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THE EFFECT OF SOURCE COUNTRY CHARACTERISTICS ON THE LABOUR MARKET ASSIMILATION OF IMMIGRANT WOMEN

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Abstract

Among non-EU female immigrants, women from North Africa and the Middle East show the lowest convergence towards native EU-citizens' labor force participation (LFP) levels. Are their traditional views on gender roles the reason for this phenomenon? In this paper, we analyze the effect of gender roles on the labor market assimilation of immigrant women in the EU using the European Social Survey. We find that all female immigrants assimilate towards natives, but women from more traditional source countries work roughly 4 pp less than women from less traditional source countries over the years of residence in the host country.

Keywords: Female Labour Force Participation, Immigration, European Union and Cultural Transmission.

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1 Introduction

Over the past decades, the EU member states have experienced increasing inflows of migrants from both the inside and outside of the European Union. In 2019, 4.9% of the EU-27 population were immigrants from non-EU countries and 2.9% from other EU member states.[1] A large proportion of the non-EU immigrants are refugees that fled war and violence from the Middle East. These immigrants have particularly marked cultural differences[2] relative to EU natives, especially with regard to beliefs and preferences for gender roles.

In Europe there has been an increasing concern about the sustainability of EU's member states welfare systems, which are at risk due to the ageing population of most EU countries. Hence, the increasing number of immigrants in Europe, has been seen by policy makers as a possible solution for the welfare problem, leading EU member states to develop their own integration policies and ensure that they are harnessing all the benefits that immigration can bring.

Regardless of the fact that integration policies are high on the EU's political agenda, non-EU immigrant women continue to exhibit a far lower labor force participation (LFP) than their native counterparts.[3] In 2018, the female labor force participation (FLFP) of immigrants from outside of EU-27 was 6% lower than that of natives (64% as opposed to 70%). The opposite is seen for EU born female immigrants, they have a 5% higher LFP than natives (75% as opposed to 70%). Moreover, natives and EU-born women have been closing the LFP gap while non-EU immigrants have had a stagnant LFP gender gap. The lower FLFP rates of non-EU born immigrants and the fact that they have not been closing the gender gap is, however, mainly driven by LFP rates of immigrant women from Northern Africa and Middle East, which account for 25% of non-EU immigrants and have the lowest FLFP rate and the widest LFP gap (see Figure

[1] Migration and migrant population statistics from the European Commission – available at https://bit.ly/38P5UNN. In these statistics, migrants are defined as individuals who have resided in Europe for at least 12 months having previously been residents of another country. Refugees are included in the stock of migrants by all EU Member States. However, asylum seekers are only included by some.

[2] We use the definition presented by Fernández (2011), according to which cultural differences are defined as the variation of the distribution of social preferences and beliefs across different nations

[3] This is according to the report by Grubanov-Boskovic et al. (2020).

1 in the Appendix).

The reasons why women from Northern Africa and Middle East have not shown any signs of assimilation compared to many other immigrant women may be due to more traditional views on gender roles.[4] In Figure 2 in the Appendix, we can see that this same region has one of the lowest FLFP rates in the world, which is a proxy of gender roles' preferences and beliefs about the women's role in society.[5] Are more traditional beliefs and preferences on gender role the reason why these women have not been increasing their LFP in Europe? Several studies have analyzed the effect that cultural beliefs on gender roles have on the labor market behavior of immigrant women in the US. This body of literature argued that to an extent the differences in female LFP rates can be explained by the differences in FLFP in the source country (Antecol 2000, Fernandez and Fogli 2009, Blau and Kahn 2011 and Blau et al. 2011).

Our study aims precisely at analyzing the role of preferences for gender roles in migrant origin countries on explaining the heterogeneity of female migrants' LFP in Europe.[6] On the one hand, we investigate whether the effect of these preferences on LFP varies with the duration of stay in the EU. If the gap in female immigrants' LFP persists over time, then preferences and beliefs on gender roles may be important. If, however, the LFP of both types of immigrant women converges as they assimilate to the EU native levels, one may argue that the preferences and beliefs for gender roles are weak in face of the EU's work incentives.

To study how the LFP of immigrant women compares to natives, we use the European Social Survey (ESS) on 28 EU countries from 2002 to 2019.[7] In addition we augment our individual data with source country characteristics, which are matched for each immigrant based on their year of arrival in the host country.

[4]We define assimilation as the convergence of immigrants' labor force participation rate to that of native, as their time in the host country increases.

[5]The measure of FLFP that we use in this paper is the activity ratio (LFP females/LFP males). Thought our paper when mentioning FLFP we are referring to the source country activity ratio; and when mentioning LFP, we are referring to our host country labor outcome.

[6]In our paper we define immigrants as individuals who were not born in the country where they were residing at the time of the interview

[7]The ESS is conducted in more than 30 countries, with some of these being non- EU member states. In our sample we only keep the ones that belong to the EU, except for Norway and Switzerland

Since a common challenge in studying the effect of gender roles on labor market outcomes is separating the effect of culture from the effect of different institutions and economic development, we include a variety of other source country characteristics in our design that may also explain the labor market behavior in the host country. We find that immigrant women from source countries with more traditional views on gender roles are less likely to work than women emigrating from less traditional source countries. What is also interesting is that the effect of source country FLFP on LFP of the host country over the years since migration persists, and that both migrant women from more traditional and less traditional countries never reach parity with natives.

In our research, we also analyze the effect of source country FLFP on male immigrants LFP as a falsification test. We find that the effect of FLFP is very small for men, becoming statistically insignificant with the increase of their years of residence in the host country. An effect of source country characteristics that is more significant and larger for women than it is for men, indicates that the effect of source country FLFP on female migrants LFP is a reflection of preferences for gender roles rather than unobservable factors that affect women and men similarly.

Our results point to the need of adjusting EU's integration policies to female migrants coming from more traditional source countries, in order to ensure that these migrants fully assimilate to natives and contribute to the sustainability of the EU's welfare systems.

2 Literature Review

The effect of traditional gender roles on labor outcomes has been widely studied in the economics literature, though mainly for the case of the United States. There appears to be a consensus that source country and host country LFP of immigrant women are positively correlated: as shown by Antecol (2000) women coming from countries with lower LFP rates participate less in the labor force of the host country than women coming from countries with higher LFP rates. However,

little is yet known about the long-term effect of the source country FLFP on the labor outcomes of female migrants.

In the case of the United States, Blau et al. (2011) provide evidence that source country views on gender roles have a persistent effect on immigrant women's labor market supply over the length of residence in the host country and that only woman coming from countries with relatively high LFP rates fully assimilate toward the labor supply levels of comparable natives. In the case of the EU, there is a single piece of evidence, to the best of our knowledge, displaying evidence of an opposite effect. Indeed, Neuman (2018) finds that differences between women from high and low LFP source countries diminish over the years of residence in Sweden but none of them reach parity with native women. Given the mixed evidence, further analysis on traditional gender roles' effect on the assimilation process is of interest. In the case of Europe, it is important to understand if the country's beliefs on women's appropriate roles are indeed weak in the face of the EU labor force incentives or is Sweden an exception due to self-selection of migrants. As Sweden ranks as one of the world's most gender-equal countries in the world and migrants coming from traditional gender countries who disagree with their home-country views, may choose Sweden for its gender neutrality.

This paper also contributes to the literature on the effect of culture or preferences developed in another place or time on current economic behavior of migrants, known as the epidemiological approach. As Fernández (2011) points out this method can be employed to analyze the effect of culture on people who currently share similar institutions and economic development but whose beliefs and preferences may be different, since individuals from different cultures will take different actions despite living in identical environments. Initially, research focused on analyzing the effect on second generation migrants. For instance, Fernández and Fogli (2009) analyzed the fertility and labor behavior of second-generation women, and found that there was a positive correlation between FLFP and fertility rates of parent's source country and the daughter's fertility and labor behavior in the US. Even though studying the descendants allows to control for some confounding factors that may affect labor outcomes, such as knowledge

of the host country language, it also means that the impact of source country culture on labor outcomes will be underestimated, as the effect is likely to decrease over generations. Therefore, still within this strand of literature, some papers choose to focus on first generation migrants (e.g Blau et al. 2011 and Blau and Kahn 2011).

Previous studies that analyzed solely first-generation immigrants, found that the effect of source country FLFP is robust to different specifications. Blau and Kahn (2011) analyzed whether the effect of FLFP on female migrants labor supply is due to differences in women's working experience rather than culture. They find that the effect of FLFP persists even when controlling for pre-migration labor supply. Additionally, Lopez and Lozano (2009) studied how changes in the FLFP in the source country affect the gender gap in the host country. They found that when the FLFP in the source country decreases then migrant women from that country will be less likely to be employed or will work fewer hours in the US.

We build on Bredtmann and Otten (2013), who also used the European Social Survey to provide evidence that the same relation between LFP of source and host country exists for female immigrants in the European Union. In their paper, they analyze the effect of parents source country FLFP on the LFP of first and second generation migrants. However, how FLFP affects the assimilation profiles of migrants from more and less traditional source country has not been studied in their paper. Also, the differences in LFP for first and second generation migrants are not relative to comparable natives. The latter is particularly important since in order to study assimilation the differences of FLFP of migrants in the host country need to be relative to comparable natives.

In a recent paper, Finseras and Kotsadam (2017) studied the effect of FLFP on second generation migrants while controlling for siblings fixed effects, to deal with selection in migration and omitted variables bias. They find that previous results on the correlation between source country FLFP and host country labor outcomes are likely to be biased upwards. Even though we include several macroeconomic indicators to ensure that we are estimating the true effect, we are unable to role out completely that there could be some factors that we are not taking into

account. Thus, our results should be perceived as conservative.

Lastly, our paper is related to a strand of literature analyzing the shape of migrants' assimilation profiles, since we investigate how the LFP profile differs for immigrant women from more and less traditional source countries, relative to comparable natives. The standard expectation is that immigrant women, have an upwards sloped labor supply: were they start by having a lower labor supply compared to natives, but over time it increases converging that of natives. However, Baker and Benjamin (1997) refute this hypothesis, proposing the family migration model, were they predict that migrant women will have a negative sloped assimilation profile. In their model they suggest that at first migrant women will take dead-end jobs to finance their husband's human capital investments and once the husband's labor outcomes improve they would either drop out of the labor market or reduce their labor market supply. However, this view was only observed for the labor supply shape of married immigrant women in Canada(Baker and Benjamin 1997), but not in the US (Blau et al. 2003). With regard to whether the predictions of the family migration model are observed for women coming from countries with a traditional division of labor by gender, Blau et al. (2011) concluded that women from both backgrounds have upward-sloping labor assimilation profiles. However, in these studies, they mainly focus on married immigrant women, since its perceived that they are more likely to be "tied movers" and have their labor supply affected by traditional views on gender of their source country. It would be also interesting to know the general shape of the assimilation profiles of women from more and less traditional source countries, when controlling for living a partner, since the trend for marriage in some countries is declining and some of the non-married immigrant women may also be "tied movers" but never been married.

We contribute to the existing literature in several ways. First, we provide further evidence on the effect of traditional gender roles on labor outcomes of female migrants for the case of Europe. Previous literature available on this topic has mostly been for the case of the US, and it is valuable to know the extent to which the relationship between FLFP in the host and source country holds in other contexts. Second, by employing a cross-country database of European

countries we provide evidence of the general assimilation profile of European immigrants in comparison to natives and thereby shed light on whether the assimilation found in Sweden is representative for other European countries. Lastly, in contrast to Bredtmann and Otten (2013) when we studying the general correlation between FLFP in the host and source country, we also perform a falsification test of FLFP on male migrants, which is important to confirm that the findings reflect preferences for gender roles and not omitted factors such as work orientation.

3 Identification Strategy

To study the effect that beliefs and preferences on gender roles have on the labor market assimilation of adult immigrants in the EU relative to natives with same observable characteristics, we estimate, similarly to Blau et al.(2011) the following model for men and women, separately:

$$LFP_{ijk} = \beta X_i' + \sum \alpha A_i + \sum \gamma R_i + \sum \delta T_i Z_j + \rho P'_{jk} + \upsilon T_i' + \eta D'_k + \epsilon_{ijk} \tag{1}$$

where for individual i born in source country j currently living in the host-country k, LFP is a binary variable that takes value of 1 if the individual participates in the labor market and 0 otherwise [8], X is a vector of individual controls, described in data section, A are series of immigrant cohort dummies, organized in intervals of 5 years from 1960 to 2019, R are series of dummy variables referring to years since migration (YSM), Z is a vector of source country characteristics, P is a vector of pairwise host- and source country relationship variables and T is a set of dummy variables for the year of the interview and ϵ_{ijk} is the error term cluster at the country of birth (both for natives and migrants). Note that all source country characteristics (Z and P) were set to 0 for native-born respondents. Moreover, in our design we use a combination of post-stratification weights and population size weights to ensure that we are controlling for differential selection probabilities within each country and accounting for differences in

[8]The LFP variable takes the value 1 if the respondent mentioned that her main activity in the past seven days was either doing paid work or unemployed but actively looking for a job, and 0 otherwise. Similar to Bredtmann and Otten (2013)

population size across countries.

For the cohort of arrival and years since migration, we defined these variables in sets of dummy variables so that they would be consistent for all rounds of data. Due to changes in the survey questions, we have information on the exact year of arrival to the host country in the rounds five to nine and for the previous rounds we have a categorical variable of years since migration. Thus, to form arrival cohort we calculated subtracting to the interview year the upper bound of each interval and the midpoint for the top interval (i.e., 40 years). And to form years since migration dummies we calculated the time in host country and grouped them into the following years: <1, 1-5, 6-10, 11-20, >20. The arrival cohort are 1960-1964; 1965-1969;1970-1974;1975-1979;1980-1984;1985-1989;1990-1994;1995-1999;2000-2004;2005-2009;2010-2014 and 2015-2019. Because using the full set of YSM and arrival cohort dummies causes collinearity issues, we have omitted the initial arrival cohort dummies (1960-1964).

To measure the propensity to work, the labor market preparedness and labor opportunities, we included the following controls: age, age squared, three education dummies (secondary, tertiary education, with less than secondary as the omitted variable) population density dummies (big city, small village and countryside) and living with a partner. Also, we include number of young children (below 5 years old), but not in our main specification since they could be endogenous to the assimilation process, according to Blau (1992).[9]

Even though the ESS is an individual survey, in each round questions are included about the household composition, which allows us to control for partner characteristics. This is an important step since for those women who are living with a partner some type of joint decision may take place about the couple's household production. As Pencavel (1998) shows, husbands and wives often share common education attainments, and married women tend to work fewer hours the more educated their spouse is. This implies that if women from more egalitarian countries are on average more educated, they will have a lower incentive to enter the labor force, because of their husband's education. Thus, our estimates of the effect of source country

[9]Our results are robust to including number of children

characteristics on the labor force participation for these female immigrants would be weaker than they are in fact. Therefore, to control for join decision making we add to our regression the following: partner's highest level of education and his working hours. But given the possible endogenous effect of partner characteristics on the women's LFP decision, we don't include them in our main regression.

Our main independent variable of interest is $FLFPR_k$, the female (to male) labor force participation ratio. We also give emphasis to total fertility rate, since a higher number of children by women is also perceived to be indicative of traditional views on gender. Note that we use female labor force participation relative to male's, as the measure of the source country female labor force participation, because this relative measure will not only capture the division of labor by gender explicitly, but will also control for any unobserved macroeconomic conditions that could be correlated with a country's FLFP rate.

We further selected some variables to serve as indicators of the extent of labor market preparedness of migrants and that capture the self-selection of immigrants into the host country. They include primary and secondary school enrolment rates, GDP per capita, geographic distance - measured as the distance between the capitals of the source and the host -, if two countries share a common official language and if the two countries have shared or currently share a colonial relationship. The latter is to control for the presence of similar institutions to the host countries in the migrants home countries. Those countries that share a common colonial past often may have similar institutions, which will reduce the barriers to migration and to enter the host country's labor market. Similarly, the inclusion of a variable that indicates a common official language, enables to control the existence of language barriers when trying to access the host country job market. The inclusion of variables on education allow us to capture the effect of that migrant's human capital characteristics may have on labor decisions. The geographic distance allow us to controls for the self-selection into the labor market, individuals coming from a greater distance may be more likely to have jobs already lined up in the EU since their migration cost will be higher, thus having more returns to their migration that those coming from a shorter distance

(Chiswick 1978).

Additionally, we will implement a series of robustness checks. First, merging the source country characteristics to immigrants at the time of the interview instead of the year of arrival to the country. Second, performing a logit and probit regressions to check for the robustness of the findings estimated using LPM.

4 Data

4.1 The European Social Survey

Our main data source is the European Social Survey (ESS), a repeated cross-sectional database, collected every two years across European countries. Currently, there are nine rounds of ESS data available, beginning from 2002/2003 up to 2018/2019 and covering more than 30 nations. In our analysis, we excluded the host countries that are not part of the European Union, with the exception to Norway and Switzerland, in order to have a more homogeneous sample and make sure that the countries included share similar institutions and regulations. [10]

We restricted our sample to female migrants aged 26 to 59 to mitigate the variation in LFP that is due to different years of education or statutory retirement ages across the countries in our dataset. In the end, our sample consists of 28,285 observations from 28 countries. Additionally, we drop from our sample the individuals that immigrated before the age of 18 mainly because they will have a longer duration of residence in the sample and are likely to be more similar to natives than the ones that immigrate as adults and immediately faced the decision to participate in the labor force or not. Thus, including those individuals may lead our estimates to inadequately portray an assimilation profile where there is not one. Also of importance is that we randomly selected 8% of natives from the dataset, [11] to have a similar number of natives and immigrants

[10] The countries excluded were the Russian Federation, Ukraine, Israel and Turkey. In the end our host countries are Austria, Belgium, Bulgaria, Switzerland, Cyprus, the Czech Republic, Germany, Denmark, Estonia, Spain, Finland, France, United Kingdom, Greece, Croatia, Hungary, Ireland, Island, Italy, Lithuania, Poland, Luxembourg, Netherlands, Norway, Portugal, Sweden, Slovenia, and Slovakia

[11] Similar to Blau et al. (2011)

in our sample allowing for a properly powered statistical comparison of both groups.

4.2 Source Country Data

To analyze the effect of source country culture on LFP, we merged our individual data with a panel database of aggregate source country characteristics. We assign every migrant with source country characteristics based on their country of origin and the year they arrived in the host country. Our source country data ranges from 1962 to 2019. However, due to missing values of source country data in some years, we have, when necessary, interpolated these values using earliest (most recent) ones for preceding years (subsequent) years. In our analysis, we drop the countries of origin for which there were fewer than 10 female migrants, missing source country characteristics or the ones that expressed a geographic region as their country of birth - in the end we have 121 origin countries. Given that some of countries in our dataset have since split, such as the USSR, Yugoslavia or Czechoslovakia, we computed a population weighted average of source countries characteristics of the current countries that in the past belonged to them, and matched those new values with the migrants that reported being born there. We decided not to combine these countries that split or combined, unlike other papers (Blau et al. 2011) because several years have passed and these countries diverged and no longer share similar values for the indicators that we are analyzing.

4.3 Descriptive Statistics

Table 1 contains the descriptive statistics of the individual characteristics for the samples of all migrants and natives by gender. Concerning our dependent variable, the table indicates that female migrants have a lower of LFP that natives (71% compared to 76% of the native women). Migrant men on the other hand have a very similar LFP as natives (88% as compared to 89%)

Table 1: *Descriptive Statistics*

	Women		**Men**	
	Immigrant	*Native*	*Immigrant*	*Native*
Participates in the labor market	0.708	0.763	0.884	0.893
	(0.455)	(0.425)	(0.321)	(0.310)
Age	41.716	43.192	41.811	42.845
	(9.258)	(9.634)	(9.111)	(9.614)
Highest level of education				
Less than Secondary Education	0.239	0.278	0.256	0.269
	(0.427)	(0.448)	(0.437)	(0.443)
Secondary Education	0.349	0.424	0.379	0.445
	(0.477)	(0.494)	(0.486)	(0.497)
Tertiary	0.406	0.296	0.359	0.283
	(0.491)	(0.456)	(0.480)	(0.456)
Other	0.006	0.002	0.006	0.003
	(0.075)	(0.046)	(0.0791)	(0.052)
No. of 0-5 children	0.565	0.431	0.543	0.402
	(0.858)	(0.764)	(0..864)	(0.748)
Years since migration				
Less than 1 year	0.013	–	0.012	–
	(0.114)		(0.108)	
1 to 5 years	0.166	–	0.183	–
	(0.372)	–	(0.387)	–
6 to 10 years	0.195	–	0.190	–
	(0.396)	–	(0.392)	–
11 to 20 years	0.277	–	0.277	–
	(0.447)	–	(0.448)	–
More than 20 years	0.350	–	0.338	–
	(0.477)	–	(0.474)	–
Partner characteristics				
Living with a partner	0.717	0.743	0.720	0.728
	(0.450)	(0.437)	(0.449)	(0.445)
Partner working hours	42.883	43.504	34.626	34.826
	(11.228)	(11.166)	(15.960)	(12.193)
Observations	8,360	6,534	7,122	6,260

Moreover, Table 1 shows that overall the immigrants in our sample are on average 1 younger than natives, whose average age is 42 for both genders of immigrants and 43 for both genders of natives. Regarding education attainment, we noticed that the share of women with Tertiary education is higher for migrant women (41% as opposed to 30% for natives). However,

the share of individuals with less than secondary and secondary education is higher for native women (28% and 42% as opposed to 24% and 35% for immigrant women, respectively). The same pattern occurs for immigrant men in our sample. In terms of household composition, both natives and immigrants have a similar share of individuals that reported living with a partner. We further see that average of children below the age of 5 living at home is slightly higher for all immigrants (0.565/0.543 as compared to 0.431/0.402 for natives). In terms of partner working hours, similar values exist for migrants women and native women and immigrant men and native men. As to the immigrant-specific variables, the Table 1 shows that a higher share of our sample arrived more than 20 years ago, 35% for women and 34% for men; and a really small fraction arrived within 1 year, 1.3% for women and 1.2% for men.

5 Empirical Results

5.1 General assimilation and source country characteristics effect

First, we start by estimating a reduced form of our main regression, without including interaction terms between source country characteristics and YSM. Of particular interest are the YSM dummies and the source country characteristics, since the former is indicative of the general assimilation pattern and the later of the general correlation that source country characteristics have with being economically active. For Tables 2 and 3 the first two columns represent a specification with only YSM, and the second two columns with YSM but with controls for different source country characteristics. This allows us to infer if those characteristics are correlated with the assimilation profiles of migrants in the EU. Also, columns (1) and (3) are specifications without the inclusion of partners characteristics and column (2) and (4) are with.

We find that the LFP of female migrants is upwards sloping across all the different regressions estimated - with the increase of years in the host country there is a higher probability of immigrant women to be in the labor force. In column (1), being a recent migrant decreases the probability of LFP by -0.101 p.p, while being a migrant who has stayed more than 20 years

in the host country, decreases the probability of being in the LFP by -0.0185p.p. But, these are not statistically significant. In column (2), when we include husband's characteristics a similar pattern emerges, the negative effect on LFP decreases with YSM, but the magnitude of the coefficients is higher than in the previous specification. Moreover, when we include source country characteristics the magnitude of the YSM coefficients increases further, indicating that source country characteristics are correlated with the general assimilation of immigrants.

For the other source country characteristics, we conclude that human capital indicators are not important in explaining LFP, similarly to Blau et al. (2011). GDP per capita is negatively correlated with LFP, indicating that migrant women from richer countries work less than women coming from poorer countries. Even though this result goes against the idea that women from richer countries would be more prepared to be in the job market, it is still in line with what other papers have found (Blau et al. 2011 and Bredtmann and Otten 2013). This result could be explained by positive self-selection into migration (Chiswick 1978). Indicating that despite high financial incentives to move, individuals from low-GDP countries will be less likely to do so because of the high relative migration costs that they tend to face on average. Hence, the ones that end up migrating are likely to have observable and unobservable characteristics that make them more likely to succeed. Thus, immigrants from poorer countries could be a more positively selected sample compared to immigrants from richer countries, thus more likely to outperform the latter in the host country.

As for men, in Table 3 we see that they face a similar penalty for being immigrants, and that effect decreases with years of residence in the host country. Have arrived within 1 year decreases the probability of being in the labor force by -0.285 p.p to -0.385, and the effect decreases to -0.188 to -0.161 when their time in the EU surpasses 20 years. Analyzing the effect of source country characteristics, we find that relative FLFP is significant, when we don't include partners characteristics, but the coefficient itself is lower than the one we found for women. Therefore, following the logic of Blau et al. (2011), this is indicative that the correlation between the FLFP of the source country and host country for female migrants is a result of gender role

Table 2: *Reduced Regression without source country characteristics and YSM integration terms for all women*

	(1) LFP	(2) LFP	(3) LFP	(4) LFP
Years since Migration				
< 1 year	−0.101	−0.227	−0.355**	−0.520**
	(0.112)	(0.144)	(0.154)	(0.215)
1-5 years ago	−0.0425	−0.0891	−0.306*	−0.389*
	(0.118)	(0.148)	(0.167)	(0.207)
6-10 years ago	−0.0840	−0.150	−0.345**	−0.430**
	(0.117)	(0.149)	(0.166)	(0.208)
11-20 years ago	−0.0396	−0.0990	−0.300*	−0.379*
	(0.119)	(0.153)	(0.163)	(0.200)
> 20 years ago	−0.0185	−0.105	−0.273	−0.354
	(0.131)	(0.172)	(0.178)	(0.229)
Source country characteristics				
LFP female/LFP male			0.00322***	0.00370***
			(0.001)	(0.001)
Total Fertility Rate			−0.0146	−0.0169
			(0.012)	(0.016)
Primary Education Enrollment			0.000189	0.000218
			(0.001)	(0.001)
Secondary education Enrollment			0.000685	0.000686
			(0.001)	(0.001)
GDP per capita (1,000 US$)			−0.00213*	−0.00169
			(0.001)	(0.002)
Partner's characteristics	*no*	*yes*	*no*	*yes*
Nr of children	*no*	*no*	*no*	*no*
Time dummies	*yes*	*yes*	*yes*	*yes*
Host-country FE	*yes*	*yes*	*yes*	*yes*
Years of arrival cohorts	*yes*	*yes*	*yes*	*yes*
Ajusted R^2	0.0757	0.0689	0.0871	0.0813
N	13036	7371	13036	7249

Standard errors in parentheses

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.001$

preference and not of other unobservable characteristics that affect women and men similarly. However, relative to the total fertility the magnitudes are similar both for men and for women, though in opposite direction. This means that in households where their cultural background in one where women have a higher number of children, the husband has a higher probability of participating in the labor force. This makes sense, since this way the husband will have a higher responsibility to sustain his family. The other source country characteristics such as the education attainment indicators and GDP per capita, do not significantly predict male LFP.

5.2 Source country characteristics interacted with YSM and assimilation profiles

We now present the results in Tables 4 and 5 the impact of source country characteristics on the assimilation profiles of immigrant men and women, respectively. Our results allow us to infer if migrants migrating from countries with a more traditional division of work, replicate that same behavior in the EU, or do they assimilate to the EU labor market participation patterns? If they show convergence, how quickly does it occur? The results on Table 4 and 5 address both of these question. Column (1) in each table represents our main regression, and columns (2) and (3) refer to a specification where we control for the presence of young children and husband characteristics, separately.

We start first by analyzing the impact of FLFP with YSM. In each of the specification we identify that there is a statistically significant positive correlation between source country FLFP and LFP in the host country for each YSM (except for being a recent migrant). Also, the effect of the FLFP on labor participation at 1-5 , 6-10 , 11-20 years since migration is not statistically different from the effect that the FLFP has on LFP at more than 20 years since migration. Therefore, we can conclude that the gap between women coming from more and less traditional countries stays somewhat constant with the increase of years of residence in the host country.

Additionally, when we include number of children and husband's characteristics the effect

Table 3: *Reduced Regression without source country characteristics and YSM integration terms for all men*

	(1) LFP	(2) LFP	(3) LFP	(4) LFP
Years since Migration				
<1 year	−0.285	−0.325	−0.311	−0.385
	(0.178)	(0.236)	(0.191)	(0.257)
1-5 years ago	−0.219	−0.0216	−0.245	−0.0832
	(0.169)	(0.022)	(0.182)	(0.092)
6-10 years ago	−0.162	−0.0371	−0.184	−0.0953
	(0.168)	(0.028)	(0.182)	(0.097)
11-20 years ago	−0.171	−0.0902**	−0.191	−0.148
	(0.168)	(0.034)	(0.181)	(0.097)
>20 years ago	−0.188	−0.104**	−0.205	−0.161
	(0.169)	(0.043)	(0.182)	(0.103)
Source country characteristics				
LFP female /LFP male			0.000779**	0.000277
			(0.000)	(0.000)
Total Fertility Rate			0.00268	0.0160*
			(0.007)	(0.009)
Primary Education Enrollment			−0.000424	−0.000409
			(0.000)	(0.001)
Secondary Education Enrollment			0.000231	0.000848*
			(0.000)	(0.000)
GDP per capita (1,000 US$)			0.000546	−0.000297
			(0.001)	(0.001)
Partner's characteristics	*no*	*yes*	*no*	*yes*
Nr of children	*no*	*no*	*no*	*no*
Time dummies	*yes*	*yes*	*yes*	*yes*
Host-country FE	*yes*	*yes*	*yes*	*yes*
Years of arrival cohorts	*yes*	*yes*	*yes*	*yes*
Ajusted R^2	0.0722	0.0567	0.0730	0.0575
N	11670	5226	11670	5226

Standard errors in parentheses

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

of relative FLFP stays roughly the same, being slightly higher only when we include partner's education and work hours (restricted then to women living with a partner). The negative effect we find for the migrant women that arrived less than 1 year in column (3) could be explained, on one hand, by the fact that the share of migrants that arrived within 1 year in our sample is low, 0.013 (roughly 100 observations), and only 21 of those come from countries with FLFP of lower than 60. On the other hand, it could indicate that the LFP of the migrant women from a traditional source country, who are living with a partner, may indeed be explained by the family migration model (Baker and Benjamin 1997): were upon arrival women enter the job market to finance their partner's human capital investments, but as their economic condition ameliorates, these women drop out of the labor market and take their culturally desired LFP levels.

In terms of the effect of total fertility rates on LFP, we observe that coming from a country with higher fertility rates decreases more the probability of being in labor force than coming from a country with lower fertility rates. However, the effect is not statistically significant for each of YSM. For the recent migrants, we get again a counterintuitive sign, as one expects that higher fertility rates in the source country would impact negatively the labor market behavior of immigrant women. However, similar to the case of FLFP, this finding could suggest that recent migrants may choose to postpone their desired fertility level and enter the job market until their partner's economic condition becomes better.

These results can be compared to immigrant men, to understand if the estimates of female migrants reflect cultural beliefs and preferences about gender roles or suffer from omitted variable bias. The results in Table 5 indicate that the impact of FLFP on the probability of being in the labor force is smaller in magnitude and not significant compared to the effect found for women. Also, the differences in the effect of FLFP on LFP across the YSM is not statistically significant. Concerning fertility, again the magnitude is lower than the one found for women, although the lack of statistical significance is common for both. The exception is only for the specification with the inclusion of spousal characteristics. This could either be due to the fact that partner's characteristics are endogenous or the fact that in more traditional couples the husband takes the

Table 4: *Table with source country characteristics and YSM interactions for all women*

	(1) LFP	(2) LFP	(3) LFP
YSM x LFP female/ LFP males			
<1 year × LFP female/ LFP males	0.000409	0.00144	−0.000215
	(0.004)	(0.003)	(0.008)
1-5 years × LFP female/ LFP males	0.00409***	0.00343**	0.00483**
	(0.001)	(0.001)	(0.002)
6-10 years × LFP female/ LFP males	0.00346**	0.00307**	0.00452**
	(0.001)	(0.001)	(0.002)
11-20 years × LFP female/ LFP males	0.00234*	0.00206	0.00220
	(0.001)	(0.001)	(0.002)
> 20 years × LFP female/ LFP males	0.00332***	0.00333***	0.00406***
	(0.001)	(0.001)	(0.001)
YSM x Total Fertility Rate			
<1 year × Fertility rate	0.167	0.158	0.274
	(0.115)	(0.112)	(0.286)
1-5 years × Fertility rate	−0.0340	−0.0235	−0.0147
	(0.037)	(0.035)	(0.045)
6-10 years × Fertility rate	−0.0440*	−0.0388	−0.0399
	(0.024)	(0.024)	(0.036)
11-20 years × Fertility rate	−0.0208	−0.0146	−0.0272
	(0.021)	(0.021)	(0.032)
>20 years × Fertility rate	−0.0171	−0.0112	−0.0242
	(0.018)	(0.017)	(0.023)
Partner Characteristics	*no*	*no*	*yes*
Nr of children	*no*	*yes*	*no*
Time dummies	*yes*	*yes*	*yes*
Host-country FE	*yes*	*yes*	*yes*
Years of arrival cohorts	*yes*	*yes*	*yes*
Ajusted R^2	0.0891	0.115	0.0849
N	13036	13036	7249

Standard errors in parentheses

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.001$

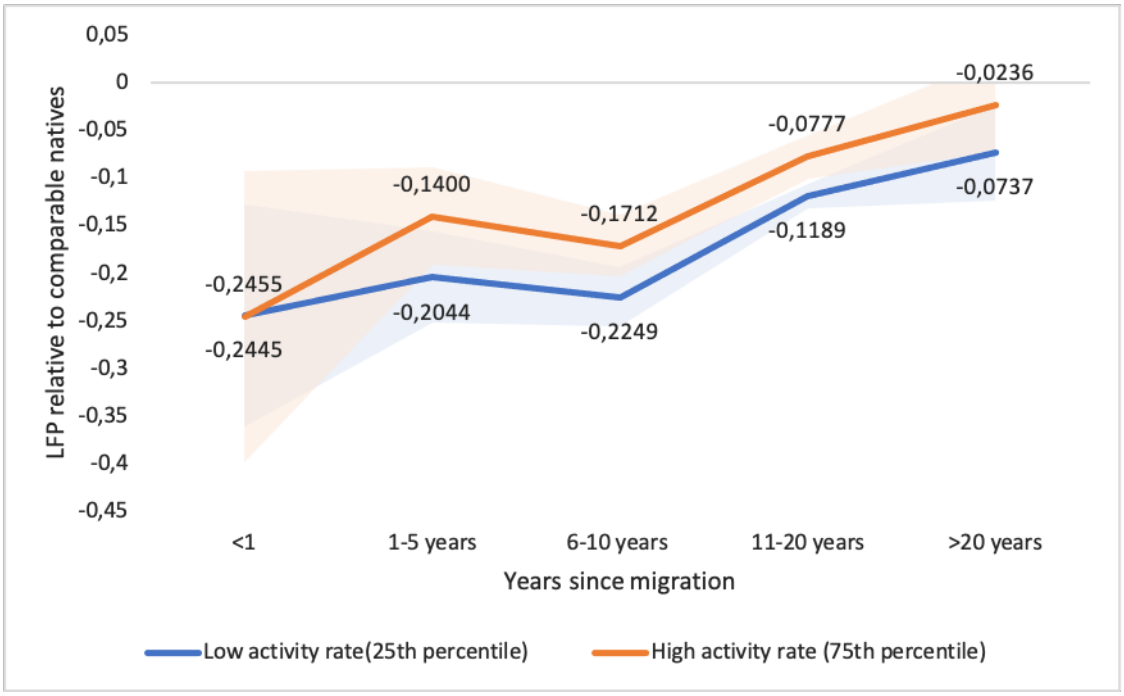

Figure 1: *Main regression predicted assimilation profiles of migrant women*

role of the breadwinner to sustain his family.

In terms of assimilation profiles, in Figure 1 and 2 are represented the predicted LFP for the 25th and 75th percentiles of the FLFP, compared to native LFP levels. The estimates were obtained setting all of the covariates, except for the source country LFP in the main regression to their mean value both for natives and immigrants. For the female migrants (Figure 1), we conclude that their assimilation profiles are both upwards sloping. There is an average difference of around 0.05p.p in the LFP rates when the source country FLFP changes from the 25th percentile (62.31) to the 75th percentile (78.42). Also, Figure 1 indicates that migrant women start by having a LFP of 0.24p.p lower than natives, but over the YSM it decreases to 0.07 p.p and 0.03 p.p -corresponding to a 17 p.p. and 22 p.p-,for the 25th and 75th percentiles of FLFP, respectively. Therefore, we can conclude that women from less traditional source countries assimilate quicker towards native levels than women from more traditional source countries

Also of interest is that no type of female migrant reaches parity with natives. This finding is in line with Neuman (2018), which studied the assimilation of immigrants in Sweden, but contradicts Blau et al. (2011) for the profile of female migrants with a high source country

Table 5: *Regression with YSM and source country characteristics interaction term for all men*

	(1) LFP	(2) LFP	(3) LFP
YSM x LFP female/ LFP males			
<1 year × LFP female/ LFP males	0.00660	0.00660	0.0376***
	(0.005)	(0.005)	(0.005)
1-5 years × LFP female/ LFP males	0.000951	0.000953	−0.00133
	(0.001)	(0.001)	(0.001)
6-10 years × LFP female/ LFP males	0.000111	0.0000982	−0.000306
	(0.001)	(0.001)	(0.001)
11-20 years × LFP female/ LFP males	0.000557	0.000509	−0.000107
	(0.000)	(0.000)	(0.001)
>20 years × LFP female/ LFP males	0.000903*	0.000880*	0.000724
	(0.001)	(0.001)	(0.001)
Total Fertility Rate			
<1 year × Fertility rate	0.000263	0.00109	1.260***
	(0.078)	(0.078)	(0.261)
1-5 years × Fertility rate	−0.00927	−0.00996	0.00972
	(0.027)	(0.027)	(0.023)
6-10 years × Fertility rate	−0.0120	−0.0118	0.00606
	(0.013)	(0.013)	(0.014)
11-20 years × Fertility rate	0.0104	0.0104	0.0205*
	(0.008)	(0.008)	(0.011)
>20 years × Fertility rate	0.00128	0.00194	0.0106
	(0.010)	(0.010)	(0.013)
Partner Characteristics	*no*	*no*	*yes*
Nr of children	*no*	*yes*	*no*
Time dummies	*yes*	*yes*	*yes*
Host-country FE	*yes*	*yes*	*yes*
Years of arrival cohorts	*yes*	*yes*	*yes*
Ajusted R^2	0.0751	0.0754	0.0694
N	11670	11670	5293

Standard errors in parentheses

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.001$

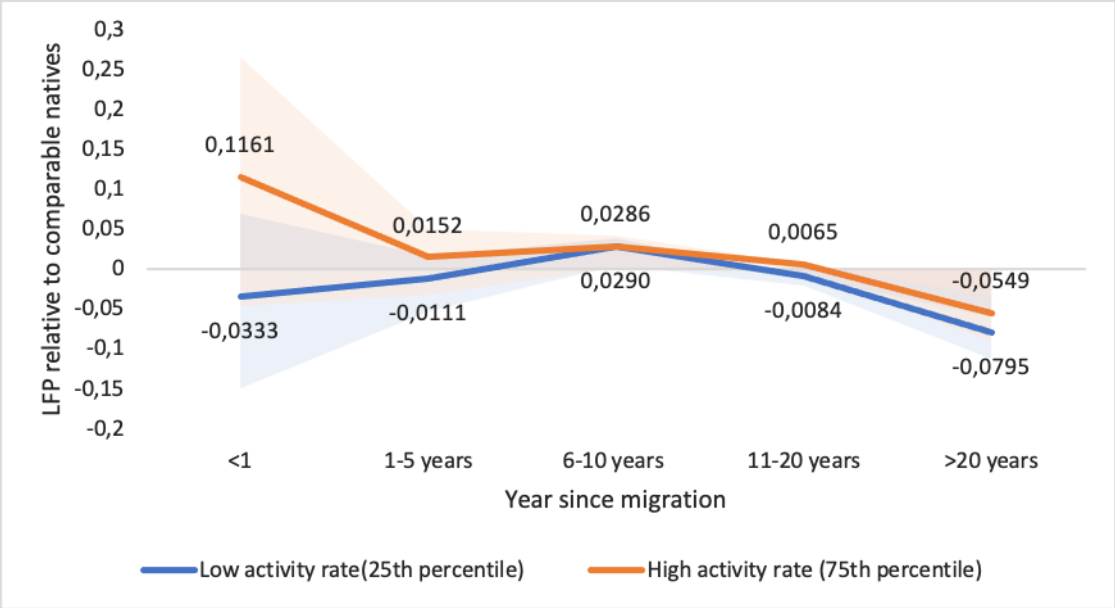

Figure 2: *Main regression predicted assimilation profiles of migrant men*

FLFP. Blau et al.(2011) found that female migrants from less traditional source countries fully assimilate to comparable natives, even outperforming them.

For the male migrants (Figure 2), in general, the LFP for both the 25th and 75th percentiles of FLFP are very similar, except for the YSM of less than 1 year. Additional, the LFP of men is close in value to LFP of natives. These results, highlight that the effect of LFP that we observed for women is not driven by unobserved effects, but is a sign for different beliefs and preferences for gender roles. The only exception appears to be the YSM of less than 1 year, since we find that men coming from source countries with the 25th percentile FLFP (52.790) have a LFP of 0.03 p.p lower than natives while men coming from a source country with the 75th percentile of FLFP (77.849) of 0.116 p.p lower. However, these LFP's are still not statistically different from each other, nor from the LFP of natives.

5.3 Robustness Checks

For the first robustness check, we match our individual data with the current values of source country characteristics (Table 1 in the Appendix). In this way, we control for the fact these

characteristics may have varied over time, and the value of these indicators at the time of migration may have been different from the values that the migrants experienced through their lifespan in the home country. We find that our conclusions are robust to using current values of source country characteristics. Thus, suggesting that these stay relatively constant through time.

In another robustness check, we restimated our regressions using logit and probit models. In our paper, we decided to run LPM for simplicity. Nonetheless, the signs for the logit/probit and LPM are similar. For the YSM of less than 1 year, there's a negative sign for women, but the other YSM the effect of FLFP is positively correlated with the probability of being in the labor force, which is line with our previous findings (Table 2 in the Appendix).

6 Conclusion

Women from regions such as the Northern Africa and Middle East have had the lowest LFP and shown the least signs of assimilation in the EU. Can more traditional views on gender roles be a possible explanation for it? In this paper we investigate whether source country culture, proxied by FLFP in the migrant country of origin, is an important factor in explaining the probability of participating in the labor force and whether this effect persists over the time of residence in the host country. We find that FLFP is positively correlated with the probability of being in the labor force - women from more traditional source countries work on average 4p.p less than women coming from less traditional source countries. Furthermore, we evidence that immigrant women initially have a LFP of 25 p.p lower than comparable natives, but the gap decreases to 17p.p and 22p.p, over the years of residence, for migrant women from less and more traditional source countries respectfully. Therefore, we can conclude that source country culture appears to be one of the reasons why non- EU migrants have a low labor force participation in Europe, in particular, the migrant women coming from the region of the Northern Africa and Middle East.

To strengthen the validity of our results, every regression that we performed for women was also performed for men. If the source country female participation has a similar significance

and magnitude for immigrant men and women, then our proxy for culture is most likely correlated with factors that have been omitted in our regression. We find that in general, the LFP of male migrants is not correlated with the source country FLFP. This finding reinforces the idea that our results reflect the role of source country culture on gender roles rather than omitted variables.

To conclude with certainty that traditional beliefs on gender roles are indeed an important determinant of immigrant female labor force participation, additional research needs to be carried out for Europe. In our research design there were some factors that we could not take into account and that would be interesting to explore. For instance, the role of self-selection in return migration. If the least successful immigrants self-select to return to their home countries, our results could be underestimating the effect of source country culture on gender roles over the years of residence. Also, the type of migration may affect the relationship between home country culture and labor force participation in the host country. If immigrants are refugees, they may face the biggest disruption in their migratory movement, having perhaps to go through a long wait time before having the legal opportunity to work and stay in the country, which could overestimate the effect of culture on gender roles. In addition, the partner country of birth could also play an important role in our study, as the effect we estimate could vary depending on whether the spouse is a native, an EU-migrant or a non-EU migrant.

In terms of policy implications, the results found in this paper reveals a need for integration policies that are tailored to female migrants coming from more traditional source countries in order to bring those women's labor force participation to the same levels of native women, and contribute in this way to the sustainability of the EU's welfare systems.

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Appendix

Table 1: *Regressions with source country characteristics matched at current values*

	Women LFP	Men LFP
<1 year × Labor Force Participation	0.000458	0.00668
	(0.004)	(0.005)
1-5 years ago × Labor Force Participation	0.00361**	0.00105
	(0.001)	(0.001)
6-10 years ago × Labor Force Participation	0.00412***	0.000127
	(0.001)	(0.000)
11-20 years ago × Labor Force Participation	0.00437***	0.000930**
	(0.001)	(0.000)
> 20 years ago × Labor Force Participation	0.00400***	0.000344
	(0.001)	(0.000)
<1 year × Fertility rate	0.181	−0.0312
	(0.111)	(0.075)
1-5 years ago × Fertility rate	0.00503	−0.0186
	(0.037)	(0.028)
6-10 years ago × Fertility rate	−0.0593**	−0.00836
	(0.026)	(0.016)
11-20 years ago × Fertility rate	−0.00349	0.00567
	(0.028)	(0.012)
>20 years ago × Fertility rate	−0.0136	0.00765
	(0.030)	(0.015)
Partner's characteristics	*no*	*no*
Nr of children	*no*	*no*
Time dummies	*yes*	*yes*
Host-country FE	*yes*	*yes*
Years of arrival cohorts	*yes*	*yes*
Adjusted R^2	0.0813	0.0721
N	12955	11711

Standard errors in parentheses

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Table 2: *Logit and Probit*

	Probit		**Logit**	
	Women LFP	Men LFP	Women LFP	Men LFP
Labor Force Participation				
Within last year	−0.00285	0.000557	−0.00310	0.000706
	(0.003)	(0.002)	(0.002)	(0.002)
1-5 years ago	0.00168*	0.000511	0.00167*	0.000510
	(0.001)	(0.001)	(0.001)	(0.001)
6-10 years ago	0.00182**	0.000151	0.00181**	0.000311
	(0.001)	(0.000)	(0.001)	(0.000)
11-20 years ago	0.00222***	0.000586	0.00217***	0.000616
	(0.001)	(0.000)	(0.001)	(0.000)
More than 20 years ago	0.00207***	0.00108**	0.00210***	0.00109**
	(0.001)	(0.000)	(0.001)	(0.000)
Fertility rate				
Within last year	0.0505	0.0394	0.0545	0.0364
	(0.060)	(0.063)	(0.053)	(0.057)
1-5 years ago	−0.00343	−0.00361	−0.00332	−0.00575
	(0.015)	(0.011)	(0.016)	(0.011)
6-10 years ago	−0.0214*	−0.00709	−0.0218*	−0.00818
	(0.012)	(0.008)	(0.012)	(0.008)
11-20 years ago	−0.00705	−0.00772	−0.00674	−0.00650
	(0.009)	(0.007)	(0.009)	(0.007)
More than 20 years ago	−0.00287	0.000634	−0.00260	0.000813
	(0.008)	(0.005)	(0.009)	(0.005)
Adjust R^2				
N	13036	11670	13036	11670

Standard errors in parentheses

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Table 3: *Source country variables*

Variable	Description
LFP female/ LFP males	The activity ratio of female to male LFP is obtained dividing the LFP of females by the LFP of males, times 100. The LFP correspond to the proportion of the population 15 and older that is economically active. We mainly used the modeled Ilo estimates, however when those were missing and a national estimate existed we used the national one. Annual data available from 1960-2020. Source: The World bank
Total Fertility Rate	Total Fertility rate indicates the number of children that would be born per women in their childbearing years, if the fertility rates in that year would stay constant. Annual data available from 1960-2018. Source: The World Bank
Primary School Enrollment by gender (% gross) by gender	The gross primary school enrollment rate is the ratio of total enrollments, regardless of age, by the population of the age group that should be officially enrolled in that level of education. Annual data available from 1960-2020. Source: The World Bank
Secondary School Enrollment(% gross) by gender	The gross secondary school enrollment rate is the ratio of total enrollments, regardless of age, by the population of the age group that should be officially enrolled in that level of education. Annual data available from 1960-2018. Source: The World Bank
GDP per capita (current US$)	GDP per capita is the gross domestic product divided by the midyear population. Annual data available from 1960-2016. Source: The World Bank
Bilateral Distance	Computed as the distance between the capitals of source and host country. Source: http://www.cepii.fr/
Colonial ties	Dummy variable that takes the value of 1 if the source and host country have a colonial link or ever had one, and 0 otherwise. Source: http://www.cepii.fr/
Common official language	Dummy variable that takes the value of 1 if the source and host country have a common official language, and 0 otherwise. Source: http://www.cepii.fr/

Table 4: *Source countries in the Sample*

	(1) Observations	(2) Frequency	(3) FLFP
USSR	154	0.99	75.36
Czechoslovakia	22	0.14	77.25
Yugoslavia	236	1.52	71.73
Afagnistan	61	0.39	19.47
Albania	311	2.01	73.74
Armenia	39	0.25	71.25
Angola	130	0.84	94.97
Argentina	79	0.51	64.67
Austria	105	0.68	65.92
Australia	64	0.41	72.00
Azerbaijan	22	0.14	77.70
Bangladesh	36	0.23	31.11
Belgium	166	1.07	64.59
Bulgaria	136	0.88	82.42
Burundi	11	0.07	101.25
Bolivia	58	0.37	73.26
Brazil	324	2.09	64.15
Belarus	94	0.61	79.85
Canada	74	0.48	78.83
Democratic Republic of the Congo	40	0.26	98.20
Congo	89	0.57	92.40
Switzerland	56	0.36	73.58
Côte d'Ivoire	30	0.19	60.98
Chile	60	0.39	46.44
Cameroon	35	0.23	89.78
China	97	0.63	84.80
Colombia	95	0.61	64.55
Cuba	41	0.26	56.75
Cape Verde	74	0.48	53.76
Cyprus	11	0.07	65.92
Czechia	136	0.88	73.47
Germany	921	5.95	68.87
Denmark	97	0.63	83.41
Dominican Republic	32	0.21	49.43
Algeria	169	1.09	16.22
Ecuador	117	0.76	61.18
Estonia	73	0.47	78.60
Egypt	44	0.28	28.86
Eritrea	21	0.14	83.12
Spain	155	1.00	56.39
Ethiopia	25	0.16	77.32
Finland	160	1.03	82.73
France	546	3.53	74.52
United Kingdom	753	4.86	73.39
Georgia	70	0.45	77.12
Ghana	47	0.30	93.52

Gambia	14	0.09	67.70
Guinea	25	0.16	96.82
Greece	115	0.74	60.14
Guinea-Bissau	14	0.09	79.74
Hong Kong	224	1.45	69.12
Hungary	92	0.59	73.64
Indonesia	57	0.37	55.60
Ireland	76	0.49	59.14
Israel	19	0.12	72.63
India	303	1.96	34.96
Iraq	161	1.04	12.65
Islamic Republic of Iran	172	1.11	14.88
Iceland	23	0.15	86.12
Italy	430	2.78	55.69
Jamaica	26	0.17	80.22
Jordan	10	0.06	16.16
Kenya	36	0.23	90.67
Kyrgyzstan	22	0.14	70.16
Republic of Korea	16	0.10	64.75
Kazakhstan	122	0.79	84.30
Lebanon	74	0.48	28.04
Sri Lanka	99	0.64	53.18
Lithuania	121	0.78	80.28
Latvia	92	0.59	76.90
Libyan Arab Jamahiriya	14	0.09	46.26
Morocco	474	3.06	31.02
Republic of Moldova	44	0.28	91.83
Montenegro	14	0.09	74.18
Madagascar	25	0.16	94.62
North Macedonia	93	0.60	63.63
Malta	11	0.07	38.57
Mauritius	32	0.21	48.69
Mexico	28	0.18	47.79
Malaysia	22	0.14	57.38
Mozambique	37	0.24	105.45
Nigeria	133	0.86	84.70
Netherlands	219	1.41	68.94
Norway	61	0.39	81.15
Nepal	18	0.12	90.50
New Zealand	21	0.14	74.81
Peru	89	0.57	70.42
Philippines	140	0.90	61.93
Pakistan	193	1.25	19.14
Poland	923	5.96	75.93
Portugal	539	3.48	70.08
Paraguay	17	0.11	62.63
Romania	576	3.72	78.38
Serbia	149	0.96	71.61
Russia	938	6.06	78.14
Rwanda	28	0.18	96.02
Sudan	20	0.13	37.39

Sweden	173	1.12	87.52
Singapore	14	0.09	62.06
Slovenia	35	0.23	79.68
Slovakia	166	1.07	78.74
Senegal	42	0.27	48.35
Somalia	52	0.34	29.58
Suriname	83	0.54	53.47
Syrian Arab Republic	77	0.50	23.50
Togo	14	0.09	98.10
Thailand	77	0.50	79.46
Tajikistan	10	0.06	53.36
Tunisia	81	0.52	32.45
Turkey	489	3.16	40.33
Tanzania	10	0.06	94.04
Ukraine	302	1.95	79.84
Uganda	23	0.15	82.42
United States	201	1.30	77.23
Uruguay	15	0.10	65.51
Uzbekistan	23	0.15	67.44
Venezuela	61	0.39	60.12
Viet Nam	69	0.45	88.91
South Africa	98	0.63	64.72
Zambia	12	0.08	85.91
Zimbabwe	42	0.27	84.02
Total	15486	100.00	

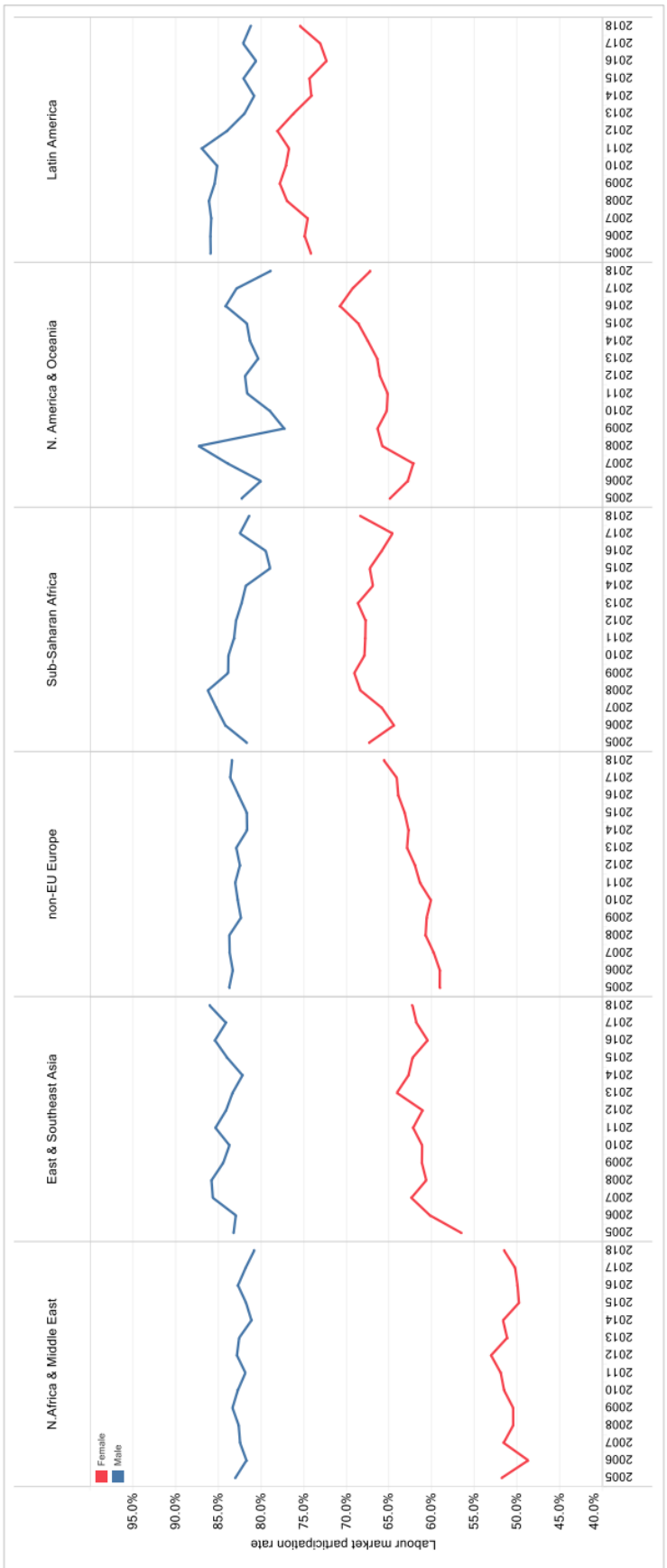

Figure .1: *Labor Force Participation of non-EU migrants by geographic region of origin Source:EU LFS data*

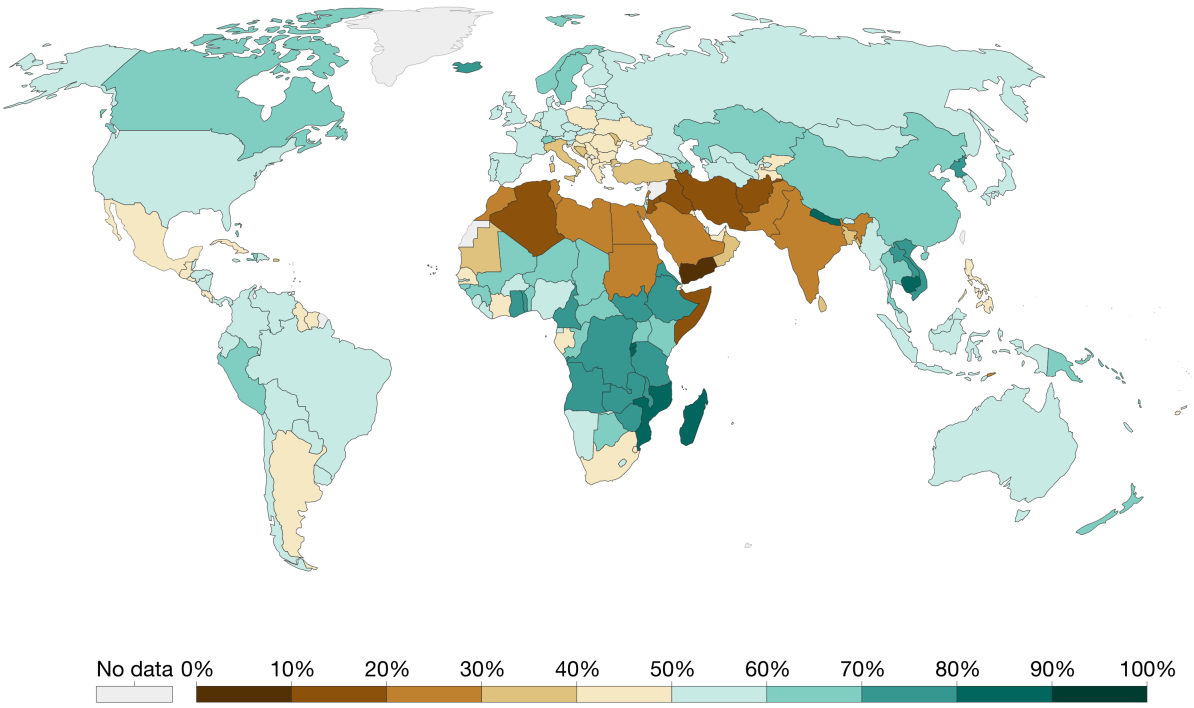

Figure .2: *Female Labor Force Participation in 2017. Source: Our World in Data, using the World Bank modeled ILO estimates*