## Article

# Labor Force Participation of Central American Migrant Women in Mexico 

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#### Abstract

Central Americans living in Mexico remain a small group (100 thousand) relative to the size of the Mexican population. However, they experienced accelerated growth between 2000 and 2020, with Guatemalans as the largest group and Hondurans as the most dynamic one. The previous literature has found a positive and significant, albeit decreasing, income advantage of Central American workers in Mexico. Meanwhile, the percentage of migrant women reported as spouses has gone down and the female labor force has increased. The paper uses information from the 2000, 2010, and 2020 Mexican censuses as well as the 2015 Intercensal Survey to compare access to the labor market for men and women from Guatemala, El Salvador, and Honduras residing in Mexico. We compare marital status, female labor force participation, main economic sectors, human capital, and income levels of the men and women of each of the three nationalities considered, seeking to identify from a gender perspective the differentiated labor performance of each nationality.


Keywords: female migration; labor integration; Central American migration

## 1. Introduction

In recent decades, the number of emigrants from Guatemala, Honduras, and El Salvador has continued to grow rapidly, primarily driven by the desire to escape violence and poverty. Although the U.S. is their primary elected destination, due to cultural and linguistic affinities with Mexico and the challenges involved in crossing the U.S. border, Mexico has increasingly become a destination for them. Despite still having a small size (less than 100 thousand in 2020), the fact that the number of Central Americans residing in Mexico has been growing rapidly (see Figure 1) makes it more urgent to understand how their integration into the country is taking place. The majority of studies examining the labor force participation of Central American migrants in Mexico focus on individuals who cross the border temporarily to work in locations near Mexico's southern border. In a previous study, we analyzed the labor market integration of migrant individuals, utilizing Mexico's census data as the primary source of information, capturing the resident population in the country.

Central American workers in Mexico have exhibited a favorable work performance, which can be attributed to a combination of factors. Notably, the employment conditions of Guatemalan agricultural laborers, who constitute a significant proportion, while inherently precarious, tend to be comparatively more favorable than those of their Mexican counterparts. Furthermore, the enduring migratory tradition among Guatemalan workers likely facilitates their ability to secure employment under more advantageous conditions than their Mexican peers. Additionally, these migrants tend to settle in regions where compensation aligns favorably with their observable and unobservable characteristics. This aspect gains particular significance when considering that, for many of these workers, the option of migrating to the United States remains a viable alternative (Meza González and Pederzini Villarreal 2022).


Figure 1. Population from Northern Central America residing in Mexico. Source: Own elaboration based on Mexican Census and Encuesta Intercensal.

In this study, we utilize data from the 2000, 2010, and 2020 Mexican censuses, along with the 2015 Intercensal Survey, to examine demographic characteristics and labor market access for individuals from Guatemala, El Salvador, and Honduras who reside in Mexico. Population censuses provide insights into the characteristics of those who have chosen Mexico as their place of residence and their integration into the Mexican labor market over the first two decades of the 21st century. Due to their universal nature, censuses are the only reliable data source for measuring the accumulated volume of the immigrant population, as well as its geographic distribution by gender and age (Pederzini 2018). The fundamental census question to measure the immigrant or foreign-born population residing in Mexico is the one that inquires about place of birth. Although immigration is a growing phenomenon in Mexico, it is still small in magnitude; only through census data can we grasp the magnitude and composition of the immigrant population. Although the 2015 Intercensal Survey is not universal (it includes information for a sample of the population), its substantial sample size (around 6 million households) renders it a suitable resource for a similar purpose.

We conduct a comparative analysis of female labor force participation within each of these three nationalities, with the aim of discerning gender-based distinctions in labor market participation among them. We primarily employ descriptive statistics and compare coefficients of an income model estimated by nationality for both men and women, drawing on findings obtained in an earlier analysis by the authors (Pederzini, forthcoming).

## 2. Women's Labor Force Participation

Labor supply responds to shifts in labor conditions, particularly variations in labor income. The number and ages of children and marital status of women impact women's labor force participation, and comparatively exert less influence on men's labor supply (Blau and Kahn 2007; Goldin 2014; Donato et al. 2014).

In Mexico, Hernández-Licona (2000) observed that labor supply exhibits a negative slope, indicating that when income decreases, individuals tend to increase the number of hours they dedicate to work. Furthermore, the study argues that low-income Mexican families support their members in the following two ways: firstly, by offering work opportunities in the informal sector to help them avoid unemployment, and secondly, by providing financial assistance during periods when they lack a source of income. This phenomenon can be attributed to the absence of unemployment insurance or other institutional safe-
guards for individuals who experience job loss in the country. Arceo and Campos-Vázquez (2010) examined the responsiveness of married women's work engagement to variations in their individual labor income, their spouse's earnings, as well as income derived from governmental programs tailored to women, such as PROGRESA/Opportunidades and Proigualdad. Their findings indicate a declining income elasticity in female labor supply concerning changes over time, suggesting a heightened commitment of women to the labor market in the year 2000 compared to 1990. The results reveal that women generally exhibit positive elasticities in response to variations in their own labor income but display negative elasticities in relation to their spouse's earnings. Additionally, the study highlights the influence of the number of children and the life stages of women on their labor responses. Lastly, the research underscores the significant impact of transfer income changes, suggesting that social policies can play a crucial role in incentivizing shifts in the employment behavior of women in a marital context (Arceo and Campos-Vázquez 2010).

The literature on migrant labor supply in the U.S. predominantly focuses on men, often overlooking the broader dynamics of gender in migration (Duncan and Trejo 2012; Laird 2015). However, when scholars delve into discussions concerning the labor supply of migrant women, they often contextualize their analysis within the broader framework of immigrant group integration and assimilation into the host society. One of the primary objectives of destination countries' integration endeavors is to achieve a comparable labor force participation rate between native-born citizens and immigrants. Within this context, it becomes evident, in the U.S. and in Europe, that the labor supply of migrant women is influenced by multiple factors, including income, specific job characteristics, as well as family-related attributes and their immigration status (Bredtmann and Otten 2013; Schoeni 1998).

Empirical evidence suggests that the involvement of women in international labor markets mirrors the gender-based occupational segregation prevalent in both their countries of origin and destination (Blau et al. 2011; Bredtmann and Otten 2013). Female migrants tend to gravitate toward roles that align with traditional gender divisions of labor, with a pronounced emphasis on caregiving and domestic services. Their contributions play a pivotal role in the social reproduction of households and correspond to the growing demand for low-skilled positions within global economies, particularly in major global cities.

According to the labor market assimilation hypothesis, immigrants initially experience less favorable labor market outcomes, followed by a gradual convergence toward the employment outcomes of the native-born working-age population as they spend more time in the host country. To investigate the applicability of this hypothesis specifically to the labor force participation of migrant women in Europe, Rendall et al. (2010) compare labor force participation rate (LFPR) disparities between migrant and native-born women in nine European countries and analyze how these disparities evolve with the additional years that migrant women spend in the host country. Their findings align with the assimilation hypothesis, as they observe that the LFPRs of migrant women in the 'old' migrant-receiving countries of Western Europe start considerably lower compared to their native-born counterparts. Over time, there is a trend toward convergence, albeit not always complete, with the LFPRs of native-born women. Conversely, in the 'new' migrant-receiving countries of Southern Europe, the LFPRs of migrant women, at all durations of residence, closely resemble those of native-born women. Additionally, the authors present descriptive evidence of elevated unemployment and underemployment rates and challenges in achieving a balance between family and work responsibilities among migrant women in Western Europe. These observations underscore the significant role of the host country's context in explaining these empirical patterns.

In another research paper concerning the labor supply of migrant women, Donato et al. (2014) emphasize that while women's representation among international migrants has significantly increased in numerous countries over the past century, there remains a considerable gap in our understanding of gender disparities in immigrant labor force participation across a wide spectrum of host societies. The authors contend that previous studies have already established that immigrant women face a dual disadvantage in terms
of labor market outcomes in countries such as the United States, Canada, and Israel. These findings raise a thought-provoking question: do gender gaps in immigrant labor force participation persist across various destination countries? In their study, they delve into the extent of this double disadvantage experienced by immigrant women in a range of host countries. Additionally, they explore the moderating role of marriage in mitigating this double disadvantage. In the case of the United States, their findings indicate that, despite immigrant women consistently exhibiting lower labor force participation rates compared to both native-born individuals and immigrant men since 1960, marital status is a crucial factor that helps explain the differences among migrant women born in different countries. Expanding their analysis to encompass eight other countries, their research unveils pronounced gender disparities in labor force participation among immigrants and underscores how marital status plays a more differentiating role in the labor force entry of immigrant women compared to men. It has also been shown in the literature that for Guatemalan women, an immigrant's social context, including factors such as ethnicity and class, significantly influences how their labor market participation is perceived and how household arrangements are negotiated (Menjívar 2006).

Florian et al. (2022) address the gap by constructing synthetic migration cohorts based on national/regional origin, period, and age at arrival to systematically track the labor force participation (LFP) of immigrant women in the United States from 1990 to 2016, using data from the U.S. Census and the American Community Survey (ACS). They develop a typology of workforce incorporation, considering individual characteristics and gender-specific attributes within migration cohorts. These gendered migration cohort characteristics encompass elements such as the gender ratio, the proportion of women arriving as single individuals, and the proportion of men arriving with a college education. Their findings reveal a gradual increase in the labor force participation of immigrant women over time, although there are significant variations in initial employment levels and growth rates among different groups.

The observed patterns are categorized into the following five-group typology: "Gradual incorporation" (cohorts from Europe, Canada, Africa, China, and Vietnam), "delayed incorporation with low entry LFP level" (cohorts from Mexico), "delayed incorporation with moderate entry LFP level" (cohorts from Central America, South America, and Cuba), "accelerated incorporation" (cohorts from India, Korea, and other Asian countries), and "continuous intensive employment" (cohorts from the Philippines and the Caribbean). Notably, the study highlights that gendered migration cohort characteristics significantly contribute to explaining variations in immigrant women's workforce participation based on their national/regional origins. This underscores the importance of considering broader cultural and structural factors that shape gender-specific patterns in the labor market integration of immigrants.

Immigrant Latinas experience multiple, interrelated constraints on employment owing to their position as low-skill workers in a labor market highly segregated by gender and nativity, as members of a largely undocumented population, and as wives and mothers in an environment characterized by significant work-family conflicts (Flippen 2014).

McManus and Apgar (2019) found that among second-generation migrant women in the U.S., endogamy (choosing a first- or second-generation partner from the same nationalorigin group) is associated with lower labor supply, net of the effects of parental origin culture. However, this negative relationship does not hold for women in cohabitating unions.

In the United States, although Central American immigrants exhibit strong participation in the workforce, their legal status and limited opportunities for progress often lead to a higher likelihood of living in poverty compared to other foreign-born individuals. Their significant involvement in the labor force alongside elevated poverty rates suggests that the compensation for their work is low. Despite these challenges, they remit a significant portion of their earnings to support their non-migrating family members (Menjivar 2015).

Wallace (1986) uncovered that Central American immigrants in California possess notable human capital advantages over Mexican immigrants, including higher levels
of education, occupation, and English proficiency. However, despite these advantages, Central American men earn similar wages to Mexican men. Wallace suggests that Central Americans may encounter similar challenges within the stratified labor market as Mexican immigrants, aligning with structural theory to explain men's economic status. Conversely, certain groups of Central American women demonstrate a slight earnings edge over Mexican female immigrants, hinting at a tendency for Central American women to adhere to assimilationist forecasts for economic integration.

Very little is known about the labor force participation of migrant women in Mexico. One of the few exceptions is the research by Nájera and Cobo (2011), which found that Guatemalan and Salvadoran female workers are primarily engaged in unskilled manual occupations, where only half of them are wage earners; a quarter are self-employed, and half earn the minimum wage income per month.

## 3. Central American Migrants in Mexico

During the first half of the 20th century, Central American population movements were primarily internal. In the 1960s, El Salvador, Guatemala, and Honduras became part of the North American migration system. The 1978-1983 crises disrupted mobility trends, leading Nicaraguans, Salvadorans, and Guatemalans to migrate to neighboring territories and later expand to Mexico and the United States, especially due to armed conflicts. Honduras experienced increased emigration post-Hurricane Mitch in 1998 (Castillo 1999).

Before the Guatemalan Civil War (1960-1996), labor movement between Guatemala and Mexico was established in the Soconusco area. Large-scale Guatemalan emigration, mainly Mayan refugees, occurred in the late 1970s due to the war. Economic stagnation and violence fueled Salvadoran emigration post-Civil War. Honduras's migratory tradition began in the late 19th century, but significant emigration started in the 1970s and 1980s, making it a key destination for those fleeing neighboring conflicts.

Central America underwent the following three migration waves: political reasons from 1980 to 1990, economic and demographic factors in the 1990s, and violence, family reunification, and low economic growth from 2000 to 2015. Natural disasters in the 1990s also contributed to population movements. The recent migration from Northern Central America to Mexico and the U.S. is a response to social and political challenges, violence, and vulnerability to meteorological phenomena (Orozco and Yansura 2015; Pederzini et al. 2015; Nájera and Rodríguez-Tapia 2020).

## 4. Data Tools and Statistical Tools

In this study, we utilize data from the 2000, 2010, and 2020 Mexican Population censuses, along with the 2015 Intercensal Survey, to examine demographic characteristics and labor market access for individuals from Guatemala, El Salvador, and Honduras who reside in Mexico. Population censuses provide insights into the characteristics of those who have chosen Mexico as their place of residence and their integration into the Mexican labor market over the first two decades of the 21st century. Due to their universal nature, censuses are the most reliable data source for measuring the accumulated volume of the immigrant population, as well as its geographic distribution by gender and age. The fundamental census question to measure the immigrant or foreign-born population residing in Mexico is the one that inquires about place of birth. Although immigration is a growing phenomenon in Mexico, it is still small in magnitude; only through census data can we grasp the magnitude and composition of the immigrant population. Although the 2015 Intercensal Survey is not universal (it includes information for a sample of the population), its substantial sample size (around 6 million households) renders it a suitable resource for a similar purpose.

We employ statistical tools from STATA and Excel to produce tables and graphs, enabling an in-depth examination of the socio-demographic and labor characteristics of migrants residing in Mexico. This analysis places special emphasis on investigating the contextual factors influencing their integration into the labor market, focusing on female
labor force participation within each of these three nationalities. This approach is designed to discern and elucidate gender-based distinctions in labor market participation among migrant populations originating from Honduras, Guatemala, and El Salvador, drawing on the findings obtained in a prior study (Pederzini, forthcoming).

We now present data on the primary characteristics of the Honduran, Guatemalan, and Salvadoran populations residing in Mexico, with a particular emphasis on women and their distinctive features in comparison to the male population.

As shown in Figure 1, the observed period from 2000 to 2020 witnessed a notable surge in the growth of the population born in each of the three countries studied. Guatemalans, while remaining a significant demographic, experienced a relative decline in importance, decreasing from $61 \%$ in 2000 to $48 \%$ in 2020. Notably, Hondurans exhibited the highest growth rates throughout the specified period. Despite a displacement from the second position, Salvadorans demonstrated noteworthy growth rates during the analyzed time frame.

The Honduran population in 2000 was relatively modest in size but exhibited a pronounced feminization among the population aged 15-24 (Figure 2). The gender ratio decreased for both Hondurans and Salvadorans across all age groups, with a more notable decline observed within the age cohort where labor participation was particularly significant. Conversely, Guatemalans displayed a slight upward trend in the participation of women within the two youngest age groups. As a result, in 2020, Guatemalans showed the highest gender ratio in the two youngest groups.


Figure 2. Gender ratios * by country of origin and age group in 2000 and 2020. Source: Own elaboration based on Mexican census data. * Number of Women/Number of men.

The majority of Central Americans residing in Mexico are concentrated at lower educational levels. However, in the year 2000, it could be observed that a percentage (more than $20 \%$ ) of Salvadoran and Honduran men possessed professional-level education. This phenomenon may be attributed to individuals who left their country for political reasons, representing a segment of the population with higher educational attainment. A similar pattern is evident for Salvadoran women. However, in the case of Honduran women, we cannot see an important change in their composition by educational level. In 2000, they concentrated in the less educated group and remained the same way in 2020 (Figure 3). It is probably the case that the Honduran women residing in Mexico in 2000 migrated for jobs in low-skilled occupations and because of the high feminization in the two younger age groups, they probably migrated without their families.


Figure 3. Schooling level by country of origin and sex. Source: Own elaboration based on Mexican Population Census.

On the other hand, the Guatemalan population, as anticipated, tends to concentrate at the lowest levels of education and maintains this pattern throughout the entire period, with no significant distinctions between men and women. Approximately $90 \%$ of Guatemalans possess only basic education (Figure 3). During the analyzed period, there was only a slight decrease in this percentage.

In 2020, the percentage of Salvadoran men and women with a college education, as well as the percentage of Honduran men with a college education, experienced a noteworthy decrease. In fact, in 2020, the percentage of the Mexican population with a
college education is higher than the percentage that all three Central American groups show. This shift in composition can be attributed to the low schooling levels of the population from these countries that have recently arrived in Mexico. On the other hand, we can see that between 2000 and 2020, there is an increase in the population with secondary education for both sexes.

There is extensive literature that supports the assertion that the marital status of women stands as a key determinant influencing female labor force participation, as evidenced by studies conducted by Blau and Kahn (2007), Goldin (2014), and Donato et al. (2014).

Figure 4 depicts the percentage of women from the three analyzed countries who were spouses of the household head over the period. A discernible decrease is evident in the percentage of spouses, particularly among Salvadoran women, with a comparatively milder decline for women from Guatemala and Honduras.


Figure 4. Percent of Women who are spouses of household head by country of origin. Source: Own elaboration based on Mexican Census and Encuesta Intercensal (2015).

Most male migrants from the northern region of Central America residing in Mexico arrived in the country during their most productive years and sought to integrate into the labor market despite not having a regularized migration status. For female migrants, this is not always the case since women's labor supply is heavily influenced by the marital status as well as the as the number and ages of children.

As commonly observed, the labor force participation of men (Figure 5) is significantly higher than that of women and an upward trend is observed during the period for Guatemalans, Salvadorans, and Hondurans in the youngest age group. This level of labor force participation, although high, is slightly below what Terrazas found for Central American men in the United States (89\%) (Terrazas 2011).


Figure 5. Labor force participation by sex, age group and country of origin in 2000 and 2020.
While Mexicans in the younger age group (15-24) tend to participate less in the labor market, a trend attributed to the fact that youngsters remain in the educational system for a longer period, for all three groups of migrants analyzed and for both sexes, labor force participation in the youngest groups grows during the period. Since migration happens mainly at young ages, this trend indicates that migrants tend to start working right after arrival.

In terms of female labor force participation, in 2000, women from the three countries analyzed show lower levels than what Terrazas (2011) reported for Central American women in the U.S. ( $57 \%$ ). However, there is an upward trend in the labor force participation of Salvadoran and Guatemalan women, particularly pronounced for Salvadoran women. This clearly positions them as the group with the highest female labor force participation among the three groups. In contrast, the labor force participation of Honduran women, although higher than what is observed for Guatemalans in 2000, appears to remain relatively stable, with only a slight increase in the age group 25-34 (Figure 5).

The labor force participation of female migrants from Central America (Figure 6) predominantly centers around the service sector, consistently exceeding $60 \%$. Commerce ranks as the second economic sector for all female migrants, while the industrial sector claims the third spot. Notably, the data indicates a noticeable increase in the percentage of women from Honduras and El Salvador engaged in the industrial sector over the observed period. Guatemalan women are the only ones with an important participation in the primary sector, probably related to the long-term involvement of Guatemalans in primary activities in the Southern states. The labor force participation of women from Guatemala, Honduras, and El Salvador in Mexico aligns with the occupational segregation by economic sector observed in many Latin American countries.

In contrast, male labor force participation spans across all four analyzed economic sectors. Honduran men exhibit a concentration in the industrial sector, with a noteworthy growth in their participation during the study period. Guatemalan men, on the other hand, predominantly engage in the agricultural sector, although their participation in this sector declines over time.

The analysis of the average level of real labor income for workers from Honduras and El Salvador (Table 1) indicates that it is comparable to or higher than the level recorded for the total employed population in Mexico. In 2000, the mean income for Salvadorans and Hondurans (male and female) surpassed that of Mexicans; however, by 2020, all three analyzed groups of migrants fell below the average income of Mexicans. Except
for Guatemalan women, the average incomes of all other groups decreased in real terms between 2000 and 2020.


Figure 6. Economic sector of labor force participation by sex and country of origin.
Table 1. Monthly Labor income by country of origin (Mexican pesos of 2015) *.

| Men | 2000 |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | 2010 |  |  | 2015 |  |  | 2020 |  |  |
|  | Mean | Median | Std <br> Dev | Mean | Median | Std <br> Dev | Mean | Median | Std <br> Dev | Mean | Median | Std <br> Dev |
| Guatemala | 4444.6 | 1977.8 | 16,915.6 | 7661.9 | 3097.0 | 21,923.2 | 3893.9 | 2571.9 | 5780.8 | 4101.2 | 3039.0 | 5886.9 |
| Salvador | 10,046.5 | 5651.6 | 13,375.7 | 7148.5 | 4424.6 | 6663.6 | 6468.9 | 4409.0 | 8490.0 | 5770.8 | 4558.6 | 7283.6 |
| Honduras | 10,154.0 | 5651.6 | 13,587.6 | 6289.2 | 4424.6 | 6779.4 | 5654.7 | 4286.4 | 6731.2 | 5779.5 | 4558.6 | 6380.9 |
| Mexico | 6007.3 | 3532.0 | 12,280.2 | 6843.8 | 4424.6 | 10,936.0 | 5832.1 | 4286.4 | 7214.1 | 6579.6 | 4558.6 | 11,585.0 |
| Total | 6054.4 | 3532.0 | 12,415.4 | 6897.6 | 4424.6 | 11,108.7 | 5876.3 | 4286.4 | 7422.5 | 6638.6 | 4558.6 | 11,797.1 |
| Women |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 2000 |  |  | 2010 |  |  | 2015 |  |  | 2020 |  |
|  | Mean | Median | Std <br> Dev | Mean | Median | Std <br> Dev | Mean | Median | Std <br> Dev | Mean | Median | Std <br> Dev |
| Guatemala | 2882.8 | 1648.2 | 3754.8 | 4978.3 | 2654.2 | 7231.1 | 3420.7 | 2571.9 | 4133.9 | 3580.4 | 2431.23 | 3682.7 |
| Salvador | 7912.2 | 4944.5 | 12,535.4 | 5173.6 | 3540.0 | 5089.8 | 5337.4 | 3306.6 | 8420.8 | 5178.4 | 3950.75 | 5007.1 |
| Honduras | 5253.7 | 2884.4 | 6871.4 | 4735.3 | 3097.0 | 6604.4 | 5857.1 | 2571.9 | 21,509.5 | 4863.8 | 3039.04 | 5925.5 |
| Mexico | 4608.1 | 2966.7 | 9913.9 | 5446.1 | 3716.4 | 8469.9 | 4909.4 | 3674.3 | 5685.3 | 5369.0 | 3646.85 | 10,111.0 |
| Total | 4635.3 | 2966.7 | 9971.3 | 5476.5 | 3716.4 | 8523.6 | 4939.5 | 3674.3 | 5801.2 | 5411.0 | 3646.85 | 10,260.0 |
|  |  |  | Source: O 2020, and incomes. | estimat ncuesta onthly in | based on ercensal mes exce | eighted d <br> 15 (INEG <br> ing 700,00 | from the * Calcul pesos we | General Po drom sa truncated | ulation an ple restri | Housin ed to in | Census 2 ividuals | , 2010, an positiv |

We estimate a series of ordinary least square regression models to explore how being a migrant from each of the Central American countries analyzed, impacts monthly income. These models are computed separately for each period and gender, defined as follows:

$$
\begin{equation*}
y_{i}=X_{i} \beta+\delta \operatorname{migrant}_{i}+\varepsilon_{i} \tag{1}
\end{equation*}
$$

where $y_{i}$ represents the logarithm of the monthly salary of worker $i, X_{i}$ is a vector encompassing individual, local, and regional characteristics affecting income, migrant ${ }_{i}$ is a dichotomous variable ( 1 if born in Honduras, El Salvador, or Guatemala, 0 if born elsewhere), and $\varepsilon_{i}$ is the error term. The vector $X_{i}$ includes age, age squared, years of education, and a dichotomous variable indicating marital status. It also incorporates a binary variable (1 if the person lived abroad five years prior to the survey), and the interaction between this variable and the one indicating whether the person was born abroad helps identify recently arrived migrants in Mexico. Additionally, various variables capturing job type, employment sector, residence locality size, and degree of marginalization, and the Mexican region where the person lives were introduced.

Our variable of interest is the one indicating whether the person was born in one of the three Central American countries under analysis, allowing us to determine whether being a migrant from that particular country has a positive or negative effect on workers' income. Conducting the analysis separately by gender and period enables us to assess whether nationality has a different impact on women and men. Additionally, we can observe the evolution of these coefficients over time.

Table 2 displays the coefficients by nationality which resulted from the estimation of this labor income model. Only the coefficients of the independent variables of interest are shown here, specifically, the country of origin of the migrant. If the regression coefficient is positive, it indicates that originating from that country has a positive impact on labor income.

Table 2. Coefficients for county of origin obtained from income models.

| Country | 2000 |  | 2010 |  | 2015 |  | 2020 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Men |  |  |  |  |  |  |  |  |
| Guatemala | 0.1920 | $* * *$ | 0.2016 | $* * *$ | 0.0269 | $* * *$ | 0.1021 | $* * *$ |
|  | $(22.59)$ |  | $(24.18)$ |  | $(4.5)$ |  | $(3.59)$ |  |
| Salvador | 0.1524 | $* * *$ | 0.0838 | $* * *$ | 0.0734 | $* * *$ | 0.2017 |  |
|  | $(10.01)$ |  | $(5.23)$ |  | $(6.39)$ |  | $(0.65)$ |  |
| Honduras | 0.2031 | $* *$ | 0.1071 | $* * *$ | 0.1211 | $* * *$ | 0.1213 | $* * *$ |
|  | $(8.95)$ |  | $(7.79)$ |  | $(12.05)$ |  | $(4.51)$ |  |
| Women |  |  |  |  |  |  |  |  |
| Guatemala | 0.1933 | $* * *$ | 0.2469 | $* * *$ | 0.2205 | $* * *$ | 0.1021 | $* * *$ |
|  | $(3.23)$ |  | $(20.35)$ |  | $(22.73)$ |  | $(9.05)$ | $* * *$ |
| Salvador | 0.3018 | $* * *$ | 0.1108 | $* * *$ | 0.0896 | $* * *$ | 0.2017 | $* * *$ |
|  | $(3.61)$ |  | $(5.31)$ |  | $(4.78)$ |  | $(11.07)$ | $* * *$ |
| Honduras | 0.2208 | $*$ | 0.0616 | $* * *$ | 0.0297 | $*$ | 0.1213 | $* * 77)$ |
|  | $(1.88)$ |  | $(2.88)$ |  | $(1.94)$ |  | $(7.77)$ |  |

$\overline{* * *} p<0.01$, $^{* *} p<0.05,{ }^{*} p<0.1$. Source: Own estimates based on weighted data from the General Population and Housing Census 2000, 2010, and 2020, and Encuesta Intercensal 2015 (INEGI).

It is worth noting that the income differentials presented in Table 2 are always positive over the four estimated points in time. Therefore, we can conclude that, controlling for their characteristics, migrant workers from Central America receive remuneration above the labor income of their Mexican counterparts. However, during the period, this advantage diminishes. Actually, the coefficient for Salvadorean men is not statistically significant in 2020. In contrast for women, although a reduction in the size of the coefficients is also observed, they all remain statistically significant in 2020.

Despite Salvadoran women experiencing a decline in their representation among immigrants from El Salvador (lower gender ratio) and a decrease in their participation
among the most educated, they still maintain an income advantage, unlike Salvadoran men. This could possibly be interpreted as Salvadoran women who arrived in the country in previous decades were able to sustain advantageous labor integration over time. This interpretation is supported by the higher female labor force participation in the oldest group and the smaller percentage of them being spouses of the household head.

## 5. Main Findings

In a prior study (Meza González and Pederzini Villarreal 2022), we demonstrated that Central American migrant workers in Mexico enjoy an income advantage. This paper enhances the existing literature by examining the performance of this group at a more recent point in time, 2020. Additionally, our focus in this paper is dedicated to elucidating the differences between men and women within this context.

The data presented here shows that the involvement of women in migration flows from Guatemala, Honduras, and El Salvador is observed to be on a decline. This change may be due to the characteristics and the danger involved in the migration process to Mexico. We know that migrants embark on a highly risky journey to reach Mexico, which may lead women to decide against migrating, while male migrants may opt to undertake the journey alone.

The presented data suggests a transformation in the family roles of migrant women, characterized by a reduced percentage of spouses. This, in conjunction with an increased level of labor force participation, implies a discernible shift toward a more independent paradigm of female migration.

We observed significant disparities in female labor force participation among migrants, with Salvadorans exhibiting the highest rates, while Guatemalans showed the lowest participation rates. In further research, we will investigate how these patterns reflect educational levels and marriage patterns. Our results, unlike what has been found by Fuentes-Mayorga (2023), do not show an increase in women-led migration from Honduras and El Salvador to Mexico. On the contrary, the proportion of women from these countries in the migration flows has been decreasing in the recent period. Only Guatemalans show an increased proportion of women in their migrant population. However, labor force participation has grown, and the percentage of women who are household head spouses has decreased, indicating a more independent life of female migrants from El Salvador and Honduras. Our analysis has also uncovered distinct patterns in the economic sectors in which individuals participate differentiated by gender and country of origin. This observation aligns with the theory of segregation by occupation, which posits that individuals tend to be segregated into specific occupations based on their gender. It implies that societal norms and expectations both, from the country of origin and the country of destination, may contribute to distinct patterns of labor market participation for immigrant men and women from Guatemala, Honduras, and El Salvador residing in Mexico.

Over the examined period, migrant men and women from Guatemala, Honduras, and El Salvador, maintained a decreasing income advantage, reflecting a noteworthy aspect of their economic standing within the context of migration. Despite the constant presence of workers from the three analyzed countries, and more particularly, from Guatemala in some states of Mexico since the mid-20th century and the fact that their labor insertion has been advantageous when compared to Mexican workers, it was not until the intensification of migrant caravans in 2018 that an anti-immigrant sentiment began to grow in some sectors of the Mexican society. Migrant caravans exposed the vulnerability of Central American people to the world, their precarious conditions, and, at the same time, showcased their resistance (Frank-Vitale and Núñez-Chaim 2020). However, it also allowed local actors to express their negative perceptions of the Central American population publicly. Expressions of verbal opposition to the migrants' presence were steeped in arguments constructed from generalized perceptions (Hernández López and Porraz Gómez 2020).


#### Abstract

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