

### Analysis of the Labor Income of Young Americans in Mexico Análisis del ingreso laboral de los jóvenes estadounidenses en México

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#### ABSTRACT

Using data from the 2015 Intercensal Survey and the 2010 and 2000 censuses, this study analyzes the labor characteristics of young Americans between the ages of 15 and 29 in Mexico and shows that their wages have been higher than those of Mexican workers of the same age group, although differentials have decreased over time. Blinder-Oaxaca decomposition exercises indicate that the unexplained part of the differential is the main determinant of labor outcomes in favor of migrants. We also include a time-fixed effects analysis, stratified by nationality, to control changes in the characteristics of different migrant cohorts and show that the wage advantage of young American workers exists and has decreased through time.

*Keywords:* 1. immigration, 2. wage differentials, 3. American workers, 4. Mexico, 5. United States.

#### RESUMEN

Con base en datos de la Encuesta Intercensal 2015 y de los censos de población y vivienda 2000 y 2010, en este artículo se analizan las características laborales de los jóvenes estadounidenses de entre 15 y 29 años radicados en México y se evidencia que sus remuneraciones han sido más altas que las de los trabajadores mexicanos del mismo grupo de edad, aunque los diferenciales han disminuido en el tiempo. Ejercicios de descomposición tipo Blinder-Oaxaca indican que la parte no explicada del diferencial es el principal determinante de los resultados laborales en favor de los migrantes. Se incluye también un análisis de efectos fijos temporales, estratificado por nacionalidad, para controlar los cambios en las características de las diferentes cohortes de migrantes y mostrar que la ventaja salarial de los jóvenes estadounidenses efectivamente existe y ha disminuido.

*Palabras clave:* 1. inmigración, 2. diferenciales salariales, 3. trabajadores estadounidenses, 4. México, 5. Estados Unidos.

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INTRODUCTION<sup>3</sup>

According to data from the 2015 Intercensal Survey (EIC, acronym in Spanish for *Encuesta Intercensal*) of the National Institute of Statistics and Geography (Inegi, acronym in Spanish for Instituto Nacional de Estadística y Geografía), the total number of people born abroad who live in Mexico amounts to just over 1 million. The largest group of foreigners is that of U.S. origin, which amounts to approximately 740 000 individuals (Inegi, 2015). Of the total number of Americans, those between the ages of 15 and 29 years add up to just over 153 000 about 20.7%. To put this figure in perspective, suffice it to say that the second largest group of foreigners in Mexico is that of Guatemalans, which in 2015 added up to a total of 42 800 people. This shows that the number of young Americans represents almost four times the total number of Guatemalans in Mexico.

On the one hand, many of the young Americans living in Mexico are the children of Mexicans who spent a few years in the neighboring country to the north and then decided to return, bringing their children born in the United States with them. As an example, of the total number of Americans in Mexico, 85% are people between 0 and 24 years old. Zúñiga (2018) refers that the children who were born and spent their first years of life in the United States, and acquired part of their education in that country, and who now live in Mexico, are the so-called “0.5 generation.” On the other hand, some young Americans who live in Mexico are a product of the cross-border dynamics that take place in the north of the country, wherein highly-educated women living in Mexico and coming from mid-high or high socioeconomic level homes choose to give birth in the United States, so that their children have U.S. citizenship and can thus improve their long-term educational and economic prospects (Vargas & Coubès, 2017). This state of things places a part of the young Americans living in Mexico under a particular circumstance: they are not really immigrants, but still are foreigners in their own country. It should be noted that the data from Inegi does not suffice to measure directly the phenomenon of cross-border birth. This article is based on the idea that young Americans are for the most part the children of Mexicans who returned to their country after a stay in the United States.

It is a known fact that young people display characteristics and labor problems that are different from those of adults. Their transition into adulthood goes through their entry into the labor market after school, and those obstacles faced by young people in obtaining their first job and staying in it can lead to situations that affect their working lives in the long term (Meza, 2018). This phenomenon is known as the “scar effect” and is well documented in the literature (Nilsen & Reiso, 2011).

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A number of studies have discussed the problems of integration into the host society faced by migrant children and teenagers (Heckmann, 2008; Lu & Zhou, 2013; Gutiérrez & Giorguli, 2018). Young people of U.S. origin in Mexico must deal not only with the problems of labor insertion that young people face in general, but also with those derived from their status as migrants; for example, problems due to poor command of the language, their verbal expressions, their accent, their customs, among other factors. However, their knowledge of the English language, their years in the U.S. school system, and their experience abroad are likely to put them at an advantage over their Mexican counterparts. Mexican employers may prefer hiring young people of U.S. origin, which would imply favorable treatment for them in the Mexican labor market.

In the case of young Americans living in Mexico, although they are not considered immigrants in the traditional sense of the concept, their integration into the host society still goes through the four stages proposed by Esser (2006): a) “culturation”, that is, the transmission to and acquisition of knowledge, cultural standards, and competencies by an individual necessary for successfully interacting in society; b) “placement”, which refers to an individual’s acquisition and occupation of relevant positions in society; c) “interaction”, which includes social action characterized by mutual orientations of actors and the formations of relations and networks, and d) “identification”, which implies the identification of an actor with a social system by which he sees himself as an element of a collective body.

The goal of this article is to analyze the conditions in which young people born in the United States living in Mexico are integrating into the Mexican labor market, in comparison with their Mexican counterparts of the same age. For this purpose, young people are classified into three age groups: from 15 to 19 years old, from 20 to 24 years old, and from 25 to 29 years old. The variable analyzed is labor income.

The study finds that young Americans have always been paid better than their Mexican counterparts, although this advantage has diminished over time. Given that young Americans have higher levels of education, it is important to ask whether their wage advantage is explained by their observable or unobservable characteristics. To this end, Blinder-Oaxaca type decomposition exercises are included that show that the unobservable characteristics of these young people are the ones that explain to a greater extent their income advantage, this suggesting that they receive preferential treatment by Mexican employers. To account for changes in observable and unobservable characteristics of the different cohorts of U.S. youth, and in order to test the robustness of the cross-sectional results, a time-fixed effects analysis is also included; that is, by means of integrated databases and separate wage regressions for each study group. This analysis allows us to conclude that young Americans are indeed advantaged in the Mexican labor market, and that this advantage has decreased over time, this being consistent with the findings of other studies addressing the labor insertion issues experienced by migrant groups in Mexico (Campos-Vázquez & Lara, 2012; Denier & Masferrer, 2020; Meza & Pederzini, 2020).

## LITERATURE REVIEW

There is little literature that examines the employment of U.S.-born population in Mexico and its economic performance. Related studies have focused on analyzing the characteristics of migration flows from the United States to Mexico and their impacts on the localities that receive them (Schafran & Monkkonen, 2017; Topmiller, Conway, & Gerber, 2011); some have focused on Americans who arrive in Mexico to retire once their working life is over (Lardiés-Bosque, Guillén, & Montes-de-Oca, 2016; Rojas, LeBlanc, & Sunil, 2014), while others examine the school insertion process of children and teenagers born in the United States who arrived in Mexico as a result of the voluntary or forced return of their Mexican parents (Jacobo-Suárez, 2017; Vargas & Camacho, 2015) and the decisions of these young people to emigrate back to their country of origin (Cuecuecha-Mendoza, Lara-Lara, & Vázquez-Vázquez, 2017).

A study that explicitly analyzes the labor insertion of young Americans in Mexico is the one carried out by Meza & Orraca (2020), who, based on census information from 2000 to 2015, focused on the population between the ages of 15 and 29 years. These authors analyze the industries in which young Americans are inserted and the job positions they occupy. In addition, they observed that the salaries received by young Americans have been higher than those obtained by Mexican workers of the same age group. This article is a continuation of this study and differs in that, based on the methodology proposed by Borjas (1985, 1994), it includes an analysis of time-fixed effects, stratified by nationality, aimed at controlling for the characteristics of the different cohorts of young Americans who have sought to enter the Mexican labor market.

Young Americans in Mexico, specifically those who have lived and studied in the United States, face a series of administrative, bureaucratic, pedagogical, and linguistic challenges that hinder their educational insertion in Mexico (Jacobo-Suárez, 2017). Zúñiga & Hamann (2015) have termed “transnational students” those who have transited between the American and Mexican educational systems, regardless of where they were born. Jacobo-Suárez (2017) argues that the lack of identity documents and the education revalidation problems among the immigrant population have prevented transnational students from enrolling in Mexican schools. These hindrances are reflected in the fact that these children and young people commonly have higher risks of absenteeism and falling behind in school grades, although these negative effects are less among transnational students born in the United States than among those born in Mexico (Vargas & Camacho, 2015). In the mid- and long-term, the problems of insertion into the educational system can be reflected in a lower accumulation of human capital, which in turn reduces the income capacity of workers.

Among the individual factors that make it difficult for young people to enter the labor market is their little experience, their lack of knowledge related to job search, and the restrictions on mobility or geographic displacement (Mocanu & Zamfir, 2016). Also, their

high unemployment rates are explained in part because they are in a state of transition, going from school to the labor market and from living with their parents to living independently, which results in frequent incursions and exits from the labor market (Vela, 2007). The structural factors for which they are unable to enter the labor market include the disconnect between the educational offer and the labor requirements demanded by employers. Likewise, there are important differences in the levels of labor participation of young people according to their socioeconomic status, particularly in the case of teenagers, where those from low-income households face greater pressure to begin working at a younger age and thus providing their households with income sufficient to cover personal expenses or continue studying (Orraca, 2014; Pablonia, 2001).

Various studies have addressed the labor insertion of young migrants. Among these, the one by Perreira, Harris, and Lee (2007) focused on the population between 12 and 20 years of age in the United States. The analysis showed that, compared to their native peers, immigrants have lower rates of labor participation during their secondary and high school studies. The authors argue that this is because immigrants and natives are quite different in the socioeconomic characteristics of their families, their social networks, and the opportunities they have in the labor market. The parents of immigrants play an important role in their labor insertion process, where their education and position in the labor market grant them different levels of access to economic and social capital and, therefore, different resources to access higher educational levels and better paid jobs (Behtoui & Olsson, 2014). Froy and Pyne (2011) examined the job performance of ethnic minority groups and young migrants in countries belonging to the Organization for Economic Co-operation and Development; they observed that young people have higher unemployment rates than the adult population and that, among young people, immigrants are more likely to be unemployed. Carrasco and Riesco (2011) analyzed the labor insertion trajectory of young immigrants in Spain; focusing on the range of ages from 16 to 29 years, they observed that Spaniards, compared to immigrants, have lower activity, employment and unemployment rates. In addition, while 38% of immigrants live exclusively on their income, this figure drops to 23% among Spaniards, where they in turn receive income 12% higher than that of immigrants.

The age at which migrants arrive in the country of destination plays an important role in their process of economic and social insertion. Those who arrive at a young age perform very similarly to natives, unlike those who arrive during teenage or as adults (Allensworth, 1997; Behtoui & Olsson, 2014). Also, there are important differences in the performance of migrants according to the length of their stay in the destination country, their levels of human capital, and their demographic characteristics. What is commonly observed is that their performance improves as they assimilate into that market; yet this does not necessarily imply that they reach a level of income or employment comparable to that observed among the native population, wherein a considerable gap can usually be found between these groups (Chiswick, 1978; Borjas, 1994).

Upon arrival in the destination country, the worst performance of migrant workers arises from the incomplete information they have on the local labor market and dynamics, and because of the imperfect transfer of their skills when moving from one country to another. As time passes and they assimilate into the country, migrants invest in acquiring new skills in order to increase their income and improve skill transferability (Chiswick, Lee, & Miller, 2005).

Important differences can be found in the degree of integration of immigrants depending on their country of origin (Grand & Szulkin, 2002; Kee, 1995). Generally, education and work experience acquired abroad is valued less than that obtained domestically, particularly in cases of south-to-north migration (from a developing to a developed country in this case). Domestic and foreign human capital are rarely close substitutes, and valuing them as a homogeneous factor may be misleading (Friedberg, 2000).

In the case of young Americans in Mexico, it is to be expected that they will perform well in the national labor market due to the high educational level they bring with them, their command of the English language, and their knowledge of the country as a consequence of the fact that a significant number of them have Mexican ancestry.

Due to the wide income gap that prevails between Mexico and the United States, it is likely that a significant number of young Americans residing in Mexico will migrate back to the United States at some point in their lives, and so their presence in Mexico will be temporary. Cuecuecha-Mendoza et al. (2017) observe that, indeed, a high percentage of U.S. children and teenagers residing in Mexico return to the United States at some stage of their lives, both for study and work reasons.

Studies that analyze the performance of foreign workers in Mexico but do not explicitly focus on youth include those made on the population from Central America and the Caribbean (Castillo, 1993; Meza, 2015; Meza & Pederzini, 2020), those that investigate immigrants from southern Europe, particularly Spain and Italy (Rodríguez-Fariñas, Romero-Valiente, & Hidalgo-Capitán, 2016; Mendoza, 2018; Ortiz, Oliveras, & Mendoza, 2019), and those that investigate workers from South America, specifically Argentina and Venezuela (Gandini, 2015; Gandini, Lozano, & Alfaro, 2019).

From the literature that examines the labor insertion of migrant populations in Mexico, several works have focused on return migrants from the United States. Campos-Vázquez and Lara (2012), based on census data from 1990 to 2010, analyzed the wages that return migrants would obtain if they had never emigrated abroad. The study evidenced the existence of a wage premium linked to returning, where the wage that returnees obtain upon returning is greater than what they would have obtained had they never emigrated. It is argued that this occurs because during their stay outside of Mexico, migrants increase their level of human capital or accumulate savings that they then invest in productive activities upon their return; however, the results vary significantly for each period. In 1990, the selection of migrants in terms of wage was slightly positive; in 2000 it remained

positive, but only in the case of women; in 2010, the selection was negative. Making use of census information from 2000 to 2015, Denier and Masferrer (2020) observed that the relative income of recent cohorts of return migrants was lower than that of previous cohorts. This suggests that the economic performance of returnees worsened in recent years. On the one hand, this is partially explained by changes in the observable characteristics of return migrants, as they are returning to the country with increasingly lower levels of education and increasingly inserting themselves in the informal sector and in low-skilled occupations (Gutiérrez, 2019). On the other hand, conditions in the Mexican labor market have changed substantially in recent decades, suggesting that both supply and demand factors are to account for these results.

Now, wage differentials between Mexicans and Americans have been studied in the past, mainly within the context of migration to the United States. In this literature, the concept of self-selection of migrant groups has been emphasized, that is, it is analyzed whether migrants come to a greater extent from less favored strata of the population, whose motivation is primarily to seek a better standard of living for them and their families away from the labor market that denies them opportunities, or if the migrants come from more favored groups, who take advantage of their situation to finance the costs associated with migration. In the first case, we speak of “negative selection” of migrants, and in the second of a “positive selection” (Borjas, 1985, 1994; Chiswick, 1978; Chiswick, Lee, & Miller, 2005).

Indeed, like many other labor issues, migration is the result of an individual decision that implies that migrants self-select from their population.<sup>4</sup> It is, however, unclear whether migrants self-select as such when they come from the lowest percentiles of labor income distributions in the country of origin, or self-select as such when they come from the highest percentiles. In this context, labor income is assumed to be the result of a person’s skills, abilities and knowledge when inserted in a labor market. It is also important to understand how the wage distribution of the country of origin compares with the distribution of labor income in the country of destination, since the motivations for migration change based on this cross-check (Borjas, 1994).

The matter of self-selection of Mexican migrants has been studied so as to understand from which part of the income distribution the population that migrates to the United States comes from. On the one hand, Chiquiar & Hanson (2005), using data from the population censuses of Mexico and the United States of the years 1990 and 2000, find that Mexican migrants who travel to the neighboring country to the north are more educated than non-migrants, and that they also come from the middle and upper part of the wage distributions in Mexico, this having been perceived as evidence of their positive selection. On the other hand, Lacuesta (2010), based on census data from Mexico for the year 2000, analyzed the

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<sup>4</sup> Other labor decisions that generate self-selection are the choice of participating in the labor market (mainly in the case of women), joining a union, or entering the informal sector, among others.

observable characteristics of Mexican migrants who returned from the United States to Mexico, coming to estimations of the salaries they would earn in Mexico had they not migrated. The author also analyzed data from the U.S. population census of the same year to estimate the distribution of salaries received by Mexicans in that country; the goal was to control for the unobservable characteristics that motivate migration to the neighboring country to the north. This study, like the one by Chiquiar and Hanson (2005), found migrants to be positively selected.

Yet the hypothesis of positive or negative selection has not only been tested with wage data of the countries of origin of the migrants. There is a large number of empirical articles that have made use of wage information from the destination country or region to test the hypothesis of positive or negative selection of migrants. The idea behind these studies is that migrants who positively self-select from their populations of origin perform outstandingly in the labor market of the receiving country, this leading them to obtain higher salaries than their native counterparts with the same observable characteristics. Likewise, migrants who negatively self-select never catch up with their native counterparts in terms of wage. Chiswick's (1978) pioneering work found that migrants to the United States outperform their native-born counterparts with similar observable characteristics over time, which is considered evidence of their positive selection. Borjas (2015) returned to the topic of positive selection and analyzed different cohorts to study the growth rate of salaries in the United States. The study evidenced that the assimilation rate of migrants in said country, that is, the rate at which their wage grows and approaches that of native workers with similar observable characteristics, decreased over time, which is considered evidence of their increasingly negative selection.

Now, this article analyzes the labor results in Mexico, specifically the income, of a migrant group from the United States that has chosen Mexico as destination country. Reflections on their selection process are included in the discussion of the results and in the closing remarks.

## DATA, METHODOLOGY, AND DESCRIPTIVE STATISTICS

This section describes the data relied on for the estimates in this article, as well as the methodology employed, and some descriptive, socio-demographic and labor statistics of the populations analyzed.

At first, the U.S. population in Mexico and its evolution in absolute and relative terms with respect to its Mexican counterpart are dimensioned. Table 1 shows that between 2000 and 2015 this population grew 106.3%, going from 358 399 to 739 362 people. In relative terms, Americans went from representing 0.4% of the Mexican population in 2000 to constituting 0.6% in 2015. In the case of young people between 15 and 29 years old, the size of this group increased 175.5% during the studied period, going from 55 672 to 153 362. In addition, their relative importance also increased, since in 2000 they

represented 0.2% of all young people in Mexico, a figure that rose to 0.5% in 2015. Regarding the rest of the U.S. population of working age (between 30 and 65 years) in Mexico, this population grew 81.6% between 2000 and 2015, going from 38 077 to 69 130 people. Likewise, its importance with respect to the Mexican population remained relatively consistent. The foregoing shows that, among the U.S. population in Mexico, those who have shown the highest levels of growth in recent years are young people. Finally, in the case of those born in Mexico, the relative size of young people between the ages from 15 and 29 years with respect to the total population has decreased in recent decades; while in 2000 this age group represented 28.4% of the Mexican population, in 2015 this figure fell to 25.7%.

Table 1. U.S. population in Mexico by age groups, 2000, 2010, 2015

Age groups	2000	2010	2015
Total Americans	358 399 (0.37)	739 918 (0.66)	739 362 (0.62)
Young Americans	55 672 (0.2)	131 641 (0.44)	153 362 (0.5)
15-19 years	26 354 (0.26)	75 453 (0.68)	79 670 (0.74)
20-24 years	18 079 (0.2)	35 573 (0.36)	50 094 (0.47)
25-29 years	11 239 (0.14)	20 615 (0.24)	23 598 (0.26)
Rest of Americans	38 077 (0.12)	69 334 (0.16)	69 130 (0.14)
30-49 years	24 089 (0.11)	45 242 (0.15)	46 456 (0.14)
50-65 years	13 988 (0.16)	24 092 (0.18)	22 674 (0.14)

Note: The group Rest of Americans is made up of people between 30 and 65 years of age. Figures in parentheses stand for the size of the U.S. population in Mexico relative to the Mexican-born population of the same age group.

Source: Own estimates based on data from the 2000 and 2010 General Population and Housing Census, and the 2015 Intercensal Survey (Inegi, 2000, 2010, 2015).

### Data

First, the 2015 Intercensal Survey was collected with the purpose of updating the sociodemographic information of the population residing in Mexico, precisely in the year midway between the censuses carried out in 2010 and 2020. The sample in this survey covers 6.1 million households. The study excludes, in all years, individuals who live in Mexico and work in the United States. According to the 2015 EIC (Encuesta Intercensal, the Intercensal Survey), only in the municipalities located along the northern border there are approximately 86 600 people between the ages of 18 and 65 years who work in the United States. Orraca (2019) estimates that this population has an income 121.7% higher than that received by their peers who live and work in Mexico.

Second, data from the population and housing censuses (Inegi, 2010, 2000) was consulted. To analyze the 2010 data, a census sample including around 2.9 million homes in the country was taken. In addition to the basic questionnaire questions, the respondents included in the 2010 census sample were also applied the extended questionnaire, which includes questions on labor insertion. Unfortunately, it was not possible to make use of all the data from the 2010 census, since the labor information was only captured through the expanded questionnaire, and this was only applied to the census sample.

When it comes to the 2000 census, the basic questionnaire included questions on the labor insertion performance of the respondents; however, to exclude those young people who worked in the United States, the census sample containing information on approximately 2.2 million households was used.<sup>5</sup> Expansion factors were accounted for in all calculations. The three samples used are representative at the national, state, and municipal levels, also accounting for localities with more than 50 000 inhabitants. Although none is representative of the foreign population, in all cases there are enough observations for estimations to be made. The results, however, should be taken with a certain degree of caution.

The databases on which the econometric estimates were based only include people between the ages of 15 and 29 years. Since the estimates make use of data on employed persons, and not only wage earners, the dependent variable in the income equations is labor income. To simplify the nomenclature, here we refer to labor income as wage.

### *Methodology*

In order to understand how the labor insertion of young people of American origin in Mexico has evolved over time, this article shows a cross-sectional analysis for each of the years for which data is available. For the cross-sectional analysis, the Mincer equations similar to those proposed by Chiswick (1978) are estimated first. The base model, estimated by the method of ordinary least squares (OLS), is the following:

$$\log w_i = X_i \Theta + \delta A_i + \lambda A_i^2 + \gamma_0 I_i + \varepsilon_i \dots \dots \dots (1)$$

wherein  $w_i$  is the labor income or wage of worker  $i$ ;  $X_i$  is a socio-demographic vector that includes educational level (continuous variable), attendance or non-attendance to school (dichotomous variable), whether or not the individual comes from the traditional region of migration in Mexico (dichotomous variable),<sup>6</sup> being head of the household (dichotomous variable), sex (dichotomous variable), whether or not they lived in the United States five years before the survey (dichotomous variable) and the region where they lived, defined

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<sup>5</sup> The extended questionnaire, which is only applied to the census sample, is the one that includes the question about the country where each of the people in the sample works.

<sup>6</sup> The states considered as belonging to the traditional migrant expelling region in Mexico are Jalisco, Guanajuato, Michoacán and Zacatecas.

through the marginalization index (categorical variable);<sup>7</sup> in the case of women, the estimates also include the number of children they have as a regressor (continuous variable);  $A_i$  represents the worker's age (continuous variable) and approximates their potential work experience;  $I_i$  is a dichotomous variable indicating whether the worker is of U.S. origin or not, and  $\varepsilon_i$  is a stochastic error.

This model includes a second order polynomial in the age variable, thus allowing for a quadratic relationship with wage. For the year 2015, the model is estimated with monthly labor income, since the questionnaire did not include the question of hours worked, but for the years 2000 and 2010 the dependent variable is labor income per hour. In this case, the coefficient  $\gamma_0$  represents the percentage wage differential between young Mexican workers and young people of U.S. origin. The regressions described were calculated for the entire young employed population, as well as for women and men separately. In addition, estimates were made by breaking down the U.S. youth population into three age groups: 15-19, 20-24, and 25-29 years.

To understand the reasons behind the wage differentials estimated with the Mincer equations, Blinder-Oaxaca type wage decomposition exercises (Blinder, 1973; Oaxaca, 1973) were carried out for each of the years analyzed. This procedure separates the wage differential in two groups of workers: the first is the endowment effect or "explained component", which refers to the observable characteristics of the workers, such as education, age or work experience; the second is the coefficient effect or the "unexplained component", in which the coefficients assigned to each of these characteristics are presented.

This decomposition process starts from estimating a wage differential between two groups, as shown in the following equation:

$$\ln Y_n - \ln Y_i = (\bar{X}_n - \bar{X}_i)' \hat{\beta}_n + \bar{X}_i' (\hat{\beta}_n - \hat{\beta}_i) \dots \dots \dots (2)$$

wherein, by means of an OLS estimate, calculations are performed of the effects on the inequality of the wage logarithm ( $\ln Y_n - \ln Y_i$ ) (subscripts  $n$  and  $i$  stand for native and immigrant workers, respectively), of the differences in personal attributes ( $(\bar{X}_n - \bar{X}_i)' \hat{\beta}_n$ ) (reflecting average productivity inequality between groups of workers), and of an unexplained proportion ( $\bar{X}_i' (\hat{\beta}_n - \hat{\beta}_i)$ ) corresponding to differences in the coefficients, which according to the authors, can be interpreted as a general measure of discrimination.

If the part of the differential attributed to differences in unobservable coefficients and characteristics (that is, the unexplained part) turns out to be negative, it means that if the supposedly disadvantaged group were paid the same as the other group for their observable

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<sup>7</sup> The regions of residence are grouped according to their degree of marginalization, which is calculated by the National Population Council (Consejo Nacional de Población) with census data and from the 2015 EIC. This variable is key in the estimation, since we assume that the labor insertion in Mexico of young people of U.S. origin is different for different regions.

characteristics, the former would receive lower wages, which implies that they receive preferential treatment from employers.

To control for what happens to labor income over time, estimates were made by integrating the databases of the three years analyzed. This estimate, which we term “time-fixed effects,” is deemed the most appropriate because, although it does not control for the unobserved heterogeneity of each one of the individuals, it does allow for changes in the characteristics of the different migrant cohorts to be taken into account. This last estimate is made by stratifying by nationality, sex, and age, which makes it possible to compare coefficients between the groups of young people of U.S. origin and those of Mexican origin.<sup>8</sup> Borjas (1985) calls this estimate “longitudinal”, although it clearly does not follow the same individuals over time, nor is it controlled by birth and death factors.

In migration studies, the use of panel data is deemed optimal, since it is argued that the unobservable characteristics that determine the labor results of migrants are the same that define their migratory quality. Also, Borjas’ (1985) critique of Chiswick’s (1978) estimates makes it possible to state that cross-sectional results are easy to misread, since where there seems to be a differential in favor of the migrant group, it is likely that it is merely a cohort effect (Borjas, 1985). It can be stated that the estimation with integrated data is carried out for two main reasons: first, to test the robustness of the cross-sectional results; and second, to avoid misinterpretation issues of wage differentials involved in making cross-sectional estimates. This last estimate also includes demand controls, by adding the economic sector in which each worker is inserted to the independent variables. This way, by means of integrated bases, the following wage models were estimated from real monthly income data:

$$\log w_{ij} = X_j \theta_i + \delta_i A_j + \gamma_i \Pi_j + \varepsilon_{ij} \dots \dots \dots (3)$$

$$\log w_{nl} = X_l \theta_n + \delta_n A_l + \gamma_n \Pi_l + \varepsilon_{nl} \dots \dots \dots (4)$$

wherein  $w_{ij}$  is the monthly labor income or wage of migrant  $j$ ;  $w_{nl}$  is the monthly labor income or wage of native worker  $l$ ;  $X$  is a vector of standard socio-demographic characteristics, which in addition to the regions of residence of the individuals, includes the productive sectors in which the workers are inserted;<sup>9</sup>  $A$  represents the worker’s age at the time of each survey or census; and  $\Pi$  is a dichotomous variable indicating from which database each observation was obtained (year-fixed effects). The coefficients for each of the independent variables are compared in the regressions of native and immigrant workers.

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<sup>8</sup> In order to simplify our analysis, the group of young Mexicans is only stratified by nationality and age.

<sup>9</sup> The sectors analyzed are the primary, industry, services and trade ones. The inclusion of the productive sectors in which each of the workers that make up the sample is inserted is considered essential, given the differentiated patterns of insertion by sector shown by descriptive statistics. The inclusion of these sectors in the time-fixed effects regressions is considered a key component of the demand controls.

### *Descriptive Statistics*

Descriptive statistics in this section refer to 2015 data only. Table 2 shows that American youth average at age 19.5 years, while the average for Mexican youth it is slightly higher, at 21.7 years. The level of schooling is very similar between both populations, although it is higher among young Americans. The proportion of women is also higher among young Americans when compared to Mexicans.

Table 2. Descriptive socio-demographic statistics by age group and sex, 2015

	Young Mexicans	Young Americans	Rest of the population in Mexico
<b>ALL</b>			
Age	21.72	19.51	44.13
Years of schooling	10.37	10.82	9.17
Woman (%)	50.91	54.15	52.83
Head of household (%)	12.08	8.86	48.24
Head of household's child (%)	58.65	62.63	11.61
Head of household's couple (%)	12.32	10.75	32.87
Recent (%)	0.38	15.10	0.82
<b>MEN</b>			
Age	21.63	19.35	44.10
Years of schooling	10.26	10.70	9.41
Head of household (%)	18.94	13.90	73.99
Head of household's child (%)	63.93	67.72	12.15
Head of household's couple (%)	1.70	1.69	7.06
Recent (%)	0.51	14.03	1.13
<b>WOMEN</b>			
Age	21.80	19.65	44.16
Years of schooling	10.48	10.92	8.95
Head of household (%)	5.45	4.35	25.20
Head of household's child (%)	53.56	58.08	11.13
Head of household's couple (%)	22.57	9.32	55.95
Recent (%)	0.25	16.01	0.54

Note: The group "Rest of the population in Mexico" is made up of people between the ages of 30 and 65 years.

Source: Own estimates based on data from the 2015 Intercensal Survey (Inegi, 2015).

According to the figures in Table 2, over 15% of young Americans arrived in Mexico between 2010 and 2015, since the "recent" variable accounts for the population that still lived in the United States five years prior to the conduction of the survey. Another fact of interest is that young women, both Mexican and American, hold slightly higher levels of

education than men. Additionally, men are more likely to be heads of household and women are more likely to be daughters and couples of the head of household; however, it is worth noting that young Americans of both sexes are less likely to be heads of households than Mexicans, which suggests that a greater proportion of them are economic dependents and not the main economic support of their households. As a whole, the above reflects that American youth in Mexico differ from their Mexican counterparts in terms of their observable characteristics, meaning that they may also differ from them in terms of their unobservable characteristics.

Table 3 shows key labor data for young Mexicans and Americans and, for comparison purposes, for the rest of the population in Mexico.

Table 3. Labor descriptive statistics, 2015

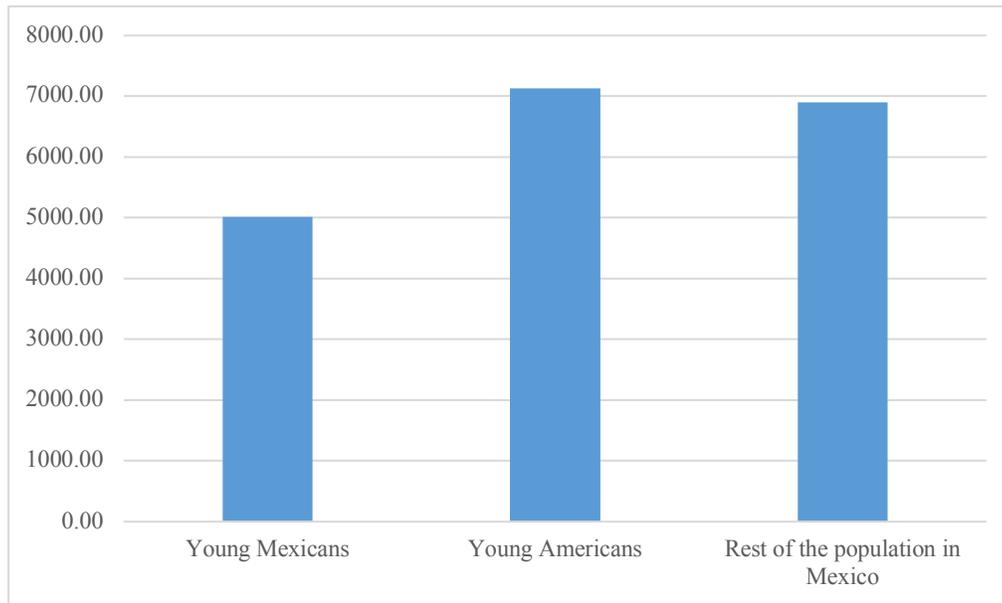
	Young Mexicans	Young Americans	Rest of the population in Mexico
ALL			
Monthly income	5 018.11	7 126.46	6 894.83
Primary sector (%)	10.73	8.25	10.27
Industry sector (%)	28.35	20.20	24.22
Services sector (%)	37.07	47.00	41.98
Trade sector (%)	20.16	22.67	17.77
MEN			
Monthly income	5 110.28	6 900.08	7 363.47
Primary sector (%)	14.99	12.24	14.85
Industry sector (%)	33.41	24.83	29.44
Services sector (%)	30.59	40.58	34.44
Trade sector (%)	17.45	20.83	15.49
WOMEN			
Monthly income	4 845.24	7 486.08	6 063.66
Primary sector (%)	2.69	1.90	2.06
Industry sector (%)	18.79	12.85	14.89
Services sector (%)	49.32	57.21	55.48
Trade sector (%)	25.28	25.60	21.86

Note: The group “Rest of the population in Mexico” is made up of people between the ages from 30 and 65 years.

Source: Own estimates based on data from the 2015 Intercensal Survey (Inegi, 2015).

Graph 1 shows the labor income of the analyzed populations, while Graph 2 shows the percentages of workers in four sectors: primary, industry, services and trade.

Graph 1. Monthly income, 2015



Note: The group Rest of Americans is made up of people between the ages of 30 and 65 years.

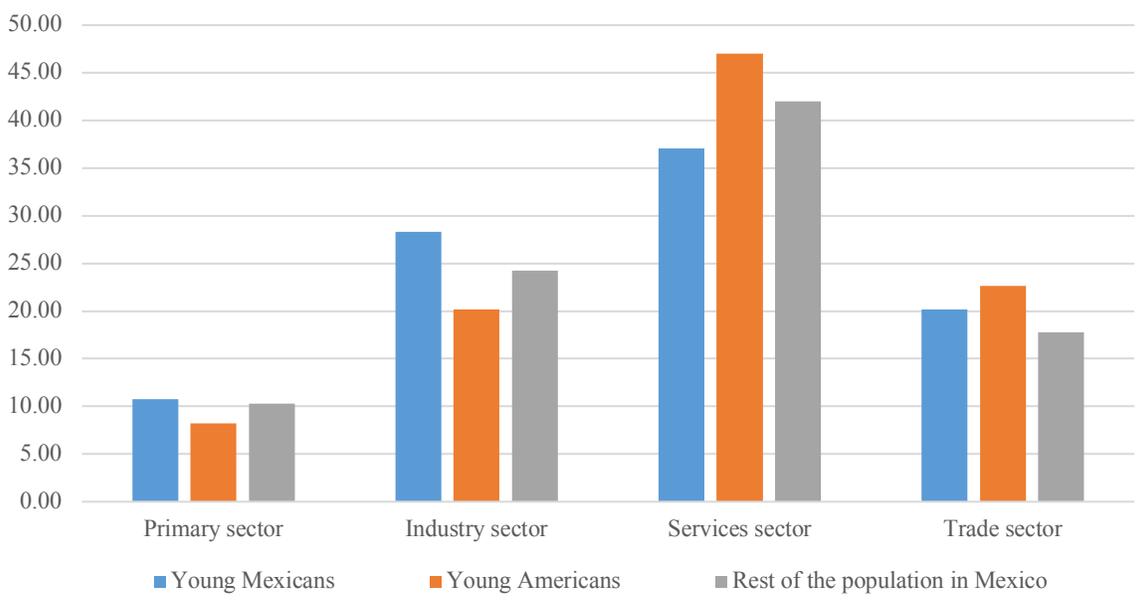
Source: Own estimates based on data from the 2015 Intercensal Survey (Inegi, 2015).

Graph 1 shows that the monthly labor income of the young Americans sample is higher than the income of young Mexicans, and then the income of the rest of the population in Mexico. Specifically, in 2015, the monthly labor income of young Americans was 42% higher than that of their Mexican counterparts, and 3.4% higher than the rest of the country's population. This income difference is significantly greater than the difference in education or age, so it is difficult to explain it by a difference in human capital investment.<sup>10</sup> Graph 2, for its part, shows that young Americans are inserted in a lower proportion than Mexicans in both the agricultural sector (8.3% against 10.7%) and the industrial sector (20.2% against 28.4%), while they are inserted in higher proportion in the services (47.0% against 37.1%) and trade (22.7% against 20.2%) sectors.

One question that arises is where are the young Americans located within the Mexican territory? Graph 3 presents the percentages of young Americans with respect to the total population by state. The state with the highest percentage of young people from the United States is Baja California, followed by Chihuahua, Colima, Sonora and Tamaulipas. This shows that the relative importance of this group is generally greater in the entities of the northern Mexican border.

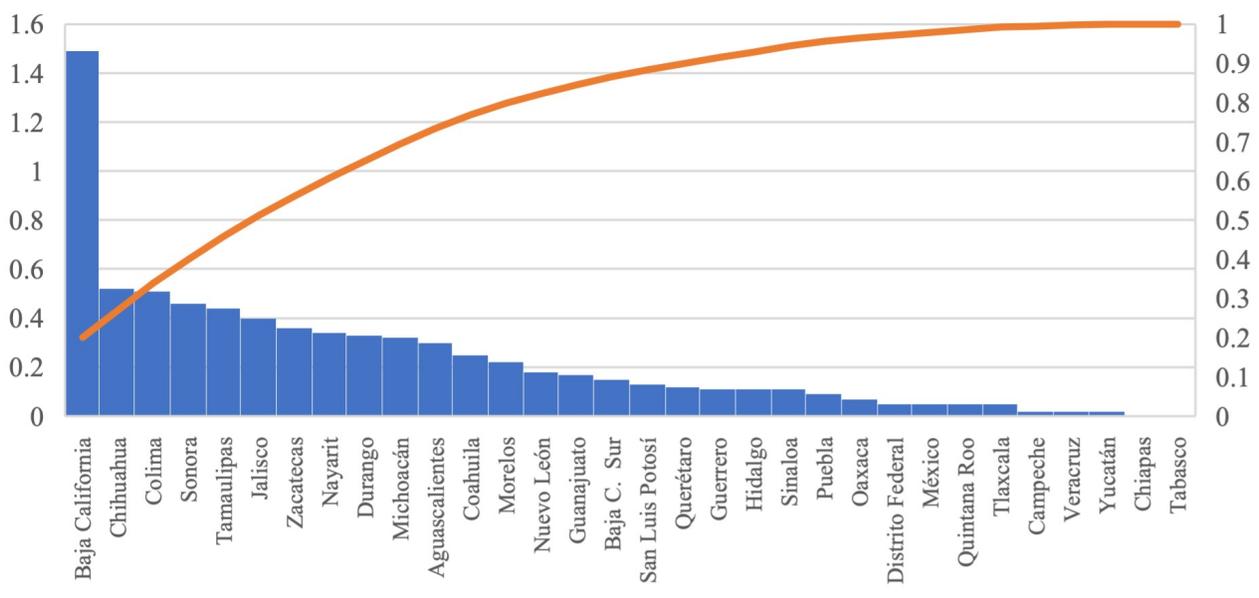
<sup>10</sup> This also reflects differences in the returns to education or human capital, according to whether they were acquired in Mexico or in the United States; however, the censuses do not allow a breakdown of what part of their human capital was obtained in Mexico and what part in the United States.

Graph 2. Percentage of workers by sector and by population group, 2015



Note: The group Rest of Americans is made up of people between the ages of 30 and 65.  
 Source: Own estimates based on data from the 2015 Intercensal Survey (Inegi, 2015).

Graph 3. Percentage of young Americans compared to the total population, 2015



Note: The orange line represents the cumulative percentage of the U.S. population with respect to the total population by state.  
 Source: Own estimates based on data from the 2015 Intercensal Survey (Inegi, 2015).

## RESULTS

### *Wage Differentials*

Table 4 shows the results of the wage equations estimations, and in particular, the coefficients of the dichotomous variable that denotes that the observation is a person of U.S. origin who falls within a specific age range. In this case, they are young Americans between the ages of 15 and 29 years.

Table 4. Wage differentials between Mexican and American youth by age group and sex, 2000-2010-2015

	2000		2010		2015	
ALL						
Young Americans	0.3580	***	0.2590	***	0.0824	***
15 to 19 years	0.1330	***	0.0512	***	-0.0470	***
20 to 24 years	0.3430	***	0.2910	***	0.0504	***
25 to 29 years	0.6380	***	0.4830	***	0.2720	***
MEN						
Young Americans	0.3810	***	0.3090	***	0.0808	***
15 to 19 years	0.1060	***	0.1140	***	-0.0752	***
20 to 24 years	0.3840	***	0.3090	***	0.0376	***
25 to 29 years	0.6750	***	0.5880	***	0.3350	***
WOMEN						
Young Americans	0.3150	***	0.1920	***	0.0831	***
15 to 19 years	0.1580	***	-0.0622	***	0.0106	
20 to 24 years	0.2840	***	0.3310	***	0.0647	***
25 to 29 years	0.5690	***	0.3160	***	0.1790	***

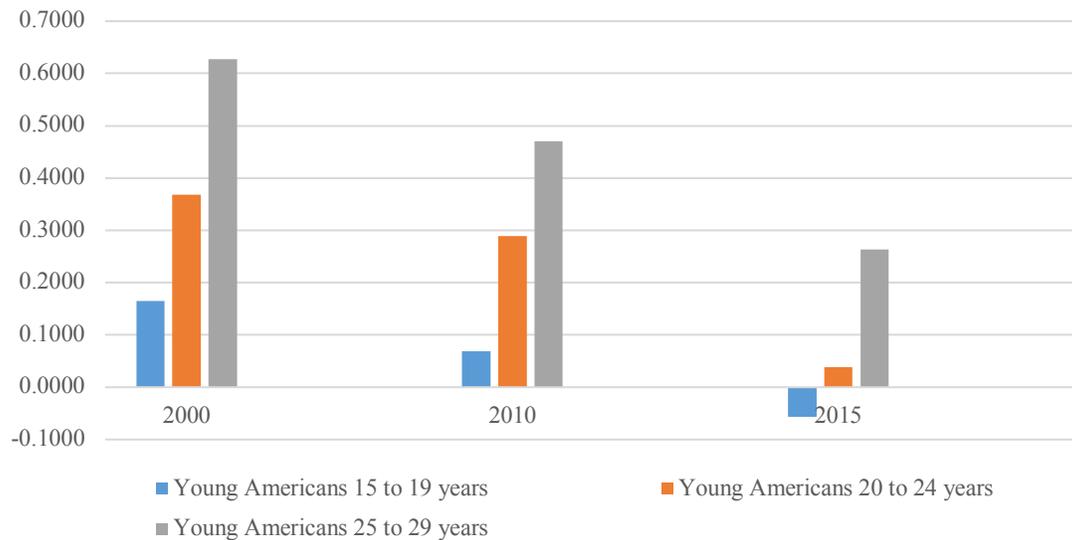
\*\*\* p<0.01

Note: Control variables include age, age squared, education, position in the household, region, recent arrival in Mexico, school attendance, and traditional region of expulsion.

Source: Own estimates based on data from the 2000 General Population and Housing Census, the 2010 Population and Housing Census, and the 2015 Intercensal Survey (Inegi, 2000, 2010, 2015).

It is particularly noteworthy that almost all the coefficients of interest were positive and highly significant ( $p < 0.01$ ), except for that of young women aged 15 to 19 years in 2015; those that are negative and significant are those of males aged 15 to 19 years in 2015 and females aged 15 to 19 years in 2010. This suggests that throughout the first 15 years of the 21st century, young Americans almost always received wages higher than those of their Mexican counterparts, even after controlling for their observable characteristics. Likewise, the differentials in the group of men are greater than the differentials in the group of women, although there are some exceptions. Graph 4 shows these wage differentials per year for young people classified by age group of both sexes.

Graph 4. Wage differentials between Mexican and American youth, 2000-2010-2015



Source: Own estimates based on data from the 2000 General Population and Housing Census, the 2010 Population and Housing Census, and the 2015 Intercensal Survey (Inegi, 2000, 2010, 2015).

It should be noted how the differentials decrease over time for all three age groups. It is likely that the gap in formal education between Mexican and American youth has closed due to the number of schooling years of the Mexican population. As for the other independent variables, they are not discussed in depth due to lack of space; however, it is worth mentioning that school attendance is associated with a lower salary, at least in 2015. Also, coming from the traditional migrant expelling region of Mexico is associated with a positive and significant wage premium, while recent arrival to Mexico from the United States is also associated with a positive and significant wage premium.

#### *Blinder-Oaxaca Decompositions*

Faced with a scenario of wage differentials that favor young people of American origin in Mexico, it is worth asking whether these differentials can be explained by the higher educational levels of these young people or if they are rather the result of favorable treatment by Mexican employers due to unobservable characteristics, such as their education received in the United States, their command of the English language, and others that are not taken into account in the databases used for this study. The decomposition exercises were done for men and women separately, taking into account the three years of

the analysis.<sup>11</sup> Table 5 shows the results of the decomposition exercise for the year 2000, Table 6 for the year 2010, and Table 7 for the year 2015.

Table 5. Blinder-Oaxaca decompositions Logarithm  
 of hourly wages, 2000

	Young Americans		Young American men		Young American women	
Group 1 prediction	3.7162	***	3.7040	***	3.7398	***
Group 2 prediction	4.4865	***	4.5219	***	4.4226	***
Differential	-0.7702	***	-0.8179	***	-0.6828	***
Endowments	-0.1025	***	-0.1097	***	-0.1113	***
Coefficients	-0.6487	***	-0.7032	***	-0.5487	***
Interaction	-0.0190	***	-0.0049		-0.0227	***
Explained	-0.1215	***	-0.1146	***	-0.1340	***
Unexplained	-0.6487	***	-0.7032	***	-0.5487	***
Explained (%)	15.7751		14.0115		19.6251	
Unexplained (%)	84.2249		85.9763		80.3603	

Source: Own estimates based on data from the 2000 General Population and Housing Census (Inegi, 2000).

Once again, the decomposition exercises show that, during the three years of the analysis, young Americans received significantly higher wages than their Mexican counterparts. It should be noted that wage differentials in all cases are negative. As an example, in 2000, the wage per hour logarithm average for young Americans was 4.48, while the wage per hour logarithm average for young Mexicans was 3.71, resulting in -0.77 differential in favor of young Americans. In the year 2000, 84.2% of this differential was explained by the unobservable characteristics of young people. This proportion increased to 98.2% in 2010 and to 108.3% in 2015. The unexplained part of wages is consistently higher in the case of men than in the case of women. It should also be noted that the fact that the unexplained part of the wage differential is negative in all cases implies that if American youth received the same pay as Mexican youth for their observable characteristics, then they would receive lower earnings. This means that, during the first fifteen years of this century, American youth have received preferential treatment when compared to Mexican youth.

<sup>11</sup> Blinder-Oaxaca type decompositions produce arbitrary results when calculating the effects of the coefficients of a group of categorical or dichotomous variables, where the estimated sum of this effect varies depending on the choice of reference groups. Intuitively, this can be solved by averaging the effect of the coefficients for different permutations of the reference groups (Yun, 2008). This is particularly problematic in cases where detailed decompositions are carried out or when one is interested in analyzing the individual contribution of a variable or a set of dichotomous or categorical variables, an analysis that is not carried out in this study.

Table 6. Blinder-Oaxaca decompositions Logarithm of hourly wages, 2010

	Young Americans		Young American men		Young American women	
Group 1 prediction	2.9835	***	2.9709	***	3.0062	***
Group 2 prediction	3.3073	***	3.3409	***	3.2514	***
Differential	-0.3237	***	-0.3700	***	-0.2452	***
Endowments	0.0894	***	0.0917	***	0.0698	***
Coefficients	-0.3179	***	-0.3728	***	-0.2244	***
Interaction	-0.0953	***	-0.0889	***	-0.0905	***
Explained	-0.0059	***	0.0028	***	-0.0207	***
Unexplained	-0.3179	***	-0.3728	***	-0.2244	***
Explained (%)	1.8227		-0.7568		8.4421	
Unexplained (%)	98.2082		100.7568		91.5171	

\*\*\* p&lt;0.01

Source: Own estimates based on data from the 2010 Population and Housing Census (Inegi, 2010).

Table 7. Blinder-Oaxaca decompositions Logarithm of monthly wages, 2015

	Young Americans		Young American men		Young American women	
Group 1 prediction	8.3326	***	8.3702	***	8.2635	***
Group 2 prediction	8.4515	***	8.4799	***	8.4074	***
Differential	-0.1188	***	-0.1096	***	-0.1438	***
Endowments	0.0522	***	0.0653	***	0.0245	***
Coefficients	-0.1287	***	-0.1267	***	-0.1395	***
Interaction	-0.0422	***	-0.0482	***	-0.0288	***
Explained	0.0100	***	0.0171	***	-0.0043	***
Unexplained	-0.1287	***	-0.1267	***	-0.1395	***
Explained (%)	-8.4175		-15.6022		2.9903	
Unexplained (%)	108.3333		115.6022		97.0097	

\*\*\* p&lt;0.01

Source: Own estimates based on data from the 2015 Intercensal Survey (Inegi, 2015).

*Estimation of Time-Fixed Effects*

Table 8 shows the results of the wage regressions estimated by means of data from the three integrated databases; that is, including the observations for the years 2000, 2010 and 2015 in a single base. In this case, the dependent variable is the monthly labor income of the

workers and not the hourly income. This change is due to the fact that the 2015 EIC does not include the hours worked variable.

This estimate allows taking into account the changes in the observable and unobservable characteristics of the different cohorts of migrants who have arrived in the country over the years. In addition, this estimate is stratified by nationality, so that it is possible to compare the regression coefficients for Americans with the regression coefficients for Mexicans. It also includes demand controls, leading us to conclude that this is the most appropriate estimate to analyze the conditions in which young people of U.S. origin are entering the Mexican labor market, and to compare them with the working conditions of Mexican youth.

A first result that is worth noting is that work experience (or older age) is only rewarded in the case of young Mexicans, and not in the case of young Americans (the age coefficient is not significant for young Americans ages 15 to 19 years, and is 0.038 for youth of the same age of Mexican origin). Likewise, the age coefficient is not significant for young Americans between the ages of 20 and 24 years, and is 0.058 for young people of the same age of Mexican origin. In the case of young people between 25 and 29 years, the age coefficient for Americans is not significant and that for Mexicans is 0.134, which implies that, in this case, the premium for age is higher for Mexicans. It is likely that employers prefer hiring older Mexican youth over younger Mexican youth who should still be in the school system, but this preference is not apparent when it comes to American youth. Note, however, that the premium for schooling is higher for young Americans, except for the 15 to 19 years age group. In the case of young Americans between the ages of 20 and 24 years, the schooling coefficient is 0.064, and that of Mexicans of the same age is 0.053; for older youth, the schooling coefficient of Americans is 0.107 and that of Mexicans is 0.084. This suggests that, for Mexican employers, years in the U.S. school system is a relevant variable when hiring workers. Also, the recent arrival in Mexico is always rewarded in the Mexican labor market, both in the case of Americans and in the case of nationals, which supports the hypothesis that the years in the American school system are highly appreciated by Mexican employers<sup>12</sup> (the coefficient of recent arrival in Mexico is always positive and significant). It was also observed that American youth receive a higher premium than Mexicans for being heads of household (for example, in the case of older youth, the coefficient of the variable that denotes head of household is of 0.142 in the case Americans and 0.131 in the case of Mexican youth). In the labor literature, it is argued that people who hold family responsibilities display greater commitment to work. Schooling in the United States, coupled with family responsibilities, is likely to be especially attractive to Mexican employers.

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<sup>12</sup> Although databases make it impossible to know explicitly whether the education was received in Mexico or in the United States, it is still possible to deduce that young Americans who recently arrived in Mexico completed part of their education in their country of birth.

Table 8 also shows that the wage penalty for women is higher in the case of young Mexicans, except for the age group between 25 and 29 years. For example, the coefficient of the female variable is -0.121 in the case of young Americans between the ages of 20 and 24 years, and -0.281 in the case of young Mexicans in the same age group. This implies that the Mexican productive sector treats men and women of U.S. origin more equally than people of Mexican origin. Altogether, it is noteworthy that young Mexicans earn less than young Americans when they enter the agricultural sector, while young Mexicans earn more than young Americans when they enter the services sector (the services sector coefficient is equal to 0.098 in the case of American youth between 20 and 24 years, and equal to 0.225 in the case of Mexican youth of the same age). This is most likely the result of the higher educational levels of young Americans, although it is not clear why they receive a lower salary premium when compared to young Mexicans when they enter the services sector. One explanation may be their occupational segregation in this sector, which was shown in Table 3 and Graph 2.

The analysis of time-fixed effects confirms that for young Americans in all three age groups, and for both women and men, the preferential treatment they receive in the Mexican labor market has decreased over time. In this sense, the coefficients for the year 2010 are always positive and significant, except in the case of U.S. women aged 15 to 19 years, which implies that almost all the groups analyzed had higher labor income in 2010 than in the omitted year, which is 2015. It should be highlighted that both the cross-sectional estimates and the analysis of time-fixed effects confirm that wage differentials favor young people of U.S. origin, which could be associated with a positive selection; however, there are several arguments to rule out the positive selection hypothesis. First, Americans show higher educational levels, which implies that their higher income is associated with their higher human capital. Also, since young Americans can move freely in Mexico, it is likely that their residence will be established in those places where they obtain higher labor income. Due to all this, and given that an analysis of the entire income distribution has not been carried out, the hypothesis of the positive selection of this migrant population cannot be confirmed. However, it is important to mention that the decision to stay in Mexico is certainly not random, and so a self-selection correction in the estimation of time-fixed effects would substantially improve the results. This is being worked on for future research.

Finally, it can be stated that the reduction in the wage premium for young Americans over time may be due to the fact that young Mexicans are reaching higher school levels, and perhaps also due to the fact that the national labor market is increasingly accustomed to the presence of the U.S. children of Mexican returnees.

Table 8. Wage regressions with integrated bases, by age groups and nationality

Independent variables	15-19 years				20-24 years				25-29 years			
	U.S. men	U.S. women	U.S. both sexes	Young Mexicans	U.S. men	U.S. women	U.S. both sexes	Young Mexicans	U.S. men	U.S. women	U.S. both sexes	Young Mexicans
Age	0.3823 (1.14)	0.0269 (0.06)	0.3210 (1.16)	0.0383*** (22.68)	0.6459 (1.31)	-0.4144 (-0.69)	0.2432 (0.63)	0.0583*** (4.32)	0.1908 (0.23)	-0.3498 (-0.31)	-0.0042 (-0.01)	0.1346*** (7.42)
Age squared	-0.0075 (-0.73)	0.0032 (0.22)	0.0047 (-0.58)	-0.0077*** (-16.76)	-0.0133 (-1.19)	0.0112 (0.82)	-0.0041 (-0.48)	-0.0053* (-1.72)	-0.0028 (-0.18)	0.0063 (0.31)	0.0004 (0.04)	-0.0020*** (-6.41)
Years of schooling	-0.0031 (-0.38)	-0.0097 (-0.84)	-0.0035 (-0.55)	0.0189*** (64.97)	0.0481*** (7.52)	0.0688*** (8.27)	0.0642*** (11.26)	0.0525*** (333.37)	0.0927*** (12.38)	0.1294*** (12.42)	0.1072*** (17.38)	0.0836*** (598.42)
Recent arrival from the U.S.	0.1168** (2.38)	0.1207* (1.90)	0.1134*** (2.92)	0.1550*** (9.45)	0.1202** (2.28)	0.0834 (1.16)	0.1019*** (2.40)	0.0804*** (12.31)	0.1444** (2.32)	0.1554* (1.75)	0.1420*** (2.78)	0.0438*** (9.49)
Head of Household	0.3212 (4.52)	0.2476 (1.41)	0.3160*** (4.85)	0.1527*** (43.82)	0.2427*** (5.46)	0.1436 (1.57)	0.2288*** (5.78)	0.1317*** (96.32)	0.1330** (2.44)	0.1261 (1.24)	0.1423*** (2.89)	0.1312*** (102.63)
Woman	-- --	-- --	-0.1795*** (-6.00)	-0.1929*** (-115.36)	-- --	-- --	-0.1214*** (-6.09)	-0.2814*** (-187.49)	-- --	-- --	-0.2772*** (-5.87)	-0.2431*** (-196.19)
School attendance	-0.2424*** (21.23)	-0.2087*** (34.45)	-0.2308*** (17.18)	-0.2135*** (9.87)	-0.1645*** (34.32)	-0.1748*** (27.39)	-0.1543*** (18.16)	-0.1876*** (10.21)	-0.1232*** (24.97)	-0.1145*** (25.74)	-0.1067*** (18.38)	-0.0978*** (9.28)
Traditional region of expulsion	0.0763*** (42.98)	0.0354*** (18.29)	0.0632*** (9.23)	0.0245 (1.29)	0.0834*** (12.90)	0.0423*** (7.34)	0.0767*** (17.16)	0.0156 (0.08)	0.0934*** (10.29)	0.0520*** (9.21)	0.8769*** (7.56)	0.0038 (1.21)
2000	0.1222** (2.44)	0.0464 (0.76)	0.0998*** (2.58)	-0.0320*** (-18.72)	0.2971*** (5.01)	0.2561*** (3.72)	0.2917*** (6.50)	-0.0124*** (-9.69)	0.4810*** (6.67)	0.3275*** (3.35)	0.4227*** (7.30)	0.0626*** (48.11)
2010	0.1005*** (2.74)	0.0109 (0.22)	0.0743*** (2.50)	0.0264*** (13.83)	0.2240*** (4.96)	0.1194*** (2.03)	0.1863*** (5.20)	0.0551*** (40.83)	0.2323*** (3.65)	0.1536* (1.90)	0.2036*** (4.08)	0.0820*** (59.13)
Industry sector	0.1860*** (4.33)	-0.1281 (-1.28)	0.1488*** (3.84)	0.2827*** (142.58)	0.2848*** (5.25)	-0.0320 (-0.31)	0.2187*** (4.58)	0.3031*** (201.94)	0.2261*** (2.66)	0.1961 (1.24)	0.2057*** (2.73)	0.2966*** (188.66)
Services sector	-0.0028 (-0.06)	-0.3099*** (-3.41)	-0.0494 (-1.27)	0.1180*** (53.61)	0.1688*** (3.12)	-0.1463 (-1.64)	0.0979** (2.17)	0.2251*** (139.34)	0.2310*** (2.90)	0.0505 (0.40)	0.1597 (2.38)	0.2428*** (149.56)
Trade sector	0.0299 (0.58)	-0.2277** (-2.45)	0.0063 (0.15)	0.1530*** (63.58)	0.1740*** (2.77)	-0.2782*** (-2.92)	0.0345 (0.68)	0.1802*** (101.88)	0.1118 (1.25)	0.0923 (0.67)	0.1001 (1.35)	0.1568*** (85.15)
Constant	3.2346 (1.10)	6.6167 (1.62)	4.0968* (1.72)	3.6357*** (26.66)	-0.1254 (-0.02)	11.1950* (1.71)	4.0561 (0.97)	6.4495*** (42.84)	4.3034 (0.38)	11.56 (0.77)	7.0453 (0.78)	5.3190*** (22.76)
R <sup>2</sup>	0.1165	0.0876	0.1143	0.0951	0.1187	0.1453	0.1329	0.1324	0.2121	0.2316	0.2210	0.2398
Observations	1 723	879	2 602	801,489	1 561	983	2 544	1 458 406	947	604	1 551	1 508 705

\*p<0.10; \*\* p<0.05; \*\*\* p<0.01

Note: T values in parentheses.

Source: Own estimates based on data from the 2000 General Population and Housing Census, the 2010 Population and Housing Census, and the 2015 Intercensal Survey (Inegi, 2000, 2010, 2015).

## CLOSING REMARKS

The present study analyzed the labor insertion process of young Americans in Mexico, compared with that of young Mexicans. On the one hand, it was shown that, in general, Americans earn more than Mexicans, where this advantage is largely explained by their unobservable characteristics, this suggesting that they receive preferential treatment in the Mexican labor market. We highlighted how despite the considerable increase in years of schooling observed in Mexico in recent decades, the level of schooling of young Mexicans is still lower than that of young Americans. In addition, the wages of young people in Mexico, regardless of their country of birth, are lower than those of adults. Although this is partly a product of them having less work experience, it also reflects the need to develop a stronger link between the knowledge and skills offered by educational institutions and those in demand and well paid in the labor market.

Our findings contribute to the literature that examines the economic performance of young migrants in the country of destination compared to that presented by the native population. While previous studies have focused mainly on cases of south-to-north migration, hereby we analyzed a case of north-to-south migration, or from a developed country (the United States) to a developing country (Mexico). Likewise, the results suggest that, unlike what happened in cases of south-to-north migration, in cases of north-to-south migration the human capital acquired in the country of origin is valued more than that obtained in the country of destination, which is consistent with what was observed by Friedberg (2000). As for the positive selection argument, there are feasible explanations that would rule out this hypothesis, such as the greater human capital of Americans and their mobility in Mexico; nonetheless, the fact that those who stay in Mexico very likely do so because of the favorable results they find there, suggests that there is indeed a positive selection. It should be noted that testing this hypothesis would require a different investigation. The fact of not carrying out an analysis of the entire distribution of income, makes it impossible to speak of either positive or negative selection.

One limitation of this study, which also represents an avenue for future research, is that it did not analyze whether the labor market performance of young Americans in Mexico varies if they are children of Mexican returnee parents from the United States, children of U.S. parents, or children of Mexican parents who have always lived in Mexico but chose to have their children born in the United States. Discrepancies would be expected between these groups due to differences in the levels of human and social capital of children (young people) and their parents. However, census data makes it impossible to carry out this analysis in any rigorous way, because this information is not available for a large part of the young Americans in Mexico; any other source containing this information is unknown to us.

Future research that may complement the findings presented here should include examining to greater detail the unobservable factors that explain the higher wages of young Americans, which may be accounting for, for example, differences in the quality of education, levels of proficiency in the English language or other skills, among others.

Likewise, the self-selection process could be weighed in the decision to work in Mexico, through Heckman-type estimates of the wage equations. It is important to acknowledge that the lack of additional variables in the census samples, and the lack of a self-selection correction, may be biasing our results, this being understood as a limitation of this study. Also, the labor insertion process of young Mexicans can be compared to that of young people from other countries, particularly those from developing countries, or of young people whose parents are not Mexican. This would provide additional information on how differences in language, ethnicity and social networks are related to the insertion and work performance of young immigrants. Finally, longitudinal data allowing to analyze who are the immigrants staying in Mexico and who are those who return to the U.S. would enable studying possible transitions between countries, providing valuable information on the process of economic insertion of the immigrant population in Mexico.

Translation: Fernando Llanas.

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