/de/legalcode

# Contents

1	Introduction	968
2	Background	970
2.1	Contrasting theories on gender attitude formation	970
2.2	The current study	97
2.2.1	The socialization perspective and immigrants' gender attitudes	97
2.2.2	The life course perspective and immigrants' gender attitudes	972
3	Data and variables	97.
3.1	Data	97.
3.2	Outcome	974
3.3	Explanatory variables	974
4	Method	97′
5	Descriptive results	978
6	Multivariate results	982
6.1	Socialization hypotheses	982
6.2	Life course hypotheses	983
6.3	Summarizing and reconciling findings	988
6.4	Robustness checks	989
7	Discussion	990
8	Acknowledgments	99
	References	992
	Supplementary material	99°

# Navigating between two cultures: Immigrants' gender attitudes toward working women

Léa Pessin<sup>1</sup> Bruno Arpino<sup>2</sup>

#### **Abstract**

#### BACKGROUND

Gender attitudes toward women's employment are of particular importance because they positively influence gender-equal outcomes in the labor market. Our understanding of the mechanisms that promote egalitarian gender attitudes among immigrants, however, remains limited.

#### **OBJECTIVE**

By studying first- and second-generation immigrants from multiple origins and living in different countries, this article seeks to explain under what conditions the prevalent cultural attitudes toward gender roles at the origin and destination influence immigrants' gender attitudes. We address three main research questions. First, does the country-of-origin gender ideology influence immigrants' views toward working women? Second, does the country-of-destination gender ideology influence immigrants' views toward working women? And third, are these relationships moderated by (1) the immigrant generation; (2) the age at arrival in the country of destination; (3) the length of residence at the destination?

#### **METHODS**

Using data from the European Social Survey, we model immigrants' gender attitudes toward working women by using linear cross-classified models to account for clustering into the country of origin and destination.

#### RESULTS

The results highlight the importance of the context of early socialization in shaping immigrants' gender attitudes. First-generation immigrants, and more specifically adult migrants, hold gender attitudes that reflect more strongly the country of origin's gender

<sup>&</sup>lt;sup>1</sup> Population Research Institute, Pennsylvania State University, University Park, USA. Email: lpessin@psu.edu.

 $<sup>^2</sup>$  Department of Political and Social Sciences and The Research and Expertise Centre for Survey Methodology (RECSM), Universitat Pompeu Fabra, Barcelona, Spain.

culture. In contrast, the positive association between gender ideology at destination and immigrants' gender attitudes is stronger among second-generation immigrants and child migrants.

#### CONTRIBUTION

We add to the literature on gender ideology formation by analyzing the influence of gender ideology at the origin and destination levels on the gender attitudes of immigrants from 96 countries of origin and residing across 32 countries of destination.

### 1. Introduction

The overall trend toward more egalitarian gender attitudes is considered a clear marker of the ongoing gender revolution (Davis and Greenstein 2009). Men and women across the world are increasingly adopting egalitarian views toward gender roles, favoring equal access to employment and greater equality within the household (Cha and Thébaud 2009; Fortin 2005; Inglehart and Norris 2003; Treas and Widmer 2000). Wealthier and postindustrial societies have adopted egalitarian gender ideology at a faster pace than poorer and agrarian ones (Inglehart and Norris 2003; Seguino 2007). Nevertheless, even across European countries, which are fairly homogeneous in terms of economic outcomes and women's legal rights, cross-national differences in gender ideology still persist (Guo and Gilbert 2012; Pampel 2011).

Gender attitudes are of particular importance because they positively influence gender-equal outcomes and behavior within families and across institutions (Brooks and Bolzen-dahl 2004). For example, gender-egalitarian attitudes foster women's participation in the labor market (Fortin 2005) and encourage men's contribution to housework and child care activities (Batalova and Cohen 2002; Fuwa 2004; Hook 2006; Knudsen and Wærness 2008). Recent studies also show that fertility decline and marital instability weaken in contexts where egalitarian gender attitudes prevail (Arpino, Esping-Andersen, and Pessin 2015; Pessin 2018).

While gender attitudes are at the core of the debate on gender equality, our understanding of the mechanisms that promote the adoption of egalitarian gender attitudes remains limited. Within the sociological literature, the debate on whether early socialization or life course experiences influence gender attitudes is still ongoing (Doepke, Tertilt, and Voena 2012). The socialization perspective emphasizes the persistence and stability of gender attitudes, acquired during early childhood, across adulthood (Myers and Booth 2002). Conversely, the life course approach argues that exposure to different beliefs and specific life events, such as tertiary education or employment, influence attitudinal formation throughout adulthood (Brooks and Bolzendahl 2004).

By studying first- and second-generation immigrants from multiple origins and living across different countries, this article seeks to explain under what conditions the prevalent cultural attitudes toward gender roles at the origin and destination influence immigrants' gender attitudes. We exploit variation in the migration experience to provide a better understanding of how gender attitudes are formed and whether they persist across contexts that provide different schemes of gender relations. In particular, we focus on the immigrant generation, the age at arrival at destination, and the length of residence in the country of destination to distinguish between values acquired through early socialization versus those promoted by the context of destination.

This study makes several important contributions to the literature on immigrants' gender attitudes. First, unlike previous studies (e.g., Frank and Hou 2015; Röder and Mühlau 2014), gender ideology at the origin and destination is measured using an attitudinal indicator. The common approach in the literature is to measure gender relations by comparing behavioral indicators, such as the share of women in parliament or women's relative labor force participation, to the same indicators for men. These indicators, however, reflect outcomes of gender equality rather than a cultural understanding of gender relations (McDonald 2013). Second, because our study includes several countries of destination, we can explore whether both the origin's and the destination's cultural understanding of gender roles influence immigrants' gender attitudes.

Our analysis includes first- and second-generation immigrants from the second, fourth, and fifth rounds of the European Social Survey (ESS). The final sample is composed of immigrants from 96 different countries of origin residing in 32 countries. We focus on one dimension of gender attitudes, namely, whether individuals believe that men and women should have equal access to the labor market. Using linear cross-classified models, we examine whether and under what conditions gender ideology in their country of origin and the country of destination influence immigrants' gender attitudes. This method takes into account the clustering of immigrants within both the origin and destination countries and simultaneously assesses the influence of both contexts on immigrants' gender attitudes. To account for compositional differences, the multivariate analysis includes control variables for sociodemographic factors (i.e., gender, education, age, partnership status, and urbanity), which are found to be relevant determinants of genderegalitarian attitudes (see Davis and Greenstein 2009). We address three main research questions. First, does the country-of-origin gender ideology influence immigrants' views toward working women? Second, does the country-of-destination gender ideology influence immigrants' views toward working women? And third, are these relationships moderated by (1) the immigrant generation; (2) the age at arrival in the country of destination; (3) the length of residence at destination?

## 2. Background

#### 2.1 Contrasting theories on gender attitude formation

The existing literature on gender ideology formation can be divided into two main strands: the socialization explanation and the life course approach (Kim and Cheung 2015). By emphasizing the role played by the intergenerational transmission of beliefs and values in childhood, the socialization perspective posits that gender attitudes are instilled mainly from parents to children and remain stable throughout adulthood (Myers and Booth 2002). The parent-to-children transmission of gender attitudes creates continuity from one generation to the next. Conversely, the life course approach argues that exposure to different beliefs in adulthood and life events can cause individuals to change their attitudes (Brooks and Bolzendahl 2004). Accordingly, living in an environment that promotes gender equality fosters the adoption of egalitarian gender attitudes and weakens the importance of values learned through early socialization (Davis 2007).

Previous research provides some empirical support for the role played by early socialization in shaping gender attitudes. Parents' gender ideologies are found to directly influence their children's gender attitudes (Davis and Greenstein 2009). Bliss (1988), for example, finds that mothers with nontraditional gender ideology have children who display more gender-neutral behaviors in kindergarten. The transmission of gender ideology from mother to child is found to be persistent during adulthood (Davis 2007; Glass, Bengtson, and Dunham 1986; Moen, Erickson, and Dempster-McClain 1997; Thornton, Alwin, and Camburn 1983; Willits and Crider 1989). Furthermore, while a majority of studies focus on maternal transmission of gender ideology, Myers and Booth (2002) show that sons are more likely to adopt gender-egalitarian attitudes if both their parents have egalitarian gender ideology. Davis and Wills (2010) also find that paternal ideology influences adolescent attitudinal formation.

In contrast with the socialization perspective, the life course approach argues that ideological learning is not restricted to childhood but can also occur later in life (Kim and Cheung 2015). Experiences and exposure to different values and beliefs cause individuals to change and re-evaluate their attitudes. For example, when exposed to a genderegalitarian context outside the home, individuals tend to develop more egalitarian gender attitudes (Brooks and Bolzendahl 2004; Cha and Thébaud 2009; Davis and Greenstein 2009; Yu and Lee 2013). For example, Baxter et al. (2015) and Guo and Gilbert (2012) find greater approval toward egalitarian gender roles in social democratic countries that promote gender equality through their welfare regimes (Esping-Andersen 2009).

#### 2.2 The current study

We extend the socialization and the life course perspectives to immigrants' attitude formation toward gender equality. We focus on how the destination and the origin provide different cultural schemes for gender relations. We contrast each theory's predictions to discuss how each context influences immigrants' gender attitudes. We conceptualize the origin gender ideology, (i.e., the prevalence of egalitarian gender attitudes in the country of origin) as a proxy for cultural attitudes toward gender roles at the origin. In contrast, the destination gender ideology (i.e., the prevalence of egalitarian gender attitudes among natives in the country of destination) captures the gender norms that immigrants are exposed to in the country of destination.

#### 2.2.1 The socialization perspective and immigrants' gender attitudes

According to the socialization perspective, attitudes are formed during childhood and remain stable throughout adulthood. This implies that immigrants adopt gender attitudes that reflect the cultural attitudes of the context in which they experienced early socialization. The distinction between the first- and second immigrant generation provides a proxy of whether immigrants experienced early socialization in their country of origin or of destination. For first-generation immigrants, the country-of-origin context is strongly influential because first-generation immigrants are predominantly exposed to the cultural attitudes of the destination country only during adulthood. For second-generation immigrants, however, the country-of-origin effect should be weaker because they experience early socialization in the destination country. Second-generation immigrants are exposed to the country-of-origin cultural attitudes through their parents, but they are also influenced by the destination country's gender relations through school and friends.

*Hypothesis 1a:* Cultural attitudes toward gender roles in the country of origin are positively associated with first-generation immigrants' gender attitudes. This association is expected to be weaker among second-generation immigrants.

Hypothesis 1b: Cultural attitudes toward gender roles in the country of destination are positively associated with second-generation immigrants' gender attitudes. This association is expected to be weaker among first-generation immigrants.

By distinguishing between the first and second generations, we can approximate whether immigrants were raised in the country of origin or in the country of destination. Nevertheless, first-generation immigrants can also migrate as children and therefore be socialized to the context of destination during childhood. In particular, the immigration literature has argued that foreign-born individuals who migrate during early childhood (ages 0–5, '1.75 generation') and middle childhood (ages 6–12, '1.5 generation') are

closer to the second generation because they are involved in the context of the destination country during their formative years (Oropesa and Landale 1997; Rumbaut and Ima 1988; Rumbaut 2004). To account for variation in ages at migration within the first-generation, we refine the first set of hypotheses to distinguish between child immigrants and adult immigrants. Because of data limitations, these hypotheses can only be tested by using a subsample of the data. (Further details are provided in the Data and variables section.)

*Hypothesis* 2a: Cultural attitudes toward gender roles in the country of origin are positively associated with adult foreign-born immigrants' gender attitudes. This association is expected to be weaker among child immigrants and second-generation immigrants.

Hypothesis 2b: Cultural attitudes toward gender roles in the country of destination are positively associated with child immigrants' and second-generation immigrants' gender attitudes. This association is expected to be weaker among adult foreign-born immigrants.

Existing findings on immigrants' gender attitudes and behavior provide mixed evidence for the socialization perspective. On the one hand, some studies find a persistent effect of the country of origin on immigrants' gender attitudes and behavior at destination. For example, Arends-Tóth and Van de Vijver (2009) find no generational differences in gender attitudes among Turkish, Moroccan, Surinamese, and Antillean immigrants in the Netherlands. Ersanilli (2012) also finds no generation gap in Turkish immigrants' gender attitudes across three different destination countries: Germany, France, and the Netherlands. On the other hand, other studies show that the origin effect is much weaker among second-generation immigrants (Dasgupta 1998; Diehl, Koenig, and Ruckdeschel 2009; Frank and Hou 2015; Merz et al. 2009; Röder and Mühlau 2014) and that immigrants adapt their behavior to cultural norms and behavior in the country of destination (Antecol 2000; Blau, Kahn, and Papps 2011; Hwang 2016).

# 2.2.2 The life course perspective and immigrants' gender attitudes

Extending the life course perspective to immigrants, the cultural context of the destination country is expected to influence both first- and second-generation immigrants' attitudes. Living in a country where gender norms are either more traditional or more egalitarian than those of their country of origin may force immigrants to re-evaluate and change their gender attitudes. Therefore, we expect that the length of stay at destination countries will moderate the influence of cultural attitudes from the origin and the destination on immigrants' gender attitudes. Recently arrived immigrants should have gender attitudes that reflect primarily their context of origin. In contrast, second-generation immigrants

and long-time residing immigrants are expected to have adopted the cultural norms of the country of destination.

*Hypothesis 3a:* Cultural attitudes toward gender roles in the country of origin are positively associated with recently arrived immigrants' gender attitudes. The longer the length of stay at destination, the weaker the origin effect should be.

*Hypothesis 3b:* Cultural attitudes toward gender roles in the country of destination are positively associated with the gender attitudes of second-generation immigrants and long-time residing immigrants. The longer the length of stay at destination, the stronger the destination effect should be.

Existing findings on immigrants' gender attitudes and behavior suggest that the influence of the country of origin weakens as the length of residence at the destination increases (Frank and Hou 2015; Vargas 2016). No previous study has explicitly tested whether the destination context is more relevant among second-generation and long-time residing immigrants. Nevertheless, Huschek, de Valk, and Liefbroer (2011) find that the gender role behavior of second-generation Turks varies by country of destination. For example, second-generation Turks living in Sweden display more gender-equal behaviors than Turks living in more conservative destination countries. This finding suggests that the context of the destination country also shapes immigrants' gender attitudes and behavior.

#### 3. Data and variables

### 3.1 Data

We use data from the ESS, which consists of repeated cross-sectional individual-level surveys, which are conducted every two years. Each round of surveys includes a core module as well as rotating sections on specific themes. The sample of countries has changed over the years to include guest countries from outside of Europe. We focus on the second, fourth, and fifth rounds of the ESS because the gender attitudes measure used in this study was not included in any other available rounds. The interviews were carried out, respectively, between 2004–2006, 2008–2011, and 2010–2012. We select first- and second-generation immigrants, and we obtain a final sample of 17,108 respondents in 32 destination countries and from 96 countries of origin. The sample size of immigrants in each country of destination and ESS round is described in Table A-1 in the Supplementary material. The percentage of missing values for all the variables used in the analysis is summarized in Table A-2 in the Supplementary material.

#### 3.2 Outcome

In this study, we focus on one dimension of gender attitudes, namely whether individuals believe that men and women should have equal access to the labor market. To measure this concept, we use the following survey question: "When jobs are scarce, men should have more right to a job than women?" Theoretically, it is one of the few available gender items that mentions both men and women and compares how adequate their respective gender roles are.<sup>3</sup> Another advantage of this survey question is that it has been used extensively to measure gender attitudes toward working women (Arpino, Esping-Andersen, and Pessin 2015; Arpino and Tavares 2013; Fortin 2005; Seguino 2007). Finally, from a practical perspective, this survey measure is present both in the ESS and the World Values Survey and European Values Study (WVS/EVS), which allows us to measure the same dimension of gender attitudes at the origin and the destination for a large cross-national sample. Other dimensions of gender attitudes are surveyed in the WVS/EVS, but there are no equivalents to these survey questions in the ESS.

The dependent variable of interest measures individual-level gender attitudes toward working women and is based on the survey question about equal acces to the labor market ("When jobs are scarce, men should have more right to a job than women?"). The respondents are asked how much they agree or disagree with the statement and choose their answer from a five-point Likert scale going from 1, 'strongly agree,' to 5, 'strongly disagree.' Higher values are interpreted to be gender-egalitarian views while lower values are considered to be traditional views toward working women. The distribution of the outcome variable is illustrated in Figure A-1 in the supplementary material.

#### 3.3 Explanatory variables

Immigrant generation: Respondents' immigrant generation is determined by their country of birth as well as their parents' country of birth. Second-generation immigrants are respondents that are born in the country of destination but that have at least one foreign-born parent. In our final sample, only 384 second-generation immigrants have parents who were born in two different foreign countries. (The final sample size of second-generation immigrants with both parents born abroad is 2,299.) For second-generation immigrants with only one parent born abroad, the country of origin is the country of birth of the one foreign parent. First-generation immigrants are respondents that are not born in the country of destination, and thus their country of origin is defined as their country of birth. (Detailed explanations are provided on how the immigrant status is determined

<sup>&</sup>lt;sup>3</sup> See Arpino, Esping-Andersen, and Pessin (2015) for an extensive discussion on the theoretical and measurement quality of existing gender items in cross-national attitude and value surveys.

<sup>&</sup>lt;sup>4</sup> 'Don't know' and 'refusal' are coded as missing. In the original ESS sample, 2.3% of responses on this question (mnrgtjb) are missing, including 'Don't know' and 'refusal.'

in the Supplementary material.) The immigrant generation variable takes a value of 1 for second-generation immigrants (reference category) and a value of 2 for first-generation immigrants.

Age at arrival: The age at arrival is calculated by taking the difference between the year of arrival and the respondent's birth year. The exact year of arrival was asked in only the fifth round of the ESS. Thus, the analysis that uses age at arrival is restricted to the fifth-round ESS sample. The age at arrival variable takes four categories: second generation (reference category), 0–12 years, 13–24 years, and 25 years+. The thresholds are based on Rumbaut and Ima's definition (1988) of the 1.5 generation, which refers to immigrant children who arrived at the destination by the age of 12. The 1.5 generation should be the closest to second-generation immigrants and natives because they have experienced middle and potentially also early childhood in the country of destination (Rumbaut 2004). The 13–24 years category is exposed to the country of origin during childhood and transitions to adulthood in the country of destination. Nevertheless, according to the socialization theory, this should correspond to a life stage where attitudes have already stabilized. The 25 years+ category clearly captures the case of adult immigrants who arrive at the destination after their transition to adulthood is complete.

Length of stay: The length of stay in the country of destination, which we use to distinguish between newly arrived immigrants and those who have lived in the country of destination for a long time. This variable takes the following five categories: second generation (reference category), more than 20 years, 11–20 years, 6–10 years, and 1–5 years. In the second and fourth rounds of the ESS, the length-of-stay variable is categorical, whereas in the fifth rounds of the ESS, the actual year of arrival was asked.<sup>5</sup>

Origin gender ideology: The variable is matched to each respondent based on their country of origin and on the survey year. The level of egalitarian gender norms in the country of origin is measured as the share of respondents in the country of origin who disagree with the statement "When jobs are scarce, men should have more right to a job than women." The variable is calculated for the entire sample, including immigrants of any generation as well as natives. Figure 1 represents the origin gender ideology variable. The data for the country of origin relies on two sources of data: the ESS and the harmonized WVS/EVS. In the WVS/EVS, the same survey question has been asked, but the respondents are offered a slightly different scale: (i) 'agree,' (ii) 'disagree,' and (iii) 'neither.' As with the ESS, we use the share of people in the country of origin who disagree with the statement. To assess the consistency between both measures, we calculate the correlation between the ESS and the WVS/EVS indicators when both are available on the same country/year and we find a correlation of 0.85. Table A-3 in the Supplementary material reports the values of origin gender ideology for each country of

<sup>&</sup>lt;sup>5</sup> Further detailed information is provided in the Supplementary material to explain how the variable was harmonized across ESS rounds.

origin and ESS round. (Further details on how the origin gender ideology variable was constructed are provided in the Supplementary material.)

Destination gender ideology: The variable is matched to each respondent based on their country of residence and on the survey year. The level of egalitarian gender norms in the country of destination is measured as the share of natives in the country of destination who disagree with the statement "When jobs are scarce, men should have more right to a job than women." Figure 2 represents the destination gender ideology variable. Natives are defined as respondents who are born in their country of residence and whose parents are also born in the same country of residence. Therefore, for European countries, the origin and destination gender ideology differ because the origin gender ideology includes immigrants and natives, whereas the destination gender ideology includes natives only. The variable is constructed by using the ESS data. Table A-4 in the Supplementary material reports the values of the destination gender ideology by country of destination and ESS round.

Figure 1: Origin gender ideology

*Note*: Origin gender ideology = % of respondents who disagree that men should have more right to a job than women when jobs are scarce within each country of origin. The origin gender ideology is calculated for the entire sample, including immigrants of any generation as well as natives. The values used for the map are summarized in Table A-3.

Source: ESS and WVS/EVS.



Figure 2: Destination gender ideology

Note: Destination gender ideology = % of natives (third generation+) who disagree that men should have more right to a job than women when jobs are scarce within each country of destination and across waves. The values used for the map are summarized in Table A-4.

Source: ESS.

Accordingly, we include the following control variables: gender, level of education, partnership status, age, and urbanity. For the gender variable, women are the reference category. The level of education is coded as four categories: less than secondary (reference), lower-secondary, upper-secondary, and tertiary. Partnership status takes two different values: partnered (reference) and without a partner. The age variable is categorized into four intervals: 15–29 (reference), 30–44, 45–59, and 60+. The urbanity measure has three categories: urban (reference), town or small city, and rural. Finally, we also include an indicator variable for the three different survey rounds used for the analysis: second round (reference), fourth round and fifth round.

At the origin and destination levels, we control for the level of economic development. We include the HDI, which is a composite measure of three dimensions of human development, i.e., life expectancy, education and economic development. As shown by Inglehart and Norris (2003), economic development is an important marker for the adoption of egalitarian gender attitudes.

### 4. Method

Our data structure calls for the application of multilevel cross-classified models. We observe immigrants clustered in countries of origin and countries of destination. The origin and destination levels of classification are not nested as in a standard multilevel model. Instead, they are cross-classified, as immigrants from the same country of origin can be present in different destination countries. Multilevel modeling, in general, allows us to take into account the nonindependence of units in the same cluster (for example, the country of origin) and to include in the same model variables defined at different levels

(Snijders and Bosker 2012). Multilevel cross-classified models allow one to partition the relative importance of the four sources of heterogeneity that we want to study (the individual level, the country of origin, the country of destination and their interaction, i.e., the community), and to test the role of macro-level variables measured in both the country of origin and of destination, as well as the community. Cross-classified multilevel analysis allows one to estimate the variability in the outcome due to the effect of countries of destination after the heterogeneity of immigrants' origin has been controlled for, and vice versa (see Kalmijn and Van Tubergen 2010; Van Tubergen, Maas, and Flap 2004; Vitali and Arpino 2015). A multilevel linear cross-classified model can be represented as:

$$Y_{i(o,d)} = X_{i(o,d)}\beta + Z_o\gamma + W_d\delta + C_{o,d}\theta + e_{i(o,d)} + u_o + v_d + z_{o,d}$$

where the subscript i(o,d) indicates an immigrant belonging to a generic unit of the cross-classified structure, where  $i=1,2,\ldots,n(o,d); o=1,2,\ldots,96$  indicates the country of origin and  $d=1,2,\ldots,32$  indicates the country of destination. Y indicates the outcome. Individual, origin, destination, and community variables are identified with X,Z,W, and C, respectively. The individual error term (e), the origin (u), the destination (v), and the community (z) error terms are assumed to be normally distributed with zero mean and variance to be estimated (Snijders and Bosker 2012). These variances are of interest in this study because they measure the importance of the different sources of heterogeneity under analysis. All upper-level variables are centered on their respective grand mean.

# 5. Descriptive results

Table 1 summarizes the variables described in the Data and Variables section. First-and second-generation immigrants in our sample come from more than 90 countries. Therefore, we grouped respondents into larger geographical regions<sup>6</sup> in order to present the descriptive statistics in a unique table.

<sup>&</sup>lt;sup>6</sup> Each region is defined in Table A-5 of the Supplementary material.

Table 1: Descriptive statistics by region of origin

	Asia	Oceania	Eastern Europe	Latin America	Middle East	Northern Africa	North America
Dependent variable							
Gender attitudes	3.66	3.82	3.40	3.93	3.07	3.32	3.99
Origin variables							
Gender ideology <sup>a</sup>	-0.21	0.20	-0.06	0.13	-0.31	-0.20	0.19
HDI <sup>b</sup>	-0.14	0.11	0.01	-0.06	-0.09	-0.19	0.10
Destination variables							
Gender ideology <sup>c</sup>	0.09	-0.03	-0.04	0.06	-0.02	0.11	0.06
HDI <sup>d</sup>	0.03	0.02	0.00	0.01	0.02	0.02	0.03
Individual-level variables							
Immigrant generation (second gener.)	34 69	26.53	51.85	20.86	51.94	38.81	55.73
First generation	65.31	73.47	48.15	79.14	48.06	61.19	44.27
Age at arrival (second gener.) <sup>e</sup>	29.63	27.27	43.87	15.00	54.44	36.31	56.57
0–12 yrs	14.81	22.73	11.91	19.00	15.09	21.66	17.17
13–24 yrs	22.22	22.73	22.05	21.00	15.68	23.57	9.09
25+ yrs	33.33	27.27	22.17	45.00	14.79	18.47	17.17
Length of stay (second gener.)	34.69	26.53	51.85	20.86	51.94	38.81	55.73
20+ yrs	28.49	36.73	19.70	24.83	21.08	31.16	23.73
11–20 yrs	12.98	14.29	8.75	18.54	14.41	8.78	6.93
6–10 yrs	10.47	8.16	7.92	15.89	7.42	11.90	4.53
1–5 yrs	13.37	14.29	11.78	19.87	5.16	9.35	9.07
Gender (woman)	51.36	55.10	56.49	61.59	48.82	43.63	56.27
Man	48.64	44.90	43.51	38.41	51.18	56.37	43.73
Partnership status (not partnered)	51.74	51.02	60.06	52.98	57.96	53.26	60.00
Partnered	48.26	48.98	39.94	47.02	42.04	46.74	40.00
Education (< than sec.)	10.85	4.08	5.14	10.93	29.35	21.53	9.07
Lower secondary	19.38	16.33	16.72	23.18	23.12	23.80	12.53
Upper econdary	29.26	40.82	53.80	36.42	31.83	34.56	36.00
Tertiary	40.50	38.78	24.35	29.47	15.70	20.11	42.40
Age (15–29)	31.98	28.57	19.78	31.46	26.77	32.01	24.27
30–44	32.75	51.02	28.95	34.44	29.03	38.53	24.53
45–59	21.71	14.29	27.00	24.17	17.31	19.83	26.13
60+	13.57	6.12	24.26	9.93	26.88	9.63	25.07
Urbanity (Urban)	49.22	48.98	36.50	46.03	49.57	47.31	38.40
Town or small city	31.40	24.49	36.42	29.47	30.65	29.46	29.33
Rural	19.38	26.53	27.08	24.50	19.78	23.23	32.27
ESS round (second round)	34.11	44.90	31.23	39.07	34.62	14.45	36.00
Fourth round	34.50	10.20	33.60	27.81	29.03	41.08	37.60
Fifth round	31.40	44.90	35.17	33.11	36.34	44.48	26.40
N	516	49	2,411	302	930	353	375

**Table 1: (Continued)** 

	Northern Europe	Post- Soviet	Southern Europe	Sub-Sah. Africa	Western Europe
Dependent variable					
Gender attitudes	4.06	3.18	3.56	3.83	3.76
Origin variables					
Gender ideology <sup>a</sup>	0.23	-0.09	0.05	-0.12	0.13
HDI <sup>b</sup>	0.09	-0.05	0.01	-0.27	0.08
Destination variables					
Gender ideology <sup>c</sup>	0.15	-0.10	0.03	0.12	0.03
HDI <sup>d</sup>	0.04	-0.05	0.02	0.03	0.02
Individual-level variables					
Immigrant generation (second gener.)	48.74	46.39	49.01	13.61	52.12
First generation	51.26	53.61	50.99	86.39	47.88
Age at arrival (second gener.) <sup>e</sup>	49.41	47.77	53.53	15.07	51.52
0–12 yrs	17.98	15.71	12.91	12.33	16.94
13–24 yrs	11.93	19.73	20.11	26.03	14.60
25+ yrs	20.67	16.79	13.45	46.58	16.94
Length of stay (second gener.)	48.74	46.39	49.01	13.61	52.12
20+ yrs	30.80	38.11	29.15	18.37	26.15
11–20 yrs	9.50	8.41	13.62	17.69	8.52
6–10 yrs	5.53	3.77	3.88	30.61	5.29
1–5 yrs	5.42	3.31	4.33	19.73	7.92
Gender (woman)	54.39	60.71	50.58	53.74	54.04
_ Man	45.61	39.29	49.42	46.26	45.96
Partnership status (not partnered)	57.41	55.24	59.46	44.90	60.24
Partnered	42.59	44.76	40.54	55.10	39.76
Education (< than sec.)	8.50	5.99	16.61	9.52	7.88
Lower secondary Upper secondary	15.99 36.22	13.79 42.23	21.31 43.08	18.37 23.81	15.23 41.71
Tertiary	39.30	37.98	19.00	48.30	35.18
Age (15–29)	21.46	17.19	23.67	46.30 29.25	16.88
30–44	31.58	21.77	31.65	46.26	30.29
45–59	25.10	29.18	25.68	17.69	23.15
60+	21.86	31.86	19.00	6.80	29.68
Urbanity (Urban)	37.56	46.70	33.59	46.94	30.63
Town or small city	30.74	34.65	34.23	40.82	28.50
Rural	31.69	18.65	32.18	12.24	40.87
ESS round (second round)	33.20	24.99	28.93	14.29	43.13
Fourth round	33.54	40.88	43.60	36.05	32.41
Fifth round	33.26	34.13	27.47	49.66	24.46
N	1,789	4,589	2,679	147	2,968

Note: gener = generation; HDI = human-development indicator; Sub-Sah. = sub-Saharan. <sup>a</sup>The origin gender ideology variable is centered on its grand mean (0.51). <sup>b</sup>The origin HDI variable is centered on its grand mean (0.80). <sup>c</sup>The destination gender ideology variable is centered on its grand mean (0.59). <sup>d</sup>The destination HDI variable is centered on its grand mean (0.86). <sup>e</sup>Age at arrival can be calculated for only the ESS fifth round. Sources: ESS, WVS/EVS, UN data and National Statistics of the Republic of China (Taiwan).

Origin gender ideology varies widely across the different regions in the sample. Countries in Asia, the Middle East, and Northern Africa have among the least egalitarian gender ideology, whereas Northern Europe and North America have some of the most

egalitarian gender ideology. Descriptively, the ranking of origin gender ideology and the individual-level gender attitudes of immigrants appear to follow a similar pattern. At the individual level also, on average, Middle Eastern and North African immigrants have more traditional gender attitudes, and as expected, the opposite is true of Northern European and American immigrants. However, there are also some exceptions. For example, Asian immigrants come from fairly traditional countries, but their gender attitudes at the destination are not among the least egalitarian.

Across countries of destination, gender ideology is on average higher than in the countries of origin and also less dispersed. This is to be expected because the countries of destination are fewer and are concentrated in Europe, and thus, represent a less diverse sample when compared to the countries of origin. When comparing the HDI at the origin and destination, we also find a similar pattern: the destination HDI (mean = 0.86) ranges between -0.15 to 0.08, and the origin HDI (mean = 0.80) takes values that range between -0.47 and 0.14. Also, thanks to the cross-classified nature of the data, we can assess the relative importance of the contextual levels in explaining immigrants' gender attitudes. The upper-level variance is divided between the origin (2.6%), the destination (9.4%), the community (1.7%).

At the individual level, immigrants' characteristics represent an important source of variation across regions. About half of immigrants from European, post-Soviet, and Middle Eastern countries are second-generation immigrants, whereas Asia, Latin America, and sub-Saharan Africa appear to reflect more recent waves of immigration. A similar pattern extends to the age distribution, where respondents from newer regions of origin are younger than other immigrants in our sample. For example, immigrants from Latin America, Northern Africa, and sub-Saharan Africa are much younger than those from other regions of origin. The regional differences are not only important in the experience of immigration (i.e., the length of stay in the country), but also in individual-level characteristics. For example, sub-Saharan immigrants have the largest share of tertiary educated respondents, ranging around 48.30%, against only 15.70% of Middle Eastern immigrants. Furthermore, immigrants from Latin America and post-Soviet countries are predominantly women.

As can be seen from the descriptive statistics, the variation in the composition of the sample can represent another potential source of explanation for finding different levels of gender attitudes among immigrant groups. For instance, age and education are characteristics that are closely related to adhering to more or less egalitarian gender attitudes. We now turn to the multivariate results to disentangle these different sources of variation

## 6. Multivariate results

In Table 2, we present the results of three cross-classified linear regression models, which correspond to the three different sets of hypotheses discussed in the background section. Models 1 to 3 include interactions between the origin and the destination gender ideology and, respectively, the immigrant generation, the age at arrival, and the length of stay at the destination. Note that the contextual variables are centered on their grand mean so that the baseline coefficients of the interaction variables can be referred to, as in the case of an immigrant living in a destination country with average gender ideology (average destination gender ideology = 59%, which is similar to Austria) and coming from a country of origin with average gender ideology (average origin gender ideology = 51%, which is similar to Portugal).

For the sake of simplicity, the results in Table 2 summarize the estimated coefficients for the explanatory variables only. The control variables described in Table 2 are included in all models (results not shown but available upon request). While not shown, the associations between the control variables and immigrants' gender attitudes are in line with the literature. Higher educational attainment, being single, and coming from a country with higher levels of development positively predict gender-egalitarian attitudes. In contrast, men, older immigrants, and residents of rural areas hold more traditional gender attitudes.

## 6.1 Socialization hypotheses

Model 1 includes the origin and the destination gender ideology and their respective interactions with the immigrant generation variable. To provide further support for the socialization hypotheses, in Model 2, we use immigrants' age at arrival instead of the immigrant generation to capture more accurately the context of early socialization. As discussed earlier, Model 2 can only be estimated for the fifth wave of the ESS. Table 2 summarizes the cross-classified multilevel linear estimation results for Models 1 and 2.

Model 1 provides empirical support for Hypothesis 1a and 1b. First, the negative coefficient for being a first-generation immigrant suggests that, on average, first-generation immigrants hold more gender-traditional attitudes toward working women. Second, we find the interaction between being a first-generation immigrant and the origin gender ideology to be positive and statistically significant, which suggests that cultural attitudes at the origin have a stronger influence on immigrants who are born in their country of origin (Hypothesis 1a).

Second, we find a negative and statistically significant interaction between first-generation immigrants and the destination gender ideology. In line with Hypothesis 1b, the gender attitudes of first-generation immigrants are less influenced by the context of the destination than are those of second-generation immigrants. Model 1 provides initial

evidence that the geographic context of early socialization positively influences immigrants' gender attitudes.

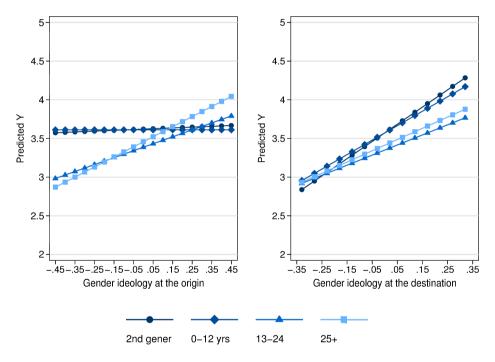
Table 2: Cross-classified linear models: Immigrants' gender attitudes toward working women

	Model 1		Model 2		Model 3	
Origin GI Destination GI Generation (ref. second gener.)	0.052 2.273 ***	(0.118) (0.180)	0.104 2.223 ***	(0.211) (0.342)	0.054 2.218 ***	(0.117 (0.181)
First generation	-0.114 ***	(0.018)				
$\begin{array}{l} \text{Generation} \times \text{origin GI} \\ \text{First generation} \times \text{origin GI} \end{array}$	0.641 ***	(0.113)				
$ \begin{array}{l} \text{Generation} \times \text{destination GI} \\ \text{First generation} \times \text{destination GI} \end{array} $	-0.577 ***	(0.118)				
Age at arrival (ref. second gener.) 0–12 yrs 13–24 yrs 25+ yrs			-0.002 -0.214 *** -0.147 **	(0.045) (0.045) (0.048)		
Age at arrival $\times$ origin GI 0–12 yrs $\times$ origin GI 13–24 yrs $\times$ origin GI 25+ yrs $\times$ origin GI			-0.103 0.794 ** 1.201 ***	(0.267) (0.254) (0.246)		
Age at arrival × destination GI 0–12 yrs × destination GI 13–24 yrs × destination GI 25+ yrs × destination GI			-0.355 -0.919 *** -0.771 **	(0.268) (0.260) (0.259)		
Length of stay (ref. second gener.) 20+ yrs 11–20 yrs 6–10 yrs 1–5 yrs					-0.057 ** -0.168 *** -0.199 *** -0.288 ***	(0.022 (0.031 (0.042 (0.040
Length of stay $\times$ origin GI 20+ yrs $\times$ origin GI 11–20 yrs $\times$ origin GI 6–10 yrs $\times$ origin GI 1–5 yrs $\times$ origin GI					0.420 ** 0.744 *** 0.789 *** 1.282 ***	(0.132 (0.182 (0.222 (0.217
Length of stay × destination GI 20+ yrs × destination GI 11–20 yrs × destination GI 6–10 yrs × destination GI 1–5 yrs × destination GI					-0.579 *** -0.452 * -0.125 -0.408 +	(0.137 (0.185 (0.246 (0.238
Constant	3.403 ***	(0.052)	3.223 ***	(0.085)	3.442 ***	(0.052
Random effects Variance (destination)	0.011 ***	(0.004)	0.026 ***	(0.012)	0.012 ***	(0.004
Variance (destination)	0.011	(0.004)	0.026	(0.012)	0.012	(0.004
Variance (community)	0.019 ***	(0.005)	0.013	(0.009)	0.018 ***	(0.005
Variance (individual)	1.222 ***	(0.013)	1.224 ***	(0.024)	1.219 ***	(0.013

*Note*: Standard errors in parentheses. GI = gender ideology. Controlled for gender, education, urbanity, partnership status, age, origin HDI, destination HDI and ESS round (not reported). The sample is restricted to the ESS' fifth round in Model 2. + p < 0.10, \* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001.

Nevertheless, the immigrant generation provides only an approximate measure of where immigrants have spent their childhood. To provide further evidence for the socialization argument, we replicate Model 1 using immigrants' age at arrival instead of the immigrant generation. Model 2 appears to confirm the findings presented in Model 1. The origin gender ideology coefficient strengthens as immigrants' age at arrival increases (Hypothesis 2a), while the destination gender ideology coefficient weakens as immigrants' age at arrival decreases (Hypothesis 2b).

Figure 3: Origin and destination gender ideology and immigrants' gender attitudes by age at arrival



Note: The predictions are based on Model 2 in Table 2. The random effects are set to zero.

To better interpret the interactions, we plot the predicted values of immigrants' attitudes in Figure 3 by age at arrival: on the left quadrant for the origin gender ideology and on the right quadrant for the destination gender ideology variable. Furthermore, to assess whether the estimated associations are not only statistically significant but also substantially meaningful, we complement the predicted values displayed in Figure 3 with the calculation of average marginal effects (AME), i.e., the average change in gender at-

titudes, for a one-standard-deviation change in the continuous explanatory variables, i.e., origin gender ideology and destination gender ideology.<sup>7</sup> To appreciate the strength of the variations measured by the marginal effects, it should be kept into consideration that the outcome variable can range between 1 and 5.

Focusing first on the context of origin, Figure 3 reveals that, for second-generation immigrants and child migrants, there is barely any relationship between their gender attitudes and the cultural values prevalent in their country of origin (AME = 0.02 and <0.01, respectively). The origin gender culture appears to be important for only first-generation immigrants. The relationship becomes increasingly important (as demonstrated by the steeper lines) as the age at arrival at the destination increases (AME = 0.17 and 0.25 for those who arrived between ages 13-24 and 25+, respectively).

We turn to the right quadrant of Figure 3 for the destination context. Here, as predicted by the socialization theory, the context of the destination has a stronger effect among immigrants who have experienced early socialization in the country of destination (AME = 0.41 and 0.34 for second-generation immigrants and child migrants, respectively). Nevertheless, Figure 3 also reveals that the destination gender ideology positively influences adult migrants' gender attitudes (AME = 0.24 and 0.27 for those arrived between ages 13–24 and 25+, respectively). The relationship is weaker (as demonstrated by the less steep lines) than for second-generation immigrants and child migrants but still positive and statistically significant.

### **6.2** Life course hypotheses

We turn to Model 3 in Table 2 to test the life course hypotheses (Hypothesis 3a and 3b). Unlike Models 1 and 2, Model 3 includes interactions between the origin and the destination gender ideology variables and the length of stay. First-generation immigrants are separated into four groups according to their length of stay in the country of destination and compared to second-generation immigrants (the reference category). As with Models 1 and 2, first-generation immigrants have more 'negative' gender attitudes (i.e., they hold more traditional attitudes) than second-generation immigrants. The estimates also show evidence of assimilation: as length of stay increases, first-generation immigrants' attitudes become more similar to those of second-generation immigrants.

The coefficients of the interaction terms between a length of stay shorter or equal to 20 years and the origin gender ideology are positive and significant, indicating that the effect of the cultural background is stronger for those who spent less time in the desti-

<sup>&</sup>lt;sup>7</sup> A one-standard-deviation change in the origin gender ideology is of about 0.17, which corresponds approximately to the difference between coming from Australia (72%) and Denmark (90%) (see Table A-3 in the Supplementary material). A one-standard-deviation change in the destination gender ideology is of about 0.17, which corresponds approximately to the difference between living in Ireland (69%) and Sweden (86%) (see Table A-3 in the Supplementary material).

nation country. Conversely, the coefficients of the interaction term between the length of stay categories and the destination gender ideology are negative, suggesting that cultural attitudes at the destination play a weaker role in explaining the gender attitudes of more recently arrived immigrants. Nevertheless, the interaction coefficients do not suggest any clear trends with regard to exposure and are not statistically significant for a length of stay shorter than ten years.

To illustrate these findings, in Figure 4 we plot the predicted values of immigrants' attitudes, using Model 3 in Table 2 for the origin gender ideology variable on the left quadrant, and using the destination gender ideology variable on the right quadrant. Echoing the age at arrival findings, Figure 4 shows that, for second-generation immigrants and long-time residents (20+ yrs), there is barely any relationship between their gender attitudes and the cultural values prevalent in their country of origin (AME = 0.01 and 0.08, respectively). In line with Hypothesis 3a, the origin cultural background appears to be primarily important for recently arrived first-generation immigrants. The relationship becomes increasingly important (as demonstrated by the steeper lines) as the length of stay at the destination decreases (AME = 0.14, 0.15, and 0.23 for those who arrived 11–20 years ago, 6–10 years ago, and less than 5 years ago, respectively).

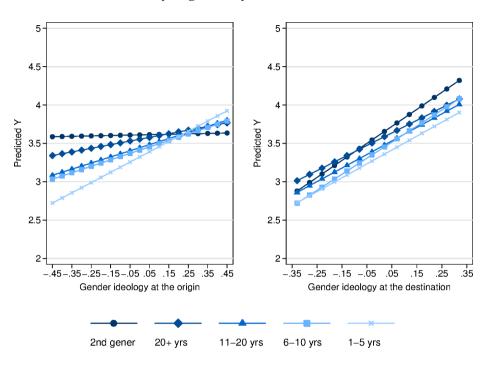


Figure 4: Origin and destination gender ideology and immigrants' gender attitudes by length of stay

Note: The predictions are based on Model 3 in Table 2. The random effects are set to zero.

Turning to the destination context, the predicted values plotted in the right quadrant of Figure 4 suggest that the association between the destination gender ideology and immigrants' gender attitudes is stronger among second-generation immigrants (Hypothesis 3b, AME = 0.37). The association is also positive and not very different in magnitude (AMEs ranging between 0.28 and 0.35), albeit weaker, for first-generation immigrants. The findings, however, do not support the hypothesis that the strength of the association between the destination and immigrants' gender attitudes increases with the length of exposure to the destination context. As illustrated by the predicted values in Figure 4, first-generation immigrants have, on average, more traditional gender attitudes than second-generation immigrants but no clear pattern emerges for different lengths of stay.

#### 6.3 Summarizing and reconciling findings

Overall, Models 1 and 2 present robust evidence for the socialization hypotheses. The results suggest that gender attitudes toward working women among first-generation immigrants primarily reflect gender norms in their country of origin (Hypothesis 1a). More specifically, this finding holds true for immigrants who migrated as adults (Hypothesis 1b). Furthermore, Models 1 and 2 show that the context of the destination has a stronger effect on second-generation immigrants (Hypothesis 1b) and child migrants (Hypothesis 2b). As illustrated in Figure 3, we observe distinctive patterns of association between the origin and the destination contexts and immigrants' gender attitudes according to where they lived during childhood. Nevertheless, our findings, as illustrated by Model 3, also provide partial support for the life course hypothesis: the longer the length of stay at the destination, the weaker the origin's influence on immigrants' gender attitudes.

Our findings support both the hypotheses that early age at arrival and increased length of stay at the destination moderate the relationship between the origin gender ideology and immigrants' gender attitudes. Empirically, however, there is an overlap between age at migration and the length of stay at the destination. For example, about 45% of long-residing immigrants (20+ years) migrated as children (0–12 years old), and 60% of recently arrived migrants (1–5 years) migrated as adults (25+ years old).

Because our data is cross-sectional, we cannot fully disentangle the effects of age, age at arrival, and the length of stay at the destination. While imperfect, we provide one additional test to attempt to distinguish between the socialization and life course perspective. We replicate the models presented in Table 2, restricting the sample to first-generation immigrants in the ESS fifth round. We include in the model the interactions between the origin and the destination gender ideology and both age at arrival and the length of stay.<sup>8</sup> As illustrated by Table 3, when including both interactions, only the moderating effect of age at arrival remains statistically significant. These findings give further support to the early socialization hypothesis rather than the life course perspective.

<sup>&</sup>lt;sup>8</sup> The respondent's age is excluded from the model because it would be multicollinear with age at arrival and the length of stay at the destination.

Table 3: Cross-classified linear models: Immigrants' gender attitudes toward working women

	Model 1			
Origin GI	-0.260	(0.304)		
Destination GI	1.752 ***	(0.468)		
Age at arrival (ref. 0-12 yrs)		, ,		
13–24 yrs	-0.251 ***	(0.057)		
25+ yrs	-0.233 ***	(0.064)		
Age at arrival × origin GI		, ,		
13–24 yrs × origin GI	0.756 *	(0.326)		
25+ yrs × origin GI	1.075 **	(0.341)		
Age at arrival × destination GI		, ,		
13–24 yrs × destination GI	-0.642 +	(0.328)		
25+ yrs × destination GI	-0.627 +	(0.351)		
Length of stay (ref. 20+ yrs)		, ,		
11–20 yrs	0.042	(0.064)		
6–10 yrs	0.138	(0.088)		
1–5 vrs	0.066	(0.089)		
Length of stay × origin GI		,		
11–20 yrs × origin GI	0.456	(0.343)		
6-10 yrs × origin GI	0.509	(0.410)		
1–5 yrs × origin GI	0.572	(0.411)		
Length of stay × destination GI		(- /		
11–20 yrs × destination GI	0.174	(0.352)		
6–10 yrs × destination GI	0.654	(0.467)		
1–5 yrs × destination GI	0.137	(0.484)		
Constant	3.109 ***	(0.102)		
Random effects	• • • • • • • • • • • • • • • • • • • •	()		
Variance (destination)	0.039 ***	(0.019)		
Variance (origin)	0.020 ***	(0.013)		
Variance (community)	0.003	(0.012)		
Variance (individual)	1.273 ***	(0.035)		
Observations	2863			

*Note*: Standard errors in parentheses. GI = gender ideology. Controlled for gender, education, urbanity, partnership status, age, origin HDI, destination HDI and ESS round (not reported). Sample: First-generation immigrants in the ESS fifth round. + p < 0.10, \* p < 0.05, \*\* p < 0.01, \*\* p < 0.001.

#### 6.4 Robustness checks

To address potential concerns about the robustness of the findings, the models presented in Table 2 are re-estimated under different model specifications. First, we replicate the analysis, treating the dependent variable as an ordinal categorical variable rather than a continuous one. We use an ordered logistic regression model with clustered standard errors at the community level. The cross-classified structure is not maintained because the estimation is too complex to converge when combined with a non-linear outcome

variable. Second, we re-estimate the main models, using the father's country of birth instead of the mother's country of birth. Third, we include additional control variables at the individual level (i.e., religious denomination and mother's employment) and at the destination level (i.e., the share of women in parliament and the women-to-men labor force participation ratio). Fourth, we exclude first-generation immigrants who have both parents born in the country of destination because their socialization and assimilation experience might be different from that of other first-generation immigrants. Finally, we assess whether our findings are sensitive to influential cases by replicating the models – dropping first a country of origin at a time, and then a country of destination at a time. The main findings of the article remained consistent across the different model specifications. The results of the robustness checks are summarized in the Supplementary material.

#### 7. Discussion

The main contribution of this paper is to explain under what conditions the prevalent cultural attitudes toward gender roles at the origin and destination influence immigrants' gender attitudes. To do so, we contrast two main theories to guide our analysis: the early socialization perspective and the life course approach. Our results provide support for the early socialization hypothesis that the cultural context of early childhood is positively associated with immigrants' gender attitudes. For example, we find that the context of origin is strongly associated with first-generation and, in particular, adult immigrants' gender attitudes, while the relationship with the origin becomes weak and statistically insignificant for second-generation immigrants and child migrants. The reverse applies when we turn to the context of the destination: Our results show that cultural attitudes toward gender roles in the country of destination are strongly associated with second-generation immigrants' and child migrants' gender attitudes, while the association is weaker among first-generation immigrants and adult immigrants.

Finally, we return to a somewhat unexpected finding: While the destination effect is much weaker among adult migrants and second-generation immigrants, we still find that, for all immigrants, a positive and statistically significant association exists between living in more gender-equal contexts and holding gender-egalitarian attitudes. Because this association is not moderated by the length of stay at the destination, the data does not demonstrate that adaptation occurs with increasing exposure to different cultural attitudes. While speculative, we interpret this finding in two different ways: On the one hand, the positive, albeit weaker, association between the destination gender ideology and adult immigrants' gender attitudes suggests that immigrants adapt their values and attitudes to the destination cultural schema, regardless of the length of exposure. On the other hand, this positive association could also suggest that adult migrants choose countries of destination that are closer to their own gender beliefs. Addressing this issue is beyond

the scope of this paper; nevertheless, what we can draw from our findings is that the context of the destination provides a non-negligible point of reference for adult migrants' attitudes.

Our empirical analysis has some limitations. Given the cross-sectional nature of the data, we cannot differentiate age at arrival or length-of-stay effects from differences in gender attitudes between immigrants who migrated at different points in time. Only panel data would allow us to accurately disentangle the adaptation hypothesis from the selection one. However, there exists no panel data that covers as many different countries of origin and destination as the ESS. Another limitation of this study is that it is restricted to only one dimension of gender-egalitarian attitudes, namely attitudes toward women's employment. We recognize the multidimensionality of gender ideology and, therefore, cannot generalize our findings to other dimensions of gender ideology (Brinton and Lee 2016; Knight and Brinton 2017). Nevertheless, the advantage of focusing on this unique dimension of gender ideology is that it can be measured with the same survey instrument at both the destination and origin levels. Moreover, gender equality in the labor market is a significant dimension of gender ideology that is worth studying separately from other dimensions (Fortin 2005).

# 8. Acknowledgments

The work has benefited from useful discussions with Clara Cortina, Gøsta Esping-Andersen, Valarie King, Aart Liefbroer, Nancy Luke, Maria Rita Testa, and participants of the Family Polarization workshop (March 2016) and the Population Research Institute Immigration working group. Léa Pessin gratefully acknowledges financial support from the European Research Council through the advanced ERC Grant ERC-2010-AdG-269387 (Family polarization, P.I. Gøsta Esping-Andersen) while obtaining her PhD, and from the Eunice Kennedy Shriver National Institute of Child Health and Human Development and the Population Research Institute at the Pennsylvania State University for Population Research Infrastructure (P2CHD041025) and Family Demography Training (T32-HD007514) during her postdoctoral fellowship.

## References

- Antecol, H. (2000). An examination of cross-country differences in the gender gap in labor force participation rates. *Labour Economics* 7(4): 409–426. doi:10.1016/S0927-5371(00)00007-5.
- Arends-Tóth, J. and Van de Vijver, F.J. (2009). Cultural differences in family, marital, and gender-role values among immigrants and majority members in the Netherlands. *International Journal of Psychology* 44(3): 161–169. doi:10.1080/00207590701545676.
- Arpino, B., Esping-Andersen, G., and Pessin, L. (2015). How do changes in gender role attitudes towards female employment influence fertility? A macro-level analysis. *European Sociological Review* 31(3): 370–382. doi:10.1093/esr/jcv002.
- Arpino, B. and Tavares, L. (2013). Fertility and values in Italy and Spain: A look at regional differences within the European context. *Population Review* 52(1): 62–86. doi:10.1353/prv.2013.0004.
- Batalova, J.A. and Cohen, P.N. (2002). Premarital cohabitation and housework: Couples in cross-national perspective. *Journal of Marriage and Family* 64(3): 743–755. doi:10.1111/j.1741-3737.2002.00743.x.
- Baxter, J., Buchler, S., Perales, F., and Western, M. (2015). A life-changing event: First births and men's and women's attitudes to mothering and gender divisions of labor. *Social Forces* 93(3): 989–1014. doi:10.1093/sf/sou103.
- Blau, F.D., Kahn, L.M., and Papps, K.L. (2011). Gender, source country characteristics, and labor market assimilation among immigrants. *Review of Economics and Statistics* 93(1): 43–58. doi:10.1162/REST\_a\_00064.
- Bliss, S.B. (1988). The effect of feminist attitudes in parents on their kindergarten children. *Smith College Studies in Social Work* 58(3): 182–192. doi:10.1080/00377318809516643.
- Brinton, M.C. and Lee, D.J. (2016). Gender-role ideology, labor market institutions, and post-industrial fertility. *Population and Development Review* 42(3): 405–433. doi:10.1111/padr.161.
- Brooks, C. and Bolzendahl, C. (2004). The transformation of US gender role attitudes: Cohort replacement, social-structural change, and ideological learning. *Social Science Research* 33(1): 106–133. doi:10.1016/S0049-089X(03)00041-3.
- Cha, Y. and Thébaud, S. (2009). Labor markets, breadwinning, and beliefs: How economic context shapes men's gender ideology. *Gender and Society* 23(2): 215–243. doi:10.1177/0891243208330448.

- Dasgupta, S.D. (1998). Gender roles and cultural continuity in the Asian Indian immigrant community in the US. *Sex Roles* 38(11–12): 953–974. doi:10.1023/A:1018822525427.
- Davis, S.N. (2007). Gender ideology construction from adolescence to young adulthood. *Social Science Research* 36(3): 1021–1041. doi:10.1016/j.ssresearch.2006.08.001.
- Davis, S.N. and Greenstein, T.N. (2009). Gender ideology: Components, predictors, and consequences. *Annual Review of Sociology* 35: 87–105. doi:10.1146/annurev-soc-070308-115920.
- Davis, S.N. and Wills, J.B. (2010). Adolescent gender ideology socialization: Direct and moderating effects of fathers' beliefs. *Sociological Spectrum* 30(5): 580–604. doi:10.1080/02732173.2010.496106.
- Diehl, C., Koenig, M., and Ruckdeschel, K. (2009). Religiosity and gender equality: Comparing natives and Muslim migrants in Germany. *Ethnic and Racial Studies* 32(2): 278–301. doi:10.1080/01419870802298454.
- Doepke, M., Tertilt, M., and Voena, A. (2012). The economics and politics of women's rights. *Annual Review of Economics* 4: 339–372. doi:10.1146/annurev-economics-061109-080201.
- Ersanilli, E. (2012). Model(ling) citizens? Integration policies and value integration of Turkish immigrants and their descendants in Germany, France, and the Netherlands. *Journal of Immigrant and Refugee Studies* 10(3): 338–358. doi:10.1080/15562948.2012.693336.
- Esping-Andersen, G. (2009). *The incomplete revolution: Adapting to women's new roles*. Cambridge and Malden: Polity Press.
- Fortin, N.M. (2005). Gender role attitudes and the labour-market outcomes of women across OECD countries. *Oxford Review of Economic Policy* 21(3): 416–438. doi:10.1093/oxrep/gri024.
- Frank, K. and Hou, F. (2015). Source-country gender roles and the division of labor within immigrant families. *Journal of Marriage and Family* 77(2): 557–574. doi:10.1111/jomf.12171.
- Fuwa, M. (2004). Macro-level gender inequality and the division of household labor in 22 countries. *American Sociological Review* 69(6): 751–767. doi:10.1177/000312240406900601.
- Glass, J., Bengtson, V.L., and Dunham, C.C. (1986). Attitude similarity in three-generation families: Socialization, status inheritance, or reciprocal influence? *American Sociological Review* 51(5): 685–698. doi:10.2307/2095493.

- Guo, J. and Gilbert, N. (2012). Public attitudes and gender policy regimes: Coherence and stability in hard times. *Journal of Sociology and Social Welfare* 39(2): 163–181.
- Hook, J.L. (2006). Care in context: Men's unpaid work in 20 countries, 1965–2003. *American Sociological Review* 71(4): 639–660. doi:10.1177/000312240607100406.
- Huschek, D., de Valk, H.A., and Liefbroer, A.C. (2011). Gender-role behavior of second-generation Turks: The role of partner choice, gender ideology and societal context. *Advances in Life Course Research* 16(4): 164–177. doi:10.1016/j.alcr.2011.09.005.
- Hwang, J. (2016). The second shift: Assimilation in housework time among immigrants. *Review of Economics of the Household* 14(4): 941–959. doi:10.1007/s11150-015-9319-4.
- Inglehart, R. and Norris, P. (2003). *Rising tide: Gender equality and cultural change around the world.* New York: Cambridge University Press. doi:10.1017/CBO9780511550362.
- Kalmijn, M. (2010). Consequences of racial intermarriage for children's social integration. *Sociological Perspectives* 53(2): 271–286. doi:10.1525/sop.2010.53.2.271.
- Kalmijn, M. and Van Tubergen, F. (2010). A comparative perspective on intermarriage: Explaining differences among national-origin groups in the United States. *Demogra-phy* 47(2): 459–479. doi:10.1353/dem.0.0103.
- Kim, E.H.W. and Cheung, A.K.L. (2015). Women's attitudes toward family formation and life stage transitions: A longitudinal study in Korea. *Journal of Marriage and Family* 77(5): 1074–1090. doi:10.1111/jomf.12222.
- Knight, C.R. and Brinton, M.C. (2017). One egalitarianism or several? Two decades of gender-role attitude change in Europe. *American Journal of Sociology* 122(5): 1485–1532. doi:10.1086/689814.
- Knudsen, K. and Wærness, K. (2008). National context and spouses' housework in 34 countries. *European Sociological Review* 24(1): 97–113. doi:10.1093/esr/jcm037.
- McDonald, P. (2013). Societal foundations for explaining fertility: Gender equity. *Demographic Research* 28(34): 981–994. doi:10.4054/DemRes.2013.28.34.
- Merz, E.M., Özeke-Kocabas, E., Oort, F.J., and Schuengel, C. (2009). Intergenerational family solidarity: Value differences between immigrant groups and generations. *Journal of Family Psychology* 23(3): 291–300. doi:10.1037/a0015819.
- Moen, P., Erickson, M.A., and Dempster-McClain, D. (1997). Their mother's daughters? The intergenerational transmission of gender attitudes in a world of changing roles. *Journal of Marriage and Family* 59(2): 281–293. doi:10.2307/353470.

- Myers, S.M. and Booth, A. (2002). Forerunners of change in nontraditional gender ideology. *Social Psychology Quarterly* 65(1): 18–37. doi:10.2307/3090166.
- Oropesa, R.S. and Landale, N.S. (1997). In search of the new second generation: Alternative strategies for identifying second generation children and understanding their acquisition of English. *Sociological Perspectives* 40(3): 429–455. doi:10.2307/1389451.
- Pampel, F. (2011). Cohort change, diffusion, and support for gender egalitarianism in cross-national perspective. *Demographic Research* 25(21): 667–694. doi:10.4054/DemRes.2011.25.21.
- Pessin, L. (2018). Changing gender norms and marriage dynamics in the United States. *Journal of Marriage and Family* 80(1): 25–41. doi:10.1111/jomf.12444.
- Röder, A. and Mühlau, P. (2014). Are they acculturating? Europe's immigrants and gender egalitarianism. *Social Forces* 92(3): 899–928. doi:10.1093/sf/sot126.
- Rumbaut, R.G. (2004). Ages, life stages, and generational cohorts: Decomposing the immigrant first and second generations in the United States. *International Migration Review* 38(3): 1160–1205. doi:10.1111/j.1747-7379.2004.tb00232.x.
- Rumbaut, R.G. and Ima, K. (1988). The adaptation of Southeast Asian refugee youth: A comparative study. Washington, D.C.: U.S. Office of Refugee Resettlement. (Final report to the Office of Refugee Resettlement).
- Seguino, S. (2007). Plus ça change? Evidence on global trends in gender norms and stereotypes. *Feminist Economics* 13(2): 1–28. doi:10.1080/13545700601184880.
- Snijders, T.A. and Bosker, R.J. (2012). *Multilevel analysis: An introduction to basic and advanced multilevel modeling*. Thousand Oaks: Sage.
- Thornton, A., Alwin, D.F., and Camburn, D. (1983). Causes and consequences of sexrole attitudes and attitude change. *American Sociological Review* 48(2): 211–227. doi:10.2307/2095106.
- Treas, J. and Widmer, E.D. (2000). Married women's employment over the life course: Attitudes in cross-national perspective. *Social Forces* 78(4): 1409–1436.
- Van Tubergen, F., Maas, I., and Flap, H. (2004). The economic incorporation of immigrants in 18 Western societies: Origin, destination, and community effects. *American Sociological Review* 69(5): 704–727. doi:10.1177/000312240406900505.
- Vargas, A.J. (2016). Assimilation effects beyond the labor market: Time allocations of Mexican immigrants to the US. *Review of Economics of the Household* 14(3): 625–668. doi:10.1007/s11150-014-9256-7.
- Vitali, A. and Arpino, B. (2015). Living arrangements of second-generation immigrants

- in Spain: A cross-classified multilevel analysis. *Regional Studies* 49(2): 189–203. doi:10.1080/00343404.2012.759649.
- Willits, F.K. and Crider, D.M. (1989). Church attendance and traditional religious beliefs in adolescence and young adulthood: A panel study. *Review of Religious Research* 31(1): 68–81. doi:10.2307/3511025.
- Yu, W.H. and Lee, P.L. (2013). Decomposing gender beliefs: Cross-national differences in attitudes toward maternal employment and gender equality at home. *Sociological Inquiry* 83(4): 591–621. doi:10.1111/soin.12013.

# **Supplementary material**

We document the construction and validity of our main variables of interest. In particular, we explain how the following variables were constructed:

- 1. Immigrant generation and country of origin
- 2. Measure of attitudes toward working women in the country of origin
- 3. Length of stay in country

### Immigrant generation and country of origin

Third generation: The respondent is born in the country of residence (brncntr = 1), and the father (facntr = 1) and mother (mocntr = 1) of the respondent is also born in that country. In case the information about one of the parents is missing, the respondent is considered to be of third generation if the parent with a non-missing response is born in the country of residence (N = 580). Second generation: The respondent is born in the country of residence (brncntr = 1), and at least one of the respondent's parents is not born in the country of residence (facntr = 1 AND/OR mocntr = 1).

- For the secondgeneration respondents, the country of origin corresponds to the mother's country of birth (mbrncnt in the second round the ESS and mbrncnta in the fourth and fifth round of the ESS). As a robustness check, we use the father's country of birth when both parents are born abroad and in different countries (N = 384).
- In case the information about one of the parent is missing, the respondent is considered to be of the second generation if the parent with a nonmissing response is not born in the country of residence (N = 34). First generation: The respondent is not born in the country of residence (brncntr = 0).
- For the first-generation respondents, the country of origin corresponds to the respondent's country of birth (cntbrtha in the second round the ESS and cntbrthb in the fourth and fifth round of the ESS).

## Measure of gender attitudes toward working women in the country of origin

The country-level measure of egalitarian attitudes toward working women is measured using both the ESS and the WVS/EVS study data.

In the ESS, we use the variable mnrgtjb, which is categorical and follows a fivepoint Likert scale. The country variable corresponds to the percentage of respondents that either disagree or strongly disagree with the statement, "Men should have more right to a job than women when jobs are scarce."

In the harmonized WVS/EVS, we use the variable c001, which takes the following three categories: Neither, Disagree, and Agree. The country variable corresponds to the percentage of respondents that either disagree or strongly disagree with the statement, "Men should have more right to a job than women when jobs are scarce."

To match respondents to the measure of gender attitudes in their country of origin and in the corresponding survey year, we take the following steps:

- If available, we use the ESS measure in the same ESS round (about 68% of cases).
- If the ESS variable is not available, we use the WVS/EVS measure in the corresponding survey year (27% of cases).
- If the WVS/EVS measure is not available in the same survey year, we use the closest available WVS/EVS measure within a two-year period (5%).

To assess the validity of using two different sources of data for the gender attitudes measure, we calculate the correlation between the ESS and WVS/EVS indicators when both are available (N = 66). We find a 0.84 correlation between them.

## Length of stay in country

The variable length of stay (livecntr) in the country has changed between the three waves of the ESS under study. In the second and fourth rounds of the ESS, the variable is categorical, whereas in the fifth round of the ESS, the actual year of arrival (livecnta) was asked. Using the interview year (inwyys) and the year of arrival (livecnta), the length of stay variable is harmonized across the ESS rounds to match the original categorical variable (livecntr): within last year, 1–5 years ago, 6–10 years, 11–20 years, and more than 20 years. For sample size reasons, the 'within last year' and '–5 years ago' categories are merged.

## Additional tables

**Table A-1:** Sample size

Country of destination	ESS round 2	ESS round 4	ESS round 5	Total
Austria	288	363	0	651
Belgium	246	290	283	819
Bulgaria	0	63	68	131
Croatia	0	214	44	258
Cyprus	0	97	69	166
Czech Republic	202	151	130	483
Denmark	111	141	165	417
Estonia	587	528	509	1,624
Finland	34	80	93	207
France	216	234	235	685
Germany	321	354	473	1,148
Greece	281	179	246	706
Hungary	77	49	69	195
Iceland	19	0	0	19
Ireland	196	300	423	919
Italy	28	0	0	28
Latvia	0	547	0	547
Lithuania	0	175	154	329
Luxembourg	680	0	0	680
Netherlands	208	188	146	542
Norway	138	147	174	459
Poland	50	63	52	165
Portugal	60	49	33	142
Romania	0	28	0	28
Russian Federation	0	217	273	490
Slovakia	112	117	128	357
Slovenia	50	215	160	425
Spain	83	178	178	439
Sweden	265	309	236	810
Switzerland	535	556	448	1,539
Ukraine	432	187	359	978
United Kingdom	175	273	274	722
Total	5,394	6,292	5,422	17,108

**Table A-2:** Percent missing for all the variables of interest

Variable	Missing	Total	Percent missing
Dependent variable			
Gender roles attitudes	417	23,033	1.81
Origin variables			
Gender ideology	5,226	23,033	22.69
Destination variables			
Destination gender ideology	0	23,033	0.00
Individual-level variables			
Length of stay	272	23,033	1.18
Gender	19	23,033	0.08
Partnered	97	23,033	0.42
Education	140	23,033	0.61
Age category	93	23,033	0.40
Urban	78	23,033	0.34
Country of origin	1,541	23,033	6.69

Table A-3: Origin gender ideology by ESS round

Country of origin	ESS round 2	ESS round 4	ESS round 5	Total
Albania	0.32	0.61	0.61	0.51
Algeria	0.20		0.20	0.20
Argentina	0.63	0.63	0.70	0.65
Armenia		0.42	0.42	0.42
Australia	0.66	0.72	0.72	0.70
Austria	0.50	0.70	0.67	0.62
Azerbaijan		0.17	0.10	0.13
Bangladesh	0.17			0.17
Belarus		0.67	0.49	0.58
Belgium	0.54	0.71	0.71	0.65
Bosnia and Herzegovina	0.63	0.63	0.63	0.63
Brazil	0.65	0.65		0.65
Bulgaria	0.54	0.45	0.46	0.48
Burkina Faso		0.35		0.35
Canada	0.80	0.80		0.80
Chile	0.50	0.58	0.58	0.55
China	0.33	0.41	0.41	0.38
Colombia			0.65	0.65
Croatia		0.58	0.53	0.56
Cyprus	0.48	0.46	0.32	0.42
Czech Republic	0.37	0.49	0.44	0.43
Denmark .	0.83	0.93	0.90	0.89
Ecuador			0.56	0.56
Egypt	0.05	0.05	0.08	0.06
Estonia	0.42	0.62	0.60	0.55
Ethiopia	0.86	0.86		0.86
Finland	0.71	0.85	0.79	0.78
France	0.56	0.76	0.65	0.66

**Table A-3:** (Continued)

Country of origin	ESS round 2	ESS round 4	ESS round 5	Total	
Georgia		0.42	0.26	0.34	
Germany	0.56	0.66	0.69	0.64	
Ghana	0.37	0.37	0.46	0.40	
Greece	0.31	0.31	0.33	0.32	
Guatemala	0.72	0.01	0.00	0.72	
Hong Kong	0.44		0.41	0.43	
Hungary	0.26	0.38	0.27	0.30	
Iceland	0.20	0.97	0.27	0.88	
India	0.71	0.97	0.97	0.88	
Indonesia	0.36	0.36		0.36	
Iran (Islamic Republic)	0.17	0.17	a	0.17	
Iraq	0.22	0.16	0.17	0.19	
Ireland	0.54	0.78	0.77	0.69	
srael		0.52	0.55	0.54	
Italy	0.33	0.68	0.68	0.56	
Japan	0.18	0.15	0.15	0.16	
Jordan		0.07		0.07	
Kazakhstan		0.28	0.28	0.28	
Korea, Republic of	0.27	0.26	0.26	0.26	
Kyrgyzstan	0.39	0.25	0.25	0.29	
Latvia	5.00	0.58	0.71	0.64	
Lebanon		3.00	0.37	0.37	
_ithuania		0.44	0.45	0.37	
	0.54	0.44	0.43	0.69	
_uxembourg	0.54		-		
Macedonia	0.45	0.52	0.52	0.52	
Malaysia	0.15	0.15	0.18	0.16	
Mali	0.23			0.23	
Malta		0.58		0.58	
Mexico	0.68		0.71	0.69	
Moldova	0.39	0.36	0.36	0.37	
Montenegro		0.74		0.74	
Morocco	0.33	0.32	0.32	0.32	
Netherlands	0.64	0.79	0.79	0.74	
New Zealand	0.73	0.78	0.78	0.76	
Nigeria		0.23	0.23	0.23	
Norway	0.80	0.90	0.84	0.85	
Pakistan	2.00	0.20	0.20	0.20	
Palestine		J.EU	0.22	0.22	
Peru	0.73	0.65	0.65	0.68	
Philippines	0.70	0.03	0.03	0.00	
Poland	0.40	0.55	0.54	0.49	
Portugal	0.42	0.60	0.53	0.51	
Qatar		0.23		0.23	
Romania	0.41	0.39	0.36	0.39	
Russian Federation	0.45	0.46	0.36	0.42	
Rwanda		0.64	0.35	0.50	
Saudi Arabia	0.09			0.09	
Serbia		0.69	0.69	0.69	
Singapore	0.46		0.37	0.42	
Slovakia	0.48	0.41	0.40	0.43	
Slovenia	0.58	0.72	0.72	0.67	
South Africa	0.49	0.49	0.48	0.49	
Spain	0.56	0.49	0.48	0.43	
Sweden	0.78	0.71	0.73	0.86	
Sweden Switzerland					
owiizerianu	0.52	0.65	0.61	0.59	

**Table A-3:** (Continued)

Country of origin	ESS round 2	ESS round 4	ESS round 5	Total
Taiwan, Province of China	0.54	0.47	0.47	0.49
Thailand	0.41	0.41	0.40	0.40
Trinidad	0.66	0.66	0.62	0.65
Tunisia		0.18	0.18	0.18
Turkey	0.17	0.16	0.32	0.21
Ukraine	0.33	0.35	0.28	0.32
United Kingdom	0.51	0.73	0.67	0.64
United States	0.67	0.70	0.70	0.69
Uruguay	0.69	0.69	0.65	0.68
Uzbekistan		0.27	0.27	0.27
Viet Nam	0.38	0.38		0.38
Zambia		0.51		0.51
Zimbabwe		0.57	0.57	0.57

*Note*: Country-of-origin gender ideology is defined as the share of respondents who disagree with the statement, "when jobs are scarce, men should have more right to a job than women."

Table A-4: Destination gender ideology by ESS round

Destination country	ESS Round 2	ESS Round 4	ESS Round 5	Total
Austria	0.49	0.66		0.58
Belgium	0.55	0.72	0.73	0.67
Bulgaria		0.45	0.46	0.46
Croatia		0.59	0.53	0.56
Cyprus		0.46	0.32	0.39
Czech Republic	0.37	0.48	0.45	0.43
Denmark .	0.84	0.94	0.92	0.90
Estonia	0.45	0.63	0.63	0.57
Finland	0.71	0.85	0.79	0.78
France	0.55	0.76	0.65	0.65
Germany	0.57	0.68	0.70	0.65
Greece	0.32	0.31	0.33	0.32
Hungary	0.26	0.38	0.27	0.30
Iceland	0.70			0.70
Ireland	0.53	0.77	0.77	0.69
Italy	0.32			0.32
Latvia		0.57		0.57
Lithuania		0.44	0.44	0.44
Luxembourg	0.56			0.56
Netherlands	0.65	0.80	0.79	0.75
Norway	0.82	0.90	0.87	0.86
Poland	0.40	0.55	0.53	0.49
Portugal	0.41	0.59	0.51	0.50
Romania		0.39		0.39
Russian Federation		0.47	0.36	0.41
Slovakia	0.47	0.41	0.41	0.43
Slovenia	0.57	0.71	0.72	0.67
Spain	0.57	0.72	0.74	0.67
Sweden	0.78	0.93	0.88	0.86
Switzerland	0.49	0.65	0.61	0.59
Ukraine	0.32	0.32	0.27	0.30
United Kingdom	0.51	0.73	0.67	0.64

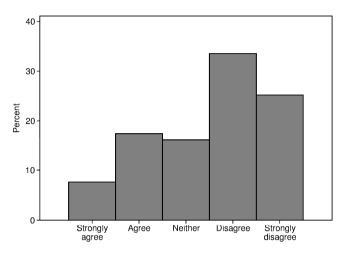
Note: Destination gender ideology is defined as the share of natives (third generation+) who disagree with the statement, "when jobs are scarce, men should have more right to a job than women." Source: ESS.

**Table A-5:** Definition of the regions

Asia	Middle East	Post Soviet
Bangladesh	Palestine	Russian Federation
China	Iran	Ukraine
Taiwan, Province of China	Iraq	Uzbekistan
Cyprus	Israel	Southern Europe
Hong Kong	Jordan	Albania
India	Lebanon	Bosnia and Herzegovina
Indonesia	Qatar	Croatia
Japan	Saudi Arabia	Greece
Korea, Republic Of	Turkey	Italy
Malaysia	Egypt	Malta
Pakistan	Northern Africa	Montenegro
Philippines	Algeria	Portugal
Singapore	Morocco	Serbia
Viet Nam	Tunisia	Slovenia
Thailand	North America	Spain
Oceania	Canada	Macedonia
Australia	United States	Sub-Saharan Africa
New Zealand	Northern Europe	Ethiopia
Eastern Europe	Denmark	Ghana
Bulgaria	Finland	Mali
Czech Republic	Iceland	Nigeria
Hungary	Ireland	Rwanda
Poland	Norway	South Africa
Romania	Sweden	Zimbabwe
Slovakia	United Kingdom	Burkina Faso
Latin America	Post-Soviet	Zambia
Argentina	Azerbaijan	Western Europe
Brazil	Armenia	Austria
Chile	Belarus	Belgium
Colombia	Estonia	France
Ecuador	Georgia	Germany
Guatemala	Kazakhstan	Luxembourg
Mexico	Kyrgyzstan	Netherlands
Peru	Latvia	Switzerland
Trinidad and Tobago	Lithuania	
Uruguay	Moldova	

## **Additional figures**

Figure A-1: Immigrants' gender attitudes toward working women



Note: Figure A-1 describes the dependent variable used in the analysis, which corresponds to gender attitudes toward working women among first- and second-generation immigrants living in 32 countries.

Source: ESS.

## Robustness checks

To address potential concerns about the robustness of the findings, the models presented in Table 2 are re-estimated under the following model specifications:

- Check 1: We replicate the analysis, treating the dependent variable as an ordinal categorical variable rather than a continuous one. We use an ordered logistic regression model with clustered standard errors at the community level. The crossclassified structure is not maintained because the estimation is too complex to converge combined with a nonlinear outcome variable. While the coefficients of a linear model and a nonlinear model cannot be directly compared, we can check whether the sign and the statistical significance of the findings are consistent across model specifications.
- Check 2: In 384 cases, respondents are born in the country of destination, but their parents are born in two different countries. In the main analysis, we use the mother's country of birth. To assess whether this may affect our results, we re-

- estimate the main models, using the father's country of birth instead of the mother's country of birth.
- Check 3: In our main analysis, we specify our models, including a parsimonious set of control variables to avoid overcontrol bias. Nevertheless, to check whether our results are robust to the inclusion of more control variables, we re-estimate the main models, including additional control variables at the individual level (i.e., religious denomination and mother's employment) and at the destination level (i.e., the share of women in parliament and the women-to-men labor force participation ratio).
- Check 4: In our main analysis, we treat all foreign-born respondents as first-generation immigrants. Nevertheless, about 11% of respondents who were born abroad have parents that were born in the country of destination (N = 948). Because these respondents might present a special case with respect to attitudes and values, we replicate the analysis, excluding them from the sample.
- Check 5: One possible concern in multilevel analysis is the potential influence of upper-level outliers on the results. To assess the potential influence of upper-level units on our conclusions, we proceed by dropping one upper-level unit of origin at a time and assess to what extent our results vary when doing so. The excluded unit is chosen according to the measurement level of the variables of interest. We replicate the models presented in Table 2, dropping first one country of origin at a time, and then one country of destination at a time.

The main findings of the article remained consistent across these five different model specifications. We summarize the robustness checks labeled as Check 1, 2, 3, and 4 in Table A-6 for Model 1, Table A-7 for Model 2, and Table A-8 for Model 3. Finally, to summarize the robustness check 5, we plot in box-plots the estimates for each variable of interest. For each figure, the whiskers indicate the range covered by 95% of the resulting estimates. The red line corresponds to the estimates, including all countries used as the main results in this article. Figure A-2, A-3, and A-4 correspond to the three main models presented in Table 2, excluding one country of origin and one country of destination at a time.

Table A-6: Robustness checks for Model 1 in Table 2

-0.039 (0.239) 3.549 *** (0.252) ** -0.216 ***	(0.181)	Model 3  -0.029 (0.111) 2.249 *** (0.222) -0.093 ***	0.071 (0.119) 2.269 *** (0.182)
(0.239) * 3.549 *** (0.252)	(0.115) 2.274 *** (0.181)	(0.111) 2.249 *** (0.222)	(0.119) 2.269 *** (0.182)
3.549 <sup>***</sup> (0.252)	2.274 <sup>***</sup> (0.181)	2.249 <sup>***</sup> (0.222)	2.269 <sup>***</sup> (0.182)
(0.252)	(0.181)	(0.222)	(0.182)
, ,	,	,	, ,
, ,	,	,	, ,
* -0.216 ***	_0 113 ***	0.002 ***	0 440 ***
		-0.093	-0.119 ***
(0.047)	(0.019)	(0.019)	(0.019)
( )	( /	()	( /
* 1 266 ***	0 649 ***	0.536 ***	0.712 ***
			(0.117)
(0.2 10)	(0.111)	(0.110)	(0.117)
* -1 017 ***	-0.590 ***	-0.550 ***	-0.645 ***
			(0.122)
(0.200)	(0.110)	(0.120)	(0.122)
17.108	17.057	16.293	16,160
	(0.240)	(0.240) (0.114)  ** -1.017 *** -0.590 *** (0.230) (0.118)	(0.240) (0.114) (0.115)  ** -1.017 *** -0.590 *** -0.550 *** (0.230) (0.118) (0.120)

Note: Standard errors in parentheses. GI = gender ideology. Controlled for gender, education, urbanity, partnership status, age, origin HDI, destination HDI, and ESS round (not reported). +p < 0.10, \*p < 0.05, \*\*p < 0.01, \*\*\*p < 0.001.

Table A-7: Robustness checks for Model 2 in Table 2

	Baseline	Model 1	Model 2	Model 3	Model 4
Origin GI	0.104	0.323	0.096	0.047	0.139
_	(0.211)	(0.365)	(0.205)	(0.198)	(0.218)
Destination GI	2.223 ***	3.109 ***	2.222 ***	2.408 ***	2.179 ***
	(0.342)	(0.424)	(0.341)	(0.459)	(0.331)
Age at arrival (ref. second generation)	, ,		, ,	, ,	, ,
0–12 yrs	-0.002	0.014	-0.001	0.004	-0.006
,	(0.045)	(0.068)	(0.045)	(0.046)	(0.051)
13–24 yrs	-0.214 ***	-0.358 ***	-0.214 ***	_0.186 <sup>***</sup>	-0.225 ***
,	(0.045)	(0.072)	(0.045)	(0.045)	(0.047)
25+ yrs	-0.147 **	-0.191 *	-0.144 **	-0.131 **	-0.140 **
	(0.048)	(0.095)	(0.048)	(0.048)	(0.049)
Age at arrival × origin GI	(****)	(51555)	(===)	(51515)	(01010)
0–12 yrs × origin GI	-0.103	-0.024	-0.101	-0.144	0.047
	(0.267)	(0.436)	(0.268)	(0.269)	(0.301)
13–24 yrs × origin GI	0.794 **	1.130 **	0.795 **	0.727 **	0.786 **
is a figure of the second of t	(0.254)	(0.383)	(0.255)	(0.257)	(0.261)
25+ yrs × origin GI	1.201 ***	1.845 ***	1.200 ***	1.051 ***	1.242 ***
201 y.o / 0.1g G.	(0.246)	(0.457)	(0.247)	(0.247)	(0.251)
Age at arrival × destination GI	(0.2.0)	(007)	(0.2 )	(0.2 )	(0.20.)
0–12 yrs × destination GI	-0.355	-0.533	-0.357	-0.362	-0.447
o 12 jio / dodandaon di	(0.268)	(0.370)	(0.268)	(0.270)	(0.301)
13–24 yrs × destination GI	-0.919 ***	-1.423 ***	-0.919 ***	-0.965 ***	-0.973 ***
is 1. jis a decination of	(0.260)	(0.406)	(0.260)	(0.263)	(0.268)
25+ yrs × destination GI	-0.771 **	-1.144 *	-0.767 **	-0.753 **	-0.824 **
20. J.S A document of	(0.259)	(0.447)	(0.260)	(0.261)	(0.266)
Observations	5,422	5,422	5,405	5,253	5,117

Note: Standard errors in parentheses. GI = gender ideology. Controlled for gender, education, urbanity, partnership status, age, origin HDI, destination HDI, and ESS round (not reported). The sample is restricted to the ESS' fifth round. + p < 0.10, \* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001.

Table A-8: Robustness checks for Model 3 in Table 2

	Baseline	Model 1	Model 2	Model 3	Model 4
Origin GI	0.054	0.013	0.039	-0.022	0.068
	(0.117)	(0.238)	(0.114)	(0.110)	(0.119)
Destination GI	2.218 ***	3.424 ***	2.218 ***	2.246 ***	2.203 ***
	(0.181)	(0.258)	(0.181)	(0.223)	(0.183)
Length of stay (ref. second generation)	, ,	,	, ,	, ,	, ,
20+ yrs	-0.057 **	-0.127 **	-0.055 *	-0.036	-0.067 **
•	(0.022)	(0.040)	(0.022)	(0.022)	(0.023)
11–20 yrs	-0.168 ***	-0.291 ***	-0.166 ***	-0.141 ***	-0.163 ***
•	(0.031)	(0.067)	(0.031)	(0.032)	(0.033)
6-10 yrs	-0.199 ***	-0.309 **	-0.198 ***	-0.170 ***	-0.199 ***
•	(0.042)	(0.094)	(0.042)	(0.043)	(0.043)
1–5 yrs	-0.288 ***	-0.432 ***	-0.288 ***	-0.283 ***	-0.270 ***
•	(0.040)	(0.098)	(0.040)	(0.041)	(0.041)
Length of stay $\times$ origin GI	, ,	,	,	,	,
20+ yrs × origin GI	0.420 **	0.841 **	0.430 **	0.357 **	0.510 ***
-	(0.132)	(0.273)	(0.132)	(0.133)	(0.140)
11–20 yrs × origin GI	0.744 ***	1.320 ***	0.752 ***	0.614 ***	0.835 ***
	(0.182)	(0.382)	(0.182)	(0.184)	(0.190)
6–10 yrs × origin GI	0.789 ***	1.617 ***	0.795 ***	0.556 *	0.787 ***
-	(0.222)	(0.444)	(0.222)	(0.225)	(0.226)
1–5 yrs × origin GI	1.282 ***	2.310 ***	1.287 ***	1.133 ***	1.329 ***
	(0.217)	(0.461)	(0.217)	(0.219)	(0.221)
Length of stay ×destination GI					
20+ yrs × destination GI	-0.579 ***	-0.922 ***	-0.593 ***	-0.567 ***	-0.700 ***
•	(0.137)	(0.265)	(0.137)	(0.138)	(0.145)
11–20 yrs × destination GI	-0.452*	-0.814 **	-0.467*	-0.383 *	-0.515 **
•	(0.185)	(0.306)	(0.185)	(0.187)	(0.194)
6-10 yrs × destination GI	-0.125	-0.331	-0.136	-0.112	-0.059
•	(0.246)	(0.516)	(0.247)	(0.252)	(0.255)
1–5 yrs $\times$ destination GI	-0.408 +	_1.117 <sup>′</sup> *	-0.418 +	_0.391 <sup>°</sup>	-0.477´+
•	(0.238)	(0.539)	(0.238)	(0.241)	(0.245)
Observations	17,108	17,108	17,108	16,293	16,160

Note: Standard errors in parentheses. Controlled for gender, education, urbanity, partnership status, age, origin HDI, destination HDI and ESS round (not reported). + p < 0.10, \* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001.

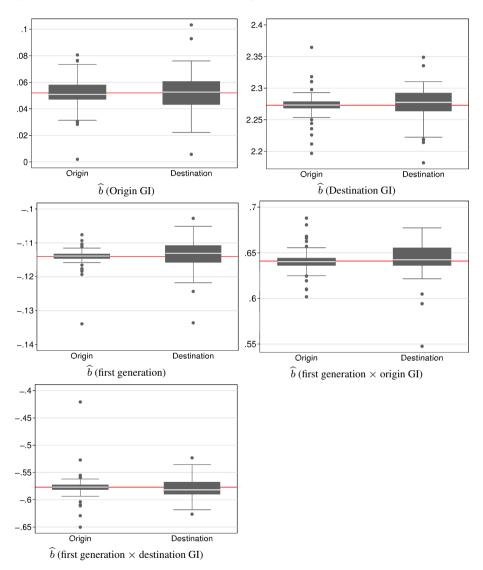


Figure A-2: Influential countries of origin and destination for Model 1 Table 2

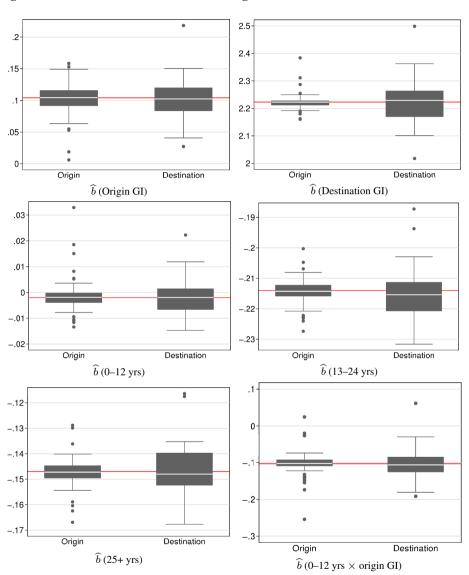
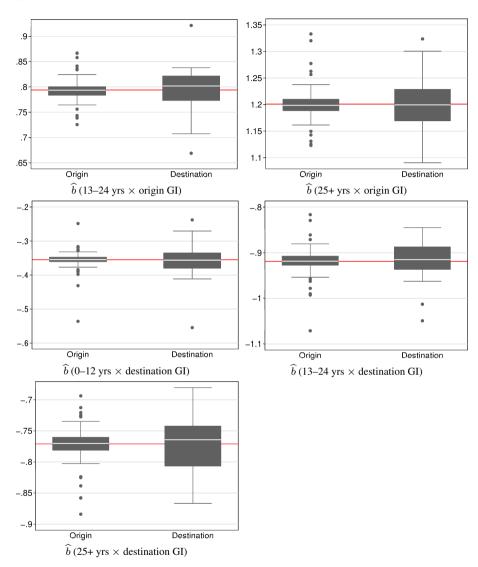


Figure A-3: Influential countries of origin and destination for Model 2 Table 2





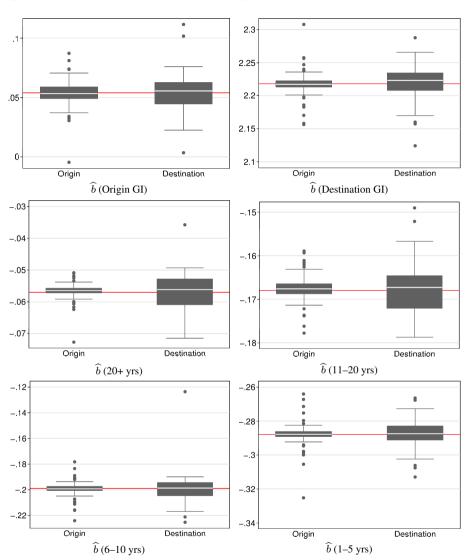


Figure A-4: Influential countries of origin and destination for Model 3 Table 2

Figure A-4: (Continued)

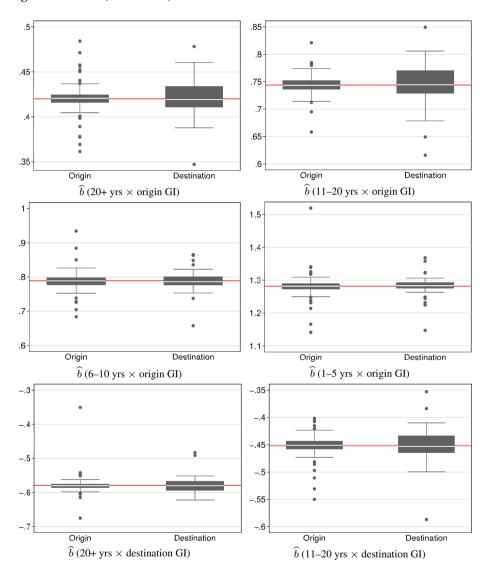
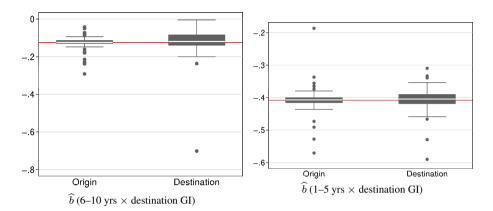


Figure A-4: (Continued)



Pessin & Arpino: Navigating between two cultures: Immigrants' gender attitudes toward working women