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The 2000-2010 Changes in Labor Market Incorporation of Return Mexican Migrants*

Los cambios entre 2000-2010 de la incorporación laboral de los migrantes mexicanos retornados

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Abstract

Mexico-U.S. migration has dramatically changed in the past three decades: the pronounced increasing flow of the 1990s stalled in the 2000s and a zero net migration rate was officially reported in 2010. Deportations and economic crisis have been discussed as the underlying reasons of this change. In the context of involuntary movements, I evaluate the labor market incorporation of return migrants with respect to non-movers and internal migrants in Mexico between 2000 and 2010. Using the Mexican Census samples, I found that the reduction on return migrants' earnings is associated to changes in both, the characteristics of returnees and in the pay rates. Specifically, changes in their occupations and higher participation in informal economy are the most important differences associated to the earnings loss of return migrants. These findings suggest that return migration in involuntary contexts restrict resources that individuals use to incorporate in the job market upon returning.

Keywords

Return migration
Mexico
Migrant incorporation
International migration

Resumen

La migración México-Estados Unidos ha cambiado dramáticamente en las últimas décadas: el incremento pronunciado del flujo de los noventa se frenó en la primera década del siglo XXI para alcanzar una tasa de migración neta nula en 2010. Las deportaciones y la crisis económica son las explicaciones asociadas al cambio. En un contexto de movimientos involuntarios, en esta investigación evaluamos la incorporación en el mercado laboral de migrantes mexicanos respecto a los no migrantes y migrantes internos en México entre

Palabras Clave

Migración de retorno
México
Incorporación de migrantes
Migración internacional

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2000 y 2010. Con las muestras censales, se encontró que la reducción de los ingresos de los retornados está asociada tanto a los cambios en sus características sociodemográficas como al valor económico de las mismas. Específicamente, los cambios en sus ocupaciones y mayor participación en trabajos informales son las diferencias más importantes asociadas a la caída del ingreso. Estos hallazgos muestran que la migración de retorno en contextos involuntarios restringe los recursos que los individuos retornados utilizan para incorporarse al mercado laboral.

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Introduction

Starting around the mid-1980s, Mexican migration to the United States grew very rapidly. The increase was particularly pronounced during the 1990s: the Mexican population in the U.S. doubled in size, from 4.3 to over 9 million[1] people. However, after 2000, the dynamic changed dramatically. By 2010, instead of doubling again, fewer than 12 million Mexicans were registered in the American Community Survey, implying a significant deceleration of the immigrant flow and a reversing trend in the net migration rate. This pattern coincides with a remarkable increase in return migration to Mexico. The Mexican Census estimates that the number of returnees between 1995-2000 and 2005-2010 more than tripled from 266,394 to above 825,168 people.

The change in the direction of the flow is primarily a product of involuntary returns. First, the December 2007 U.S. economic crisis had a particularly detrimental effect on precisely those occupations where immigrants tended to concentrate (Parrado, 2012; Passel, Cohn & Gonzalez-Barrera, 2012; Rendall, Brownell & Kups, 2011). Second, deportations grew greatly after 9/11, as immigration policies continued to increasingly emphasize removals. According to the reports from the Department of Homeland Security, cumulative five-year removals of Mexican citizens at the beginning of 2000 increased from 461,000 to more than one million people in 2010. In fact, recent evidence of the Survey of Demographic Dynamics in Mexico (ENADID: Encuesta Nacional sobre la Dinámica Demográfica) showed that fewer than 25% of the Mexican return migrants of 2009-2014 came back due to deportation o job related reasons (seeking or changing jobs).

The reversal of the trends poses important research and policy questions for Mexico, especially in the domains of the labor market. Since the 1990s, the Mexican labor market has deteriorated significantly. In this time, informal and poor-quality jobs have grown substantially (Ariza & Oliveira, 2001, 2013; García Guzmán, 2010) and, since the 2008 economic crisis, unemployment rates have been steady at historically high levels (García Guzmán & Sánchez, 2012). In addition, labor earnings, which were severely affected by the recurrent economic crises of the 1980s and 1990s, have recovered quite slowly and barely reached the levels of the early 1990s (Salas, 2007). Within this context, migration was said to be a "safety valve" for the Mexican economy, but the new and voluminous waves of returnees – which are mainly composed of working age population (92%) – represent a challenge for the already constrained labor market.

1 http://www.census.gov/population/www/documentation/twps0081/twps0081.html

Previous studies on the labor market incorporation of return migrants in Mexico have relied on frameworks that conceptualize movements as voluntary, mostly due to the positive or advantageous outcomes that migrants have shown upon return (Massey & Parrado, 1998) or when compared to non-movers (Ambrosini & Peri, 2012; Gitter, Gitter & Southgate, 2008). However, the increasing possibility of involuntariness among returnees requires changing the scope. We know little about the determinants of labor outcomes when migrants come back unexpectedly and with potentially fewer resources, and how these determinants have changed over time along with the transformations of the labor market and the migration flow. Recent studies have already shown that the advantageous position of return migrants in the labor market has disappeared in 2010 and their earnings have been severely affected (Campos-Vazquez & Lara, 2012; Parrado & Gutierrez, 2016).

The aim of this study is to assess the labor market incorporation of migrants aged 25 to 50 returning to Mexico from the U.S. in two periods: 1995-2000 and 2005-2010. Specifically, this paper analyzes what factors and changes were behind the fall in return migrants' earnings between 2000 and 2010, and what their situation is relative to non-movers and internal migrants. I look to disentangle how much of this fall is possibly due to either changes in their human capital or employment conditions, or to differences in the characteristics of places they are returning to reside. Alike, I test what contributes more: the changes in return migrants' composition or the changes in the payoffs of their characteristics in the labor market.

Results of Blinder-Oaxaca decompositions show that, between 2000 and 2010, greater participation in the informal economy significantly contributed more to wider the earnings gap than the difference in return migrant's educational attainment. In fact, this change in informal economy participation, less rewarded occupations and the lower payoffs of traditional destinations to return migration shifted the advantageous earnings of returnees and placed them at the bottom compared to non-movers and internal migrants. Our findings suggest that returnees' situation in the labor market is more vulnerable nowadays, which requires improvements to existing policies and creation of new ones that guarantee their successful integration into Mexican society.

Background: Return migration and labor market outcomes

The understanding of return migration is still in its early stages. In general, studies draw on the classical frameworks of migration, in which returnees' labor market outcomes are the ultimate expression of the returns to migration. For example, for neoclassical economics' a return migrant is a *disappointed* migrant; one that fails to succeed in the hosts' labor markets due to miscalculations (Borjas & Bratsberg, 1996) or lack of information when choosing the destination place (Sjaastad, 1962). Returning is an anomaly of the migration process that does not provide any capital gains for the migrant. If skills were acquired, they are assumed to be not transferrable, and the financial accumulation, if present, will be used to cover the cost of migration. Therefore, the disappointed returnees are not expected to have any advantages in the labor market compared to those remaining in origin countries.

The two additional perspectives predict more positive outcomes. According to new household economics theory, returnees are *successful* migrants that achieved the goals of capital accumulation that motivated their migration (Stark & Taylor, 1989). Beyond financial gains, migrants benefit from their experience abroad by acquiring training

and skills that are rewarded in the labor markets of the places of origin. Therefore, their outcomes will exceed those of non-movers. A similar result is hypothesized by Michael J. Piore (1979), who predicted that once the migrants have reached a specific target –either through savings or remittances– they return to their places of origin. Migrants are "birds of passage", *target earners* whose low skilled jobs and low wages will translate into small, but still significant advantages in the economic markets with respect to those who did not migrate.

Just as theories predict different outcomes for return migrants compared to non-movers, empirical research shows mixed findings for several job indicators and poses different explanations. One body of research argues that differences in observable and unobservable characteristics between return migrants and non-movers could account for the differential job outcomes. William Ambrosini and Giovanni Peri (2012), using the 2002 and 2005 waves of the Mexican Family Life Survey, found a wage premium compared to non-movers that is associated with positive selection on socio-demographic characteristics. Using the same data, Seth Gitter, Robert Gitter and Douglas Southgate (2008) found that chances of employment for returnees did not significantly differ from non-movers' when selection is controlled using instrumental variables. Using census data, Raymundo Campos-Vazquez and Jaime Lara (2012) argue that, when comparing different points in time, negative selection in demographic and socioeconomic characteristics had reduced migrants' premium on wages. The degree of negative selection varied according to the urbanization level of the municipality and state of return. However, there is still a wage premium associated with migration: if migrants had not migrated, according to their characteristics, they would have earned less.

Conversely, other studies explain the advantageous economic position of return migrants relative to non-movers by analyzing their class of worker. Entrepreneurship among migrants is more prevalent after migration. Supporting the target earner theory, a retrospective analysis of men and women returnees in western Mexico in 2000 found that, even when almost 75% of migrants were incorporated in the same sectors of the economy in which they worked before their trip, the proportion of business owners and self-employed individuals more than doubled when compared to that prior migration. Migrants were more likely to become entrepreneurs if starting a venture was a goal of the migratory process (Papail & Arroyo, 2004), and the higher wages earned in the U.S., as well as the remittances sent back home, allowed them to do so (Papail, 2002). Alike, compared to non-movers, migrants have showed to be more prone to start a microenterprise (Massey & Parrado, 1998), and the ventures related to migration resources were more profitable over time than microenterprises unrelated to migration resources (Woodruff & Zenteno Quintero, 2007). As owners/employers, migrants hold an advantage in the labor market compared to non-movers. However the recent changes in sociodemographic profiles of return migrants (Campos-Vazquez & Lara, 2012; Masferrer & Roberts, 2012; Reyes, 1997) and the destabilizing effect of the 2008 economic crisis on the job-to-job transitions between the U.S. and the Mexican labor markets (Cuecuecha & Rendon, 2012) could have altered their labor market incorporation; especially, entrepreneurship might have been reduced in recent times.

In addition, entrepreneurship and ventures' profitability do not rely exclusively on individual and household factors, or on the migration-specific context, but also on the economic climate of reception areas. Local opportunities, such as economic dynamism and industrial development of reception societies (Lindstrom & Lauster, 2001; Massey

& Parrado, 1998), shape and promote entrepreneurial investments, and during migration, affect remittances and savings behaviors among migrants (Lindstrom, 1996). For example, Connor Sheehan and Riosmena (2013), in their analysis of business formation among migrants, showed that migrants are more likely to start ventures in the informal sector, though migration is not negatively associated with formal business formation. In general, informal businesses were more responsive to contextual factors, while new formal businesses were strongly related to socioeconomic status and financial capital of individuals and, in the case of migrants, were more probable within places where opportunities in the formal economy were greater. Overall, the relation between economic outcomes and migration is mediated by the local opportunities after return.

In this sense, it is important to consider the situation and recent changes of the Mexican labor market for the study of return migrants' outcomes. There has been a transformation of the Mexican labor market's industrial composition; the share of manufacturing jobs decreased while opportunities on the service sectors peaked and primary production diminished substantially (Ariza & Oliveira, 2001). The spatial distribution of jobs in specific work niches became more heterogeneous and, together with a differential urbanization process across the country, increased inequality in the capacity of absorption of labor force. Also, in terms of the job characteristics, participation in the informal economy, precariousness and nonstandard work arrangements have increased during the past three decades (Ariza & Oliveira, 2001, 2013; García Guzmán, 2010). Even though there is some evidence of "self-selection" into the informal economy, most of the informal jobs are taken due to the existing barriers of incorporation into the formal economy (Alcaraz, Chiquiar & Salcedo, 2015). Unemployment rates have not decreased since the 2008 economic crisis (García Guzmán & Sánchez, 2012), which shows the inability of the Mexican labor market for absorbing the labor force. Wages have stalled substantially since the 1990s, after being severely affected by the recurrent economic crises of the 1980s and 1990s (Salas, 2007). How this situation affects classic outcomes of economic incorporation of Mexicans returning from the U.S. has not been explored yet.

Another important change in local context is that related to its exposure to migration. The literature on return migration suggests the emergence of new destination places in Mexico in recent times (Riosmena & Massey, 2012), which are characterized as being more heterogeneous in terms of development, urbanization and historical migration reception (Masferrer & Roberts, 2012). If migrants bring resources back (skills or even financial capital) into these new contexts which are less familiar with the phenomenon, resource capitalization may be lower. But traditional places of return migration could have reached a saturation point and then, the returns to migration could be smaller than those in new destinations.

In summary, four different explanations could be given to the fall in return migrants' earnings between 2000 and 2010. First, the change could be due to selection, that is to say variation and changes in sociodemographic characteristics, especially in human capital, particular to the return migrant group. Second, changes on the incorporation in the labor market; return migrants could possibly being now taking "bad jobs" (Kalleberg, 2011) associated to both, the deterioration of the labor market or the change in their composition in sociodemographic characteristics. Third, the changes in the geography of return migration imply differences in local contexts that could affect the ways in which migrants capitalize their resources and activate networks. And finally,

the differences across space and time of the local labor markets that return migrants incorporate into; more dynamic and diverse economies could better incorporate an influx of labor force than slow economies.

Methodology

Analytical Strategy

I test the four potential explanations of return migrants' labor market outcomes. To consider the issues of selection, I compare return migrants to non-movers; this comparison gives us both, returns to migration and a sense of how different in terms of composition return migrants are from those not migrating (selection on observables). In addition to the classical contrast between returnees and non-movers, I use the comparison of international versus internal migrants to distinguish between movements motivated by push factors (i.e. deportations and economic crisis) and pull factors (i.e. better job opportunities). While recent return migration was mostly involuntary (Parrado, 2012; Passel, Cohn & Gonzalez-Barrera, 2012), internal migrants have been characterized to be mostly driven by economic motives (Rivero-Fuentes, 2012; Sobrino, 2010). This comparison also serves to control for the willingness and propensity to migrate and the resources associated with migration (such as social capital, networks and human capital) that distinguish migrants from those not moving.

To evaluate the quality of jobs that return migrants are taking, I analyze their class of worker. Furthermore, different from previous studies (i.e. Parrado & Gutierrez, 2016), I separate workers between those receiving or not mandatory benefits. Lack of mandatory benefits and self-employment are among the main indicators that characterize the labor force working in the informal economy, an increasing form of employment incorporation in the Mexican labor market (García Guzmán, 2010). This definition of informal economy is based on conceptions of deregularization of the labor market (Portes & Haller, 2005; Portes & Sassen-Koob, 1987) and increasing heterogeneity of production systems out of standard work arrangements (Tokman, 2007). Class of worker together with earnings will describe if return migrants are taking "bad jobs" (García Guzmán, 2011).

To address differences in resources related to migration, like networks, I include an indicator whether the person resides in their state of birth. Also, I add a variable that measures return migration experience of the local context of the individuals' residence. As mentioned before, the literature on return migration shows changes in the distribution of the migrants across Mexico between 2000 and 2010; new destinations emerging and traditional ones getting lower influxes. It also shows that diverse experiences of migration at local level result in different resources used in the labor market (i.e. Woodruff & Zenteno Quintero, 2007).

I include variables on urbanization and economic dynamism to account for the context of the local labor markets. Heterogeneity and changes in both, the Mexican labor market and the distribution of return migrants across Mexico, become an important source of variation that could potentially affect their outcomes. As shown in other studies (Giorguli & Gutierrez, 2012; Masferrer & Roberts, 2012), return migrants by 2010 increased their presence in more rural-less developed economies, which can be an explanation for the fall observed in their earnings.

I analyze two time periods that correspond to different stages of implementation and migratory flows: 1995-2000, which includes the beginning of strong enforcement but positive net migration to the U.S.; and 2005-2010, which includes strict post-9/11 enforcement, the economic crisis, and a period of zero net migration. The purpose of the analysis of several groups and periods is twofold. On one hand, it considers both changes in the labor market and in migration flows that have resulted in different labor outcomes. On the other, it provides an insight into the processes behind these changes. Are they a product of differences in who migrates and the voluntariness of their movements? Of the changes in the geography of destinations? Or of the distinct market valuations of individual and local economic characteristics?

Finally, both migration and labor market participation are gendered phenomena. This calls for separate analyses that are infrequent in the return migration literature. Women have different motivations for migrating (i.e. family formation or reunification) (Hondagneu-Sotelo, 1994); compared to men, they use different resources when moving internally and internationally (Curran & Rivero-Fuentes, 2003), and are less likely to migrate without documents (Donato *et al.*, 2008). Their share among the Mexican population in the U.S. has increased substantially in the 1990s (Cerrutti & Massey, 2001) and, just after Immigration Reform Control Act (IRCA), they have experienced more wage deterioration and a stronger push to informal jobs than men (Donato *et al.*, 2008). Similarly, in Mexico, female labor force participation is less prevalent and more precarious than male participation (García Guzmán & Oliveira, 2004). Therefore, different pathways of incorporation are expected. As the female history of migration is more recent and their economic opportunities more precarious than men's, their returns to migration should be lower and, in general, their outcomes will look less advantageous, as women valuation in the Mexican labor market is lower too. However, the deterioration of their comparative advantage with respect to other Mexican women is expected to be slower than the men's process, as the majority of deportations are comprised by men (approximately 90%).

Data

The analysis is conducted using the ten percent samples of the Mexican Censuses of 2000 and 2010. Each sample collects data for all non-institutionalized individuals living in Mexico (Inegi, 2011; IPUMS, 2011). The questionnaire provides information on the individuals' current place of residence, place of residence five years prior to the census date, and birthplace. It also contains questions on employment status, occupation, earnings, class of worker, and benefits provided by employers, and other sociodemographic characteristics. Total sample sizes of these data sources, including all ages, range from 10 to 12 million people surveyed per year. The Mexican Census samples are considered the best source of information to estimate both internal and return migration in Mexico, as they are designed to provide representative estimations of small count events (as return migration or teenage fertility). These samples have a wide coverage and are representative of the lowest administrative unit in Mexico; the municipalities.

Our analytical sample is composed of Mexican-born men and women aged 25 to 49 years at the census time. The age interval was chosen to exclusively analyze the working age population that is not close to retirement or could still be attending school. Individuals whose disability prevents them from working were excluded from the analysis. I also excluded individuals with missing information on employment status, migration experience, earnings, and other covariates included in the models, which

represented 5.0 and 2.5% of the initial analytical samples of 2000 and 2010, correspondingly. As our main goal is to analyze earnings differentials, I further restricted our sample to employed[2] individuals working for a pay; this means that unpaid people or those who reported no-earnings were excluded from the analysis (for a detailed description of return migration and labor force status see Parrado & Gutierrez, 2016).

Dependent variable: Earnings

In the Mexican Census harmonized samples (IPUMS, 2011), earnings are reported on Mexican pesos on monthly basis. Monthly earnings were converted to real earnings of the 2000. Using the Mexican consumer price index (Inegi, 2015), earnings of 2010 were deflated. Finally, I model the natural logarithm of earnings due to lower bound and skewed distribution of the variable.

Explanatory variables: Migration status, employment mediators sociodemographic migration, and local context characteristics

The main explanatory variable of the models is migration status, which is divided in three categories according to the combinations of individuals' place of residence five years prior to and at the survey time. Return migrants are Mexican-born individuals who were living in the U.S. either in 1995 or 2005, and in Mexico in 2000 or 2010, respectively. Internal migrants are individuals that changed their state of residence in the periods of 1995-2000 and 2005-2010. Non-movers are people that reported living in the same state in the previous five years – although some of them may have migrated within the state.

Three additional sets of variables are included to account for individuals' sociodemographic characteristics, employment mediators, and local contexts characteristics influencing earnings gaps. Sociodemographic characteristics are age, education, marital status, relationship with the household head, and number of household members under 15 years old to measure young economic dependents. With exception of the latter, all these variables are categorical.[3]

Employment mediators[4] are occupation and class of worker. Occupation is classified into five categories[5] – skilled manufacturing workers, professionals, clerks and service workers, skilled agricultural workers, crafts, and unskilled manufacturing. Class of worker is divided in four categories: owner/employer, self-employed, wage-worker with benefits, and wage-worker with no-benefits.[6] Self-employed and wage-workers with no-benefits represent workers in the informal economy, while owners and wage-workers with benefits identify those employed in the formal sector.

Migration characteristics are measured with two variables. First, I incorporate an indicator of whether the individual resides in their state of birth. Second, I include an indicator of the municipalities' experience of return migration. The indicator combines

2 Individuals who during the last week worked or did not worked but had a job.

3 Both, categorical and continuous specifications of age and education were tested, categorical specifications were preferred due to their significant associations.

4 Hours worked per week were also explored but not included in the analysis as they did not show any variation between 2000 and 2010. The mean number of hours per week worked by return migrants were 46.4 in 2000 versus 46.7 in 2010 with standard deviations of 18.3 versus 19.4 respectively.

5 The 2000 and 2010 censuses reported a different classification. I harmonized this year with the rest using the four-digit codes for each occupation to create the same five categories.

6 By law, all wage-workers are subject to receive work benefits. The mandatory benefits are health insurance, pension or retirement, paid vacations, Christmas bonus, and profit sharing.

the tertiles of the distributions of the proportion of return migrants in the municipality in two time points: the current year and a decade ago. Tertiles of both proportions where combined in three categories: low, medium, and high.[7]

Local contexts are described with two variables measured at the municipal level: urbanization and economic dynamism. Economic dynamism is measured combining tertiles of the distribution of the female labor participation rate (Lindstrom & Lauster, 2001; Tienda, 1975) with the tertiles of the distribution of the proportion of population working in the manufacturing sector, which represents the industrial composition of the market at the local level. Combinations were also classified in three groups: low, medium and high.[8] The urbanization level of the municipality is classified in rural, rural-urban, urban and metropolitan. Categories are defined on the basis of population sizes and metropolitan area delimitations for each year: rural includes municipalities where 100% of the population live in rural localities (fewer than 2,500 inhabitants); rural-urban describes municipalities where 99 to 33% of the population live in rural localities; urban includes municipalities where fewer than 33% of the population live in rural localities; and metropolitan includes municipalities that are part of metropolitan areas defined for each period of time (for 1990 see Sobrino (1993); for 2000, Consejo Nacional de Población, 2004; and for 2010, Consejo Nacional de Población, 2012).

Methods

To answer whether migrants are taking more bad jobs than in the past, I use multinomial logistic regression models to predict the class of worker of individuals. The main explanatory variable, migration status, and interactions of this variable with year, measure significant changes over time on the probabilities of being in certain classes of worker. These models are run by sex and account for sociodemographic, migration experience and local context characteristics.

Changes in earnings between 2000 and 2010 are analyzed on three groups (g): return migrants (R), non-movers (N) and internal migrants (I). For each migration status and sex, I decompose the changes in earnings between 2000 and 2010 to estimate the contributions of our explanatory variables to these gaps in terms of differences in groups' characteristics (endowments), and different payoffs of these characteristics in the labor market (coefficients). To decompose earnings' changes, I estimate a model for the dependent variable for each group at each time point to obtain specific coefficients. These coefficients constitute an earnings structure that follows this equation

$$Y_t^g = \beta_t^g X_t^g + \varepsilon_t^g$$

where Y is a vector of earnings for individuals in each migration status g at year t; is a vector of parameters for each covariate of the matrix X; and the error terms. I estimate this equation with Ordinary Least Squares (OLS) techniques and robust standard errors clustered within municipalities.

7 Low level includes combinations of first-first, first-second, and second-first tertiles of the prior decade and current distributions of the proportion of return migrants in the municipality; medium level includes first-third, third-first, and second-second; and high level includes second-third, third-second, and third-third tertiles.

8 Low level includes combinations of first-first, first-second, and second-first tertiles of the distributions of the female labor participation rate and the proportion of workers in the manufacturing sector; medium level includes first-third, third-first, and second-second; and high level includes second-third, third-second, and third-third tertiles.

To calculate how much each dimension and each variable account for the earnings' changes, I use Blinder-Oaxaca technique. This consist in reorganizing the earnings differences between two groups in three components: 1) differences in characteristics (endowments); 2) differences in coefficients (payoffs); and interactions between the former two. Then, the case of return migrants,

$$y^R_{2000} - y^R_{2010} = \left(x^R_{i,2000} - x^R_{i,2010}\right)b^R_{2010} + \left(b^R_{2000} - b^R_{2010}\right)x^R_{i,2010} + \left(x^R_{i,2000} - x^R_{i,2010}\right)\left(b^R_{2000} - b^R_{2010}\right)$$

The first component of the equation, differences in characteristics or compositional change, represent the changes in earnings of return migrants if their covariates did not change, that is to say, if they had in 2010 the same distributions of their characteristics than in 2000. In the equation, these changes are valued at the payoffs of 2010 for return migrants. The second component measures the differences in the coefficients, which represent the additional increase in return migrants' earnings if 2010 earnings were estimated using the earnings structure (coefficients) of 2000. Specifically, differences the returns to migration are measured by the differences in constant term (model's intercept). Finally, the third term, called interaction term, represents the additional earnings that returnees would obtain if their differences in endowments were paid at the differential rates that were exclusive to return migrants in 2010.

This technique has two important advantages compared to conventional decompositions (Jann, 2008). First, it allows to estimate standard errors of the variables' contributions and, therefore, tests of statistical differences can be performed. Second, in the conventional decomposition the contributions of categorical variables depend on the base categories because their coefficients remain as part of the constant term. Blinder-Oaxaca techniques propose normalizations to purge the effects of base categories from this term (see Oaxaca & Ransom, 1999; Yun, 2005).

I estimate Blinder-Oaxaca decomposition based in separate OLS regression models of the logarithm of earnings for non-movers, return migrants, and internal migrants, by sex and year, with robust standard errors clustered by municipalities.[9] Deviation contrast is used to obtain coefficients of base categories purged from the intercepts of each regression. For each group, I obtained a decomposition between years. The contributions of covariates were grouped in components (i.e. individual's age is represented in categories that are reported as age) to report the total contributions of each dimension.

Results

Descriptive results

Table 1 shows descriptive results for all the variables included in this analysis by migration status, sex, and year. First, I describe the men's situation, comparing results for return migrants in 2000 and 2010; then, return migrants are compared to non-movers and internal migrants. I follow the same order for women.

9 A pooled model was also estimated and results did not changed meaningfully. Separated models were preferred for easy interpretation.

Labor earnings of men return migrants fell significantly between 2000 and 2010: by 2010, they were earning $ 1,261 pesos less than a decade ago ($ 4,504.7 vs $ 3,242.8), which implies a discount rate of 32% on the 2000's earnings. This dramatic drop contrasts with the increases in earnings for internal migrants and non-movers: between 2000 and 2010, earnings for these groups grew by nine and three percent, respectively. This picture for women is very similar; return migrants lost 33% of their 2000's earnings by 2010, non-movers gained nine percent more and internal migrants obtained a substantial 20% of increase.

The deterioration of return migrants' earnings came along with important changes in employment and local characteristics, but not on their sociodemographic characteristics. For example, the age distribution of male return migrants grew slightly older; those under 30 years old represented less than 55% by 2010, when in 2000 they made up more than 60% (Table 1). However, both non-movers and internal migrants experienced a similar change, not significantly different from return migrants' change. A similar process took place in the case of women, as the age distribution of the three groups also grew older.

In terms of education, in 2010 male return migrants were more schooled than a decade ago; the share of individuals with less than nine years of schooling was reduced by more than seven points. Yet, returnees were still less schooled than non-movers and internal migrants: while both groups had more than 25% with high school or more in both years, returnees had nearly 19% by 2010. Women return migrants became a little more schooled by 2010, their share with people with less than five years of schooling decreased by five points, which were gained in the group of 9-11 years. However, compared to non-movers or internal migrants, return women are impressively less educated: those with more than high school represent less than 19% in 2010, while for the other groups these figures reached 30 and almost 50%, respectively. The composition in terms of educational attainment could account for a sizeable portion of earnings gap between all groups, but it could not necessarily be a great piece of the story behind the earnings fall over time for return migrants, as their educational distribution shift to higher educational levels. Distributions of other sociodemographic characteristics, such as marital status or being the household head, did not changed for both men and women return migrants, and the number of children under 15 years changed as much as it did for the two comparison groups.

Changes in employment characteristics for men show worsening conditions among return migrants between 2000 and 2010 (Table 1). On one hand, while the proportions of owners, self-employed, and wage workers with benefits decreased between 2000 and 2010 (1.7, 4.4, and 5.5 points, respectively), the proportion of wage workers with no benefits increased nearly by 12 points. This last indicator for non-movers and internal migrants went up only by four points. This change means that the share of people employed in the informal economy for return migrants doubled the growth of the other comparison groups (7.9 versus 1.9 and 3.9 points). On the other hand, professional occupations decreased by half, while unskilled manufacturing jobs almost doubled for returnees; the former occupations went up for non-movers and internal migrants, and the latter increased little (no more than three points). The situation for women deteriorated less than for men. Although their share of people in informal economy increased by 9.4 points, due to increases in self-employed and wage workers with no benefits (2.7 and 6.8 points), their participation in professional occupations fell less than one point and increased by 5.4 points in unskilled manufacturing jobs.

The geographical distribution of return migrants changed slightly towards places with low experience levels of return migration (new destinations), more rural, and with high economic dynamism (Table 1). In 2010, four out of five men return migrants came back to their state of birth, a little increase when compared to the 2000 figure (77.1%). Similar changes occurred for non-movers and internal migrants, though at different start levels for the latter (24.7 in 2000). For women, in 2010 three out of four return migrants were residing in the state they were born – an increase of 4.5 points with respect to 2000 – while non-movers had a 78 percentage in this category and internal migrants only 28 percent. These distributions show a differential in social capital between internal and return migrants, as well as different factors determining the election of destination places.

The share of male return migrants in municipalities with high experience of return migration fell by nine points in 2010, from which the majority were reallocated in places with low experience. Yet, two out of three men return migrants were residing in traditional destinations (high experience levels) by 2010, which significantly differs from the 35 and 32% registered for non-movers and internal migrants, respectively. For these two groups, the proportion of population in new destinations of return migration also increased, and more than it did for return migrants. An increase in the proportions of internal migrants and non-movers in new destinations was also observed among women; both groups surpassed the 40% in 2010. An increase was also observed for women return migrants, the proportion in new destinations went up by 7 points. However, as in case of men, the majority of women return migrant were located in places with high return migration experience in both 2000 and 2010.

Between 2000 and 2010, the proportion of men return migrants in rural and rural-urban places increased by four points, increases for non-movers occurred only in metropolitan areas (three points), and the distribution for internal migrants barely changed. For women, changes among the three groups were similar to those for men but even smaller. For example, the proportion of women return migrants in rural and rural-urban places only went up by 2.5 points. All groups for men and women, by 2010, had higher presence in municipalities with high economic dynamism, which suggests both improvements in economy at the local level and redistribution of the population towards places more economically dynamic.

Two interesting points for our research questions emerge from the descriptive results. First, return migrants, mostly men, have a disproportionate representation in jobs with no-benefits, and their share increase greatly by 2010. This fact has implications for their potential earnings: since 2000, wage-workers with no-benefits have been at the bottom of the earnings distribution by class of worker (i.e. in 2010 men earned on average $3,642, women $ 3,079, those without benefits made 31 and 37% less, respectively). Specifically, in 2010, men return migrants in this type of jobs lost 11% of their 2000 earnings, while the other groups gained more than 20%. Earnings for all women increased between 2000 and 2010, but the lowest rate of increase was observed for return migrants (15 percent compared to 19 and 25% for non-mover and internal migrants). Second, descriptive results for characteristics at the local level suggest that the geography of destinations for return migrants differs from the spatial dynamic of internal migrants and non-movers, and has diversified between 2000 and 2010. This result is consistent with other studies findings and reinstates the emergence of a “new geography of return migration” (Masferrer & Roberts, 2012; Riosmena & Massey, 2012).

Table 1: Means and distributions of earnings and sociodemographic, employment, migration, and local characteristics of Mexicans 25 to 49 years old by migration status and sex. Mexico, 2000 and 2010

	Men						Women					
	Non-mover		Return migrant		Internal migrant		Non-mover		Return migrant		Internal migrant	
Variables	2000	2010	2000	2010	2000	2010	2000	2010	2000	2010	2000	2010
Monthly earnigns (in 2000's MXN Pesos)	3,867.0	3,979.7 **	4,504.7	3,242.8 **	5,330.0	5,812.5 **	3,043.8	3,347.8	4,970.6	3,328.0	3,454.2	4,174.6
	(12,253.5)	(7,729.5)	(10,192.7)	(11,595.1)	(12,344.7)	(11,456.1)	(10,115.1)	(6,655.0)	(36,429.6)	(5,825.0)	(10,756.5)	(7,006.2)
Sociodemographic characteristics												
Age												
25-29	25.7	22.3 **	33.1	27.3 **	32.3	27.7 **	25.9	22.2 **	37.8	27.2 **	36.0	31.4 **
30-34	22.9	21.4	28.8	27.2	26.3	25.9	23.1	21.7	29.0	28.4	26.7	25.3
35-39	20.6	21.5	19.7	22.0	19.7	20.6	20.8	21.5	17.3	22.0	18.4	21.0
40-44	17.2	18.7	11.6	14.3	13.2	15.0	16.9	18.6	9.8	14.3	11.6	13.6
45-49	13.5	16.1	6.8	9.3	8.5	10.8	13.3	16.1	6.2	8.1	7.4	8.7
Educational attainment (years)												
Less than 5	21.4	13.7 **	19.9	14.6 **	13.3	8.3 **	25.8	15.3 **	15.9	9.3 **	17.0	8.9 **
6-8	25.0	20.3	30.7	30.2	20.4	14.1	27.0	21.8	30.1	26.2	23.6	16.0
9-11	27.0	31.8	30.0	36.7	27.8	28.5	27.7	32.1	32.1	35.7	31.6	30.6
12-15	13.4	18.3	13.5	14.7	17.7	21.9	9.6	16.1	14.0	19.9	13.5	21.4
More than 15	13.2	15.9	5.9	3.7	20.8	27.1	9.9	14.6	7.9	9.0	14.4	23.1
Household head	75.0	68.8 **	67.9	67.7	77.6	72.7 **	12.9	14.9 **	21.7	22.5	14.8	18.3 **
Married	80.4	76.3 **	74.4	74.2	81.6	76.4 **	76.1	72.6 **	78.8	77.2	78.1	73.8 **
Children under 15	1.9	1.6 **	1.7	1.5 **	1.6	1.3 **	2.0	1.7 **	2.1	1.8 **	1.8	1.5 **
	(1.5)	(1.4)	(1.5)	(1.4)	(1.4)	(1.3)	(1.6)	(1.4)	(1.4)	(1.3)	(1.4)	(1.3)

Continues

Table 1, continued

	Men						Women					
	Non-mover		Return migrant		Internal migrant		Non-mover		Return migrant		Internal migrant	
Variables	2000	2010	2000	2010	2000	2010	2000	2010	2000	2010	2000	2010
Employment characteristics												
Informal economy participation	47.2	49.1 **	62.7	69.9 **	35.1	38.9 **	38.3	43.4 **	53.0	62.4 **	36.1	42.4 **
Class of worker												
Owner	3.5	3.5 **	5.6	3.9 **	3.5	3.4 **	2.1	2.1 **	5.3	4.1 **	2.3	2.4 **
Self-employed	25.7	23.8	33.7	29.3	17.3	17.2	23.5	24.1	32.2	34.9	20.2	22.7
Wage worker w/benefits	49.3	47.4	31.7	26.2	61.4	57.6	59.6	54.5	41.7	33.4	61.6	55.2
Wage worker w/no benefits	21.5	25.4	29.0	40.6	17.7	21.7	14.8	19.3	20.8	27.6	15.8	19.7
Occupation												
Skilled manufacturing workers	13.5	14.6 **	12.1	12.0 **	13.4	12.1 **	5.2	5.9 **	7.7	4.7 **	8.2	4.9 **
Professionals	14.6	15.8	8.1	4.9	20.5	25.0	23.8	25.0	16.2	15.4	22.8	28.5
Clerks and service workers	21.4	21.2	19.6	18.8	26.9	25.7	39.6	40.5	48.6	51.5	37.4	40.5
Skilled agricultural workers	17.2	12.0	24.1	21.4	6.7	4.7	3.4	1.7	1.8	2.8	2.7	0.9
Cratfs	24.0	24.0	27.2	25.6	22.4	21.3	9.6	8.1	12.2	6.7	9.4	7.0
Unskilled manufacturing workers	9.3	12.4	8.9	17.3	10.1	11.2	18.4	18.8	13.5	18.9	19.5	18.2

Continues

Table 1, continued

	Men						Women					
	Non-mover		Return migrant		Internal migrant		Non-mover		Return migrant		Internal migrant	
Variables	2000	2010	2000	2010	2000	2010	2000	2010	2000	2010	2000	2010
Migration characteristics												
Residing in state of birth	77.4	78.2 **	77.1	80.1 **	24.7	29.5 **	76.9	78.1 **	69.8	74.3 **	24.7	28.5 **
Migration experience level												
Low	30.9	41.3 **	6.0	14.5 **	24.3	42.4 **	32.0	41.2 **	5.5	12.6 **	25.9	43.2 **
Medium	30.6	23.5	18.2	18.7	33.1	25.5	29.2	23.2	18.7	19.2	32.9	25.0
High	38.6	35.2	75.8	66.8	42.6	32.2	38.8	35.6	75.8	68.2	41.3	31.8
Local economic context characteristics												
Urbanization level												
Rural	3.7	2.9 **	5.6	6.1 **	1.6	1.7 **	3.6	3.0 **	4.1	4.8 **	1.6	1.7 **
Rural-urban	20.3	19.1	32.1	35.7	11.5	11.9	20.4	19.8	26.8	28.6	11.3	11.7
Urban	18.4	17.4	24.4	21.6	17.2	17.8	18.5	17.5	24.3	24.5	15.8	16.5
Metropolitan area	57.6	60.6	38.0	36.5	69.7	68.6	57.5	59.8	44.8	42.0	71.2	70.2
Economic characteristics level												
Low	24.2	15.0 **	35.0	25.3 **	14.5	10.1 **	24.4	15.7 **	30.7	21.8 **	14.1	9.7 **
Medium	23.8	17.5	20.7	21.6	24.9	19.7	23.8	17.5	21.7	20.9	23.8	18.5
High	52.0	67.5	44.2	53.1	60.7	70.2	51.9	66.9	47.7	57.4	62.1	71.8
Total population	12,034,383	14,577,016	83,446	355,541	692,510	691,737	5,395,416	7,819,424	12,821	44,187	287,256	333,196
Sample size	972,610	1,057,271	6,777	33,183	55,347	41,879	441,048	560,428	1,097	3,975	23,425	20,168

Notes: Statistics obtained using individual weights. Standard deviations in parenthesis.
*** p<0.001 according to T and Chi-square tests for means and distributions, respectively.*
Source: Own calculations based on 2000 and 2010 ten percent Mexican Census Samples, INEGI (2011) and IPUMS (2011).

Multivariate Results

The descriptive results provided evidence of an association between different migration status and employment conditions. However, the strength of their contributions and the extent to which they held after considering differences in human capital and sociodemographic characteristics among groups, remains pending. Therefore, Tables 2, 3 and 4 present multivariate models and a decomposition that address these questions. For the sake of simplicity, in tables 2 and 3, I only report the coefficients for migration and local characteristics, and employment conditions, as our main contribution is to analyze the association of these dimensions, migration status and earnings[10]. But, as a reminder, all models also include age, educational attainment, marital status, household head status, and number of children under 15 years.

Table 2 shows results of multinomial logistic regression models of class of worker for men and women accounting for the dimensions mentioned above. The models include interaction terms of migration status and year to test changes overtime, and robust standard errors clustered within municipalities. Men, regardless of their migration status, were more likely to be wage-workers with no-benefits (1.18) or self-employed (.53) than to be wage-workers with benefits (*ref.*), and their odds increase even more by 2010 (.54 and .34, respectively). Compared to non-movers, the odds of being a wage-worker without benefits versus with benefits for return migrants were 90 percent higher (exp[.65]-1) in 2000 and, by 2010, an additional 20 percent (exp[.14]-1) of increase was observed. Return migrants were also more likely to be self-employed in 2000 (.85), and even when in 2010 the likelihood was significantly reduced (-.14), their higher chances did not disappear. A similar trend is observed for employers/owners, return migrants were more likely to be in this position in 2000 (.99), but this advantage went down in 2010 (-.23). Different from return migrants, internal migrants in 2000 were as likely as non-movers to be in jobs without benefits, and less likely to be self-employed or employers/owners. The chances for these two classes of work did not change by 2010, but their likelihood of being employed in jobs without benefits significantly increased (.12).

Different from men, women's participation in self-employment was not more likely than participating in jobs with benefits (-.15), but participation in jobs with no-benefits did have higher chances (.53). By 2010, women were no longer less likely to be self-employed, and their chances of being wage-workers with no-benefits increased substantially. Alike men, women return migrants in 2000 were more likely to be employers, self-employed or workers without benefits than non-movers, and conditions remain the same by 2010 (none of the interaction terms are significant). Women internal migrants in 2000, unlike return migrants, were as likely as non-movers to be employers or self-employed, and more likely to be in jobs with no-benefits. By 2010, likelihoods for these three classes of work increased, but did not reached the levels of return migrants.

Regarding migration and local characteristics, it is worth to point out that places with high levels of migration experience, compared to places with low levels, promote entrepreneurship: the odds for being an employer versus a wage-worker with benefits for men and women increase by 50 (exp[.38]-1) and 30 (exp[.24]-1) percent, respectively. This type of places and those with medium levels discourage self-employment and

10 Full models are available upon request.

working for a pay with non-benefits, suggesting that the higher exposure to return migration, the lower the chances of working in the informal economy. Finally, the more urbanized and dynamic the local context, the higher the chances of being a wage-worker with benefits.

Table 2: Multinomial-logistic regression models of class of worker of Mexicans aged 25 to 49 years by migration status and sex. Mexico, 2000 and 2010

Variables (Wage workers with benefits)	Men			Women		
	Owner	Self-Employed	Wage-worker w/no benefits	Owner	Self-Employed	Wage-worker w/no benefits
Year 2010	0.04	0.34**	0.54**	0.14**	0.56**	0.82**
Migration status (non-mover)						
Return migrant	0.99**	0.85**	0.65**	1.18**	0.94**	0.75**
Internal migrant	-0.08*	-0.20**	-0.01	0.07	0.02	0.13*
Interaction						
Return migrant*Year 2010	-0.23*	-0.14*	0.14**	-0.08	-0.08	0.00
Internal migrant*Year 2010	-0.01	0.00	0.12*	0.16*	0.19*	0.16*
Migration characteristics						
Residing in state of birth (other state)	-0.13**	-0.33**	-0.31**	0.11**	-0.13**	-0.08*
Migration experience level (low)						
Medium	0.06	-0.27**	-0.14*	-0.01	-0.19**	-0.09*
High	0.38**	-0.46**	-0.20**	0.24**	-0.40**	-0.20**
Local economic context characteristics						
Urbanization level (metro area)						
Rural	0.48**	1.26**	0.81**	0.03	0.92**	0.42**
Rural-urban	0.32**	0.74**	0.61**	0.17*	0.59**	0.36**
Urban	0.11*	0.10*	0.14*	0.10*	0.14*	0.02
Economic characteristics level (low)						
Medium	-0.21**	-0.27**	-0.24**	-0.09*	0.01	-0.12*
High	-0.27**	-0.43**	-0.54**	-0.26**	-0.14*	-0.42**
Constant	-3.51**	0.53**	1.18**	-4.07**	-0.15*	0.53**

Source: Own calculations based on the 2000 and 2010 ten percent Mexican Census Samples, INEGI (2011) and IPUMS (2011). Reference categories are in parentheses.
Notes: Models include controls for age, educational level, household head, marital status, and number of children under 15 years old.
***p<0.001; *p<0.05.*

The results suggest that, net of education, migration sorts individuals in the labor market, and mostly into the formal and informal economy. Logistic models predicting the probability of working in the informal economy (being self-employed or wage-worker with no-benefits, tables not included) showed that, by 2010, men return migrants had 13 and 46% higher odds of working in informal jobs than non-movers and internal migrants. For women there were no differences against non-movers, but they had odds 38% higher than internal migrants. However, it is important to highlight that education is the strongest predictor of being self-employed or wage-worker with no-benefits for both men and women.

Given the strong association between return migration and class of worker, and the link between the latter and earnings (shown in the descriptive results), is important to answer: how much of the fall in return migrants' earnings is possibly due to their changes in human capital? How much to those in their employment conditions and local characteristics of their place of residence? And, what is contributing more: the changes in their composition or the changes in the payoffs of their characteristics in the labor market? Tables 3 and 4 address these questions using OLS regression models and Blinder-Oaxaca decomposition over time of the logarithm of earnings for men and women by migration status. Models in Table 3 feed the analysis of Table 4, the coefficients (the earnings structure), together with the distributions and means of variables, are combined and rearrange to produce an estimation of the contribution in changes in characteristics and coefficients to the changes in earnings.

Models in Table 3 show the earnings structure for each migrant status in 2000 and 2010. Overall, structures look very similar, with small differences between them on the variables for employment, migration and local economic characteristics. Among the groups, men return migrants get the lowest payoffs for being owners/employers or self-employed. However, all groups received more for being a wage-worker with benefits as, between 2000 and 2010, almost all coefficients for other classes of worker decreased among all groups in about the same amounts. Return migrants also got the lowest payoffs for professional occupations among the groups, but over time, they increased little. The payoffs for crafts, the occupation with the highest proportion of return migrants, went also up compared to skilled manufacturing workers. I also observe that residing in the state of birth or in places with high levels of return migration experience increased earnings for all. However, between 2000 and 2010, the positive association of high levels of migration experience was significantly reduced, mostly for return and internal migrants. More urbanized contexts entail higher returns for all groups, and high levels of economic dynamism have positive advantages in earnings for return migrants in both years.

For women, the largest negative change in the association between class of worker and earnings is observed among self-employed return migrants: between 2000 and 2010, their coefficient went down by .22 points. The payoffs for clerks and service workers, the occupation with the largest share of women return migrants, significantly increased by 2010. Residing in the state of birth or migration experience at the local level did not have a significant association with earnings, neither did the local economic characteristics.

The falls and increases of the earnings structure coefficients result in different contributions to the net changes in earnings, depending on how much the composition of the groups changed. Table 4 shows Blinder-Oaxaca decomposition contributions for changes in characteristics. The decomposition is formulated from the point of view of the year 2010, so contributions of components are read as, for example, what return migrants would have earned in 2010 if they had their 2000's characteristics (for a mathematical expression see Methods). Bolded components show significant differences with respect to non-movers.

Table 3: OLS regression models of logarithm of monthly earnings of Mexicans aged 25 to 49 years by migration status. Mexico, 2000 and 2010

	Men						Women					
	Non-mover		Return migrant		Internal migrant		Non-mover		Return migrant		Internal migrant	
Variables	2000	2010	2000	2010	2000	2010	2000	2010	2000	2010	2000	2010
Employment mediators												
Class of worker (wage worker w/benefits)												
Owner	0.54**	0.36**	0.42**	0.29**	0.49**	0.33**	0.38**	0.17**	0.45**	0.15	0.44**	0.17**
Self-employed	-0.09**	-0.20**	-0.12**	-0.21**	-0.09**	-0.19**	-0.45**	-0.55**	-0.26**	-0.48**	-0.44**	-0.51**
Wage worker w/ no benefits	-0.17**	-0.18**	-0.24**	-0.23**	-0.22**	-0.25**	-0.44**	-0.39**	-0.43**	-0.35**	-0.38**	-0.37**
Occupation (skilled manufacturing workers)												
Professionals	0.21**	0.21**	0.17*	0.19**	0.30**	0.24**	0.29**	0.24**	0.28*	0.32**	0.34**	0.37**
Clerks and service workers	-0.04**	-0.04**	-0.14**	-0.08**	0.01	-0.10**	0.11**	0.07**	0.09	0.10*	0.18**	0.11**
Skilled agricultural workers	-0.47**	-0.53**	-0.37**	-0.40**	-0.30**	-0.46**	-0.09**	-0.21**	0.12	-0.05	0.07	-0.02
Cratfs	-0.01	0.06**	-0.05	0.03*	0.07*	0.02	-0.16**	-0.26**	0.08	-0.12	0.01	-0.11*
Unskilled manufacturing workers	-0.21**	-0.22**	-0.27**	-0.22**	-0.18**	-0.24**	-0.18**	-0.06**	0.05	-0.06	-0.11**	0.03
Migration characteristics												
Residing in state of birth (other state)	0.09**	0.09**	0.09*	0.09**	0.08**	0.10**	0.08**	0.09**	-0.01	0.05	0.06*	0.09**
Migration experience level (low)												
Medium	0.16**	0.10**	0.05	0.02	0.11**	0.02	0.11**	0.04*	0.01	-0.13*	0.10**	-0.02
High	0.30**	0.20**	0.18**	0.09**	0.22**	0.06*	0.20**	0.10**	0.14	-0.09	0.21**	0.00

Continues

Table 3, continued

	Men						Women					
	Non-mover		Return migrant		Internal migrant		Non-mover		Return migrant		Internal migrant	
Variables	2000	2010	2000	2010	2000	2010	2000	2010	2000	2010	2000	2010
Local economic context characteristics												
Urbanization level (metro area)												
Rural	-0.21**	-0.25**	-0.21*	-0.17**	-0.28**	-0.22**	-0.31**	-0.38**	-0.17	-0.24**	-0.29**	-0.41**
Rural-urban	-0.15**	-0.22**	-0.18*	-0.14**	-0.19**	-0.18**	-0.20**	-0.28**	-0.35**	-0.22**	-0.23**	-0.27**
Urban	-0.05*	-0.12**	-0.07	-0.07*	-0.01	-0.06*	-0.09**	-0.16**	-0.19*	-0.10*	-0.04	-0.11**
Economic characteristics level (low)												
Medium	-0.03	0.03	0.01	0.04*	0.00	0.07*	-0.01	-0.03	-0.12	0.03	0.06	0.05
High	0.05*	0.03	0.15*	0.06*	0.03	0.04	0.06*	-0.05*	0.16	0.00	0.08*	0.00
Constant	7.34**	7.63**	7.62**	7.83**	7.41**	7.80**	7.06**	7.37**	7.23**	7.69**	7.20**	7.57**
Sample size	972,610	1,057,271	6,777	33,183	55,347	41,879	441,048	560,428	1,097	3,975	23,425	20,168

Source: 2000 and 2010 ten percent Mexican Census Samples, INEGI (2011) and IPUMS (2011).
Notes: Models include controls for age, educational level, household head, marital status, and number of children under 15 years old. Reference categories are in parentheses.
***p<0.001; *p<0.05.*

Earnings for both men and women return migrants drop mainly due to changes in their characteristics. Earnings for men return migrants went down by 17%, from which 65% was associated to compositional change (0.107) and 20% to changes in the payoffs to their characteristics in the labor market.

Table 4: Blinder-Oaxaca decomposition over time of the logarithm of earnings for Mexicans aged 25 to 49 years by migration status and sex. Mexico, 2000 and 2010

	Men			Women		
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
	Non-mover	*Return migrant*	*Internal migrant*	*Non-mover*	*Return migrant*	*Internal migrant*
Total decomposition						
Log earnings 2000	7.800 **	7.947 **	8.119 **	7.580 **	7.721 **	7.746 **
Log earnings 2010	7.840 **	7.777 **	8.129 **	7.578 **	7.541 **	7.801 **
Diffference	-0.041 *	**0.170** **	**-0.011**	0.002	**0.180** **	**-0.055** *
Characteristics Δ	0.052 **	**0.107** **	**0.078** **	0.071 **	**0.104** **	**0.029**
Coefficients Δ	-0.079 **	**0.035** +	**-0.090** **	-0.049 **	**0.077** +	**-0.086** **
Interaction Δ	-0.014 *	**0.029** *	0.001	-0.020 *	**-0.001**	**0.002**
Δ *in characteristics*						
Age	-0.003 **	**-0.003** **	**-0.004** **	-0.007 **	**-0.011** *	**-0.003** *
Educational level	-0.009 *	**0.018** **	**-0.012** *	-0.031 **	**0.009**	**-0.060** **
Family characteristics	0.003 **	**0.003** **	**0.009** **	-0.004 **	**-0.002**	**-0.009** **
Class of worker	0.016 **	**0.032** **	**0.030** **	0.055 **	**0.061** **	**0.059** **
Occupation	0.010 *	**0.028** **	**0.007** *	0.011 **	**0.013** +	**-0.009** *
Residing in state of birth	0.005 **	**0.007** **	**0.013** **	0.005 **	**0.004**	**0.010** **
Migration experience	0.003	**0.001**	**0.005**	0.001	**-0.006** +	**-0.002**
Urbanization level	0.028 **	**0.021** **	**0.027** **	0.041 **	**0.038** **	**0.040** **
Economic characteristics	0.000	0.000	**0.003** *	0.001	**-0.001**	**0.002**
Δ *in coefficients*						
Age	-0.001 *	**-0.006**	**-0.002**	0.000	**-0.052** *	**0.003**
Educational level	-0.022 **	**-0.069** **	**0.012** **	0.005 **	**0.013**	**0.011** *
Family characteristics	0.009 *	**0.022** +	**0.007**	-0.004	**0.032**	**0.002**
Class of worker	-0.040 **	**-0.030** *	**-0.037** **	-0.044 **	**-0.041**	**-0.061** **
Occupation	-0.006 **	**-0.006**	**-0.003**	-0.016 *	**-0.034**	-0.015
Residing in state of birth	0.002	0.000	**-0.002**	0.004	**0.017**	-0.003
Migration experience	-0.001	**0.027** +	**-0.007**	-0.001	**0.064** *	**-0.008**
Urbanization level	-0.005	**-0.003**	**0.007**	-0.014 *	**-0.016**	**-0.028** *
Economic characteristics	0.012 *	**0.007** +	**0.007**	0.027 **	**0.034** *	**0.024** *
Constant	-0.028 *	**0.093** *	**-0.072** **	-0.005	**0.060**	**-0.010**

Source: Own calculations based on 2000 and 2010 ten percent Mexican Census Samples, Inegi (2011) and IPUMS (2011).
Notes: Bolded coefficients indicate significant differences at p<0.05 with respect to non-movers decomposition (models 1 and 4) according to Z-tests of differences in means.
*** p<0.001; * p<0.05; + p<0.10.*

Though internal migrants and non-movers also lost earnings due to their changes in composition (7.8 and 5.2% of their 2000's earnings, respectively), the gains in their wage structure compensated this lost, and even surpassed it in the case of non-movers. Women return migrants lost 18% of their 2000's earnings, 55% associated to their compositional change and 45% to their coefficients' change. This situation is very different from that of internal migrants, who overall earned 5.5% more in 2010 than in 2000. This advantage was only associated to significant gains in their earnings structure. Earnings did not change for non-movers, their lost due to changes in characteristics was compensated by gains in their coefficients and the interaction term.

What are the factors that contributed more to the lost in earnings due to compositional change for men and women? The detailed decomposition shows that men lost more for changes in their class of worker or occupation, than for their changes in education. If return migrants had the educational composition of the 2000, their earnings in 2010 would have been two percent higher. Yet, they would have earned over three percent more if their class of worker distributions was that of the 2000. Components estimated for single categories of this variable show that changes in the proportion of wage-workers with no-benefits account for 80% of the class of worker contribution (0.026/0.032). In terms of occupation, the 2010 earnings would have been of 2.8% higher if return migrants had the occupation distribution of the 2000; 89% of this increase would have come from greater participation in professional occupations and lower participation in unskilled manufacturing jobs. Another significant change came from their spatial distribution: if return migrants were distributed in places with the urban distribution of 2000, their earnings would have been two percent higher (.021). The components of the rural and rural-urban categories accounted for all this change (.021). In summary, class of worker, occupation and urbanization compositional changes accounted for 76 percent of the overall compositional change. The situation was similar for non-movers and internal migrants to whom these dimensions made up to 100 and 82% of the compositional change. However, unlike return migrants, non-movers and internal migrants would have had lower earnings if their education had not changed.

For women return migrants, I do not observe significant changes in their educational attainment that account for their lost in earnings between 2000 and 2010. Yet, a significant six percent of the fall in earnings was associated to shift in their class of worker distribution (0.061). Components of the single categories for this variable show that self-employed and both types of wage-workers contribute in similar amounts, while owners did not change. Changes in occupational distribution contributed less than they did among men; only a 1.3% of increase would have taken place if this variable's distribution had not changed. Alike the men's situation, changes in the urbanization level of their spatial distribution accounted for a substantial drop in their earnings: the 3.8% decrease is mostly explained by shifts towards more rural and rural-urban places. Non-movers and internal migrants had very similar losses associated to changes in the distributions of class of worker and urbanization, but their gains due to educational attainments neutralized the discount these factors.

As mentioned previously, changes in coefficients reduced men and women return migrants earnings, but not those of other migration status. I discuss now the factors that contributed to this fall. Among men, differences in education payoffs increased earnings by 6.9%. Earnings also increased by three percent due to changes in class of worker: while owners and self-employed lost, both types of wage workers gained more in 2010, mostly those with no benefits whose contribution was of 3.1%. Interestingly,

there was a decrease in payoffs of migration experience of municipalities. Single components of this factor show that the 2.7% reduction in earnings came only from the losses in payoffs of residing in places with high levels of migration experience. Finally, returns to return migration fell significantly and accounted for nine percent of the drop in earnings between 2000 and 2010. Compared to non-movers and internal migrants, return migrants got better returns to education (-.069 versus -.022 and 0.012), but lower payoffs for class of worker (-.030 versus -.040 and -.037) and migration experience (0.027 versus no significant change), and were the only group with losses in their payoffs to group membership (.093 versus -.028 and -.072).

For women return migrants significant losses were associated only to migration experience (0.064) and economic characteristics (0.034). Decreases of payoffs in places with high migration experience brought earnings down by 7.5%, which was not neutralized by the small gains of low and medium levels of experience (less than 1%). Similarly, payoffs in places with high levels of economic dynamism decreased earnings by 7.2%, but the increases in payoffs in places with medium levels (.038) halved this negative effect. Conversely, non-movers and internal migrants increased their earnings associated to better payoffs in class of worker and urbanization level, and migration experience at the local level did not significantly changed their earnings. However, these groups also lost earnings due to reductions of payoffs in local economic characteristics, but their losses were smaller than those of return migrants (.027, .024 versus .034).

Overall, compositional changes in class of worker, occupation and urbanization contributed the most to the fall in earnings for men and women return migrants. The same factors also reduced non-movers' and internal migrants' earnings, but their contributions were smaller. Why return migrants lost more? The changes in educational attainment and occupation distributions distinguished return migrants form the other groups. This can be interpreted as a status loss of return migrants possibly associated to human capital losses. In terms of the change in earnings structures, the biggest fall that made men return migrants depart from other groups was in their group membership. Compared to the previous decade and net of individuals' human capital, the returns to return migration were impressively reduced. I suggest this change is associated to the constraints imposed by involuntary returns made more difficult to capitalize their migration capital in the labor market. For women, the changes in coefficients of the migration experience factor distanced return migrants from internal migrants and non-movers. I suggest two potential explanations: either traditional destinations seem to be reaching a saturation point that values less being a return migrant –and mostly among women– or these places were the most affected by the consequences of growing deportations and the economic crisis (studies have documented a significant fall in remittances since 2007, see Cohn, Gonzalez-Barrera & Cuddington, 2013). Another possible explanation could be that return migrants of 2010 compared to those of 2000 had spent less time in Mexico since their return. Those who arrived very recently could be pushed to worse jobs than those with longer spans in the Mexican labor market. This is a limitation of the study that can be improved by including in the census questionnaire the year of arrival for internal and international migrants.

Conclusion

Our analysis reveals that incorporation of return migrants in the Mexican labor market is more difficult and less advantageous. In the past decades, return migrants provided themselves with job opportunities by establishing microenterprises (Lindstrom, 1996;

Massey & Parrado, 1998; Sheehan & Riosmena, 2013), but recently, the involuntariness of the movement and lower financial resources due to the economic crisis may have been pushing them stronger to the informal economy. Our results showed that both, return migrants' proportions and the probabilities (net of their sociodemographic characteristics) of being in jobs with no-benefits and self-employed increased substantially between 2000 and 2010.

The documented earnings decline is mainly associated with the compositional change of the flow. As said above, educational levels of returnees in 2010 were significantly lower than the levels of internal and non-movers. Over time, they also held fewer professional positions in the labor market, and did it even more by 2010. Finally, their distribution within the country does not follow the patterns that the literature has documented as related to economic reasons (Rivero-Fuentes, 2012; Sobrino, 2010). Return migrants recently settle within Mexico more in rural-urban and less economically developed places than did it before (Giorguli & Gutierrez, 2012; Masferrer & Roberts, 2012).

By changing the classical approach of return migration to broader perspective that incorporates involuntary and non-economic movements (Cassarino, 2004; Portes & Rumbaut, 1996), our analysis portraits diverse scenarios of return migration to Mexico. Nowadays, return migrants seem to be less driven by economic motives when coming back to Mexico. Not only the Obama administration deported illegal immigrants at a record pace[11], president Trump has been following the same strategy and increasing the anti-immigrant climate with derogative public comments about the Mexican immigrant population[12]. In fact, according to the Department of Homeland Security statistics, Mexican deportations started rising since 2005, which aligns with the flow surveyed in the 2010 Mexican Census. At the same time, job opportunities in the US declined significantly (Parrado, 2012). More than 2.3 million jobs were lost in the services and construction sectors, which have been traditional niches of Mexican migrants' jobs (Donato & Sisk, 2012; Parrado, 2012). Lack of job opportunities in the U.S. has proved to be reason for returning to the Mexican market in other studies (Cuecuecha & Rendon, 2012; Papail, 2002). The lower preparedness and readiness of involuntary movements might explain the deterioration of return migrants' position in the Mexican labor market, which is supported by the divergent results of internal and international migrants. This analysis includes only one decade, and yet the situation can be continuing in an attenuated version, as deportations have not slowed although the economic crisis has already been surpassed. Therefore, the Mexican government needs to get "their hands on" the incorporation of return migrants to fully reverse this trend.

The lack of widely representative information on reasons for returning to Mexico of the migrants analyzed in this study, limits our conclusions. Excluding Mexican born who stayed in the U.S. from the analysis does it as well. The latter group might have better educational attainment, more successful incorporation experiences, and longer stays in the U.S., and fewer economic reasons to come back to Mexico. But, they might also have more chances of residing legally in the U.S. and therefore they would be less likely to come back involuntarily, which supports our argument.

11 http://www.nytimes.com/2014/04/07/us/more-deportations-follow-minor-crimes-data-shows.html?hp&_r=1 1/, http://www.thenation.com/article/179099/why-has-president-obama-deported-more-immigrants-any-president-us-history#

12 https://www.bbc.com/news/av/world-us-canada-37230916/drug-dealers-criminals-rapists-what-trump-thinks-of-mexicans

The new situation of return migration posits enormous challenges for migration and job creation policies in Mexico. Our findings showed that returnees are more likely now to have bad jobs – no-benefits and lower wages – than an average Mexican. These results are relevant when thinking about health insurance and retirement access for those who worked abroad during a period of their lives. In Mexico, formal jobs have been the pathway for warranting social security to the population (García Guzmán, 2011). The new conditions for return migrants in Mexico potentially deprive them from social security stability and quality of life at elder stages. Migration to the United States seems to be no longer a *safety valve* for the Mexican labor market. Sadly, Mexican return migrants are joining the lines of the already large population that struggle for better life conditions in Mexico.

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