



ELSEVIER

Contents lists available at ScienceDirect

The Social Science Journal

journal homepage: www.elsevier.com/locate/soscij



The Mexican Dream? The effect of return migrants on hometown development

Benjamin James Waddell^{a,*}, Matías Fontenla^b

^a Adams State University, Department of Sociology, 208 Edgemont Blvd, Alamosa, CO 81101, USA

^b University of New Mexico, Department of Economics, MSC 05 3060, 1 University of New Mexico, Albuquerque, NM 87131, USA

ARTICLE INFO

Article history:

Received 1 July 2014

Received in revised form 15 February 2015

Accepted 15 February 2015

Available online xxx

Keywords:

Return migrants

Migration

Human development

Political participation

ABSTRACT

Mexican migrants are returning to their homeland at record rates. Along with material goods, these former migrants may bring with them new ways of thinking about the world and envisioning the future. Still, relatively little is known about the degree to which former migrants affect the wellbeing of their local communities over time. This study evaluates the effect of return migrants on health, education, income, and political participation in Guanajuato, Mexico during the period 2000–2010. The findings imply that returnees may have positive effects within local economies, improving not only income, but also education, healthcare, electoral participation, and overall wellbeing. The results of this study have important implications for policy makers operating within emigration-prone regions of the world.

© 2015 Western Social Science Association. Published by Elsevier Inc. All rights reserved.

1. Introduction

Today, there are more migrants returning to Mexico from the U.S. than there are Mexicans crossing into the U.S. in pursuit of the American Dream (INEGI). In fact, for the first time since the Great Depression net migration flows from Mexico to the U.S. have reversed, with estimates of the U.S. unauthorized immigrant population from Mexico dropping from a peak of 6.9 million in 2007, to 6.0 million in 2012 (Passell et al., 2012).¹

A number of push factors may be related to this historic change, including heightened border enforcement, a rise in deportations, the growing dangers associated with illegal border crossings, and weaker U.S. job opportunities.

Many immigrants may also simply be following through with their original plan to work hard in the U.S. and return home riding on the coattails of their success abroad. However, it appears that improved labor markets in Mexico as well as important shifts in the country's demographics, such as lower fertility rates, may be pulling former migrants back home. Regardless of their reasons for returning, former migrants share one thing in common: They are not the same as when they left. Living and working in the U.S. appears to have changed them, and they, in the process of returning, may be changing Mexico. Still, current research sheds little light on the actual influence of return migrants on hometown communities. The task of this study is to empirically assess the degree to which return migrants impact—if at all—their hometown communities.

Many studies have focused on the effects of immigration. However, the authors are unaware of any empirical research on the effect of return migrants on development over time in their home communities. Given the recent reversal in migration flows, and the potential impact of return migrants on their homelands, this becomes an

* Corresponding author. Tel.: +1 719 587 7394.

E-mail addresses: bwaddell@adams.edu (B.J. Waddell), fontenla@unm.edu (M. Fontenla).

¹ The authors wish to acknowledge Richard Wood, Bob Fiala, participants from the 2014 WSSA Conference, and the anonymous referees for their helpful comments and suggestions.

important issue to study. This paper attempts to fill this gap. The study statistically analyzes the effect of return migrants on healthcare, education, income, and political participation and finds that return migrants have a positive effect on all of these measures, suggesting that former migrants may play a key role in underpinning development trends in their home communities.

Results from field research in central Mexico, detailed in Waddell (2013), Waddell (2014), motivate this paper and support its findings. Specifically, since 2009 the authors have met many former migrants settling back into their hometown regions. Across these conversations the authors noticed a recurring trend. In explaining how things should be done in Mexico, former migrants frequently evoke lessons learned while living abroad. For example, in the summer of 2011 during a research visit to the small town of Ojo de Agua, Guanajuato the authors talked to two men who were working on a municipal road. Almost immediately the workers began to express their frustration with the project. According to them, several local families had recently reneged on an agreement to allow the municipal government to use a small part of their land to complete the road. As a result, the project faced a serious impasse that threatened the road's completion. As one of the young men explained,

When I was living in Nebraska this type of thing never would have happened. In the U.S., you see, they do things differently. The people work together for the good of the community and when necessary the government steps in and takes over. Here the government only acts in the interest of those who can pay for it.

The other former migrant, who was nodding his head in agreement, added,

That's why we are different you see. We come back with a new vision of the world and we refuse to do things the way they've always been done. If they stop this project, believe me, we'll head down to the municipal president's office and make sure they know how we feel.

In another instance, María José, who had recently moved back from California, noted,

Here there are traffic laws, but the people don't respect them and the authorities don't enforce them. In Mexico for the right amount of money you can get out of anything and the citizens are the ones to blame because they allow it to go on. They participate in it. If things are going to change it has to start with the people. Myself, I've seen how things can work differently and I'm now determined to contribute to a better Mexico.

On a similar note, Martin, who lived several years in New Mexico and now lives near Jerécuaro, Guanajuato, brought up the importance of cultural habits in driving economic productivity.

In Mexico people work at their own pace. If it gets done today, so be it and if it has to wait until tomorrow, well then that's ok too. In the U.S. though, everyone is working with a deadline and if you don't meet the deadline

you lose your job. Here I have my own tortilla factory and I try to run it like my bosses ran their businesses back in the U.S. I open every day at the same time, I pay attention to quality control, and I always make the customer my priority.

As these men and women show, return migrants often come back to their homelands with a different vision of the world. This tendency is confirmed by existing research, which reveals that living abroad or in larger urban centers alters the way migrants and their family members think about social norms (Levitt & Lamba-Nieves, 2011), investments in human capital (Hanson & Woodruff, 2003; Yang, 2008), entrepreneurialism (Woodruff & Zenteno, 2007; Yang, 2008), and politics (Li & McHale, 2009; Pérez-Armendáriz & Crow, 2010; Pfützte, 2012; Spilimbergo, 2009; Waddell, 2015). Research in this area reflects the reality that while international immigration has reached historic highs in recent years, a large percentage of migrants eventually end up returning to their homeland. For example, a 2008 study by the Organization for Economic Co-operation and Development (OECD) found that after five years roughly 18% of Mexican migrants returned home, whereas 24% of South American migrants returned, 43% of Canadian migrants, and 54% of migrants from the European Union (Dumont & Spielvogel, 2008:172).

Return migrants clearly make up an important percentage of international migration flows. Still, only a handful of studies directly address the effect of return migration on hometown communities (Arce, Renato, & José Antonio, 2011; Batista & Vicente, 2011; Marchetta, 2012; Chauvet & Mercier, 2011; Dustmann, Fadlon, & Weiss, 2010; Marchetta, 2012; Rother, 2009; Von Reichert, Cromartie, & Arthun, 2014), and where they do, results are largely limited to the analysis of small surveys and qualitative field data.

This study looks to build on extant research by considering municipal-level effects of return migration over the years 2000–2010 in the state of Guanajuato, Mexico. The research focuses on Guanajuato for several reasons. First, migration is particularly widespread in Guanajuato and has a long history pre-dating the Great Depression (Durand, 1987). Second, Guanajuato is one of the leading return-migrant receiving states in the nation, and it sends more migrants to the U.S. than any other state (INEGI). Third, the state's income per capita and demographics are roughly average for the nation, but with large heterogeneity across municipalities. It has both high-income industrialized cities, like León and Celaya, and poor rural municipalities with large indigenous populations, such as Xichú and Atarjea. Such socio-demographic variation across the state makes Guanajuato an ideal location for exploring the effects of return migration on human development—measured in terms of education, healthcare, income, and civic participation. Finally, data is available at the municipal level for all the variables of interest.²

² For a much more detailed review of historic migration trends out of Guanajuato, see Arias (2004). Old Paradigms and New Scenarios in a Migratory Tradition: U.S. Migration from Guanajuato. In Jorge Durand and

All else equal, the findings indicate the percentage of Guanajuato homes with return migrants is strongly associated with higher levels of municipal development over time. Return migrants have a particularly strong impact on levels of municipal education and health outcomes. Return migrants also share a positive relationship with electoral participation, indicating that former migrants may influence political norms within their communities. In contrast, remittances, and thus migration, have a negative effect on development outcomes and electoral participation.

The findings indicate that in addition to financial capital, return migrants very likely bring back with them less tangible, but arguably more important, forms of capital, such as human and cultural capital. Still, the degree to which these social transfers contribute to development appears to depend greatly on local policy environments. The Mexican government has a wide array of programs designed to support migrants and their families in the U.S. as well as encourage financial investments in their hometown communities. However, officials lend far less attention to assisting return migrants. In fact, if anything, by glorifying migrants as national heroes local officials play a key role in encouraging additional emigration. These results suggest that the Mexican government would be wise to design policies to help return migrants pursue a “Mexican Dream.” In doing so, officials would facilitate the reintegration of millions of citizens but may also incite long-term growth within local economies by encouraging migrants to tap into skills learned abroad.

This study is organized in the following manner. Section 2 summarizes related literature. Section 3 presents the panel data, and Section 4 outlines the empirical specifications. Section 5 discusses the results, and Section 6 offers a brief series of conclusions.

2. Literature review

Over the last thirty years Mexico has experienced a number of fundamental social, economic, and political shifts. Human development indices have improved throughout the country, revealing the successful expansion of education, healthcare, and employment to previously marginalized populations. Poverty and inequality are hardly a thing of the past, but Mexicans are better off today than they were four decades ago (Esquivel, 2010). In addition, since the late 1980s Mexico has experienced an unprecedented opening of the political sphere (Avritzer, 2002). Across the country parties now compete for political posts in relatively transparent elections. Moreover, the decentralization of decision making and resource allocation from the federal government to state and municipal authorities has opened up avenues for political participation to previously excluded groups. Perhaps as a consequence of these changes, coupled with a historic economic slowdown in the U.S., fewer Mexicans feel the need to emigrate abroad, and a growing number of migrants have decided to return to their country of origin.

In many respects the jury is still out regarding why so many migrants have returned to Mexico in the last decade. However, the purpose here is not to assess why migrants are returning home but to evaluate how those who do return might be affecting their local communities. With that in mind, between 2005 and 2010 nearly 1.4 million Mexicans returned to their homeland (INEGI). This figure is nearly double the number of migrants that returned between 1995 and 2000 (INEGI). Although a small percentage of these individuals were deported, most migrants returned on their own volition (Passell, Cohn, & Gonzalez-Barrera, 2012).

Available research indicates that returnees are more likely to be young males with few ties to the U.S. (Ravuri, 2014; Reyes, 2001). Females are far less likely to return home. Researchers attribute this to the fact that males stand to lose a great deal of social status by leaving a highly patriarchal society, whereas females stand to gain a great deal of freedom in the U.S. (Hondagneu-Sotelo, 1994). Education levels also appear to play a key role. Extant research indicates that highly educated immigrants who have clear advantages within local labor markets are more likely to return home (Carrión-Flores, 2006; Reinhold & Thom, 2009). On the other hand, the least educated are also more likely to return to Mexico, perhaps due to the fact that their opportunities in the U.S. are limited by human capital barriers (Public Policy Institute of California, 1997). In addition, migrants who own property in Mexico tend to return more frequently (Ravuri, 2014), and in general, migrants return more often to areas with favorable labor markets (Lindstrom, 1996; Reyes, 2001). Migrants who acquire skills abroad that are easily transferrable to labor markets in their home countries tend to return more frequently than those who acquire less-applicable skills (Dustmann et al., 2010, p. 66). Finally, legal status affects the probability that a migrant will return. For example, research from the Mexican Migration Project reveals that undocumented immigrants in the U.S. are less likely to return to Mexico than immigrants who have obtained legal status (Riosmen, 2004). In short, return migration is filtered by gender, education, socio-economic wellbeing, economic conditions within hometown communities, and legal status.

To be clear, a relatively small percentage of immigrants return home, but for the millions who do, there is obvious value in understanding how they affect receiving communities. What is the effect of millions of former migrants settling back into life in Mexico? Do these individuals improve human development levels? And if so, how do they affect individual indicators of human development, such as healthcare, education, and income? Furthermore, do return migrants influence political participation? If so, how might these effects be measured? Existing research provides initial insight into these inquiries.

A growing number of studies analyze the manner in which current migrants influence social norms and local belief systems back home (Smith, 2006; Levitt & Lamba-Nieves, 2011; Marchetta, 2012; Pérez-Armendáriz & Crow, 2010). These studies evaluate the effects of migration networks on hometown communities. As Levitt and Lamba-Nieves (2011) argue, migrants frequently remit

Douglas S. Massey (Eds.), *Crossing the Border: Research from the Mexican Migration Project*. New York, New York: The Russell Sage Foundation.

social and culture norms to their hometowns. Their research demonstrates that social remittances influence the way those left behind think about education, health-care, local business ventures, and even politics. These findings suggest that return migrants likely influence development outcomes within receiving communities.

Regarding education, scholars have found that ties with migrants (Acosta, Fajnzylber, & Humberto Lopez, 2007; Amuedo-Dorantes & Pozo, 2010; Antman, 2010; Borraz, 2005; Calero, Bedi, & Sparrow, 2009; Cox & Ureta, 2003; Creighton, 2013; Illahi, 2001; Kandel & Kao, 2001; Lu & Treiman, 2011; Mansuri, 2006; Yang, 2008), and return migrants in particular (Arce et al., 2011), have a positive impact on education attainment in migrant-sending regions. Arce et al. analyze the Survey of Mexican Migration to the United States (EMMEU), and find that return migrants place additional value on the education of their children. The migrant experience instills belief in education as the soundest avenue to obtain better employment and improve standards of living. Data from EMMEU, for example, reveal that 59.7% of children attend school in households headed by return migrants, whereas in comparable households without return migrants only 47.2% regularly go to school (Arce et al., 2009, p. 174). Given this, one might suspect that in regions with higher concentrations of return migrants, local residents would, by way of example, come to place more emphasis on the education of their children.

In terms of health, a number of studies note the potential for migration to improve physical wellbeing in migrant-sending regions. Levitt (1997) finds that migrants remit social practices that foster improved health outcomes in Mexico. In separate studies, Kanaiapuni and Donato (1999), and López Córdova (2004), find that household remittances have positive effects over time on the wellbeing of families. Specifically, they find that municipalities receiving relatively higher influxes of remittances experience a significant drop in infant mortality rates. Similarly, researchers have found that remittance flows have a positive impact on overall healthcare expenditures in Mexico (Amuedo-Dorantes & Pozo, 2009; Valero-Gil, 2008). In turn, Frank and Hummer (2002) find that babies born into families with at least one migrant living abroad register higher birth weights. These outcomes are likely a product of both relaxed liquidity constraints as well as access to improved shelter and infrastructure—that is, modern housing, potable water, electricity, refrigeration, etc. (Duryea, López-Córdova, & Olmedo, 2005). Although existing research does not directly address the impact of return migrants on health, given these findings, one might suspect that returnees would have a positive impact on healthcare outcomes in areas receiving former migrants.

Concerning economic outcomes, an emerging body of literature demonstrates that return migrants, relative to those who have not migrated, are much more likely to obtain stable employment and participate in entrepreneurial ventures. This is particularly true for return migrants who resided abroad for extended periods of time (Arce et al., 2009). Return migrants tend to use capital saved abroad to start independent businesses in fields such as arts and crafts, transportation, construction, small stores,

ranching, and farming (Adams, 2006; Arce et al., 2009; Durand & Arias, 1997; Massey & Parrado, 1997; Woodruff & Zenteno, 2007; Woodruff, 2007; Yunez, Taylor, & Becerril, 2000). Marchetta (2012) finds that Egyptians returning from oil rich countries in the Middle East have a positive effect on local economies. Specifically, she finds that return migrants are more likely to engage in entrepreneurial business ventures, and most importantly, compared to non-migrants, they are more likely to succeed. Similarly, in rural communities in the U.S. Von Reichert and colleagues (2014, p. 200) find that return migrants who have spent extended periods of time in cities bring back human capital and occupy professional positions that are often difficult to fill in rural communities. Moreover, returnees foster a spirit of entrepreneurialism, which creates local jobs and improves the quality of life in rural America.

Finally, regarding political norms, studies reveal that migrants often influence political tendencies within hometowns and surrounding regions (Germano, 2013; Goldring, 2002; Goodman & Hiskey, 2008; Itzigsohn & Villacrés, 2008; Pfitze, 2012). Pérez-Armendáriz & Crow (2010) find that connections with “relatives or friends who have migrated north greatly raises one’s proclivity toward democratic participation.” Their findings indicate that individuals living in areas with high levels of migration are more likely to participate in politics beyond the electoral booth, such as civic associations and protests. Pfitze (2012, p. 174), in turn, points to a link between household remittances and political change, indicating, “as remittances increase voters’ disposable income, the necessary clientelistic transfers paid in exchange for political support would need to increase as well. To the extent that the government faces budget constraints, this patronage system will become unsustainable.” Pfitze’s suggest that migrants, via cash transfers and social networks, play a role in promoting electoral competition and “the improvement of democratic institutions at the local level.” Chauvet and Mercier’s (2011, p. 1) research in the West-African nation of Mali shows that migrants frequently trigger “transfers of political norms” and in this manner contribute to higher participation rates in local elections. On a similar note, Batista and Vicente (2011) document evidence in Cape Verde that suggests that return migrants have a positive effect on the demand for political accountability. Like Chauvet and Mercier (2011), they note that this effect is particularly evident among migrants who have lived in countries with relatively better governance. Related to this, Rother’s (2009) work in the Philippines demonstrates that the effect of return migrants on local politics depends a great deal on the country in which migrants resided in abroad. Rother (p. 274) finds that migrants returning from non-democratic countries in the Middle East have a proclivity to be less supportive of democratic norms. This finding leads the author to conclude “it [is] clear that migrants are a worthwhile factor to include in the research on external factors of democratization, diffusion, democratic consolidation and diffuse support for democracies.”

Existing research mainly focuses on the effects of transnational connections on those whom immigrants left behind. Far less attention is lent to the influence of return migrants on the communities where they choose

Table 1
 Descriptive statistics, Mexican Pesos.

Variable	Mean	S.D.	Data source
HDI	.77	.05	INEGI; SNIM
Infant mortality rate	22.43	7.61	INEGI
Education attendance rate	61.48	3.92	INEGI
% Pop illiterate	85.53	5.08	INEGI
Income per capita ¹	69,720	46,267	INEGI
Electoral participation	51.39	7.26	CIDAC; IFE
% Homes return migrants	4.49	2.26	CONAPO
% Homes remittances	13.36	6.68	CONAPO
Municipal population	113,553	4601	INEGI
Municipal revenue per capita ²	101.93	62.19	SNIM
Public works per capita ³	922.09	21.23	SNIM; INEGI
Population 18+ (% total)	58.12	4.13	SNIM; INEGI
Population 18+ (% total female)	31.83	2.32	SNIM; INEGI

Source: Proposals to Change Mexico (CIDAC), National Population Council (CONAPO), Federal Electoral Institute (IFE), National Institute of Statistics and Geography (INEGI), National System of Municipal Information (SEDESU), and National System of Municipal Information (SNIM).
^{1,2,3} Figures in Mexican Pesos. Exchange rate for 2010 was \$12.38 pesos per \$1U.S. dollar.

to resettle. The remainder of this paper systematically analyzes the effects of return migrants on communal well-being across 46 municipalities in the state of Guanajuato, Mexico. Grounded in extant research, the hypothesis is that returnees will improve education, healthcare, income, and political participation within their local communities.

3. Data

Guanajuato is the ideal location to analyze the effect of return migration on local communities. The state has a deep history of emigration to the U.S. Over the last several decades it has ranked among the top three migrant-sending states in the nation, and in recent years the state has sent more migrants to the U.S. than any other Mexican state. In 2010, for example, 116,235 migrants left Guanajuato for the U.S. Michoacán had the second highest total, sending 83,642 migrants to the U.S. At the same time, however, Guanajuato is also one of the leading return-migrant receiving states in the nation (INEGI).

Table 1 outlines the municipal-level balanced panel data. The first dependent variable of interest is the *Human Development Index* (HDI). The HDI, designed by the United Nations Development Program (UNDP), employs data logged by the National Institute of Statistics and Geography (INEGI). The HDI ranges from 0 to 1, where 1 implies highest human development. The index is composed of equal weights of 1/3 each, for health (infant mortality rate), education (school attendance rate, and literacy rate), and living standards (income per capita).³

Fig. 1 plots human development trends in Guanajuato across municipalities from 2000 through 2010. At the turn of the twenty-first century very few of Guanajuato's municipalities surpassed .8 on the HDI scale. In turn, by 2010 more than nine of the state's 46 municipalities had exceeded .8, and all municipalities registered HDI levels

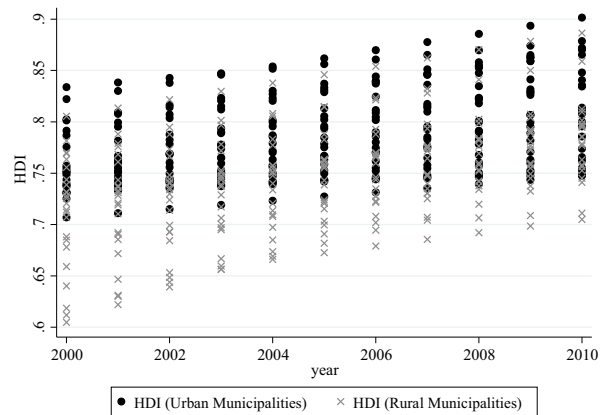


Fig. 1. Guanajuato human development index, by municipality, 2000–2010.
 Source: National Institute of Statistics and Geography (INEGI).

above the .6 level. Furthermore, by 2010 several municipalities approached the .9 level, with one municipality, Celaya, surpassing it. Moreover, development inequalities between municipalities have decreased over the last 10 years—the reduced spread between the most developed and least developed municipalities in Guanajuato evidences this trend. Finally, since 2000, development levels in rural municipalities where the bulk of return migrants settle have improved substantially relative to urban municipalities. The task is to evaluate the degree to which return migrants have contributed to this progress. Although the analysis is limited to Guanajuato, the results may help researchers interpret outcomes in other parts of Mexico and the rest of the world.

The final dependent variable of interest is *Electoral Participation*, which is employed to evaluate the relationship between return migration and participation in local elections. The variable measures the percentage of eligible voters who turned out to vote in elections during the period 2000–2010. Elections were held in 2003, 2006, and 2009. Data for this variable come from the Federal Electoral Institute (IFE) and Proposals to Change Mexico (CIDAC).

Concerning explanatory variables, the main variable of interest, % of Homes with Return Migrants, measures the percentage of homes with a migrant who returned to Mexico within the previous five years and stayed. Data for this variable was collected from the National Population Council (CONAPO), and INEGI. The expectation is that return migrants will have a positive impact on measures of human development and political participation.

The variable % Homes with Remittances represents the percentage of homes in a given municipality receiving migrant remittances. Data for this variable is from the CONAPO and INEGI. The total amount of remittances a municipality receives would be the usual variable employed. However, this analysis favors the percentage of homes receiving remittances due to the fact that family members frequently withdraw remittances in larger cities in neighboring municipalities, and as a result, where remittances are withdrawn does not necessarily correspond to the location in which remittances may have an impact.

³ Income per capita is adjusted for inflation, using August 2005 as a baseline (INEGI).

Thus, for the purpose of cross-municipality analysis, the percentage of homes receiving remittances provides a better measure of the potential impact of remittances. This different way of measuring may be a key contributing factor to the current research disagreements on the effects of remittances on development. Some studies find a positive relationship between remittances and economic development (Fajnzylber & López, 2008), while others find a negative relationship on development outcomes (Reichert, 1981). The anticipated result is a negative relationship between overall human development and migrant remittances. This expectation is grounded in the fact that most remittances are not invested in entrepreneurial projects or public infrastructure, but are rather used for conspicuous consumption in migrant hometowns (Durand & Massey, 1992). Also, at the aggregate municipal level, forgone wages due to migration may be much higher than the remittances that replace them.

Municipal Population is included in order to control for population differences across municipalities. Previous studies have demonstrated that migrants from rural areas are more prone to go to the U.S., whereas their counterparts from relatively urban areas are more likely to migrate to larger regional cities (Massey and España, 1987). Moreover, municipal capacity—measured in terms of the human capital of municipal workers and municipal transparency, measured in terms of government transparency and accountability—increases dramatically in more urban municipalities (UNDP, 2005). The qualitative research on the ground in Guanajuato reaffirms this notion. Data for this variable comes from the National System of Municipal Information (SNIM) and INEGI.

Municipal Revenue per Capita is included to control for municipal income. Although municipalities in Mexico do not collect income taxes, they do receive property taxes, as well as fees for services such as business licenses and building permits. Municipalities that generate more revenue naturally have more resources to invest in local development initiatives. Thus it is expected that municipalities with higher revenues will have more favorable development outcomes compared to municipalities that generate less revenue. In turn, in order to control for municipal spending on public works projects, the variable *Public Work Spending per Capita* is included. This variable measures the amount of money municipalities spend per capita on public works projects in a given year. Controlling for public works spending is particularly important in Mexico due to the fact that since 1997 municipal governments have wielded a great deal of control over fiscal spending, especially in the area of public works projects. Data for this variable comes from SNIM and INEGI. Finally, the variables *Population 18+ (% total)*, and *Population 18+ (% total female)* are included in order to control for the percentage of municipal populations eligible to vote. Electoral participation should be higher in those municipalities with relatively larger voting-age populations. However, given the gendered nature of migration trends coupled with Mexico's patriarchal past, voting trends may be very different for voting age males and females. Specifically, municipalities with higher percentages of voting age females relative to males will likely experience lower

turnout rates. Data for these variables are made available by INEGI.

4. Empirical specification

The analysis begins by evaluating the relationship between HDI and a matrix of independent variables. Consider the basic model

$$HDI_{i,t} = \gamma Rtrn_Migr_{i,t} + \beta' X_{i,t} + v_i + u_{i,t} \quad (1)$$

where subscripts correspond to municipality i at time t , and $Rtrn_Migr$ denotes the main variable of interest, the percentage of homes with return migrants. $X_{i,t}$ represents the matrix of control variables, v_i denotes time-invariant fixed parameters, and $u_{i,t}$ is the standard error.

However, the main variable of interest, $Rtrn_Migr$ may be endogenous. That is, return migrants may affect development, but migrants may also return as a response to improved conditions in Mexico. In that case, $Rtrn_Migr$ will be correlated with the error term, and the coefficient estimates will be biased. The endogeneity problem is addressed by lagging the endogenous explanatory variables so that causality, forced by the time dimension, can only run in one direction. Further, if the disturbance term is first-order autoregressive, then

$$u_{i,t} = \rho u_{i,t-1} + e_{i,t},$$

where $|\rho| < 1$, and $e_{i,t}$ is independent and identically distributed (i.i.d.) with mean 0 and variance σ^2 . To account for autocorrelation, a Generalized Least Squares model estimator (GLS) is estimated based on Baltagi and Wu (1999). The specification thus becomes

$$HDI_{i,t} = \gamma Rtrn_Migr_{i,t-1} + \beta' X_{i,t} + v_i + u_{i,t}, \quad (2)$$

where if v_i is assumed to be fixed parameters, then our specification becomes a fixed-effects model. If v_i are assumed to be realizations of an i.i.d. process with mean 0 and variance σ^2 , then our specification becomes a random-effects model.

In the second stage of the analysis the relationship between Electoral Participation and a matrix of independent variables is assessed. The GLS model is run again, specified as

$$Elect_Particip_{i,t} = \gamma Rtrn_Migr_{i,t-1} + X'_{i,t} \beta + v_i + u_{i,t} \quad (3)$$

where the dependent variable $Elect_Particip_{i,t}$ corresponds to the cross-sectional unit i at time t .

5. Results

In recent decades human development levels have improved a great deal across the state of Guanajuato. The goal of the first stage of analysis is to determine the degree to which return migrants have contributed to these advances in human development over the time period 2000–2010.

Initially, both fixed-effects and random-effects specifications are run, and Hausman's (1978) specification test is implemented. The null hypothesis, that the preferred model is random-effects, is not rejected thus indicating

Table 2
 Human development in Guanajuato, by municipality, 2000–2010.

	Human development indicators				
	HDI Coef.	Infant mortality rates Coef.	School attendance Coef.	Literacy rates Coef.	Income per capita Coef.
% Homes with return migrants	.01*** (6 × 10 ⁻⁴)	-1.27*** (.10)	.88*** (.08)	.59*** (.05)	186.24*** (34.54)
% Homes with remittances	-2 × 10 ⁻³ *** (4 × 10 ⁻⁴)	.39*** (.06)	-35*** (.04)	-.12*** (.03)	-45.06** (14.94)
Municipal revenue per capita	1 × 10 ⁻⁴ *** (.00002)	-.03*** (3 × 10 ⁻³)	.02*** (.003)	3 × 10 ⁻³ * (2 × 10 ⁻³)	4.60*** (1.19)
Public works per capita	2 × 10 ⁻⁶ (4 × 10 ⁻⁵ 7)	-2 × 10 ⁻⁴ * (1 × 10 ⁻⁴)	2 × 10 ⁻⁴ ** (8 × 10 ⁻⁵)	4 × 10 ⁻⁵ (5 × 10 ⁻⁵)	.54*** (.05)
Municipal population (log)	.03*** (4 × 10 ⁻⁵)	-2.78*** (.61)	-.23 (.36)	2.92*** (.39)	-754.16*** (87.52)
Constant	.42*** (.04)	56.05*** (6.91)	63.09*** (4.15)	52.52*** (4.37)	9481.37*** (1045.89)
N	460	460	460	460	460
Prob. > χ ²	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
R ²	.48	.43	.25	.43	.66

Source: CIDAC, CONAPO, IFE, INEGI, SEDESU, and SNIM. For the full list of acronyms please see Table 1.

Notes: Standardized coefficients reported. Standard errors in parentheses.

- * Statistical significance at the .1 level.
- * Statistical significance at the .05 level.
- ** Statistical significance at the .01 level.
- *** Statistical significance at the .001 level.

that the unobservable individual effects in the models are independently distributed from the regressors. That is, a random-effects model is both consistent and efficient. Tables 2 and 3 report the results for the GLS random-effects model specification.

Table 2 displays the results of the model specified by Eq. (2). The main variable of interest, % Homes with return migrants, shares a strong positive relationship with all measures of human development, implying that return migrants may play an important role in underpinning

Table 3
 Electoral participation in Guanajuato, by municipality, 2000–2010.

Electoral participation (DV)	Model I Coef.	Model II Coef.	Model III Coef.
% Homes with return migrants	1.14** (.42)	.97** (.43)	.93** (.42)
% Homes with remittances	-.37** (.16)	-.36** (.16)	-.31* (.16)
Public works per capita	2 × 10 ⁻³ ** (6 × 10 ⁻⁴)	2 × 10 ⁻³ ** (7 × 10 ⁻⁴)	2 × 10 ⁻³ ** (7 × 10 ⁻⁴)
School attendance (% attended)	.23 (.20)	.36* (.21)	.34* (.21)
Income per capita (logs)	7.04 (11.89)	283.66* (164.99)	295.69* (165.63)
Income per capita squared (logs)	- (-)	-198.00* (118.07)	-206.29* (118.44)
Population 18+	-.29* (.21)	-.35* (.21)	- (-)
Population 18+ (% total female)	- (-)	- (-)	-.68* (.37)
Constant	47.96** (14.50)	-52.54* (61.38)	-54.79* (61.38)
Number of obs.	138	138	138
Prob. > χ ²	(0.000)	(0.000)	(0.000)
R-squared	.18	.17	.19

Source: CIDAC, CONAPO, IFE, INEGI, SEDESU, and SNIM. For the full list of acronyms please see Table 1.

Notes: Standardized coefficients reported. Standard errors in parentheses.

- * Statistical significance at the .1 level.
- * Statistical significance at the .05 level.
- ** Statistical significance at the .01 level.

development trends in the state of Guanajuato. The coefficient for return migrants is relatively large at .01, indicating that returnees contribute to positive development outcomes in Guanajuato during the period 2000–2010.⁴ Regarding individual indicators, for every 10% increase in return migrants infant mortality rates fall by nearly 13 in the ensuing year, indicating that for every 1000 births 13 fewer children die before their fifth birthday. The percentage of return migrants residing in households has a similar effect on school attendance and literacy rates. For every 10% increase in return migrants, school attendance rates increase by almost 9%, and literacy rates go up by nearly 6%. Finally, for every 10% increase in return migrants, municipal income per capita goes up by \$1862 Mexican pesos, roughly \$155 US dollars. In practical terms, this represents a 3% increase on average municipal income per capita, which was \$69,720 pesos or \$5631 US dollars during the period 2000–2010. These findings reveal the measurable impact of return migrants on hometown communities.

These results echo extant research that finds that when migrants return to their countries of origin they bring with them new and innovative ways of thinking, and as a result, contribute to community development. They may do this not only through monetary means, but also by opening up communities to alternative ways of seeing the world. Further, the quantitative trends parallel Waddell's (2013), Waddell's (2014) research on the ground in Guanajuato. For example, interviews of migrants in the field revealed that return migrants were far more likely to bring up the importance of education. In the small town of El Timbinal, which is located in Yuriría, Guanajuato, return migrant leaders proudly showed us the school they had helped fund. In addition, migrant leader Ángel Calderón indicated the town's migrant club frequently sponsors children who are interested in continuing with their education beyond the primary level (Waddell, 2014). Related to this, the findings outlined above indicate that social capital brought back by migrants may help explain why return migrants have a positive impact on local development outcomes. Taken together, the regression results imply that returnees may have positive effects on their hometowns, improving not only the economy, but also education, healthcare, and overall wellbeing.

In contrast with return migrants, the independent variable % *Homes with remittances* shares a negative relationship between household remittances and all measures of human development. For every 10% increase in household remittances infant mortality rates increase by 4, literacy rates drop by 1%, school attendance experiences a 4% decrease, and income per capita drops by \$450 pesos, or \$38 US dollars. This finding indicates that household remittances alone may repress human development at the municipal level in Guanajuato. This outcome likely relates to several factors. First, in communities that receive high remittance flows, children grow up admiring migrants. Migrants, after all, are part of a relatively privileged

economic sector in the Mexican countryside. As a result, young men and more and more young women see migration to the U.S. as the key to a successful future. As migrants frequently suggested during field interviews, the only way to get ahead in Mexico is to go North and try one's luck. In this sense, individuals leave in order to financially support their immediate family members. Remittances, therefore, are a welfare transfer from abroad intended to improve the individual wellbeing of those left behind. However, instead of spurring local development, the money is often spent on conspicuous consumption and in turn motivates others to leave as well, thus creating a vicious cycle in which migration becomes the only way out. Migration may also drain municipalities of their most productive and motivated workers, thus lowering output and labor productivity within local economies. The suspicion here is that forgone wages due to migration are on average much higher than the remittances that replace them. Therefore, despite the fact that remittances trickle into communities and create multiplier effects within local economies (Quinn, 2005), this study indicates that raw cash transfers do not contribute much to the long-term development of the wider community.⁵

Municipalities with relatively larger revenues are expected to have better development outcomes. The variable *Municipal Revenue per Capita* supports this notion, reporting positive and relatively large coefficients across each model. In turn, *Public Works per Capita* has a positive impact on infant mortality rates, school attendance rates, and per capita income. Finally, *Municipal Population* shares a positive relationship with HDI, confirming the notion that human development levels are higher in relatively more urban municipalities.

Table 3 outlines the results of the model specified by Eq. (3) exploring the relationship between electoral participation and return migrants. Three regression models were run; χ^2 tests show that regressions are significant across each model.

The percentage of homes with return migrants has a positive effect on electoral participation: for every 10% increase in return migrants, electoral participation increases by nearly 9%. This finding echoes earlier work (Batista & Vicente, 2011; Chauvet & Mercier, 2011; Pérez-Armendáriz & Crow, 2010; Rother, 2009), indicating that when migrants return to their hometowns they have the potential to reengage local communities in electoral politics. In contrast, the coefficient for the variable % *Homes with remittances* is significant and negative in each model, indicating that as the percentage of homes receiving migrant

⁴ In interpreting this effect it is important to note the HDI index runs from 0 to 1; thus, what may seem like relatively small increases should be interpreted as substantially significant.

⁵ Here it is worth noting there is likely an interaction effect between remittances and return migration. In the panel data there is a positive correlation ($r = .39$) between these two variables, indicating that the percentage of homes receiving remittances tends to be higher in precisely those communities that also receive higher numbers of return migrants. Still, despite this interaction, return migration is found to have a positive effect on development outcomes whereas remittances are found to hamper local development. This finding implies that it may be in the absence of return migrants—and the social and human capital they bring with them—that remittances are most pernicious. Teasing out the exact effect of this interaction is an important issue worthy of further research.

remittances increases, the number of registered voters participating in elections falls. A one standard deviation shift in the percentage of homes receiving remittances leads to a nearly 3% drop in electoral participation. This finding mirrors previous research (Goodman & Hiskey, 2008; Germano, 2013), implying that as communities gain economic support from friends and family living abroad, they become less likely to engage in local affairs.

Public Works per Capita has a positive effect on electoral participation. However, the effect is small, implying that while municipal investments in public works projects likely contribute to local development, they do not appear to have a large impact on electoral participation trends. In turn, *School Attendance* has a more notable effect on voter participation. For every 10% rise in school attendance rates, electoral participation increases by more than 3%.

In Model I *Income per Capita* shares a positive relationship with electoral participation. However, as Models II and III illustrate, this relationship does not appear to be linear but parabolic. In this case, β_1 no longer captures the marginal effect of X_i on Y_i . Instead, the quadratic term represents the increasing or decreasing marginal effects of X_i on Y_i or $\partial Y_i / \partial X_i = \beta_1 + 2\beta_2 X_i$. In other words, electoral participation increases as per capita income improves but eventually begin to drop in municipalities with higher per capita income levels. This trend mirrors the experience of relatively wealthy nations in which electoral participation rates have fallen off in the later stages of development.

Finally, as Models I and II reveal, *Population 18+* has a negative effect on electoral participation, demonstrating that as the percentage of eligible voters increases, electoral participation falls. Also, as Model III illustrates, *Population 18+ (% total female)* has a negative effect on electoral turnout, implying that electoral participation in the state of Guanajuato may be moderated by gender norms. Given the state's long history of male migration to the U.S., this outcome makes sense. That is, typically working age males leave their hometowns for the U.S. right around the time they would become eligible to vote. Once migrants gain stable employment abroad, they begin to send money home, but mainly to female members of the family that were left behind. However, as previously discussed, remittances make it less likely that individuals feel a need to engage with the state. Moreover, in a highly patriarchal society like Mexico, working age males, many of whom have migrated to the U.S., are the very individuals most expected to engage with the state. Together, these factors help explain why areas with high migration in Guanajuato experience drops in voting turnout. This is a novel finding. Related to this, it is worth reemphasizing the fact that even when controlling for the absence of voting age males, the percentage of homes with return migrants continues to have a positive effect on electoral participation. This outcome is testimony to the strong influence of return migrants within local communities across Guanajuato.

6. Conclusions

In his seminal 1980 analysis of return migration, Gmelch wrote, "Large numbers of returnees in a community or region may provide the critical mass needed to organize

and bring about needed reforms" (p. 144). If there has ever been a critical mass of return migrants it is to be found in the current wave of returnees settling back into life in Guanajuato, Mexico. Still, the degree to which return migrants actually affect local development outcomes in Guanajuato, or anywhere else for that matter, is not well understood. The present study attempts to shed light on the degree to which return migrants underpin social, economic, and political changes in Guanajuato using original panel data compiled for the period 2000–2010.

The results indicate that where former migrants settle back into life in Guanajuato, fewer infants die before the age of 5, more children attend school, literacy rates improve, per capita income rises, and citizens engage in electoral politics in greater numbers. These findings reveal the potential for return migrants to contribute to improved development outcomes in their hometown communities. These findings are novel and add to a growing body of literature concerning the impact of return migrants on hometown communities and regions (Arce et al., 2011; Batista & Vicente, 2011; Marchetta, 2012; Chauvet & Mercier, 2011; Marchetta, 2012; Rother, 2009). Still, although the research improves the general understanding of return migration, there are a number of important issues that we are unable to address in this manuscript.

First, the generalizability of this research is limited by its focus on one specific case study. However, within the context of Mexico, the findings in the state of Guanajuato likely mirror the experiences of neighboring states such as Michoacán, Jalisco, Zacatecas, and Durango, all of which have experienced large influxes of return migrants in recent years. With this in mind, future research should focus on comparing the effect of return migration across different regions and countries, both within Mexico and beyond. Second, it would be helpful to understand the degree to which a migrant's former legal status affects his or her impact on hometown communities. Research in this direction would improve understanding of foreign policy decisions on local development outcomes. Third, researchers need to address the potential interaction effect between return migration and remittances. For example, do return migrants improve the development potential of remittances? Although unable to address this question here, a better understanding of the interaction effect of these two variables could help policy makers maximize the development potential of remittances. Finally, social scientists need to investigate how returnees respond to local economic conditions. Are returnees more likely to come back to areas with relatively stronger economies? Although these queries fall outside the scope of the current article, they are important questions worthy of additional inquiry.

This research also has important implications for policy makers. Return migration has the potential to improve local development outcomes. However, as previous studies reveal (Arce et al., 2011, p. 173), more often than not the new skill sets that former migrants bring back with them are underutilized. In this sense, the degree to which return migrants influence their homeland may largely be contingent on local policy makers. The underutilization of return migrant capital is likely due to local factors such as lack of state support, limited credit markets, insufficient access to

education, and poor infrastructure. Given this, as a means of maximizing the development yields of human capital brought back by former migrants, it is in the Mexican state's best interest to reduce potential barriers to development within migration-prone regions.

In recent years the Mexican government has engaged with its large diaspora community in new and innovative ways. Specifically, the government has implemented a number of programs for diaspora communities that allow them to interact transnationally with their communities of origin. For example, *Bienvenido a Casa Paisano* facilitates migrants returning home with things such as the repatriation of remains, filing official paperwork, and renewing visas. *Vete Sano y Regresa Sano*, on the other hand, is designed to support the health care of migrants and their families. In turn, the program 3×1 *para Migrantes* allows migrants to spearhead community development projects including the expansion of local electricity grids, as well as the construction of roads, schools, and sewage systems. The 3×1 program is unique in that for every dollar migrants contribute to a project the government contributes three additional dollars.

Still, while extremely important, the aforementioned programs focus almost exclusively on supporting current migrants. In turn, the Mexican state has focused far less attention on issues related to the reintegration of return migrants into Mexican society. A notable exception to this is found in the case of La Universidad de Guanajuato's branch campus located in Yuriria, Guanajuato. The campus recently launched a new program for return migrants designed to certify former migrants as instructors of English as a second language. The program recognizes that many migrants return with the ability to speak English but they frequently lack the basic skills, such as writing and arithmetic, necessary to formally instruct others in English as a second language. The program is unique in that it allows returnees to capitalize on skills they obtained while living abroad. In this sense, the program helps returnees pursue a Mexican Dream by obtaining meaningful employment teaching English in local primary and secondary schools. Although this program is a pilot study and is only now being adopted in other parts of the state, the Mexican government would be wise to expand programs of this nature to migrant-sending regions across the country. In doing so, the findings outlined in this study suggest that policy makers may very well mitigate some of the very social-economic factors that underpin emigration in the first place.

References

- Acosta, P., Fajnzylber, P., & Humberto Lopez, J. (2007). *The impact of remittances on poverty and human capital: Evidence from Latin American household surveys*. In Özden Çağlar, & W. Schiff Maurice (Eds.), *International migration, economic development and policy*. Washington, DC: The World Bank.
- Adams, R. (2006). *International remittances and the household: Analysis and review of global evidence*. *Journal of African Economics*, 15(2), 396–425.
- Amuedo-Dorantes, C., & Pozo, S. (2010). *Accounting for remittance and migration effects on children's schooling*. *World Development*, 38(12), 1747–1759.
- Amuedo-Dorantes, C., & Pozo, S. (2009). *New evidence on the role of remittances on healthcare expenditures by Mexican households*. *Review of Economics of the Household*, Springer, 9(1), 69–98.
- Antman, F. M. (2010). *Gender, educational attainment, and the impact of parental migration on children left behind*. Social Science Research Network. <http://ssrn.com/abstract=1151831> Retrieved 11.06.14
- Arias, P. (2004). *Old paradigms and new scenarios in a migratory tradition: U.S. migration from Guanajuato*. In D. Jorge, & S. M. Douglas (Eds.), *Crossing the border: Research from the Mexican migration project*. New York, NY: The Russell Sage Foundation.
- Arce, J. M., Renato, S. A., & Soberón Mora, J. A. (2011). *La Migración de retorno desde Estados Unidos hacia el estado de México: Oportunidades y retos*. *Cuadernos Geográficos*, 49(2), 153–178.
- Avritzer, L. (2002). *Democracy and the public space in Latin America*. Princeton, NJ: Internationals. Oxford, Princeton University Press.
- Baltagi, B. H., & Wu, P. X. (1999). *Unequally spaced panel data regressions with AR(1) disturbances*. *Econometric Theory*, 15, 814–823.
- Batista, C., & Vicente, P. C. (2011). *Do migrants improve governance at home? Evidence from a voting experiment*? *World Bank Economic Review*, 25(1), 77–104.
- Borraz, F. (2005). *Assessing the impact of remittances on schooling: The Mexican experience*. *Global Economy Journal*, 5(1), 1–9.
- Calero, C., Bedi, A. J., & Sparrow, R. (2009). *Remittances, liquidity constraints and human capital investments in Ecuador*. *World Development*, 37(6), 1143–1154.
- Carrión-Flores, C. E. (2006). *What makes you go back home? Determinants of the duration of migration of mexican immigrants in the United States*. Retrieved from <http://www.fred.ifas.ufl.edu/carmencf/research.htm>
- Chauvet, L., & Mercier, M. (2011). *Migration and elections in Mali. Does migration promote democratization in Africa?* <http://www.csa.ox.ac.uk/conferences/2011-EDiA/papers/758-Mercier.pdf> Accessed 12.12.12
- Cox, E. A., & Ureta, M. (2003). *International migration, remittances, and schooling: Evidence from El Salvador*. *Journal of Development Economics*, 72(2), 429–461.
- Creighton, M. J. (2013). *The role of aspirations in domestic and international migration*. *Social Science Journal*, 50(1.), 79–88.
- Dumont, J.-C., & Spielvogel, G. (2008). *Return migration: A new perspective*. OEDC. Available at <http://www.oecd.org/migration/mig/43999382.pdf>
- Durand, J. (1987). *Guanajuato: Cantera de migrantes*. *Encuentro*, 4, 49–62.
- Durand, J., & Arias, P. (1997). *Las remesas: Continuidad o Cambio?* *Revista Ciudades*, 35, 3–11.
- Durand, J., & Massey, D. S. (1992). *Mexican migration to the United States: A critical review*. *Latin American Research Review*, 27, 3–42.
- Duryea, S., López-Córdova, E., & Olmedo, A. (2005). *Migrant remittance and infant mortality: Evidence from Mexico*. Washington, DC: Inter-American Development Bank.
- Dustmann, C., Fadlon, I., & Weiss, Y. (2010). *Return migration, human capital accumulation, and the brain drain*. *Journal of Development Economics*, 95, 58–67.
- Esquivel, G. (2010). *The dynamics of income inequality in Mexico since NAFTA*. Centro de Estudios Económicos. Retrieved from <http://www.cid.harvard.edu/Economia/GEsquivel.pdf>
- Fajnzylber, P. J., & López, H. (Eds.). (2008). *Remittances and development*. Washington, DC: The World Bank.
- Frank, R., & Hummer, R. A. (2002). *The other side of the paradox: The risk of low birth weight among infants of migrant and nonmigrant households within Mexico*. *International Migration Review*, 36(3), 746–765.
- Germano, R. (2013). *Migrants' remittances and economic voting in the Mexican countryside*. *Electoral Studies*, 32(4), 875–885.
- Gmelch, G. (1980). *Return migration*. *Annual Review of Anthropology*, 9, 135–159.
- Goldring, L. (2002). *The Mexican state and transmigrant organizations*. *Latin American Research Review*, 37(3), 55–99.
- Goodman, G. L., & Hiskey, J. T. (2008). *Exit without leaving: political disengagement in high migration municipalities in Mexico*. *Comparative Politics*, 40(2), 3–39.
- Hanson, G.H., & Woodruff, C. (2003). *Emigration and Educational Attainment in Mexico*. Unpublished. Retrieved from <http://irps.ucsd.edu/assets/022/8772.pdf>
- Hausman, J. A. (1978). *Specification tests in econometrics*. *Econometrica*, 46, 1251–1271.
- Hondagneu-Sotelo, P. (1994). *Gendered transitions: Mexican experiences of immigration*. Berkeley: University of California Press.
- Illahi, N. (2001). *Children's work and schooling: Does gender matter? Evidence from the Peru LSMS panel data*. The World Bank. Policy Research Working Paper Series, No. 2744

- Instituto Nacional de Estadística y Geografía (INEGI). <http://www3.inegi.org.mx/sistemas/temas/default.aspx?s=est&c=17484> Accessed 01.05.14.
- Itzigsohn, J., & Villacrés, D. (2008). Migrant political transnationalism and the practice of democracy: Dominican external voting rights and Salvadoran home town associations. *Ethnic and Racial Studies*, 31(4), 664–686.
- Kanaiaupuni, S. M., & Donato, K. M. (1999). Migradollars and mortality. The effects of migration on infant survival in Mexico. *Demography*, 36(3), 339–353.
- Kandel, W., & Kao, G. (2001). The impact of temporary labor migration on Mexican children's educational aspirations and performance. *International Migration Review*, 35(4), 1205–1231.
- Levitt, P. (1997). Transnationalizing community development: The case of migration between Boston and the Dominican Republic. *Nonprofit and Voluntary Sector Quarterly*, 26(4), 509–526.
- Levitt, P., & Lamba-Nieves, D. (2011). Social remittances revisited. *Journal of Ethnic and Migration Studies*, 37(1), 1–22.
- Li, X., & McHale, J. (2009). *Emigrants and institutions* Working Paper. Galway: University of Michigan and National University of Ireland.
- Lindstrom, D. P. (1996). Economic opportunity in Mexico and return migration from the United States. *Demography*, 33, 357–374.
- López Córdova, E. (2004). *Globalization, migration and development. The role of Mexican migrant remittances*. Mimeo, Inter-American Development Bank. Working Paper 20
- Lu, Y., & Treiman, D. J. (2011). Migration, remittances and educational stratification among blacks in apartheid and post-apartheid South Africa. *Social Forces*, 89(4), 1119–1144.
- Mansuri, G. (2006). *Migration, school attainment, and child labor: Evidence from rural, Pakistan*. The World Bank. Policy Research Working Paper 3945.
- Marchetta, F. (2012). *Return migration and the survival of entrepreneurial activities in Egypt*. Retrieved from http://www.hks.harvard.edu/var/ezp_site/storage/fckeditor/file/pdfs/centers-programs/centers/cid/migration/events/2011/4th/documents/francesca.marchetta.pdf
- Massey, D., & Parrado, E. (1997). Migración y Pequeña Empresa. *Revista Ciudades*, 35, 34–40.
- Massey, D. S., & España, F. G. (1987). The social process of international migration. *Science*, 237, 733–738.
- Passell, J. S., Cohn, D., & Gonzalez-Barrera, A. (2012). *Net migration from Mexico falls to zero—and perhaps less*. Pew Research Center. Retrieved from <http://www.pewhispanic.org/2012/04/23/net-migration-from-mexico-falls-to-zero-and-perhaps-less/>
- Pérez-Armendáriz, C., & David, C. (2010). Do migrants remit democracy? International migration, political beliefs, and behavior in Mexico. *Comparative Political Studies*, 43(1), 119–148.
- Pfütze, T. (2012). Does migration promote democratization? Evidence from the Mexican transition. *Journal of Comparative Economics*, 40, 159–175.
- Public Policy Institute of California. (1997). *Return migration to Mexico: Who goes? Who stays?* Public Policy Institute of California. Retrieved from http://www.ppic.org/content/pubs/rb/RB_197BRRB.pdf
- Quinn, M. A. (2005). Remittances, savings, and relative rates of return. *The Journal of Developing Areas*, 38(2), 1–23.
- Ravuri, E. D. (2014). Return migration predictors for undocumented Mexican immigrants living in Dallas. *The Social Science Journal*, 51, 35–43.
- Reichert, J. S. (1981). The migrant syndrome: Seasonal U.S. wage labor and rural development in Central Mexico. *Human Organizations*, 40, 56–66.
- Reinhold, S., & Thom, K. (2009). *Temporary migration and skill upgrading: Evidence from Mexican migrants*. Retrieved from http://papers.ssrn.com/sol3/PIPJournal.cfm?pip_jrnl=1425858
- Reyes, B. I. (2001). Immigrant trip duration: The case of immigrants from Western Mexico. *International Migration Research*, 35(4), 1185–1204.
- Riosmen, F. (2004). Return versus settlement among undocumented Mexican migrants, 1980 to 1996. In D. Jorge, & S. M. Douglas (Eds.), *Crossing the border: Research from the Mexican migration project*. New York, NY: The Russell Sage Foundation.
- Rother, S. (2009). Changed in migration? Philippine return migrants and (Un)democratic remittances. *European Journal of East Asian Studies*, 8(2), 245–274.
- Smith, C. S. (2006). *Mexican New York: Transnational lives of new immigrants*. Berkeley, CA: University of California Press.
- Spilimbergo, A. (2009). Foreign students and democracy. *American Economic Review*, 99(1), 528–543.
- United Nations Development Programme (UNDP). (2005). Guanajuato: Panorama Estatal. Retrieved from <http://www.undp.org.mx/IMG/pdf/Guanajuato.pdf>
- Valero-Gil, Jorge. (2008). *Remittances and the household's expenditures on health*. Munich Personal RePEc Archive, Paper No. 9572. Retrieved from <http://mpra.ub.uni-muenchen.de/9572/>
- Von Reichert, C., Cromartie, J. B., & Arthun, R. (2014). Impacts of return migration on rural U.S. Communities. *Rural Sociology*, 79(2), 200–226.
- Waddell, B. J. (2013). *The political economy of remittance-led development in Guanajuato, Mexico* (PhD dissertation). Albuquerque: Department of Sociology, University of New Mexico.
- Waddell, B. J. (2014). Remitting democracy? The role of migrant remittances in promoting social and political change in Guanajuato, Mexico. *Journal of Community Positive Practices*, XIV(1), 116–130.
- Waddell, B. J. (2015). Old habits die hard: Political patronage and remittance-led development in Guanajuato, Mexico. *Latin American Research Review*, 50(1), 5–28.
- Woodruff, C. (2007). Mexican microenterprise investment and employment. *Integration and Trade Journal*, 27, 185–209.
- Woodruff, C., & Zenteno, R. (2007). Migration networks and microenterprises in Mexico. *Journal of Development Economics*, 82(2), 509–528.
- Yang, D. (2008). International migration, remittances and household investment: Evidence from Philippine migrants' exchange rate shocks. *The Economic Journal*, 118, 591–630.
- Yunez, J., Taylor, E., & Becerril, J. (2000). Los pequeños productores rurales en México: Características y análisis de impactos. In A. Yunez (Ed.), *Los pequeños productores rurales en México: Las reformas y las opciones*. México: El Colegio de México.