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Migration Between Mexico and the United States

IMISCOE Regional Reader

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Preface

Recently, around the globe, the political context and the particular politics of migration have been characterized by xenophobia and anti-immigrant and racist discourses. Mexico and the United States are no exception. Furthermore, while in the past hostile discourses could play a political role without actually upsetting lives and uprooting people, this time discourses and actions have moved in unison. Border enforcement has increased, programs supporting incorporation and integration have been weakened, red tape has become almost impossible to manage, political asylum and refugee populations have been in practice blocked at the door, or expelled from the countries where they demand protection. All this translates into fear, uncertainty, unemployment and poverty in everyday life for immigrants, and into a seemingly endless journey for many others trying to reach safe haven. Our binational group of scholars, working together since the mid-1990s, had not undertaken a project such as this at a time as dire as this.

Our perspective, however, is not as pessimistic. This book offers an analysis of the decade when departure and return migration changed: i.e. from 2000 to 2010. It analyzes in detail the events that led to Mexico–U.S.–Mexico migration today. From a binational perspective of the well-being of the Mexican migrant population on both sides of the border, this study includes scholars from both countries. We provide an analysis of the demographic, labor, education, health, violence, and fear and insecurity dimensions, and close with a study of access to social programs in Mexico. Looking closer at this decade and the changes it brought is key for understanding the new dynamics of Mexican migration, for understanding attacks against the Mexican population in the United States, for projecting what could happen to this aging population, and for generating effective policies for reincorporating returnees or integrating their children and families in Mexico.

The authors have decided to come together for three reasons. Firstly, at a time in which dialogue among groups with differing positions, and countries with complex, diverging and converging interests, is increasingly difficult, we hope to have proved that for U.S. and Mexican scholars it is possible to overcome national biases and beliefs in order to define the status of Mexico–U.S.–Mexico migration in a more objective manner. And we have done so for the third time as a Mexico–U.S. group

centered on a dialogue on migration.[1] Secondly, we came together because there is an important story to tell. Abruptly, the financial and housing crisis of 2007–8 triggered, and other factors helped establish, substantial changes in migration that were probably long due.[2] As of this writing, the status quo arising from that Great Recession still stands. The change we analyze here has altered the lives of Mexican immigrants in the U.S., would-be migrants who stayed in Mexico, return migrants, and their families and households. In other words, millions of people. While we can almost certainly say changes in these flows will continue, we also believe it is extremely unlikely that the status quo *ante–2007* will return. The period surrounding this change was probably unique, and this book provides the reader with a rigorous overview of the before and after of this change. Finally, we have come together, once more, to stress the fact that binational dialogue and policies can protect the well-being of this binational population and, by doing so, unleash its ability to further North American prosperity. We don't see migration as a threat, but rather as an opportunity, to provide particular individuals with the tools to contribute much more to society.[3]

In the 2020s, Mexico's position and role in global flows is more complex than ever. We focus on Mexicans moving North, and on Mexicans and Mexican Americans moving South. But of course, Mexico is being traversed today by thousands of migrants, mostly from the Northern Triangle of Central America (Guatemala, El Salvador and Honduras) as well as by persons departing the Caribbean, South America and Africa. Refugee applications in Mexico soared by more than 5000% in 7 years, from 2013 to 2020. Another study needs to focus on the increase in Central American migration; refugees or asylum seekers; President Donald Trump's or President Andrés Manuel López Obrador's reactions and initiatives towards migrants and migration flows; future developments under a Biden administration; recent increases in enforcement at the state and federal levels in both countries; discussions in the U.S. Supreme Court on Deferred Action for Childhood Arrivals (DACA), and the prospect of it being returned to its 2006 status,

[1] The founding members of this group were 20 Mexican and U.S. migration scholars officially invited by both governments to arrive at a non-partisan, binational definition of the status of Mexico–U.S. migration, in 1995. The outcome of this project was published in both languages, in both countries, in 1997 and 1998 (Commission on Immigration Reform and Secretaría de Relaciones Exteriores 1997, and Mexican Ministry of Foreign Affairs and U.S. Commission on Immigration Reform 1998). The group reformed independently in 2004 to do a follow up (Escobar and Martin 2008). Finally, the present study received funding from the MacArthur Foundation and has been approved for publication by El Colegio de México as a coedition with CIESAS (forthcoming) in Spanish. The reader is holding a new version modified to respond to English language reviewers.

[2] One of us wrote, in 2009, that Mexico–U.S. migration had come to a point in which neither the migrants themselves, nor Mexico, derived substantial benefits.

[3] We consider both societies and both governments as relevant interlocutors. Therefore, this book is also being published in Spanish by El Colegio de México and CIESAS, under the title *La década en que cambió la migración. Enfoque binacional del bienestar de los migrantes mexicanos en Estados Unidos y México* (forthcoming).

namely as an initiative in the U.S. Congress. And Mexico should also implement practical actions to protect its 1.5 million poor, indigenous workers migrating every year from South and Southeast Mexico towards the North and Northwest.

This book does not deal with these other complex flows. We analyzed Central American immigrants in Mexico and the U.S. recently in partnership with Central American academics and activists (our briefs in both English and Spanish can be found at CANAMID.org). Nevertheless, change is happening rapidly. Mexico is today at the vortex of global migration flows that will undoubtedly continue to spur new research in the future. We believe there is another substantial story to be analyzed, and factors remaining to be unveiled when it comes to Mexico as a country of transmigration.

As we stress in this book, flows are quite different today to what they were in 2000–2006. As the flows slow down, some subjects gain importance and other recede. What happens to the new generations of Mexican-Americans will be key for future economic, social, and political well-being, to a greater extent than the future of migrant flows. Understanding and questioning the integration process, in Mexico, of Mexican returnees and their families is also of first importance. Moreover, since the Mexican Revolution more than a hundred years ago, and Mexico's religious civil war of 1926–1929, in Mexico we had not studied the role of violence in emigration or return. Starting at the time covered in this study, the interaction of migration and violence becomes crucial. On the one hand, violence and criminal groups motivate the Mexican exodus. On the other hand, in the United States, this population lives in fear of being criminalized unfairly.

As we write this preface, at the turn of 2020, it is still uncertain how migration will evolve in a new world post the COVID-19 pandemic. A good number of scholars included in this volume have already written about migration and inequalities in Mexico and the United States in the face of COVID-19, but the effects are still unclear (see numbers 4 and 5 of the series "*Notas sobre migración y desigualdades*" available in English at migdep.colmex.mx). Mobility was reduced as international borders were closed and non-essential travel was limited during 2020, but still flows travelling south and north continued, and we expect that future economic effects of the pandemic might keep people on the move.

After the period covered here, the specific situation of Mexican migration has continued to be in flux, and became, if anything, far more complex. We do not rule out new flows from Central America to Mexico, nor do we rule out the possibility that Mexicans, in the face of increasing violence and uncertainty, will look Northward again. Similarly, flows traveling south due to return from the United States to Mexico or Central America are expected.

Today, the largest immigrant group in Mexico is formed by U.S.-born immigrants, most of whom were minors brought to Mexico by their returning parents. Similarly, the largest immigrant group in the United States is the Mexican population. The current scholarly effort anticipated its time by conceiving a binational lens for studying different dimensions of the well-being of these populations. Many of us continue to believe that this shared population can and should prosper, integrate into the host society, motivate mutual understanding, and contribute to social

cohesion. Each group of authors provides policy recommendations. This may seem naïve, especially at a time when migration policy dialogues seem to have stopped, whether between opposing political groups, or as a public debate across nations. The actions undertaken by governments these past few years have left millions in the shadows; criminalized documented and undocumented immigrants; detained and expelled many *bona fide* asylum applicants; and placed the lives of many more at the mercy of criminals. This is not an acceptable future for migrants in our North American region. We urge both governments to foster a dialogue centered on the well-being of our diverse migrant populations, one that will arrive at policies and actions that achieve positive results for them and for our two countries. The exercise of a well-thought series of detailed policy recommendations continues to be key for rethinking how to improve migrant well-being. We accept some of our recommendations can themselves be improved. But we stress that it is time we move in the direction of greater recognition of ourselves in others. The time has come, once again, to devise and enact ways to further the well-being of these populations, and thus of our both societies.

Guadalajara, Mexico — Agustín Escobar Latapí

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December 2020

Introduction: The Decade Migration Changed. A Binational Approach to the Welfare of Migrants in the United States and Mexico

Agustín Escobar Latapí and Claudia Masferrer

This book offers a comprehensive and in-depth analysis of the changes in migration between Mexico and the United States during the first decade of this century, as well as the living conditions and welfare of migrants. During this period, migration flows from Mexico to the United States, which had grown steadily since the 1960s, fell substantially. Some also changed direction. For over a decade after 2008, migration from Mexico to the United States remained low. On the contrary, in terms of recent flows, Mexico is for the first time in a long time an immigrant country. In other words, the past decade represents a turning point in migration flows. This book explores this change in depth, offering an analysis of the economic and social integration of Mexican migrants in the United States and Mexico. It is necessary to fully comprehend what happened to understand what factors strengthen or undermine the living conditions of the population affected by migration; to seek ways to improve their wellbeing with the best possible tools; and to strengthen their ability to contribute to binational well-being.

While the early years of this century (2000–2006) saw Mexico lose and the United States gain a population of about half-a-million Mexico-born people each year, as of 2007, Mexico gained and the United States lost about 100,000 people annually, among them returning Mexicans and their families and others leaving the United States. This change brought with it many other changes: the total population of those born in Mexico living in the United States peaked in 2007, with 12.8 million people, mostly undocumented. In 2018, the Mexican population of the United States fell by one million. On the other hand, the gradual legalization of this population has made it, for the first time in a long time, mostly regular migrants.[1] Furthermore, the much lower total flow from Mexico to the United States has meant the vast majority of the flow "fits" within the legal channels provided for it in terms of tourist visas, temporary work visas, residence permits and work permits as per

[1] See Gonzalez-Barrera, A. (2015). *More Mexicans leaving than coming to the U.S.* <http://www.pewhispanic.org/2015/11/19/more-mexicans-leaving-than-coming-to-the-u-s/>; and Passel, J. S. & D.V. Cohn (2018). *U.S. Unauthorized Immigrant Total Dips to Lowest Level in a Decade*. Washington, D.C.: Pew Research Center, July.

the North American Free Trade Agreement (NAFTA). Undocumented migration has not ceased to exist, but it is much less than it was up until 2007. The movement of Mexican migration to the U.S. through legal channels is an unprecedented event that has not occurred since the early 1970s. Today, in objective terms, there is no "Mexican immigration problem" in the United States.

Since Mexican undocumented immigration was the largest, the fact that it has fallen so drastically changes the overall outlook for irregular flows. Although Mexicans still constitute the largest national group among all undocumented immigrants, most of the undocumented migration from any country to the United States is explained by the arrival of people by air with tourist or temporary visas who subsequently do not leave the country. In light of this, walls are absolutely useless in practice, though politically they are lethal weapons.

In relative terms, however, the change is more pronounced in Mexico. If we are to only analyze flows, starting in 2007, Mexico went from being an emigration country to being a net immigration and transmigration country. Not only was this a consequence of Mexicans returning but more so because the majority of the flow from the United States to Mexico is the movement of families; families that arrive with children and spouses born in the United States[2], among other scenarios. Is Mexico prepared for this flow? Is it necessary to "prepare" and have policies in place for this, or is it enough that everyone relies on their own networks and relatives as a means of integrating into Mexican society? What happens to the health concerns of returnees? How do they integrate into the Mexican labor market? Could Mexico create conditions that allow these migrants to develop and live better quality lives while also contributing to a better future for the country? All of these changes are detailed in this book, and the authors from both countries agree that Mexico is obliged to implement practices that facilitate the integration of this population, practices that can, at the same time, enhance the country's development.

How did we arrive at this new situation? Firstly, flows increased from the United States to Mexico due to the rise in returning migrants, whether due to economic, family or health reasons, being deported, or because the deportation of a family member motivated the return of a whole family. Secondly, emigration from Mexico slowed down that is to say, the decline in flows towards the North. And finally, Mexicans gradually obtaining permanent residence in the United States.

What would the scenario be like if migration had not changed? In 2018 there would have been four million more Mexicans in the United States (that is, around 16 million total), and ten million undocumented Mexicans, instead of six. The impact in Mexico would have been greater: not only would it have meant four million less people, but, since migration rates are higher in rural areas, the shortage of young adults would have prevented the development of agriculture; the annual number of births would be substantially lower (since it is mostly young people of

[2] Masferrer, C., E. R. Hamilton, & N. Denier (2019). Immigrants in their Parental Homeland: Half a Million US-Born Minors Settle Throughout Mexico. Demography, 56(4), 1453–1461.

reproductive age who leave); and rural depopulation would be a significant issue in Mexico.

Although flows have varied substantially, the Mexican diaspora in the United States is still the largest in the world. The Mexico-born population in the country totals almost 12 million people, while the population with Mexican roots within one or two previous generations totals around 40 million. This population also changes and the decrease in movement of Mexicans has an effect on it. The duration of stays in the United State has extended: it is estimated that by 2015 half of the Mexican undocumented population in the United States had lived in the country for almost fifteen years, while in 2007 the median duration of residence among the irregular population was 8.6 years. The average age has also increased; it is getting older because fewer young newcomers are arriving. It is also expected that the number of children born to Mexicans in the United States will decrease gradually as the migrant population ages. If these migration trends continue, it could also be assumed that the schooling of Mexican children, which has been among the lowest in the United States, will increase. Schooling is strongly affected by the immigration status of parents, as explained in the chapter on education. An increasingly regular immigrant population should lead to better school results among their descendants.

Finally, it has been intensely debated since the 1990s what the impact of a large influx of new migrants had on the wages and welfare of the population already established in the country. Although research differs when estimating the impact on the population in general, it is agreed that large flows reduced the salaries of already established Mexicans working in the same industries and positions as newcomers. Therefore, with less Mexican immigration, one might assume the salary of established Mexicans would increase, as long as there are no policies that intensify their *segmented incorporation*,[3] or keep them in poverty and a precarious situation in terms of their rights.

Nevertheless, the recent decrease did not bring about a decrease in the population of Mexican origin during these years. On the contrary, it grew, due to the creation of families, often mixed in terms of place of birth, ethnic origin and legal status, both mixed and irregular. As a result of Mexican migrants forming unions, having children and creating families, the number of Americans born to a Mexican father or mother increased naturally. With the growth of the undocumented Mexican population also came an increase in the volume of families with members who had regular and irregular statuses, including U.S. citizens, Mexicans, and dual citizens. This population of Mexican origin is currently approximately 40 million and will grow over time if members remain in the country.

However, this population is also affected by other measures, and, in particular, by increasing restrictions on access to public goods and social services, as explained in this book. In the United States, this population is less likely to have medical insurance and work benefits, as outlined in Chap. 2, or the basic necessary

[3] Portes, A. (2007). Migration, Development and Segmented Assimilation: A Conceptual Review of the Evidence. *The Annals of the American Academy of Political and Social Science*, 610(1), 73–97.

documentation, such as a social security number and driver license. In Mexico, although most seem to have access to social services and programs, there are also barriers to this access (Chap. 7). The Mexican population in the United States, and those who have returned to Mexico with or without children born there, work, live, strive, seek and take advantage of opportunities for their well-being within a restrictive context. To achieve the well-being of this population and their contributions to their families as well as to both countries, it is necessary to resolve these barriers.

The change observed in recent years motivated two types of studies. The first refers to what happens to the migrants themselves and the quality of life in both countries: Have their jobs changed? What about their access to education, health, work, income and social programs? Have their perceptions of security or insecurity changed? The chapters in this book explore these topics. The second is to delve deeper into the factors affecting change. The conditions faced by migrants in the world and how they are received in the destination countries are deteriorating. After introducing the authors and explaining what sense this study makes in terms of binational social sciences, this introduction addresses some of the global discussions about migration, and their potential to explain the change we have observed.

A Binational Research Community

This book is neither an anthology, nor a compilation of other works. Each chapter was written to help build a demographic, social and economic panorama of this group formed by millions of people, and is the product of binational discussion meetings that took place over several years. Thus, we follow the example of the Binational Study on Mexico – United States Migration (1997 and 1998), which was convened by both governments in 1995. The team, which consisted of 20 researchers and a coordinator for each country, was given the task of reaching agreements for each topic based on different approaches, data and ways of working. Our first encounter commenced with mutual distrust. After two years of discussions and working together, we agreed that we had formed a group with rare and valuable assets: a perspective and a way of working that overcame our initial differences without eliminating them; and a work scheme where we could discuss differences in a constructive manner, in order to agree on the most precise and rigorous binational vision of the facts related to migration. This book continues this tradition.

Perhaps equally valuable to discover at that time was how Mexico and the United States were deeply and intimately imbricated, and that our migrant and non-migrant populations were building a social reality that crosses the border, as Andrew Selee concludes in *Vanishing Frontiers*.[4] We did not agree among ourselves on the benefits of the North American Free Trade Agreement. However, the study convinced us

[4] Selee, A. (2018). *Vanishing Frontiers. The Forces Driving Mexico and the United States Together*. New York: Public Affairs.

there is a real social unity between Mexico and the United States, despite conflicts and differences.

For this reason, though the two subsequent governments did not reconvene the team, a large part of the group decided to start meeting again in 2004 to resume the study, update it, and disseminate it in both countries. *Mexico – U.S. Migration Management. A Binational Approach* or *La gestión de la migración México – Estados Unidos: un enfoque binacional* was published in 2008 in both countries following the logic of the first study: each chapter was created and agreed by a team of scholars, including the best evidence and the best studies available to date in both countries. This book offers a broad binational perspective of the Mexico – United States migration phenomenon. Not having the two governments as instigators and sponsors made it more difficult to carry out and maintain the team's work throughout the two years. In return, we gained independence from the vision and interests of the governments. We thank the Hewlett Foundation for supporting that effort.

The book introduced here – the third one produced with this methodology and binational spirit – is supported by the MacArthur Mexico Foundation and returns to this topic of migration 20 years after the first study and the launch of NAFTA.

Our small research community has continued to transform. Already in the second study, several young researchers joined; and now in this third edition, we have the contribution of talented, young, previously recognized researchers from both countries. This community has expanded. Most of the authors have continued to work in binational teams, as is natural given the binational phenomenon of migration. Perhaps the most important common feature that unites us is that, despite our differences in training, focus and nationality, it is possible and desirable to build knowledge across borders. Today, there are multiple knowledge communities focused on various binational issues. The population and education chapters of this study are a good example. Both teams have produced multiple, excellent binational or multinational studies on these issues.

Factors of Change

The central fact of this third study is the significant change in migration trends: a substantial reduction in migration from Mexico to the United States, coupled with rapid growth in Mexico of the population of returnees from the U.S. and of children and young people born north of the border with the right to dual citizenship. We decided to carry out this study because it is essential to go deeper, explore in more detail and communicate this fact: that there has been a substantial reduction in Mexican emigration, and an unprecedented growth by modern standards of the returning migrant population and their descendants in Mexico. In fact, irregular Mexican migration ceased to be a problem for United States immigration policy. Today, although a low flow of undocumented migrants from Mexico to the United States continues, the vast majority of the flow passes through institutional channels, which has resulted in the increase of the migrant population in Mexico, not in the

United States. However, neither country has reacted to this substantial change as it should. In the United States, the change should be addressed by much greater attention to other forms of entry (air, which is now the largest source of irregular migrants – those who arrive on a tourist or temporary visa and stay), and other population groups. In Mexico, effective policies should be implemented to reincorporate returning migrants with their families, and to focus on the humanitarian treatment of transmigrants fleeing Guatemala, El Salvador, Honduras, and other countries (the most recent being Venezuela). As a research community that recognizes the importance of agreeing and recognizing facts and trends within the context of reality, we believe that it is time for both governments – or even better, the three governments of North America – to establish the minimum bases for a migration policy that promotes general well-being in this wide region.

In 1998, based on the first study, Martin, Escobar, Donato and López made an optimistic prediction:[5] The North American Free Trade Agreement would promote employment growth in Mexico. This, coupled with lower Mexican population growth derived from the fall in fertility, would lead to less pressure to emigrate. At some point, greater internal job creation and lower labor force growth would lead to less labor emigration. The conclusion related to immigration policy: Mexico and the United States needed a migration agreement to administer a decade, or decade and a half, of high migration, which would fall as employment in Mexico responded to the favorable conditions of the Free Trade Deal. Thus, Carlos Salinas' saying would come true: Mexico would export tomatoes, not tomato pickers. After 2008, Mexican migration to the United States fell, and return increased. However, the conditions in which this happened were very different from what was predicted: there was a great economic and employment crisis in the United States that affected global financial markets and further criminalized immigration. In addition, in Mexico population growth did not fall as much as expected. This section explores some factors related to the change in migration.

1. Employment, remittances and family decisions.

At the beginning of the first decade of this century, we noted that migration no longer represented, for Mexico,[6] the mechanism to substantially complement household income that had worked for fifty years. If this was the case, then one of the main engines of such migration was ceasing to operate.

Firstly, although Mexico received substantial remittances, both remittances per migrant and remittances as a proportion of the GDP were low in comparative Latin American terms. Remittances in 2004 amounted to 3.5% of Mexico's GDP. However,

[5] Escobar, A., P. Martin, G. López & K. Donato (1998). Factors that Influence Migration. In: Binational Study on Migration & Secretaría de Relaciones Exteriores (SRE). *Migration between Mexico and the United States: Binational Study* (vol. 1, pp. 163–250). Mexico/Washington, D.C.: Commission on Immigration Reform.

[6] Janssen, E. & A. Escobar (2008). Remesas y costo de oportunidad. El caso mexicano. In: A. Escobar (ed.). *Pobreza y migración internacional* (pp. 345–364). Mexico: CIESAS (Publicaciones de la Casa Chata).

in 2003, nine Latin American countries received more remittances per migrant in the United States than their GDP per capita. Mexico, on the other hand, only received 22% of the GDP per capita for each migrant.[7] In other words, for Mexico, international labor migration did not represent the optimal placement of labor resources. However, Mexico as a country does not decide who or how many migrants leave for the United States. According to the classical theory of migration, migrants decide for themselves after comparing their local income with their potential income as migrants. However, this theory has been widely surpassed. According to approaches developed in the 1980s (new economics of labor migration), this decision corresponds to the family or the household. Nevertheless, even in this case, the calculation for families was no longer as favorable as it would have been previously.

The argument is as follows: Domestic survival is the product of the sum of its members' income and jobs. A remittance sent by a migrant in the United States – which is a fraction of the migrant's income – is their contribution to the family's income, while workers who stay in Mexico contribute a much greater proportion of their total income because they share a home and household expenses. Though the amount of money earned in Mexico is less, the non-migrant's domestic contribution can exceed income from the remittance. Between 2000 and 2004, remittances were lower than the salary earned by household members in their municipalities, controlled by sex, age, ethnicity and schooling (the migrant's school level is not reported in the census, so that income was estimated according to the average schooling of household members)[8]. Therefore, on average, labor migration was not a higher source of household income than working in Mexico in the municipality where the household was resident.[9]

This analysis is based on the theoretical approach of the so-called "new economics of labor migration",[10] according to which labor migration is based on two premises: 1) the household and not only the individual, is the social unit that sets in motion an income strategy, and the survival that is assured is that of the home and family; and 2) the diversification of income offered by migration protects against risk (and insurance) in the communities left by migrants: by diversifying sources of income, security is offered to the domestic unit.

According to this theory, the income from migration (remittances) does not need to be greater than local income, but to compensate for the risks associated with local

[7] Escobar, A. (2009). Can Migration Foster Development in Mexico? The Case of Poverty and Inequality. *International Migration*, 47(5), 75–113.

[8] In the aforementioned analysis, the cost of the opportunity to migrate was based on the salary the migrant would earn as part of their household in Mexico if they did not migrate. This amount was compared with the remittance reported. The cost of opportunity, or associated income, was estimated for each municipality where migrants were reported in households.

[9] Janssen, E. & A. Escobar (2008). Remesas y costo de oportunidad. El caso mexicano. In: A. Escobar (ed.). *Pobreza y migración internacional* (pp. 345–364). Mexico: CIESAS (Publicaciones de la Casa Chata).

[10] Stark, O. & D. E. Bloom (1985). The New Economics of Labor Migration. *American Economic Review,* 75(2), 173–178.

income. Therefore, if the net income from migration, the remittance, is less than a local salary, that does not necessarily mean migration doesn't make sense as long as the remittance compensates for variations in local income. However, the economists who developed this approach in Mexico[11] found that labor migration causes local processes of greater inequality, because as some households increase their income through migration, it causes a demonstration effect and an increase in departures from the community. Consequently, several analyses based on this approach expect migration to not only compensate for local risks but to also increase income.

Janssen and Escobar's analysis, however, refers to a single year. It does not establish whether the situation is the result of a decrease in remittances or if, on the contrary, income from remittances had already been, beforehand, at this level. It could be that when analyzing the local or municipal economy as a whole, having a significant percentage of the workforce in other distant labor markets takes pressure off local employment, and therefore migration has an impact on the rise of local income.

It is worth noting that the census does not record how much a household spends to migrate (the journey, payment to the *pollero* or coyote, the time lapse from when the migrant leaves until the household begins to receive remittances). Therefore, in reality, remittances do not represent net household income, at least not while it is paying debts incurred to finance the migration of a family member, which makes the net income of the household per migrant even lower.

In summary, although Mexico received substantial remittances at the beginning of the millennium, these remittances were neither proportional to the number of Mexican workers in the U.S. nor did they, on average, represent higher household incomes than if the worker had remained in their original community. Thus, it could be that migration was not an economic solution for households, even during the years when there was an employment boom in the United States. However, if it was not a solution, why continue with it, particularly during the crisis years after 2008 when remittances per capita decreased further and the living conditions of migrants in their communities in the United States worsened as described in Chap. 5 in this volume? In addition, waged employment grew in Mexico's rural areas, particularly in the West and North. The aforementioned analysis implies that the decision to stop migrating may not have been so difficult for households in those circumstances.

2. The crisis and unemployment

As explored in this book, during the years of highest labor migration at the beginning of this century, Mexican workers headed largely towards the construction sector of the United States, which was booming. In these jobs, wages of twenty dollars per hour were common, with additional bonuses for productivity and overtime.

[11] Taylor, J. E. (1992). Remittances and Inequality Reconsidered: Direct, Indirect and Intertemporal Effects. *Journal of Policy Modeling*, 14(2), 187–208; and Yúnez-Naude, A. & A. Meléndez-Martínez (2007). Efectos de los activos familiares en la selección de actividades y en el ingreso de los hogares rurales en México. *Investigación Económica* 66(260), April-June, 49–80.

However, the increased labor force in construction experienced a rapid and drastic setback after 2007. In the United States, unemployment rose more among Hispanic migrants than among any other group. In one year, it rose from 5.1% to 8%, and the employment rate fell from 67.5% to 64.7%. Something similar happened among Hispanics born in the United States, as well as among the African-American population.[12] In other words, the shortage of well-paid jobs caused fewer workers to migrate. However, although our chapter on employment shows that employment recovered slowly, recovery did come, while Mexican migration did not recover. Even when more jobs were generated, Mexicans no longer migrated again in the numbers observed between 2000 and 2006.

A significant precursor of the Great Recession occurred between 2001 and 2002, when employment growth slowed in the United States. During that time, the annual net migration from Mexico to north of the border decreased between 30 and 40%, but resumed its growth as soon as employment recovered.[13] This had always been the nature of Mexican labor migration: it closely followed the United States' employment dynamics. However, that did not happen after 2007.

To sum up, although the crisis undoubtedly represented greater difficulties for finding employment, which could explain the lower levels of migration from 2008 to 2019, labor migration's failure to recover indicates that other factors weighed in following the worst years of the Great Recession. It is also important to point out that other populations, notably from Central America, significantly increased their presence in these labor markets after 2010. Moreover, labor market conditions deteriorated and earnings of return migrants and U.S.-born immigrants suffered important declines in all regions of Mexico.[14]

3. Criminalization in the United States, violence and criminality in Mexico

This factor encompasses two phenomena: on the one hand, migrants are identified, persecuted and punished. They are penalized for being a migrant in general, and for being an undocumented migrant in particular. In most "voluntary departure" orders issued by a U.S. judge, it is warned that recidivism will be punishable by mandatory jail. The vast majority of migrants know this, and are aware of the much greater risk of migrating without documents. It can be said that criminalization operates through fear: not all migrants are necessarily punished in practice, but their life is tinged with anguish, isolation, the stigma of belonging to "illegal" populations and the secret of being undocumented. Furthermore, undocumented migration is a growing business for criminal organizations in both countries, which implies greater risks and costs to migrate. In summary: being a migrant has been

[12] Passel, J. S. & D. V. Cohn (2009). *Mexican Immigrants: How Many Come? How Many Leave?* Washington D.C.: Pew Hispanic Center, July.

[13] Passel, J. S. & D. V. Cohn (2009). *Mexican Immigrants: How Many Come? How Many Leave?* Washington D.C.: Pew Hispanic Center, July.

[14] Denier, N. & C. Masferrer (2020). Returning to a New Mexican Labor Market? Regional Variation in the Economic Incorporation of Return Migrants from the U.S. to Mexico. Population Research and Policy Review, 39(4), 617–641.

criminalized, while undocumented migration exposes migrants to criminal groups in both countries, to whom ransom payments are frequently paid.

The phenomenon is clearly observable in the growth of the Mexican prison population in the United States. Though this phenomenon is not reflected greatly in federal, state and county prisons, the growth is very clear in the private sector where migrant detention centers are a growing business, facilitated by financing from the United States Congress destined for that purpose. It is related to greater delays in asylum and deportation processes to which migrants are subjected. The longer the processes take, more places are needed in detention centers. The growth of this business coincides with the new strategies implemented for the removal of migrants. While up until approximately 2000 the strategy for the containment of undocumented migration in the United States was based on reinforcing surveillance, apprehension and return of migrants in the border areas, as of 2005, detention and deportation within the interior of the country was substantially increased, including in the workplace, on the streets, in buildings and public offices.

Nestor Rodríguez (Chap. 5 of this study), describes the much greater vulnerability not only among the undocumented population, but among all those visible to the authorities. In part, this is due to having accessed the legal system through institutions that maintain records on the population, which in turn generates greater fear among families in their daily lives.[15] For example, this is the case for the immediate family of young beneficiaries of DACA (Deferred Action for Childhood Arrivals), beneficiaries of the program created by the Obama administration. During the application process, these young people provided information about their immediate family residing in the United States. Given this perceived risk related to belonging or not belonging to the system, the Mexican and Latin American population in general experiences changes in their daily practices, and a fear that socially isolates and traumatizes the undocumented individuals and their families. Consequently, information about the vulnerability and quality of life experienced by undocumented relatives in the United States that is communicated within migrant networks could be a significant deterrent.

On the other hand, crime relates to the growing insecurity in Mexico. Liliana Meza (Chap. 6 of this book) asks if Mexican crime drives the population away. Contrary to what might be assumed, she finds the highest homicide rates, municipality by municipality, are related to lower levels of international emigration when considering the country as a whole. However, when addressing the border municipalities (which were, in 2010, among the most violent) separately, she finds a greater propensity to migrate where the homicide rate is higher. Thus, in general, insecurity seems to discourage migration, while when it is relatively easy to migrate – because you live on the border– it happens. Overall, and as paradoxical as it may seem, to date it seems that the criminalization of migrants in the United States has deterred migrants, while crime in Mexico has not encouraged international emigration,

[15] Asad, A. L. (2017). Reconsidering Immigrant Illegality: How Immigrants Perceive the Risk of Immigration Law and Enforcement. Doctoral Dissertation. Cambridge: Department of Sociology, Harvard University.

though there are accounts of an increase in forced internal displacement. In other words, despite what one might normally suppose, criminalization and violence have been factors that have retained the population in Mexico yet expelled them from the United States.

4. Decrease in the population reserves for migration.

In Mexico, the population does not decrease homogenously as a result of migration. The vast majority of migrants leave agricultural and rural regions. In Mexico's rural areas, the migration rate is three times higher than in urban areas.[16] The mass emigration of 1990 – 2007 substantially reduced the reserves of this labor force. Such reduction, coupled with the growth of export agriculture and urban employment in Western Mexico, facilitated employment and improved wages in Mexico. This idea has gained a significant following since the analysis by Taylor, Charlton and Yúnez-Naude in 2012.[17]

Although from 1980 to 1990, urban, southern and southeastern areas in Mexico increased their contribution to the flow of migrants, the region called "traditional" retained its majority as zone of origin. The "concentration" of mass emigration in a region and in rural areas, where less than 21% of the Mexican population lived in 2010, had a substantial impact on the cohorts of rural youths in Mexico. Between 1995 and 2005 (the time of greatest emigration), the cohort between 5 and 9 years old in rural areas across the country decreased by 25% among men and by 21% among women; the 10 to 14-year-old cohort fell by 47% and 37%; and that of 15 to 19-year-olds decreased by 44% and 35%, respectively.[18] Naturally, this decrease was greater in the area of traditional emigration. In other words, the cohorts of young workers in 2005 were substantially lower than those of 1995. It was precisely in the traditional region of origin where export agriculture, which is labor intensive, had been developing since the start of the millennium,[19] along with significant economic and employment growth in urban areas. For these two reasons (the decrease in cohorts and the growth of employment), the population in this region had significant regional opportunities, which thus contributed to the decrease in emigration.

5. Mexican social programs and their impact on migration

The analysis in Chap. 7 of this book shows that, though modestly, the Mexican social programs in force between 2005 and 2018 may have played a role in the fall

[16] Bermúdez, J., S. C. Meroné & A. Reyes (2017). El impacto demográfico de la migración internacional en las estructuras poblacionales a nivel municipal en México, 1990-2015. In: Consejo Nacional de Población (Conapo). *La situación demográfica de México 2017*. (pp. 203–220) Mexico: Conapo.

[17] Taylor, J.E., D. Charlton & A. Yúnez-Naude. (2012). The End of Farm Labor Abundance. *Applied Economic Perspectives and Policy*, 34(4), 587–598.

[18] Own calculations based on population counts from 1995 and 2005.

[19] This region mainly includes areas of Querétaro, Michoacán, Guanajuato, Jalisco, Sinaloa and Baja California. Though coincidence with the traditional region of migration is not perfect, it overlaps.

of emigration. In order to benefit from the social programs that we analyzed in this book (Oportunidades – Prospera, Seguro Popular, 70 y Más, the federal program for elderly adults of 2009) the population is required to reside in the area. The most significant program in this regard is Oportunidades – Prospera, which provides more resources, and requires evidence on a bimonthly basis that the family attends school and the health clinic, performs community tasks and attends talks. Penalization for absences is reflected in the money transfers, and ultimately the household is excluded from the program. This program granted significant transfers, and had reached 5 million families by 2006, with an emphasis on rural and marginalized areas. The analysis, which is based on these areas,[20] shows that households affiliated with Oportunidades – Prospera were inclined to emigrate more than others. However, at the same time these homes tend to show more returns. In other words, migrants are inclined to return more frequently to homes that are less vulnerable due to the coverage of this and other programs. The analysis does not show that the other two programs have the same impact.

In summary: although the prediction we made in 1996 was based on premises that were false, given that employment in Mexico grew less than expected, and that the Mexican population grew more than predicted, these factors did, indeed, have an impact (there was a shortage of rural population, and rural employment increased and improved). Together with other factors in Mexico (social programs), alongside those in the United States (recession, criminalization of migrants, less access to goods and services), these factors collaborated to produce a large drop in the numbers of Mexican workers and their families leaving Mexico, and a great movement of those returning.

Laws, Policies, Public Practices and Migrant Welfare

The book analyzes people and their well-being, which result from a confluence of factors, among which social, economic and political factors stand out in two regards: those referring to the political landscape and how political actors influence it; and the politics, both manifest and implicit, of laws and institutions. In the past, migration policy has been analyzed as if there were consistency between the laws, institutions and practices of government agents. This is not the case.

Unlike our previous studies,[21] what we are presenting now deals exclusively with people and their living and working conditions in both countries, and not with the policies that are applied and discussed in both countries. Nevertheless, the policies

[20] The Mexican government designated a large number of municipalities for priority attention areas or ZAP, based on their levels of marginalization and poverty. CONEVAL monitored these municipalities through a survey, which is the survey used by the authors of the chapter.

[21] See Loaeza, E., C. Planck, R. Gómez, S. Martin, L. Lowell & D. Meyers (eds.). (1997). *Estudio binacional México-Estados Unidos sobre migración*. Mexico City: Secretaría de Relaciones Exteriores; Escobar, A. & S.F. Martin (2008). *Mexico-U.S. Migration Management. A Binational*

have varied substantially. As of 2005 in the United States, undocumented migration is more severely penalized. Until the beginning of the first decade of this century, the effort to limit undocumented migration focused on legal or illegal entry points, and migrants could later enjoy some security in their workplaces and neighborhoods. However, after 2005, arrests and deportations started to take place in the workplace, neighborhoods and homes owing to greater collaboration between local police and immigration authorities; while, on the other hand, the recidivism of undocumented migrants was penalized with jail.

During Barack Obama's presidential term, *federal* policy was deployed on three fronts: deportations from the interior remained at very high levels, so much so that it is estimated that during his presidency three million undocumented migrants were "removed" or deported, mostly Mexican. Secondly, in the opposite direction, an administrative program called DACA (Deferred Action for Childhood Arrivals) was designed and implemented to prevent those who were taken to the United States as minors, and who remain in the education system and do not have criminal records, from being prosecuted and deported. This program began in 2012 and ended on September 5, 2017 when it was revoked by President Donald Trump. However, despite not accepting applications after February 13, 2018, a federal court order issued on January 9th of the same year allowed program beneficiaries to request a renewal of the permit. It is still possible that these young people with impeccable behavior could be prosecuted and deported in light of the program's cancellation. However, such deportations have been suspended by the judiciary.

Thirdly, the Obama administration substantially extended temporary work permits in two programs for low-skilled workers, the H-2a and the H-2b for agricultural and non-agricultural work, respectively. Between 2008 and 2018, the number of H-2a visas issued increased from 64 thousand to 196 thousand, while the number of H-2b was around 90 thousand annually during that period. The TN visas, created by the Free Trade Agreement in 1994 for United States, Canada and Mexico nationals – which in theory allowed nationals to obtain work legally in any country in North America with a simple work letter – had in practice a set of bureaucratic constraints for Mexicans that meant only about 4000 were issued per year at the beginning of the NAFTA. However, this process was expedited and in 2017 almost 25,000 were issued. A greater number of visitor visas were also authorized, and finally the number of permanent resident cards (Green Cards) granted to Mexicans grew modestly. Thus, exclusionary and punitive measures against undocumented migrants continued, but opportunities for regular migration were expanded. Certainly, less undocumented migration combined with easier means of getting temporary visas and residence permits resulted in the regularization of the flows of Mexicans to the United States and the Mexican population in the United States.[22]

Approach. Lanham, Maryland: Lexington Books; and Escobar, A. & S.F. Martin (2008). *La gestión de la migración México-Estados Unidos: un enfoque binacional*. Mexico City: El Equilibrista.

[22] Making visitor visas easier to obtain opens the door to their potential abuse, as happens with nationals of any country in the world who arrive by air with these visas and sometimes stay beyond their validity, or find a job.

Together, these factors mean that undocumented Mexican migration to the United States decreased.

However, simultaneously, in a process that began in 1996 and intensified after the terrorist attacks on the World Trade Center, immigration policy became much more complex: the attacks were used politically to attract votes through a policy directed in general towards restrictions on immigrants, although most of the terrorist attacks and massacres in the United States were committed by natives of Western European extraction. Anti-immigrant discourse, which has always existed, resurfaced with greater force thereafter, preventing the most significant bipartisan initiatives for immigration reform in Congress in 2006 and 2012–13 from even being voted on in the lower house, much less accepted. Nevertheless, at the same time, the most conservative and anti-immigrant initiatives were also discarded. Approved initiatives, such as the requirement that federal contractors be affiliated with workers' identity certification programs, are significant, but on a smaller scale. The result is a legislative paralysis in federal congress, with a general mood that is more hostile to immigration.

The heads of the executive branch, presidents Bush, Obama and Trump, responded to this paralysis with administrative programs and executive orders, which extend or restrict the migration routes provided by law. In the 287(g) initiative, President Bush gave permission, through an agreement, to state or local police forces to cooperate with immigration authorities, thereby expanding the operations of migrant identification and expulsion. Obama's response fitted within the conventions of the federal administration. Owing to the strain on immigration courts, he ordered the Department of Homeland Security (DHS) to refrain from persecuting migrants who did not decide to violate immigration laws themselves and who have not violated any other laws. However, those who are not beneficiaries of the DACA program are criminalized even if they have not committed any crime, because the agreements relating to 287(g) remain in force in most cases. Finally, Trump's executive order prohibits people with certain nationalities, mostly Muslim, from traveling to the United States.

There are other responses to this paralysis. There were 3,520 state legislative acts passed between 2007 and 2018 related to migration in the National College of State Legislatures.[23] Although a significant number of acts are understandably local adaptations of federal laws, others dictate their own state measures. Whether restrictive or permissive, they regulate the ability of migrants to obtain certificates and to practice professions, the use of public funds, school attendance, the amount of tuition fees, the prohibition or requirement to collaborate with immigration authorities, etc. The variation between states is diametrical. While in California most immigration legislation facilitates the participation of migrants in social and political life, being permissive in character, opening areas and channels of life for migrants, in Alabama and Arizona the majority are restrictive, excluding immigrants from certain

[23] National Conference of State Legislatures (NCSL) (2018). Immigration Laws and Current State Immigration Legislation, <http://www.ncsl.org/research/immigration/immigration-laws-database.aspx>.

occupations and services, and requiring state employees to collaborate with immigration authorities. Something similar happens, but in even greater numbers, with county council requirements and agreements: from those that prohibit people without a defined immigration status to associate with or join groups, or those that impose impossible requirements to rent housing or acquire licenses, to the so-called "sanctuary cities," which grant valid IDs or licenses for access to multiple institutions without requiring proof of legal permission to stay.

Finally, the confrontation and contradictions between the powers regarding immigration policy have given rise to the latest element of this complexity: judicialization. Migration policy has ceased to be defined by legislation and applied by executive power, with judiciary intervention on the rise which has brought about the suspension of several "executive orders" made by the president and intervention in the legality of federal and state actions and decisions. There are examples where the courts have halted the execution of executive initiatives either wholly or partially, for both permissive actions such as DACA as well restrictive actions such as the Muslim ban.

In the opinion of the authors gathered here, "proof" of the laws and policies and their conflicting framework can be seen in people's lives. Proof that we believe can be found in this book. However, the research continues as political changes in both countries continue. The Colegio de México, CIESAS and other institutions work with a broad set of academics, legislators and officials from both countries to define a collaborative agenda for migration. At the end of 2017 and the beginning of 2018, supported by the Mexican consular network in the United States, CIESAS conducted a survey of Mexicans using the consular services. Among other issues, interviewees (consular officials, users in general, young people in the DACA program) were asked to judge the change in social attitudes towards them and towards migrants in general. Although the results vary by city and state, in general the perception is that their life has become more difficult and their environment more hostile, in such a way that they socialize less, participate less in school and in political, labor and civic activities, and socialize their children with an attitude of distrust towards people outside their immediate circle.[24]

Together, all of the changes in the laws, executive orders and policies result in migrants in general, and especially Mexicans and Central Americans – both regular and irregular – having fewer options in life, and that they live in fear of falling into the private and public networks that have become an industry of immigration repression and of imprisonment and deportation of immigrants for various offenses, including minor ones. But, our study also points to other trends that are already visible or predictable: aging, the growing legalization of the Mexican diaspora in

[24] The study included a survey as well as focus groups and structured interviews. The issues included in the perception of social change are: being subjected to abuse or "different treatment;" having been arrested; having relatives who have been deported; or that third parties have told them to speak only English. See: Martínez, R. (2020). Nuevas tendencias en la población mexicana en Estados Unidos en tiempos de la administración Trump. In: R. Martínez, M. Baros & G. Rojas (eds.). *Laberintos del sueño americano* (pp. 29–57). Mexico City: Paralelo XXI.

the United States, better educational levels for new generations, better income in the event that migration continues at low levels, and the gradual emergence of groups with Mexican descent becoming increasingly more important. Furthermore, the study indicates that in Mexico, although the policies for receiving returnees are either minimal or they do not apply, or simply do not exist, returnees have been reintegrating into Mexican society, albeit a minority ends up returning to the United States.

In Mexico – unlike the United States or Canadian context where immigration policy has been controlling migrant arrivals for centuries, facilitating family reunification, and providing asylum and shelter –, since 1991, the government's interest has focused on supporting Mexicans abroad,[25] without, so far, a clear concept of its role as an immigration country. In 1997, the constitution was modified to allow dual citizenship, with the aim of facilitating Mexicans to participate in the United States as citizens while retaining their rights in Mexico. The Institute of Mexicans Abroad was designed in 2003 to support Mexicans in the United States. Even though this stance can be considered right and necessary due to the volume of the Mexican population in the United States – especially those in irregular situations with limited access to social rights –, the current reality makes it necessary to rethink migration policy and the narrative around migration from and to Mexico.

Although the Migration Law of 2011 sought for the first time to define Mexico, within a legal framework, as a country of emigration, return, transit and immigration, its implementation has been slow and uncertain. Despite the regulation of this law being approved in 2012, it became clear that having legal frameworks is not enough if the principles of respect for the rights of migrants, hospitality, non-criminalization and incorporation embodied in the law are not implemented. Even though the Special Migration Program 2014–2018 included a vision of immigrant integration in addition to the control of entry to the country, it has not yet received continuity from the new administration of President López Obrador.

For many years, Mexico was considered a country of emigration. Mexico's extensive consular network in the United States and the policies and programs that ensure the rights of Mexicans abroad are a notable reflection of this. During the administration of President Salinas de Gortari (1988–1994), the consular identity card was introduced, which is an identity document that recognizes the individual as a Mexican citizen residing abroad. Although it did not certify legal residence in the United States, the document allowed the Mexican population with irregular status to access certain services in the United States, though the card is often not accepted in some procedures following an individual's return to Mexico. During those same years, the 3X1 Program implemented in 1992 sought to generate local development by providing support for infrastructure, equipment and community

[25] That year, the Program for Mexican Communities Abroad was founded. As of 1996, a program was established to bring Mexicans into clubs and recognize their leaders as government interlocutors. As of 2003, the Institute of Mexicans Abroad was created, which holds elections among Mexicans in the U.S. and formalizes its relationship with the Mexican State in annual executive and legislative meetings.

services, linking migrants with their communities of origin. With the passage of time, government policies, programs, strategies and actions included different types of support (health, education, employment, productive projects or protection and monitoring), from both a federal and state perspectives.[26]

However, there is still a lot that remains to be defined in the immigration policy given the new scenario described in this book. In particular, that the immigration policy in the future could address not only how the entry of foreigners into Mexico is managed but also how migrants are integrated, taking into consideration both Mexicans who return to the country after a migration experience and their relatives born in the United states as well as the foreign population living in Mexico, regardless of their country of origin. That is to say, contemplating more than just how we define and document the legal status and stays of migrants but also the policies that facilitate their entry into the institutional life of the country and Mexican society in general. In other words, the bi-national approach of this book highlights the still primarily binational character of migration in Mexico, with the creation of a population with strong family, social, economic, political and cultural ties on both sides of the border. The movement and settlement of Central Americans and other migrants should also be progressively added to this approach.

The rising number of returns observed in the last decade is a wake-up call for the implementation of effective integration initiatives. This might seem unnecessary since one million of those who have arrived to Mexico are Mexicans by birth, and another 750,000 are descendants of Mexicans and therefore Mexicans by descent. A great error. Many of the Mexicans returning after long periods of time are not able to access social programs, official IDs or formal jobs due to lack of documents. There is progress, such as the simplification of certification and the revalidation of studies abroad, due to the reforms made to annex 286 of the General Education Law of 2017. But even this relatively modest reform is far from being applied by all the country's higher education institutions. Despite successfully simplifying the process to access the Mexican education system for those arriving from abroad, the system lacks protocols to serve populations with limited knowledge of Spanish, or Mexican history and geography. While it is true that this is not exclusive to the children of returnees from the United States, it reflects the absence of a comprehensive vision that takes into consideration the incorporation of children born abroad who have diverse ethnic and linguistic origins.

Since the first decade of this century, the National Migration Institute has been operating a program to offer transport to Mexican migrants who were returned to the northern border, financing tickets to their states or their communities. On the other hand, the government and other national and international actors, including religious organizations, financed houses and shelters for these migrants and for the Central Americans who were heading north. President Peña Nieto launched a

[26] Giorguli, S., A. Angoa & R. Villaseñor (2014). Los retos ante el nuevo escenario migratorio entre México y Estados Unidos: patrones regionales y políticas locales. In: Silvia, Giorguli, S. & Vicente. Ugalde (eds.). *Gobierno territorio y población: las políticas públicas en la mira*. Mexico City: El Colegio de México.

program in 2014 called *Somos mexicanos* [We are Mexicans] which sought to unite these and other efforts from various federal government agencies to meet the needs of Mexicans returning to Mexico. However, it didn't receive much support and was poorly coordinated, and it is not known if they succeeded or not beyond what had already been achieved up until then.

Consequently, Mexico has changed the way it thinks about itself in terms of migration as seen in its laws and regulations, some of which formalize our desire to be a hospitable and humanitarian country. But the State is still far from converting that change into new and effective practices that integrate migrants and make it easier for them to contribute to the general well-being of the country. The slaughter of Central American migrants in San Fernando, Tamaulipas in 2010 was a jolt to Mexican society, causing it to seek arrangements with Central America and the United States for action, without much success. Violation of the rights of transit migrants continues. The two huge factors that weigh heavily on this contradiction cannot be ignored: on the one hand, the emergence of organized crime as an actor that controls large portions of the territory and communication channels, while on the other, the new geopolitical role of Mexico with regard to global migration to the United States. For criminal organizations, flows of people are a source of resources and labor that they will not give up without further violence. For the United States, Mexico plays the same role as Morocco, Turkey, Iran and Libya do for Europe. It is a second level actor that has to absorb or return people from other countries so they do not become a burden for the United States. While the authors consider it is possible to make substantial progress in a policy that effectively integrates migrants, we also consider that these two factors, which weigh more heavily than ever, will require years of work and effort within Mexico and the United States. Several intermediary countries such as those mentioned above have secured benefits in exchange for playing the role of a migratory brake. For decades, the United States government has used Mexican immigration control for its own purposes. But now, for the first time it has made this quid pro quo explicit.

Content of the Book

Firstly, the book describes the changes in the Mexican population in the United States, as well as in the population returning to Mexico and those who were born in the United States who live in Mexico, followed by an exploration of the crucial elements that contribute to well-being and quality of life. In the first chapter Masferrer, Pederzini, Passel and Livingston provide a review of the population dynamics of migration on both sides of the border. Following a brief overview of recent Mexican migration, they put into context the changes in emigration and return flows as well as changes in the stocks of Mexican migrants in both countries. Regarding flows, they analyze the estimates of both unauthorized Mexican migrants and temporary migrants arriving with permission to the United States. In terms of Mexico, the notion of return is extended to include flows of Mexicans and Americans who arrive

in Mexico after a stay, or after having been born north of the border. Subsequently, they describe both the sociodemographic and family characteristics, as well as the geographical patterns of settlement, and identify patterns of selectivity within the Mexican population in Mexico and the United States. The family dimension is crucial to our understanding of several of these changes: unlike the old migratory patterns, Mexican migrants are not isolated individuals who leave children, parents or spouses behind in their home community; with the passage of time, today they belong to families with roots in the United States, while some return to Mexico as a family, bringing with them children who were born in the United States.

The second chapter focuses on the topic of work and addresses the labor dynamics behind the decrease in the flows described above. Arroyo, Berumen, Martin and Orrenius analyze the implications of the changes that occurred in 2000 and 2010 in the labor market in both Mexico and in the United States. It elaborates on the economic effects of the great global crisis of 2007–2009 and how unemployment and recession led to changes in participation and unemployment, wages, and the composition of Mexican migrants participating in these labor markets in both countries. It is well known that the Mexican migrant population in the United States is a group that has traditionally carried out low-skilled jobs. Although the average level of education has increased over the years, the Mexican population has lower levels of education compared to Native Americans and other immigrants. This characteristic, coupled with the type of occupations and industries where Mexican's find work, has repercussions on the income and working life of Mexican migrants. However, the authors' analysis reveals differences in both countries geographically and over time. The increase in Mexicans returning and the concentration of returnees being of working age, implies that the creation of employment in the Mexican labor market is essential for the well-being of the migrant population. The heterogeneity of returnees, and the differences in working conditions according to their destination of return, demonstrate the challenges for labor reintegration, especially in poor areas.

Giorguli, Jensen, Brown, Sawyer and Zúñiga present a comprehensive, wide-reaching and integrated diagnosis of the "educational well-being" of children of Mexican migrants on both sides of the border. The authors address the educational well-being of children and young people of Mexican origin who have been affected – either directly or indirectly – by international migration. The analysis distinguishes four groups of young people on both sides of the border: those who remain in Mexico while family members work and reside in the United States; immigrants returning to Mexico; first-generation immigrants in the United States; children and grandchildren of Mexican immigrants in the United States (including second, third and subsequent generations). Their concept of well-being considers the duration and quality of schooling that children of Mexican immigrants receive in both the United States and Mexico. In addition, they discuss, as far as possible, the conditions found within families, schools and communities in relation to the reported welfare indexes in order to provide recommendations for policies and programs that support Mexican-born students affected by migration between the two countries, while also considering the specificities of the local contexts in which the students are integrated.

The fourth section of this book is based on a systematic review of the literature documenting the health status of migrants and their de jure and de facto access to health services, which are two key considerations for understanding the social vulnerability faced by these populations. In addition, it presents an evaluation of health insurance coverage and health conditions in both countries based on census data. Nelly Salgado, Fernando Riosmena, Miguel Ángel González-Block and Rebeca Wong make it clear that, though migrants are not a vulnerable group in and of itself, the conditions of social inequality in which migration occurs and the circumstances in the place of origin, transit, destination and return are a significant source of vulnerability. Thus, the authors demonstrate how migrants have limited access to health services at all stages of the migration process, which is worrying since the first part of the study also shows that the state of health before migration, in transit, in the United States and in Mexico in the event of return, is usually poor. Faced with this challenge, the chapter analyzes programs and policies to reverse this vulnerability.

Another source of vulnerability, which is an increasing risk characterizing the period under investigation, is the rise of control and violence that is generating a climate of insecurity and fear among the migrant population in Mexico and in the United States. In Chap. 5, Nestor Rodríguez discusses how this adverse climate has implications for psychological well-being, and how it is ever more evident in both communities of origin and possible return, in the Mexican border areas and in the destination communities in the United States. This adverse climate is characterized by an increase in border control, deportations and local migration and surveillance policies in the United States, as well as a socio-political context in Mexico marked by the violence and insecurity that followed the war against drug trafficking and an economy with limitations that threaten the population. Based on a methodology using data from surveys carried out in the Texas cities of Houston and Galveston, and in the Mexican cities of Nuevo Laredo, Tamaulipas and Guadalajara, Jalisco, the author discusses the different dimensions of stress and fear; the dangers in border cities following deportation; and the great uncertainty experienced upon return.

To better understand the effect of growing insecurity in Mexico, Liliana Meza studied the impact of violence, measured by deaths related to organized crime, on the intensity of international migration at municipal level. The results based on municipal-level regression analysis indicate that migratory networks determine the proportion of households that receive remittances and send migrants to the United State; nevertheless, violence has a small but significant influence, behind remittances and migratory movements, at least in the northern border states. The findings also reveal that violence prevents circularity: i.e., Mexican migrants returning to their communities of origin, despite the adverse context in the United States in 2010. That is, everything points to increased emigration from unsafe municipalities and disruption to circularity due to violence. We know today that the insecurity and violence caused by the war on drug trafficking that began formally in 2007 increased dramatically in the years after 2010, and that it expanded to different areas within the Mexican territory. The results of this chapter also suggest changes in the profiles of migrants to the United States, which should be analyzed within the context of the Mexican migration phenomenon and its transformation.

Finally, in the last chapter, Israel Banegas, Graciela Teruel and Agustín Escobar focus on the goods and services provided to households in Mexico through social programs, in a context where social policy transformations in Mexico have endeavored to extend the social protection safety net. The authors use data from a survey of households in poor and marginalized regions in Mexico and supplement it with an ethnographic investigation in eight municipalities and twelve communities where the survey was applied in order to understand the access to social programs among returning migrants as well as their incorporation into health and educational services. In general, the results point to the need to strengthen institutions in places of extreme poverty as they are not prepared to meet the needs associated with an increase in populations with migratory experiences in the United States, both returning migrants and their American children. Without such reinforcement, returning Mexicans and their families will be denied access to social rights and programs that would facilitate their well-being.

Conclusions

For 20 years, our group has insisted that migration cooperation is key to arriving at a satisfactory outcome. On this point, three statements can be made: (1) mass irregular migration has drastically decreased and a satisfactory situation has been reached, at least in terms of flows meeting the basic legal requirements, although the volume of the undocumented Mexican diaspora without access to rights is still high. (2) Arriving at this objective situation did not stop the political manipulation of the immigration situation for electoral purposes. The reality of the situation was denied to successfully obtain a political advantage. (3) Cooperation has occurred, but instead of promoting the welfare of migrants and their political and social integration, it increases their vulnerability. It is worth explaining each of these points.

Since 2008, the flows from the United States to Mexico have been greater than the reverse. The majority of the population originating in migration have legal immigration status. These flows pass through authorized crossings. In other words, after 2007, Mexican migratory flows have not been an objective source of problems for either migrants or governments. However, the legality and control of migratory movements has not meant that migrants' lives have developed optimally. Firstly, this is because there is still a large undocumented population of just over five million people. Secondly, because a set of xenophobic attitudes and actions has deteriorated the living conditions of immigrants and their families.

Adequate migration management requires a better bilateral relationship and internal political contexts in which migrants are not subject to attack, and their social incorporation is fostered. For this reason, we propose that this period, during which time it was necessary for irregular migration to be managed, makes way for another where legal flows and access to rights prevail. However, despite the decline of irregular migration, this positive situation has been negated to keep migration as a profitable source of anti-immigration votes. The insistence and expansion of

anti-immigrant discourse creates adverse conditions for all types of immigrants, but particularly for Mexicans and Central Americans.

Finally, there are multiple instances where the two government have cooperated on migration issues. Most of them have been positive, both to ensure regular flows as well as to safe-guard the well-being of migrants and to coordinate efforts against human traffickers. Nevertheless, on the one hand, the United States government underestimates the importance of this collaboration, which it does not officially recognize. On the other hand, at least two aspects of the collaboration are contrary to the rights and well-being of migrants: firstly, the insistence since 2014[27] that Mexico stops migrants who try to cross the country without documents, and, if possible, repatriates them. This procedure goes against the Mexican law of 2008, nor the law of 2011 in particular.

Secondly, after the arrival of migrant caravans to Mexico in 2018, it was confirmed that Mexico had signed an agreement with the United States whereby those applying for asylum in the United States can remain in Mexico for the duration of their process. Asylum seekers are not undocumented. They arrive at the border posts and present themselves to immigration officers with proof of identity and the dangers they face in their country. Remaining outside the country where they are applying for asylum is a practical obstacle to processing their application promptly and can reduce their chances of success. Moreover, the low proportion of applications approved to Central Americans means that for practical purposes almost everyone will become Mexican residents in the future. The government that receives the request is normally responsible for providing conditions for the applicant to survive during the process, whether they are given authorization to work, receive subsidies to live or are arrested. However, in Mexico, applicants do not have access to such support. Mexico will give them a humanitarian visa with the right to work, but with a job in Mexico they will not be able to prove that they are able to support themselves in the U.S., which is one of the criteria for receiving refugee status.

We have also argued that the cooperation between the United States and Mexico is essential so that public policies in Mexico are developed to retain the population through better working and living conditions, while in the United States, security for migrants is achieved through legal access to jobs, payment of taxes and their corresponding rights to social benefits, and the possibility to save for retirement, unite retirement funds from both countries, and receiving tax rebates where appropriate.

Both proposals are compatible with the sovereign right of each country to apply measures that reduce or prevent irregular migration, and are, therefore, compatible with secure borders and measures to control identity in the workplace. However, they are not compatible with policies that discriminate or criminalize people who

[27] Since the beginning of this century, it was rumored that the Department of Homeland Security (DHS) in the U.S.A was pressing the Mexican government to stop as many migrants from Central America as possible, so they would not reach the U.S.A. As of 2014, this request was made explicit and motivated systematic meetings between the DHS, the Interior Ministry and the National Migration Institute in Mexico.

have worked in legal jobs, or with policies that limit access to public and social services, or that extend punishments to family members and descendants of migrants. However, until recently, it was not this way; there were strict border control measures, but once workers entered the United States, the control measures stopped. At the same time, it is not right to apply unilateral punitive measures: As of 2006, fines had been imposed on less than ten companies for employing irregular migrants, while hundreds of thousands of workers had been removed and deported from the country.

We believe the change that has occurred in these migratory flows opens up two different scenarios, both for migrants and for North America. The "inertial" path of persisting with anti-immigrant actions and policies in the United States is not going to prevent the growth of the population of Mexican origin – ever more converting into "Latina" – since its growth is increasingly the result of births that occur in the United States and less the result of migration; albeit a North American population whose incorporation is segmented, with fewer or denied rights, and with precarious life prospects (added to which, many will continue to be weighed down further by the risk of expulsion). And, of course, their ability to contribute to the future of North America would also be precarious.

On the contrary, we urge the governments of both countries to coordinate on far-reaching and effective public policy measures that allow this population to enjoy their rights and contribute to North American society. North America is the only other continental region in the world, in addition to the Asian region centered in China, where there is healthy, although moderate, demographic growth, with a positive employment dynamic and welfare in general. While demographic and employment growth in Europe is clearly decreasing, and large regions of the world lack the possibility to offer full employment in the near future, as a region, North America has what it takes to achieve a dominant position in the world with widespread prosperity for its citizens. Americans of Mexican origin, who are becoming increasingly more integrated into the United States and regional economies, can contribute substantially to ensuring that this economic and demographic conjunction consolidates North America as a region that is globally integrated but with shared democratic and welfare regimes. We believe that national isolation does not contribute to the general well-being of a country or its inhabitants. The prosperity of Mexico, unlike that of Asia, contributes to the well-being in the United States and Canada, and vice versa. We believe that the modest achievements of the first NAFTA could be much improved if an adequate regional migration regime is implemented, together with better policies for the social incorporation of immigrants in all three North American countries.

Contents

Chapter 1
Population Dynamics of Mexican Migration on Both Sides of the Border

Claudia Masferrer, Carla Pederzini, Jeffrey S. Passel, and Gretchen Livingston

1.1 Introduction

The first decade of the twenty-first century was remarkable in terms of migration between Mexico and the United States. For the first time since the 1930s, the net flow of Mexicans to the United States declined to approximately zero for an extended period, and in fact, may have been negative (with more Mexicans returning to Mexico than going to the U.S.). Flows in both directions changed dramatically over a very short period. Movement to the United States decreased after 2005 reaching low levels not seen since the 1970s. At the same time, migration from the U.S. to Mexico—mostly Mexican-born former immigrants and some U.S.-born children of Mexicans—more than doubled from the levels of the late 1990s.[1]

[1] See, Passel, J. S., D. V. Cohn & A. Gonzalez-Barrera. (2012). *Net Migration from Mexico Falls to Zero-and Perhaps Less*. Washington D.C. <http://www.pewhispanic.org/2012/04/23/net-migration-from-mexico-falls-to-zero-and-perhaps-less/>; and Zenteno, R. (2012). Saldo migratorio nulo: el retorno y la política anti-inmigrante. *Coyuntura Demográfica*, (2), 17–21.

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These dramatic changes in migration occurred at a time when the economic "boom" of the end of the 1990s in the United States was replaced by the Great Recession and financial crisis that began in 2007–2008. The difficult economic circumstances faced by potential migrants to the United States undoubtedly depressed migration flows and encouraged some return migration. In addition, pervasive border and interior enforcement plus recent legislative changes in many states and cities (for example Arizona's SB1070 law) have presented other challenges to migrants living in the U.S. and those considering leaving Mexico. Significant increases in deportations began after 2005 reaching almost 400,000 in fiscal year 2009 or more than double their 2000 level of 188,000; deportations have remained at this level through 2011. About three-quarters of these removals were Mexican; most of the removals were classified as non-criminals but a significant minority (over 40 percent in 2010–2011) was described by DHS as criminals.[2]

This chapter places the Mexico-U.S. migration in the context of these recent trends and events in both countries. We briefly trace the history of Mexican migration to the United States and provide numbers and profiles of Mexican migrants in the United States and those who have returned to Mexico. We also examine the large number of Mexican-origin persons who were born in the U.S.—most of whom live in the U.S., but some of whom moved to Mexico with their families. The profiles and estimates are based primarily on official U.S. and Mexican data sources from the last decade. The chapter also describes major features of the migration process including basic characteristics such as age, gender and education, geographical distribution, family formation, and fertility patterns, plus changes in mobility patterns and selectivity by age, gender and education. We explicitly examine changes in selection of return migrants in the context of the recent economic recession.

1.2 History of Mexico-U.S. Migration

1.2.1 Migration in the Twentieth Century

The movement of Mexicans into and out of the United States has a long history (Fig. 1.1). The number of Mexican immigrants living in the U.S. increased steadily in the early twentieth century from about 100,000 in 1900 to a peak of more than 600,000 in 1930. In the next decade, the Mexican-born population in the U.S. fell by more than 40 percent during the Great Depression as a result of both voluntary and forced return migration. The numbers settling in the U.S. began to grow again in the 1940s and the Bracero program, which lasted from 1942 until 1964, allowed a large number of Mexicans to work legally in the U.S. on a temporary basis. By

[2] Lopez, M. H., A. Gonzalez-Barrera & S. Motel (2011). As Deportations Rise to Record Level, Most Latinos Oppose Obama's Policy. <http://www.pewhispanic.org/files/2011/12/Deportations-and-Latinos.pdf>.

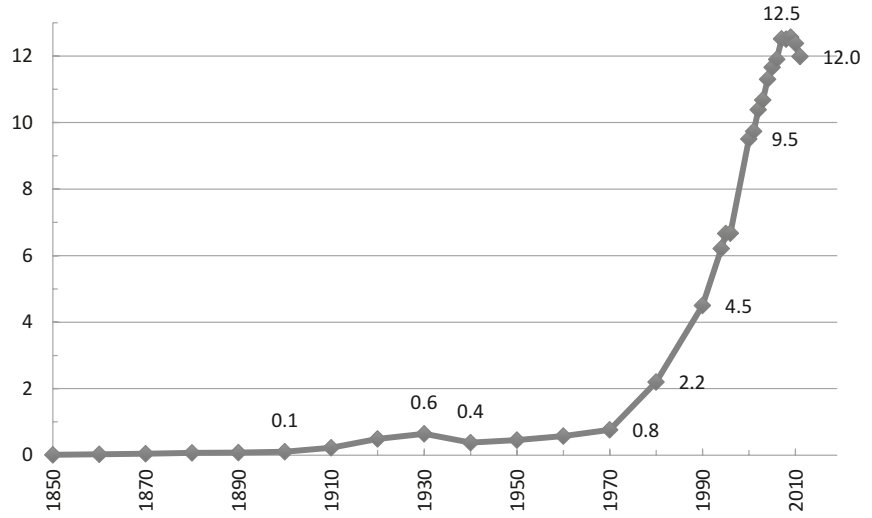

Fig. 1.1 Mexican-Born population in the U. S.: 1850–2011
Source: U.S. Census and Current Population Survey

1970, there were 760,000 Mexican migrants living in the U.S., the first time the population exceeded the 1930 peak. The Mexicans represented about 8 percent of immigrants in the U.S. at that time (1970) and were outnumbered by Italian, German, and Canadian immigrants.[3]

The end of the Bracero worker program in 1964, the introduction of U.S. immigration reform in 1965 and demographic-economic shifts in Mexico led to substantial changes in the nature of Mexican migration to the United States. What had been a largely legal and modest flow of immigrant settlers accompanied by a regulated temporary flow changed into a growing volume of authorized immigration and rapid increases in unauthorized migration. Between 1965 and 2010 more than 13 million Mexicans moved from Mexico into the United States, creating one of the largest mass migrations in modern history.[4] The Mexican migrant population tripled to 2.2 million by 1980 and became by far the largest immigrant group in the U.S. The Mexican-born population in the U.S. more than doubled again to 4.5 million by 1990 as annual inflows averaged more than 300,000 during the 1980s.

Migration from Mexico into the U.S. grew substantially throughout the 1990s. At the beginning of the decade, some 370,000 migrants from Mexico arrived in the

[3] Gibson, C. & K. Jung (2006). *The Foreign-Born Population of the United States, 1850–2000.* New York: Novinka Books, Nova Science Publishers Inc.

[4] See Passel, J. S., D. V. Cohn & A. Gonzalez-Barrera. (2012). *Net Migration from Mexico Falls to Zero-and Perhaps Less*. Washington D.C. <http://www.pewhispanic.org/2012/04/23/net-migration-from-mexico-falls-to-zero-and-perhaps-less/>; and Zenteno, R. (2012). Saldo migratorio nulo: el retorno y la política anti-inmigrante. *Coyuntura Demográfica*, (2), 17–21.

U.S. The number of immigrants crossing the border rose throughout the decade, reaching 570,000 in 1995, and then 700,000 in 1999.[5]

1.2.2 Migration Since 2000

Migration from Mexico remained high at the turn of the twenty-first century. In 2000, Mexican immigration to the U.S. peaked, when more than three-quarters of a million Mexicans migrated to the U.S. As a result of a decade of very high immigration, the Mexican-born population in the U.S. more than doubled from 1990 levels to 9.5 million in 2000. Migration slowed somewhat after 2000 with the post-2001 recession but still averaged about 600,000 per year for the next 5 years. By 2007, the Mexican-born population in the U.S. reached a peak of 12.5 million.[6] However, migration patterns changed after 2007. For the five-year period from mid-2005 through mid-2010, the U.S. experienced a sustained period of zero net migration from Mexico—something that had not occurred since the 1930s. This is the result of two key factors: (1) very large declines in the amount of immigration from Mexico, and (2) increases in the amount of return migration from the U.S. to Mexico.[7]

1.3 Reduced Migration from Mexico to the U.S.

In 2010, only about 140,000 Mexicans migrated to the U.S., less than 20 percent of the peak flow in 2000 and probably the lowest figure in the last 40 years. As a result of this reduced migration flow, growth in the number of Mexican immigrants living in the United States slowed before reaching a peak of 12.5 million in 2007. Growth then stopped and by 2010 that number had dropped to about 12 million—the first notable drop in the number of Mexicans in the U.S. since the exclusionary policies of the 1930s.

Data from both sides of the border indicates that the bulk of the decline in immigration from Mexico to the U.S. after 2005 is due to a large decline in unauthorized immigration as opposed to legal immigration. In fact, admission of legal immigrants

[5] Passel, J. S., D. V. Cohn & A. Gonzalez-Barrera (2012). *Net Migration from Mexico Falls to Zero-and Perhaps Less*. Washington D.C. <http://www.pewhispanic.org/2012/04/23/net-migration-from-mexico-falls-to-zero-and-perhaps-less/>.

[6] Passel, J. S., D. V. Cohn & A. Gonzalez-Barrerra (2012). *Net Migration from Mexico Falls to Zero-and Perhaps Less*. Washington D.C. <http://www.pewhispanic.org/2012/04/23/net-migration-from-mexico-falls-to-zero-and-perhaps-less/>.

[7] Passel, J. S., D. V. Cohn & A. Gonzalez-Barrera (2012). *Net Migration from Mexico Falls to Zero-and Perhaps Less*. Washington D.C. <http://www.pewhispanic.org/2012/04/23/net-migration-from-mexico-falls-to-zero-and-perhaps-less/>.

increased from 1996–2000, when 760,000 Mexicans were granted green cards, to 2006–2010, when 816,000 Mexicans were admitted as legal permanent residents. This continuing admission of legal immigrants was sufficient to cause a slight increase in the total number of legal Mexican immigrants living in the U.S., from 5.4 million in 2005 up to 5.8 million in 2011.[8]

In contrast to the sustained flow of legal immigrants, unauthorized flows apparently decreased substantially by 2010 from the high levels of the late 1990s.[9] Legal admissions for 1996–2000 (noted above) represented less than one-quarter of the total estimate flow to the US; by 2006–2010, green cards represented more than two-thirds of the total arrivals and an even higher share in 2010 than 2006. The changing flows had a marked impact on the total number of unauthorized Mexicans living in the U.S. The number increased steadily from 4.5 million in 2000 to 6.3 million in 2005 and reached a peak of 7.0 million unauthorized Mexican immigrants in the U.S. in 2007. By 2011 this population had dropped to 6.1 million implying that more unauthorized immigrants left the U.S. than arrived between 2007 and 2011.

In addition to the flows of legal permanent residents moving to the U.S. and unauthorized migrants settling in the U.S. is a large flow of legal temporary migrants admitted for specific purposes and specific durations. These include students admitted temporarily to study in the U.S. (on F and M visas), seasonal workers (H2A and H2B), workers with specific skills, occupations or employers (H1B, L, O, P), exchange visitors (J), treaty traders and investors (E visas), and NAFTA workers (TN visas) coming to the U.S. The number of annual admissions from Mexico is dominated by temporary visitors for business or pleasure (B1 and B2 visas). Although the published data suggest an upward trend in arrivals from Mexico over the last decade,[10] changes in the way arrivals have been counted appear to be responsible for much of the increase and the underlying pattern is one of level or slightly declining arrivals of legal temporary migrants from Mexico.[11] While most of the movement is temporary, its huge scale (over 17 million arrivals in fiscal year 2011) does translate into some settlement—legally for some groups (e.g., students) and unauthorized for others (e.g., visa overstays). Using the Nonimmigrant Information System, the Department of Homeland Security estimates that about 110,000 legal

[8] Passel, J. S., D. V. Cohn & A. Gonzalez-Barrera (2012). *Net Migration from Mexico Falls to Zero- and Perhaps Less*. Washington D.C. <http://www.pewhispanic.org/2012/04/23/net-migration-from-mexico-falls-to-zero-and-perhaps-less/>.

[9] The green card data do not directly measure inflows of legal immigrants because some of the migrants receiving green cards are already in the US. Further, information on unauthorized inflows must be derived from changes in the resident population.

[10] U.S. Department of Homeland Security (DHS) (2012). *Yearbook of Immigration Statistics: 2011*. Washington D.C.: DHS, Office of Immigration Statistics.

[11] For example, see Monger, R. (2012). *The Impact of Counting Changes on Nonimmigrant Admissions: An Update*: <http://www.dhs.gov/sites/default/files/publications/immigration-statistics/ois_individuals_update_fs.pdf>.

Box 1.1 Concepts Used to Measure Migration in Mexican Data Sources

The analysis presented here uses a broad definition of migration from the U.S. to Mexico. The principal focus is the Mexican-born population who used to live in the U.S. (or still does). The analysis also includes the population born in the U.S. but living in Mexico, most of whom are children of Mexican migrants to the U.S.

Previous Residence in U.S. Several Mexican data sources (including the census, the population count or Conteo, and the Survey of Demographic Dynamics or ENADID) have questions about previous residence at a specific time point, either 5 years or one-year before the data collection. Those in Mexico who report living in the U.S. at the previous time are persons who migrated to Mexico during the period. These migrants are designated "intercensal migrants."

If they were born in Mexico, then they are "return migrants".
Those not born in Mexico (most of whom were born in the U.S.) are "new immigrants" to Mexico. If these U.S.-born migrants have at least one parent who is Mexican, then they are "U.S.-born children of Mexican migrants."

Recent Emigrants from Mexico. The Mexican census and ENADID include questions to identify persons who left Mexico in the five years before the data collection. They also ask whether the emigrant has returned to Mexico. Those who returned by the time of the census/survey are designated as "intracensal migrants."

Intracensal migrants who are back in Mexico are also "return migrants."
Intracensal migrants who are still in the U.S. at the time of the data collection are "emigrants to the U.S."

Return Migrants. Return migrants are persons born in Mexico who lived in the U.S. at some point but are observed in Mexico in the Census, Conteo, or ENADID.

Intercensal migrants lived in the U.S. five years before the data collection; i.e., they left Mexico more than five years ago.
Intracensal return migrants left Mexico in the five-year interval before the data collection and returned during the same five-year period (also referred to as circular migrants).

U.S.-born Migrants. Individuals born in the U.S. who are observed in Mexico in the Census, Conteo or ENADID are "U.S.-born migrants to Mexico."

Those in the same dwelling as their mother or father who was born in Mexico can also be classified as "U.S.-born children of Mexican parent(s)."

temporary residents from Mexico were residing in the U.S. as of January 2011.[12] However, most of the temporary admissions (even other than tourists) do not lead to long-term settlement in the U.S. and the group is only incompletely covered in U.S. data sources on Mexican residents.

Mexican data sources tell a similar story. Temporary visa holders do account for a significant and growing share of the departures from Mexico, as captured by the 2009 Mexican Survey of Demographic Dynamics (ENADID). In 2008, nonimmigrant visa holders represented 20 percent of the departures, up from 13.5 percent in 2005. Most of these people would not be entitled to long-term residency in the U.S. and while most are likely to return to Mexico, evidence from the past decade suggests some overstay illegally or eventually become legal residents.[13] However, there are no data on the emigration behavior of legal temporary visa holders.

The Mexican Censuses of 2000 and 2010 document reduced migration to the United States. Emigration data from Mexico based on data for "intracensal" departures from Mexico (see box on "concepts")[14] show that almost 1.5 million Mexicans left for the U.S. between 1995 and 2000. Ten years later, the number had dropped by almost one-third to 995,000 departures to the U.S. during the 2005–2010 period (Table 1.1).

1.4 Increased Migration to Mexico from the U.S.

Return migration to Mexico by people who were in the U.S. 5 years previously increased dramatically over the past decade. In 2000, there were 280,000 people in the Mexican Census who had been in the U.S. in 1995; in 2005, there were 238,000 migrants from the U.S. in Mexico; by 2010, the number was almost 4 times larger than in 2000 at 985,000 (see Table 1.2). These larger return flows occurred at the same time that emigration from Mexico was decreasing. In fact, even though emigration from Mexico was decreasing (Table 1.1), the share of intracensal migrants who returned to Mexico after less than 5 years in the U.S. increased dramatically. Of the 1.5 million Mexicans who left Mexico between 1995 and 2000, about 18 percent returned by 2000 (Table 1.1). The share of 2005–2010 emigrants who had returned by 2010 was almost 31 percent.[15]

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[12] Baker, B. (2012). *Estimates of the Size and Characteristics of the Resident Nonimmigrant Population in the United States: January 2011*. <http://www.dhs.gov/sites/default/files/publications/immigration-statistics/ois_ni_pe_2011.pdf>.

[13] For example, see Massey, D. & N. Malone (2002). Pathways to Legal Immigration. *Population Research and Policy Review*, 21(6), 473–504.

[14] To compare the definitions of return migration used in this chapter with that of the rest of the book, please refer to the note on the different definitions used by chapter.

[15] Another possible explanation for the increase in return is the increase in trip duration. As mentioned earlier, return migration defined by residence five years ago could include longer-term

Table 1.1 Mexico: Emigration to the U.S. and return to Mexico over the five previous years from 1995, 2000 and 2010

	Emigration over the period[a]			Return over the period		
	1990–1995[a]	1995–2000[b]	2005–2010[c]	1990–1995	1995–2000	2005–2010
Total	1,737,160	1,471,485	994,869	387,907	260,650	307,783
Percentage	100	100	100	22.3%	17.7%	30.9%
Sex						
Male	69.3%	75.3%	76.7%	69.1%	78.1%	79.6%
Female	30.6%	24.7%	23.3%	30.9%	21.9%	20.4%
Mean age at departure	25.1	25.5	27.87	27.3	28.5	29.5
Median	22	23	25	25	26	27
Duration of the trip for those who have returned to Mexico (in days)[f]						
Median				273	303	548
Mean				414.19	442.3	620.8

Source: 10 percent sample of the Mexican 1995 Population Count, 2000 Population Census and 2010 Population Census

Notes

[a]Refers to the population that migrated to the United States over the 5 year period

[b]Refers to the population that migrated but was residing in Mexico at the time where the data was captured

[c]The period 1990–1995 is captured in the 1995 Population Count

[d]The period 1995–2000 is captured in the 2000 Population Census

[e]The period 2005–2010 is captured in the 2010 Population Census

[f]Refers to the last trip made

"Intercensal migration" to Mexico includes a significant number of people who are not "return migrants" because they were born in the U.S., not in Mexico. The number of these U.S.-born migrants to Mexico increased threefold from 58,000 in 2000 to 153,000 in 2010 (Table 1.2). This increase is mainly driven by minors born in the United States to Mexican parents.

1.4.1 U.S.-Born Mexican Minors

The U.S.-born population living in Mexico more than doubled from 343,000 to 739,000 between 2000 and 2010. This increase was not driven by a rise in the number of American expatriates that decided to retire in Mexico or otherwise move to Mexico. Rather, there was a dramatic increase in the number of minors (under 18 years old) in Mexico who were born in the U.S.— from 251,000 in 2000 (representing 73 percent of all U.S.-born immigrants to Mexico) to 570,000 in 2010 (77

migrants, i.e. migrants from earlier cohorts of arrival to the US. However, this measurement or methodological issue is hard to disentangle with the current available data.

Table 1.2 Mexico: Selected characteristics for the population aged 5 years and older who resided in the U.S. 5 years before: 2000, 2005 and 2010 (Mexico)

	2000		2005		2010	
	Male	Female	Male	Female	Male	Female
Total [a]	280,051		238,331		985,383	
Total by gender [a]	167,497	109,715	156,058	82,273	648,655	286,914
Percent	60.5%	39.5%	65.5%	34.5%	68.7%	31.3%
Age [b]						
Mean age	29.5	26.4	32.5	29.4	32.1	28.1
Age group						
5–14	18.7%	28.4%	12.4%	23%	11.6%	24.7%
15–24	16.3%	19.1%	14.4%	17.6%	13.8%	16.7%
25–49	55.2%	43.1%	61%	46.1%	64.2%	48.8%
50 and more	9.8%	9.4%	12.5%	13.3%	10.4%	9.8%
Place of birth						
Mexico	136,946	80,611	NA		593,677	230,737
United States	30,161	28,168	NA		78,318	74,275

Source: Complete set of individual records of the 2000 Mexican Census and 2005 Count, and 10 percent sample of the 2010 Census

Notes: Includes non-institutionalized individuals only

[a]The subtotals may not add up to the total due to missing values in the variables of interest

[b]The percentages may not add up to 100 due to rounding effects

percent of the U.S.-born). This increase indirectly reflects the growing number of return migrants who have spent longer periods in the U.S. and formed families there. The relative presence of minors, increased from 73 to 77 percent of the U.S. born population from 2000 to 2010.[16] In addition to this increasing share of minors among the U.S.-born population in Mexico, there is a growing presence of young adults reflecting the aging into adulthood of U.S.-born minors from the previous decade.

Most of the U.S.-born migrants living in Mexico appear to be the U.S.-born children of Mexican migrants to the U.S. who have moved back to Mexico. Using 2010 Mexican census data we can identify an individual's parents if they are in the same dwelling. With this linkage we can determine whether the U.S.-born individual have at least one Mexican parent.[17] This measure underestimates the actual number of Americans living in Mexico who were born to Mexican parents, because it is not possible to determine an individual's parentage if the parents are not living with their children. The children may be living with relatives other than their parents if the parents are still in the United States, or if the parents left children with other

[16] Unfortunately, the lack of information regarding place of birth and intra-censal migration in the 2005 Population Count, as well as year of arrival for the inter-censal migrants and emigration of the foreign-born makes it difficult to fully explain the absolute increase.

[17] This was impossible to calculate in previous censuses and population counts where it was only possible to know the relationship with the individual characterized as the head of the household.

relatives while establishing a new household in Mexico after entering a union or to work or study, for example.

The U.S.-born children of Mexican parents are especially important because, according to Mexican law, all individuals born abroad with a Mexican parent are entitled to Mexican citizenship[18] In order to receive citizenship, Mexican parents need to register their U.S.-born children at Mexican consulates or at the Civil Registry once they are in Mexico. In 2010, 71 percent of those born in the U.S. were actually living in Mexico with at least one Mexican parent, i.e. more than half a million were entitled to Mexican citizenship and a considerable share have likely already applied for dual citizenship. Note that a similar percentage of those Americans who were living in the U.S. in 2005 are actually living with at least one Mexican parent. Seven out of ten of those U.S. born who had arrived in the last 5 years are actually living with a Mexican parent. Thus, much of the immigration from the U.S. (i.e., U.S.-born individuals moving to Mexico) is related to return migration to Mexico (by Mexican-born residents).

The U.S.-born population that is living in Mexico and has Mexican parentage spans all ages, implying that the parents went to the U.S. in quite different eras (see Table 1.3). About 6000 U.S.-born migrants over 30 years old still live with at least one Mexican parent. Given their age (meaning that they were born before 1980), they are likely to be children of early migrants, possibly former braceros. On the other hand, almost half a million migrants are minors under 18 (i.e., born in 1992 or later) and thus are sons and daughters of more recent migrants who were in the U.S. after passage of the Immigration Reform and Control Act (IRCA) in 1986. Of these, most are children of Mexicans who were probably in the U.S. after passage of the Illegal Immigration Reform and Immigrant Responsibility Act (IIRIRA) in 1996; after which the number of deportations exploded.

Although the census data do not provide detailed information on the migration experiences of these U.S.-born children in Mexico, they do provide information on their diverse living arrangements. In 2010, 22 percent of the minors born in the U.S. and living in Mexico were grandchildren of the household head, whereas for the total Mexican population in this age group this percentage is only 16 percent. This phenomenon of return over the generations has increasing relevance in transnational literature; i.e., the descendants of migrants—siblings, grandchildren, children—return in order to live with grandparents and other family members left behind so that they are exposed to the homeland culture of the migrants.[19] Thirteen

[18] Actually, recent changes to the citizenship law (Ley de Nacionalidad) were made on the 23rd of April, 2012 to allow children born abroad with a Mexican grandparent to have access to Mexican citizenship. This was approved in the Mexican Senate to respond to U.S. state legislatures that might attempt to remove the U.S. citizenship of the children of undocumented parents: see Ballinas, V. & A. Becerril (2012). Senado reforma la Ley de Nacionalidad para acoger a menores deportados por EU. *La Jornada*, March 9, p. 16, <http://www.jornada.unam.mx/2012/03/09/politica/016n1pol>.

[19] For example, see Durand, J. (2004). Ensayo teórico sobre la migración de retorno. El principio del rendimiento decreciente. *Cuadernos Geográficos*, 35(2), 103–116.

Table 1.3 Mexico: Population born in the U.S. living in the U.S. 5 years before and coresidence with Mexican parent, 2000 and 2010

	2000		2010		2010					
					All born in the US				Born in the U.S. and living in the US in 2005	
	Born in the U.S. and living in the US in 1995		Born in the U.S. and living in the US in 2005		Total		Living in 2010 with at least one Mexican parent [a]		Living in 2010 with at least one Mexican parent	
Age group	N	%	N	%	N	%	N	% of Total US born, 2010	N	% of total US born living in US, 2005
Total	58,329	100	152,541	100	739,634	100	525,549	71.1	106,823	70.0
0–4 [b]	NA	NA	NA	NA	203,003	27.4	182,306	24.6	NA	NA
5–9	29,095	50	78,899	51.7	209,415	28.3	188,377	25.5	70,873	46.5
10–17	11,029	18.95	34,735	22.8	157,725	21.3	105,137	14.2	29,958	19.6
18–29	8327	14.3	19,639	12.9	83,080	11.2	43,060	5.8	5282	3.5
30–49	5357	9.21	11,622	7.6	45,242	6.1	6508	1	689	0
50 +	4383	7.53	7646	5.0	41,169	5.6	161	0	21	0

Source: Ten percent sample of the 2010 Mexican Population Census
Notes
[a]This information is not available in the 2000 Census
[b]The place of residence 5 years ago is only asked to the population 5 years and older

thousand minors born in the United States are not living with any of their parents and 44 percent of them are actually the grandchildren of the head of the household.

Among the U.S.-born children of Mexicans who were in Mexico in 2010, almost 300,000 moved to Mexico between 2005 and 2010. About 182,000 of these minors are under 5 years old and another 100,000 are 5–17 years old and were in the U.S. in 2005 (Table 1.3). About one-third of these dual national children live in border states—11.6 percent in Baja California, 10.4 percent in Chihuahua, 7.1 percent in Tamaulipas and 5.4 in Sonora—and another one-sixth are in traditional migrant sending areas—9.3 percent in Jalisco and 7.3 percent in Michoacán. Among those under 5 years old, there is an even larger concentration in these states along the U.S. border.[20] On the other hand, for the older minors, we see a larger relative

[20]This pattern suggests two somewhat different processes that deserve further examination in future studies: Mexican population in border areas opting to deliver their children on the U.S. side of the border or Mexican deported parents living in the border area with their U.S.-born children while waiting to cross back to the U.S.

presence in states like Jalisco and Michoacán suggesting a significant presence of households returning to their Mexican homes, although still a large share is living in states along the U.S. border.

1.5 The Changing Geography of Migration

The demographic changes of Mexican migration to the United States in the last decade have been associated with geographic changes in both countries. Just as the diversification in the places in the U.S. evolved over time moving away from the old traditional receiving states of California, Texas, Arizona and Illinois, the states of origin in Mexico have also diversified away from the West-central region.[21] A recent study using the 2006 ENADID finds a link between the changes in the origins in Mexico and the changes in the destinations in the U.S.—the growth of immigration to new destinations in southern and eastern states in the U.S. is driven by migration from non-traditional sending areas in Mexico.[22]

Changes in the geography of return migration are also linked to these changes in the geography of emigration and immigration. Previous work using the 2005 Mexican Population Count and the 2010 Mexican Population Census finds that destinations for return migrants had been border cities, prosperous communities and metropolitan areas.[23] The U.S.-Mexico border region played a key role in the migration process. Not only has the region had an advantageous economic position with ample employment opportunities, but its convenient proximity to the U.S. allowed for the concentration of a floating population, especially deportees, with intentions of crossing the border into the U.S. However, conditions at the Northern Mexican border changed over the period 2005–2010 with an increase in violence and insecurity related to organized crime and drug smuggling, and a decline in employment related to the global financial crisis late in the 2000–2010 decade, the decline of the *maquiladora* industry in the region and business closures.[24]

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[21] For example, see Donato, K. M., C. Tolbert, A. Nucci & Y. Kawano (2008). Changing Faces, Changing Places: The Emergence of New Nonmetropolitan Immigrant Gateways. In: D. Massey (ed.). *New Faces in New Places: The Changing Geography of American Immigration* (pp. 75–98). New York: Russell Sage Foundation; and Zúñiga, V. & R. Hernández-León (2005). *New Destinations. Mexican Immigration in the United States*. New York: Russell Sage Foundation.

[22] For full details, see Riosmena, F. & D. S. Massey (2012). Pathways to El Norte: Origins, Destinations, and Characteristics of Mexican Migrants to the United States. *International Migration Review*, 46(1), 3–36, <doi:10.1111/j.1747-7379.2012.00879.x>.

[23] Masferrer, C. & B. Roberts (2012). Going Back Home? Changing Demography and Geography of Mexican Return Migration. *Population Research and Policy Review*, 31(4), 465–496.

[24] This is reflected in the increase of poverty related to earnings as measured by CONEVAL using the Index of Labor and Poverty trends. The index calculated using ENOE from 2005 to 2010 show the clear deterioration of economic conditions in the northern states of Baja California, Baja California Sur, Coahuila, Chihuahua, Nuevo León, Sonora and Tamaulipas: Consejo Nacional de

Regional comparisons of 1995–2000 to 2005–2010 show a continued decline of relative return (using the definition of residence in the U.S. 5 years previously) to traditional sending states and a sustained increase to the South and Southeastern states where migration to the U.S. is a more recent phenomenon. Similarly, the percentage of circular return migration by region shows that the only region which experienced a sustained decrease of return within the five-year period is the traditional sending states, while all others show an increase.[25] This reflects the declining importance of traditional sending states in attracting returnees either as a result of local conditions in Mexico or a well-established community in the U.S. In this sense, communities from states that introduced themselves later into the migration process may be at earlier stages of the migration and settlement process, and therefore tend to return more. The process of return migration to one's home state involves assessing conditions in that area, economic and otherwise, in comparison with alternative destinations. The traditional sending areas may not be as attractive to potential return migrants as other options, including alternative destinations in Mexico or staying in the U.S. The disproportionate return to states which had low out-migration levels and to metropolitan areas which provide employment opportunities suggests an increasing share of migrants that do not return to their communities of origin and a possible link between international and internal migration in Mexico.[26]

1.5.1 Profile of Mexican Migrants in the U.S. and Mexico

As dramatic changes have taken place in patterns of migration over the past decade, the profiles of Mexican immigrants living in the U.S., and those who have returned to Mexico have changed in some ways, but in other ways have remained somewhat stable. Some of stability can be attributed, in part, to the notable changes in the migration process prior to the recent declines engendered by legalization programs of IRCA, legislative changes in the 1990s and their aftermath. In particular, over the post-IRCA period, Mexican migration to the United States has gone through an increasing process of settlement where migrants are staying longer in the U.S. (and possibly settling more). The diversification of the demographic composition of the flow influenced by family reunification, increasing family formation in the U.S. (i.e., couples having U.S.-born children), as well as legalization programs like IRCA[27]

Evaluación de la Política de Desarrollo Social (Coneval) (2011). *Tendencias económicas y sociales de corto plazo. Resultados por entidad federativa*. Mexico: Coneval.

[25] Masferrer, C. & B. Roberts (2012). Going Back Home? Changing Demography and Geography of Mexican Return Migration. *Population Research and Policy Review*, 31(4), 465–496.

[26] Masferrer, C. & B. Roberts (2012). Going Back Home? Changing Demography and Geography of Mexican Return Migration. *Population Research and Policy Review*, 31(4), 465–496.

[27] For understanding the effects of legalization and its relationship to return migration in the case of the 1986 Immigration Reform and Control Act, see Riosmena, F. (2004). Return versus

and enhanced border control and immigration enforcement that make cross-border mobility more difficult[28] all contributed to significant population changes even before the recent slowdown in migration to the U.S.

The decision to return depends not only on the migratory experience itself but on the economic, social and political conditions both in Mexico and the United States. Return migration is embedded in two interrelated selection processes: emigration and return. The literature on emigrant selection is vast and it is well known that migrants are not randomly selected.[29] Selectivity of return migrants has received much less attention in the literature; however, some evidence shows that the selectivity of the return is inversely related to the selectivity of the arrival.[30] A recently published article shows that selection of Mexican returnees from the U.S. differs from that of non-Mexicans in terms of economic integration, age and gender. Using data from 1996 to 2009, the authors do not find a strong association between education or economic factors and return. But, the structure of families and social ties in the U.S.—in particular, marital status, household size, and the presence of children—were more strongly associated.[31]

This section of the chapter examines some of the process-related features of the migrant population both in Mexico and the U.S. Specifically we describe the changing length of time migrants are spending in the U.S. and changes in the legal status composition of the flow. Finally, we present information on the family structure of Mexican migrants in the U.S. and those who have returned to Mexico with a special focus on the presence and status of children. With these factors as background, we turn in the next section to the topic of "selectivity" of migration, i.e., who among the Mexican population is more likely to migrate to the U.S. and who among those in the U.S. is more likely to return to Mexico.

Settlement among Undocumented Mexican Migrants, 1980 to 1996. In J. Durand & D. Massey (eds.). *Crossing the Border. Research from the Mexican Migration Project* (pp. 265–280). Nueva York: Russell Sage Foundation.

[28] The increasing immigration control has been found to be preventing some migrants from engaging in circular movements as they did before and making them stay put in the U.S. longer periods, for example, in Massey, D. (2005). *Backfire at the Border. Why Enforcement Without Legalization Cannot Stop Illegal Immigration*. Washington D.C.

[29] Borjas, G. J. (1987). Self-Selection and the Earnings of Immigrants. *The American Economic Review*, 77(4), 531–553; Lindstrom, D. & A. López (2010). Pioneers and Followers: Migrant Selectivity and the Development of U.S. Migration Streams in Latin America. *The Annals of the American Academy of Political and Social Science*, 630(1), 53–77; and McKenzie, D. & H. Rapoport (2010). Self-Selection Patterns in Mexico-U.S. Migration: The Role of Migration Networks. *The Review of Economics and Statistics*, 92(4), 811–821.

[30] See Borjas, G. J. & B. Bratsberg (1996). Who Leaves? The Outmigration of the Foreign-Born. *The Review of Economics and Statistics*, 78(1), 165–176.

[31] Van Hook, J. & W. Zhang (2011). Who Stays? Who Goes? Selective Emigration among the Foreign-Born. *Population Research and Policy Review*, 30(1), 1–24, <doi:10.1007/s11113-010-9183-0>.

1.5.2 Duration of Residence in U.S. and Re-Emigration

The slowdown in immigration during the 2000s has meant that the duration of stay in the U.S. for Mexican immigrants is increasing. As fewer new migrants arrive, there are fewer with short durations of residence. Moreover, the increasing levels of migration from the 1970s through the 1990s mean that there were initially more migrants who could stay and become "long duration migrants." U.S. data shows exactly this pattern. In 2000, more than one-fifth (22 percent) of immigrants had arrived in the past 5 years; just over half (51 percent) had been in the U.S. for more than 10 years; and 37 percent had been in the U.S. for 15 years or more. By 2010, the share of recent migrants dropped to only 9 percent, and more than half (52 percent) reported living in the U.S. for 15 years or more (see Fig. 1.2).

Mexican Census data show this same pattern of extended stays in the U.S. among return migrants in Mexico. Table 1.1 shows the duration of trips to the U.S. for those who left and came back within a 5-year period. The mean duration of the last trip increased from about 16 months to more than 21 months (i.e., from 442 to 620 days).[32] This pattern is consistent with an increase in the settlement of the Mexican population and decreasing fresh inflows.

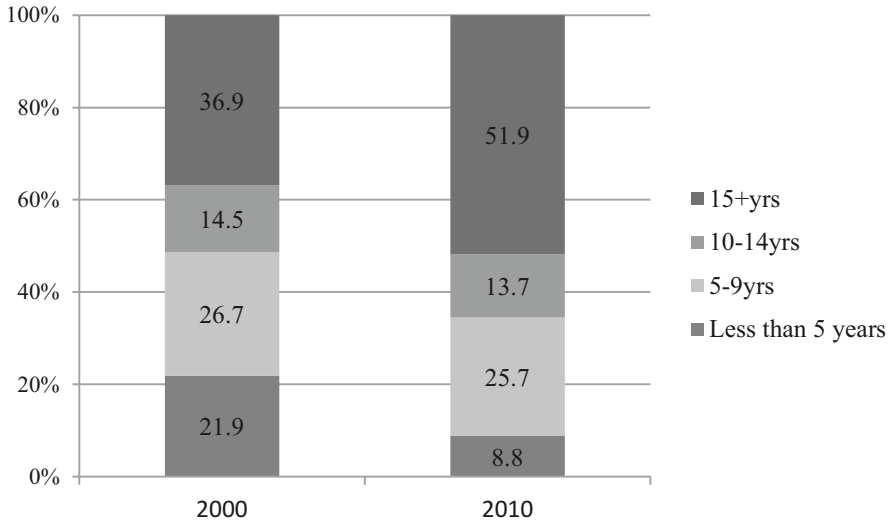

Fig. 1.2 Share of U.S. Mexican immigrant population, by years spent in U.S.
Source: U.S. Current Population Survey 2000 and 2010

[32] Unfortunately, there is no information available to estimate the duration of U.S. trips for return migrants who were out of Mexico for longer than 5 years.

1.5.3 Documentation Status

Even though the flow of unauthorized Mexicans has dropped in the last decade, data from both sides of the border show that individuals migrating without documents still comprise the largest group. Data from the U.S. show that in 2000, almost 85 percent of immigrants arriving in the previous 5 years were unauthorized; 10 years later in 2010, the share without documents was about 70 percent.[33] Mexican data from the Survey of Demographic Dynamics (ENADID) show that more than 60 percent of all Mexican migrants who left within the 5 years prior to the Survey entered the U.S. without documents. Among those ones who left and returned to Mexico during the same period, the percentage with no documents is only slightly smaller.[34]

However, migrants who managed to cross the border without documents were the least likely to return among all migrants who left Mexico during the five-year period (see Fig. 1.3). Migrants without documents may be especially reluctant to return to their country since they are not sure of whether they will be able to get back to the U.S. in the future. Green card holders who left Mexico within the previous 5 years are the most likely to return within the period. Some of the green card holders may actually be circular migrants who spend part of the year working in the U.S. and the rest of the year in Mexico with movement between the countries facilitated by their legal status. In addition, some other green card holders may be joining deported family members in Mexico.

Returnees who left Mexico without documents comprise a much larger percentage of migrants in younger age groups (see Fig. 1.4). Around two-thirds of returned migrants who left at ages 20–39 in the five-year period before the Survey, left with no documents. Older returnees who left during the same period were more likely to have migrated with a visa, a working permit or a residence permit. The percentage of migrants who migrated with U.S. citizenship increases greatly among those returned migrants aged 60 or older at time of migration. Since we consider only individuals born in Mexico, the large percentage of U.S. citizens may be reflecting migrants who have spent a large portion of their life in the U.S, or moving back and forth to the U.S.

While long-term settlement is increasing markedly among Mexican immigrants in the U.S., the link between long-term settlement and legal status has weakened a

[33] These data are drawn from unpublished analytic estimates using the March Current Population Surveys (CPS) of 2000 and 2010. They are consistent with estimates published in Passel, J. S. & D. V. Cohn (2011). *How Many Hispanics? Comparing New Census Counts with the Latest Census Estimates*. Washington D.C.: Pew Research Center.

[34] It is important to recall here that if anything this is an underestimate of migrants lacking documentation, because this information regarding type of document at the time of entry does not inform us completely about whether or not their document was still valid at the time of return, and if migrants were deported from the U.S. For example, those entering the U.S. with a tourist visa (around 10 percent) may have overstayed and green card holders are also susceptible for deportation.

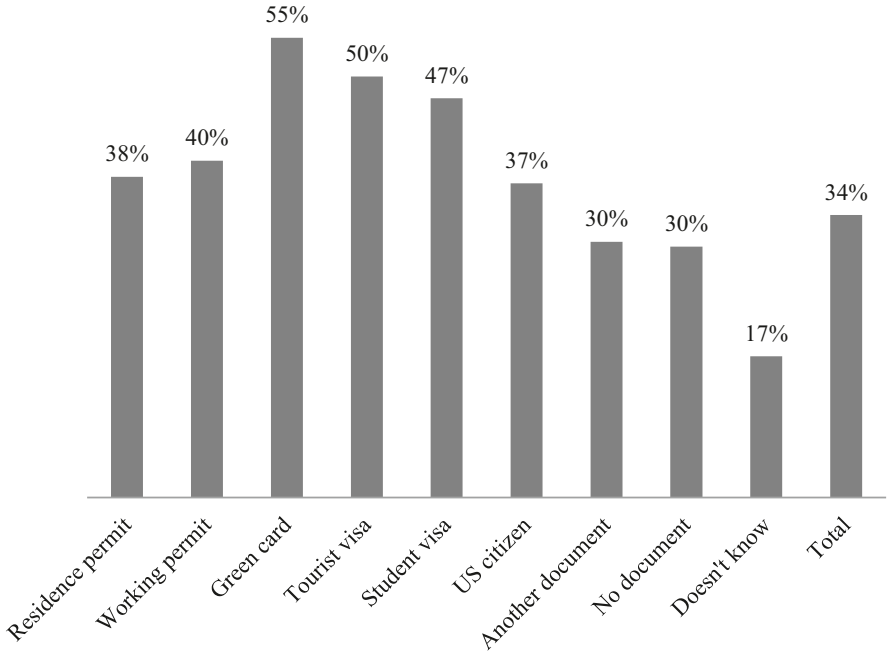

Fig. 1.3 Percentage returned by type of document at U.S. entry
Source: Encuesta Nacional de la Dinámica Demográfica, 2009

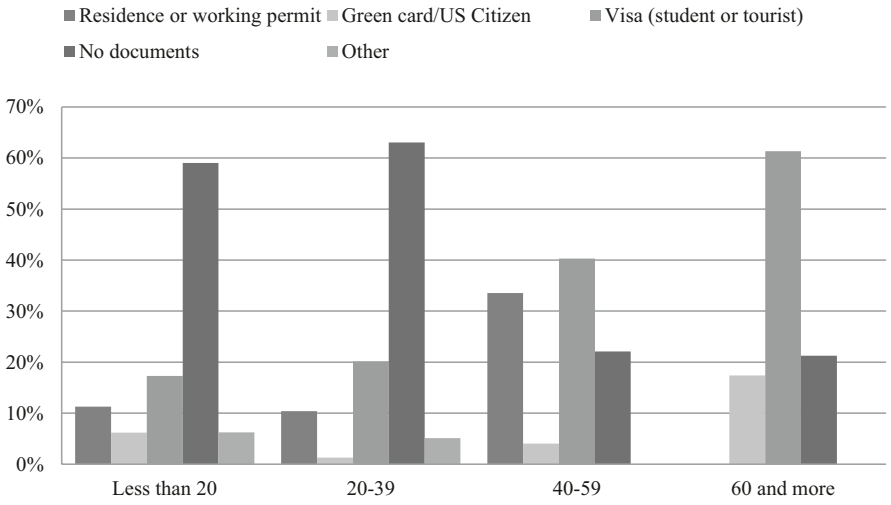

Fig. 1.4 Returned Migrants by type of document and age group (at U.S. entry)
Source: Encuesta Nacional de la Dinámica Demográfica, 2009

bit over time. The bulk of arrivals during the 1990s were unauthorized and virtually all pre-1980 entrants had acquired legal status through IRCA, so the profile of unauthorized adults was quite different from legal Mexican immigrants in 2000. Among unauthorized adults, only about one-third (35 percent) had been in the U.S. for 10 years or more compared with almost three-quarters (73 percent) of legal residents. In contrast, by 2010, 58 percent of unauthorized adults, and 81 percent of legal residents had been in the States for 10 years or more.[35] Thinking about it another way, in 2000, some 81 percent of Mexican immigrants who had been in the U.S. for at least 15 years were documented. By 2010, that share was down to 61 percent. Rates of documentation among more recent immigrants remained significantly lower than those of long-term immigrants in both periods—from 28 percent for immigrants in the U.S. for less than 5 years, to 36 percent for those in the U.S. for 10–14 years.

1.5.4 Mexican Families in the U.S.

Persons of Mexican origin comprise by far the largest share of Hispanics in the U.S., and the population continues to grow and change. As the number of Mexican adult immigrants in the U.S. increased and they lived longer in the U.S., they formed families and had children. While the growth of the Mexican-origin population in the U.S. was dominated by immigration between 1970 and 2000, during 2000–2010, growth was fueled by U.S. births to Mexican-origin persons.[36]

In 2010, about 37 percent of Mexican-origin persons in the U.S. were foreign-born, while one-third were second generation (the U.S.-born children of immigrants), and 30 percent were born to U.S. natives. This represents a long-term shift towards an increasingly native-born Mexican population in the U.S., but generational change can take time and has been quite moderate since the turn of this century, when 40 percent of Mexican-origin persons were foreign-born in 2000, 30 percent were second generation, and 29 percent had U.S.-native parents. After all, it took 30 years for the immigrant dominated Mexican origin population to fully emerge. In 1970, at the very beginning of the era of large-scale Mexican immigration, only 17 percent of the Mexican-origin population was foreign-born, 29 percent were the U.S.-born children of immigrants and fully 54 percent had U.S.-native parents.

However, focusing on Mexican-origin children (under 18) in the U.S. reveals more dramatic change in the past decade, which in turn signals changes to come in the future. In 2000, the 8.2 million Mexican born adults in the U.S. had 5.8 million children. About 1.3 million or 22 percent of the children were themselves

[35] Taylor, P., M. Hugo, J. S. Passel & S. Motel (2011). *Unauthorized Immigrants: Length of Residency, Patterns of Parenthood.* Washington D.C.: Pew Research Center.

[36] Pew Research Center (PRC) (2011). *The Mexican-American Boom: Births Overtake Immigration*: <http://www.pewhispanic.org/files/reports/144.pdf>.

immigrants from Mexico and 4.5 million or 78 percent were U.S. born. By 2010 there were 39 percent more Mexican-born adults—11.4 million. The number of second generation children increased by 32 percent to 7.6 million. The number of immigrant children actually fell because of the decrease in new arrivals during the second half of the decade. As a result 87 percent of the children of immigrants or 6.7 million children were U.S. born. The very large increase in U.S.-born children created a larger pool of potential return migrants to Mexico that is reflected in the results of the 2010 Mexican census, as we have noted above.

Over the years, the profile of Mexican migrants in the U.S. has evolved to include more varied family situations. In 2010, 61 percent of Mexican immigrants aged 18 and older were married—a share 10 percentage points greater than that of the U.S. population as a whole. Two-thirds (66 percent) of female migrants, who often come to the U.S. with a partner, are married, as are 57 percent of male migrants.

A sizeable share of Mexican immigrants are married, but a notable minority are living apart from their spouses. In 2010, among married immigrants, 8 percent are separated from their spouse. Only 4 percent of female immigrants are living away from their spouses, but among men, the share rises to 12 percent. Overall, 5 percent of all Mexican immigrants are married but living apart from their spouse. The share of spouses living apart from each other was similar in 2000.

Being married and living with a spouse are linked to documentation status, which is of course linked to the amount of time an immigrant has spent in the U.S. In 2010, some 61 percent of household heads of Mexican immigrant families who are in the U.S. legally are married, and about 8 percent of these married heads are living apart from their spouses. In contrast, among unauthorized immigrant families, who on average have been in the U.S. for less time, some 45 percent are headed by a married person, and 20 percent of these married heads report that they are living apart from their spouse.

As is the case in their homeland, which has experienced a dramatic fertility drop, the fertility of Mexican immigrants in the U.S. is declining, as well. Nonetheless, their fertility is relatively high by U.S. standards. Around 2000, the average Mexican immigrant woman at the end of her childbearing years in the U.S. had 3.0 children (with some having been born in Mexico and some in the U.S.). By 2010, this average had dropped to 2.6 children. In comparison, among all U.S. women, the average number of children ever born was essentially unchanged at 1.9 for both 2000 and 2010.

The increasingly long durations that Mexican immigrants spend in the U.S., along with their relatively high fertility, have led to the accumulation of larger numbers of children and the creation of more complex "mixed-status" families, which typically include at least one foreign-born parent and one U.S.-born child. In 2000, there were about 900,000 unauthorized immigrant children from Mexico. By 2010, the number had dropped to about 600,000 because fewer new unauthorized immigrants were arriving in the U.S. and many of the unauthorized immigrant children from earlier years had become adults (i.e., they turned 18).

In contrast, the number of U.S.-born children with unauthorized Mexican parents had increased dramatically, more than doubling from 1.4 million in 2000 to 3.3

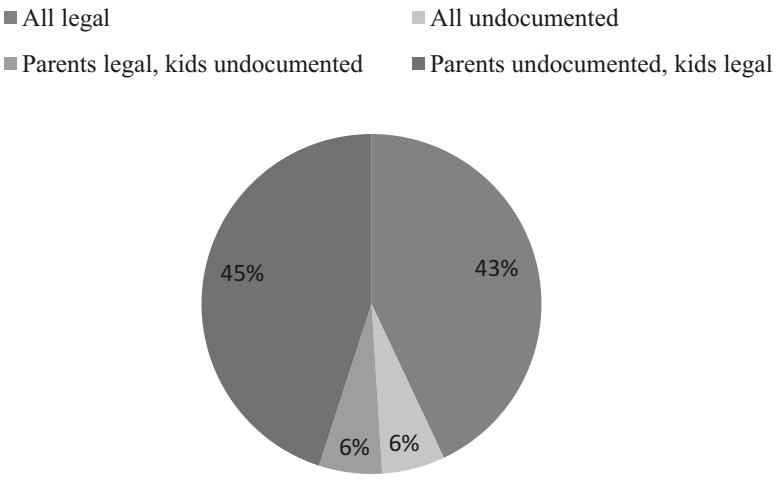

Fig. 1.5 U.S.: Legal status of Mexican immigrant families with kids, 2010
Source: U.S. Current Population Survey
Note: Based on families with children under age 18

million in 2010. More of the unauthorized Mexican adults were staying in the U.S. longer, forming families, and having children. The prevalence of children in unauthorized families was very apparent by 2010, when 44 percent of Mexican immigrant households included children under the age of 18. Just over half (51 percent) of these households were "mixed status" households (i.e., either legal parents and unauthorized children or, most likely unauthorized parents and US-born children). This share represents a marked increase from 2000 when 41 percent of Mexican-immigrant households with children included parents and children of mixed documentation status. Not surprisingly, all of the growth in mixed status families is driven by growth in the presence of families with an undocumented parent and U.S.-born children. While in 2000, some 33 percent of Mexican immigrant families fell into this category, in 2010, the share had risen to 45 percent (See Fig. 1.5).

Looking at this situation from the perspective of the children, 59 percent of children in Mexican immigrant households had documented parents in 2000, and by 2010, that share had dropped to 50 percent (see Table 1.4). For the U.S.-born children of Mexican immigrants, the change in parental legal status over 10 years was especially notable. In 2000, about than one-third (32 percent) of U.S.-born children of Mexican immigrants had an undocumented parent. By 2010, almost half (48 percent) did.

Table 1.4 U.S.: Parent documentation among kids in Mexican immigrant families, 2000–2010

	2000	2010
Total		
Parents legal	57.8	49.9
Parents undocumented	42.2	50.1
Kids ages 6 years or less		
Parents legal	56.9	47.8
Parents undocumented	43.1	52.3
Kids ages 6–17 years		
Parents legal	60.3	51.2
Parents undocumented	39.7	48.8

Source: U.S. Current Population Survey

1.5.5 Kinship and Living Arrangements of Return Migrants in Mexico

Migration not only affects an individual, it affects the entire family. In the case of return migration, a broader range of families and family members can be affected. In the destination country (i.e., the U.S.) the entire family may not return so that some family members may remain in the U.S. In the origin country (i.e. Mexico) some or all family members may return and they may be returning to an existing family unit or they may have a range of relatives in Mexico. Mexican immigrants living in the U.S. who decide to leave and go back home depend more heavily on family and social considerations in reaching that decision than other immigrants.[37] In addition to family members left in Mexico, family members already in the U.S., life cycle stage, the presence of U.S. born children and other social attachments have an impact on migrants' decision to make the U.S. their home.

In 2010, the census shows that 3.7 million individuals in Mexico lived in households exposed to return migration[38] (broadly defined as households where either one or more members lived in the U.S. 5 years previously or where a member is a U.S.-born minor with a Mexican parent).[39] Some 200 thousand of these return migrants

[37] See Van Hook, J. & W. Zhang (2011). Who Stays? Who Goes? Selective Emigration among the Foreign-Born. *Population Research and Policy Review*, 30(1), 1–24, <doi:10.1007/s11113-010-9183-0>.

[38] In the 2010 Mexican census the definition of a household comprised all members living in the dwelling. We will use the term "household" although the correct term would be "dwelling". INEGI used the term "censal household" for 2010.

[39] Note that this is underestimating the actual number of individuals exposed to return migration since this number does not include returnees who were in the U.S. in 2005, returned and then left again without having come back. Using the 2009 ENADID we see that this number is very similar to the number of individuals exposed to return migration in the period 2004–2009: 3.3 million. We did other comparisons to check the estimations made by ENADID and overall the small differences suggested that return is well captured. This allowed us to use ENADID to study the type of document that returnees had at the moment of arrival to the US; information which is not available in the censuses or population counts.

lived in households where all the members were returnees and 50 thousand were returnees living alone. In terms of households, 840 thousand households were exposed to return migration; 60 percent of them being nuclear households, 33 percent extended households and 6 percent were comprised of returnees living alone.

In more than half of the nuclear-family households exposed to return migration only one returnee is present: the head or their spouse (Table 1.5). In less than a third of extended family households, the only returnee is the head or the spouse. Among non-nuclear family households (extended families, mixed families, non-familial households), the most common configuration is one in which the returnees are children of the household head. The high percentage of households where returnees live with other family members shows that return is still related to family reunification. However, the number of returnees living alone shows that for others, return does not occur to the same dwelling or household from which they left. This could be explained by the stage in the life cycle and its relationship to leaving the parental

Table 1.5 Mexico: Household by returnee participation (2009 and 2010)

Returnees present in the household [a]	Type of household			
	2010 Census[a]		2009 ENADID	
Households with more than one person	Nuclear [b]	Non-nuclear [c]	Nuclear [b]	Non-nuclear [c]
Total	449,600	244,782	424,970	282,032
Head or spouse	284,724	69,183	271,178	80,395
Head and spouse	52,322	8039	35,499	6296
Head or spouse and son(s) or daughter(s) of head	15,646	7866	16,821	6054
Head, spouse and at least a son or daughter	24,495	4498	22,379	2315
Only son(s) or daughter(s) of head	72,154	89,925	79,093	89,378
Only members with other relationship with the head	NA	63,489	NA	63,742
Return of complete households				
All the members of the household are returnees	26,020	3306	20,737	2034
% of households with all members returnees	5.79	1.35	4.88	0.72
Unipersonal household	49,534		33,852	

Source: Ten percent sample of the 2010 Census and 2009 Survey of Demographic Dynamics (ENADID)

Notes

[a]By returnee here we refer to the population born in Mexico who resided in the United States five years before as well as the population who left and came back during the five previous years. ENADID returnees include also those individuals who lived in the United States one year before the survey but were living in Mexico at the time of the survey

[b]Refers to dwellings, not households since the 2010 Census changed the definition of household previously used by INEGI

[c]Refers to households formed by head and/or a spouse with or without a son or daughter of the head

[d]Refers to households with members with other relationship to head than spouse or son or daughter

home and creating new households.[40] Another possible explanation could be that upon return, after a long period in the United States, individuals live with other family members only until they are able to settle in a new household of their own.[41]

Although the number of returnees increased dramatically from 2005 to 2010, there was not a major change in the relationship of returnees to the households. There was a notable increase in the share who were household heads (from 36 percent in 2000 to 43 percent in 2010), offset by small decreases in spouses or partners (from 15 to 12.6 percent), children of the head (from 34.8 to 30.8 percent) and individuals with other relationships.[42] These small distribution changes relate to the increase in male returnees, concentrated in the 25–49 year old age group and other characteristics that will be discussed in the next section.

It is beyond the scope of this chapter to discuss specific impacts of changes in the magnitude and family structure of return migration because these will be dealt in subsequent chapters. However, it is important to note that the impact on impact family life and their economic status varies in different ways based on which family member returns. By definition, return implies the interruption of the remittance flows. However, remittance behavior varies depending on the migrant or returnee position in the household. Target or "planned" return normally occurs after the achievement of saving a considerable amount of money, and differs from "unplanned return," for example, a deportation, which occurs without the achievement of a specific goal. But, not every emigrant remits money to the family members left behind. It is not easy to predict remittance behavior from Census data. However, we can tell that two-thirds of the emigrants who left during the 2005–2010 period and had not returned by 2010 left from dwellings where no remittances were reported. Households which receive financial support from more than one source may still be receiving remittances after the return of one member. Data from the 2010 Mexican census shows that 14 percent of the 745,000 households exposed to return migration in the period 2005–2010 receive international remittances suggesting that other members of the household in the U.S. are still sending money back to them.

[40] Masferrer, C. (2012). Cuando el origen no es destino: el ciclo de vida y el retorno como posibles vínculos entre la migración interna e internacional. *Coyuntura Demográfica*, 2, 45–50.

[41] It is known that migrants in the U.S. live in extended households as a way to cope economically, as noted in Van Hook, J. & J. E. Glick (2007). Immigration and Living Arrangements: Moving beyond Economic Need versus Acculturation. *Demography*, 44(2), 225–249. This could also explain living arrangements among returnees, especially among recent returnees who spent long periods in the U.S.

[42] This is true for all types of relationship except for the category of other relationships with the head. Due to the changes in Census design, the greater prevalence of members with other relationship in 2010 is influenced by the fact that in 2010 instead of households we are dealing with dwellings.

1.6 Composition and Selectivity: Selected Demographic Characteristics of the Mexican Population on Both Sides of the Border

Box 1.2 Measuring return migration rates

"Returnees to Mexico" from the U.S. are measured with Mexican census and survey data. Two groups are included:

(1) Persons born in Mexico, living in the U.S. 5 years before the census/survey and in Mexico for the data collection;
(2) Persons born in Mexico who left Mexico during the 5 years before the census/survey and were back in Mexico by the Census/survey date.

"Population at Risk of Returning" to Mexico from the U.S. is measured with U.S. data from the American Community Survey. It includes:

(1) Persons born in Mexico and living in the U.S. at the time of the survey.

"Distribution of Return Migrants" is a percentage distribution of the return migrants with a broader sociodemographic group. An example would be the share of female return migrants in each age group.

"Rate of Return Migration" compares the number of return migrants in Mexico in a group (e.g. male college graduates) with the U.S. population of potential return migrants in the same group (can be expressed as a percentage or per 1000 Mexicans living in the U.S.):

$$\text{Risk of Return}\left(2010,5\,\text{years}\right)=\frac{\text{All returnees}\left(2005-2010\right)}{\text{Population at Risk}\left(2005\right)}$$

This section presents data on the gender, age and educational composition of the Mexican population on both sides of the border using the most recent data from both countries—the 2010 Mexican Census and the 2010 American Community Survey.[43] Comparison of the Mexican immigrants in the U.S. with the Mexican population highlights which groups and individuals are most likely to have migrated to the U.S. and returned.

To better understand the process of return migration to Mexico, we address selectivity by comparing returns during the period 2005–2010 with the Mexican population in the U.S. at the beginning of the period (2005). Through this comparison, we develop rates of return which take into account the population at risk of

[43] Special considerations were addressed in order to allow for the appropriate comparability between data sources from both countries.

returning (see box on "Return Rates").[44] Our focus on differences in return rates before and after 2008 (i.e., after the full onset of the Great Recession) helps explain the impact of the adverse environment (economic and enforcement) on the selectivity of return migration.

1.6.1 Sex

The sex ratio among Mexicans living in the United States continues to favor men somewhat, with little overall change evident in the last decade. In 2000, about 56 percent of Mexican immigrants in the U.S. were men and 44 percent were women. These numbers were unchanged in 2010. As was the case in 2000, men comprise the majority at virtually all ages in 2010.

Although intercensal return migration increased dramatically during the period, the gender composition of the returnee population that resided in the U.S. 5 years prior to the Mexican census has not changed much over time. Men still comprise a large majority of this population and the share of male returnees increased over time. Men comprised about 61 percent of intercensal returns in 2000 (i.e., Mexicans who had been living in the U.S. in 1995); 66 percent in 2005; and an even higher 69 percent in 2010 (see Table 1.2).

The gender composition of intercensal migrants from Mexico (those departing from Mexico during the 5 years before the census) is also dominated by males. In concert with the large share of males among Mexicans in the US, the emigration flow from Mexico shows an even larger male share and a share that has increased over the past 20 years. Of those who left for the U.S. during the 2005–2010, fully 77 percent were men, compared with 75 percent for 1995–2000 departures, and 69 percent for those departing from Mexico during 1990–1995 (Table 1.1). Most of these emigrants did not return to Mexico during the five-year period, but those that did were even more heavily male. Further, the percentage male among the return migrants increased significantly from 69 percent among 1990–1995 returnees to 79 percent among 2005–2010 returnees (Table 1.1). Thus, while the overall share of women in the migration stream was decreasing, a larger share of those who left Mexico was likely to return, comparing the periods 1995–2000 and 2005–2010.

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[44] In order to measure a rate of return which takes into account the Mexican population at risk of returning we calculate the next proportions as follows: $R(2010,5) = \text{Proportion of return over the last 5 years} = \frac{\text{All returnees}(2005-2010)}{\text{MBPUS}(2005)}$ Where the number of returnees includes all migrants who were living in the U.S. in 2005 as well as those who left and returned over the 5 year period previous to the Survey, and MBPUS (2005) is the Mexican Born Population in the U.S. in 2005. Different rates are calculated by sex and age group, as well as by educational level. In this last case, we restrict the population of interest to adults, i.e., persons aged 18 to 59 in 2005, because we are interested in the population in the prime working and family years; as we have seen the greatest rates of Mexican emigration and return occur at these ages.

Over the course of the 1990s, Mexican female participation in migration decreased, while female settlement in the United States, relative to males increased. These divergent trends have been explained by the fact that women tend to migrate once the entire household has established in the U.S. and, since they are especially affected by greater deterrence at the border, they tend to stay in the United States once they enter. Therefore, while females have been relatively less likely to migrate from Mexico; females who do migrate to the United States have a greater tendency to remain.[45] The gender differentials in settlement and return patterns are linked to differentials in documentation status. With the exception of migrants with a student visa, women are less likely to return than men, regardless of the type of document they use to migrate, as shown in Fig. 1.6. This fits with previous findings regarding gender differentials in settlement and return patterns.

Comparing the intercensal migrants in Mexico in 2010 (i.e., those who were in theU.S.in 2005 and Mexico in 2010) with U.S. population data for 2005 shows the proportion of the 2005 U.S. population that left. (See box.) Among Mexican-born females in the U.S. in 2005, only 3.7 percent returned to Mexico by 2010. For Mexican-born men, the proportion returning is much higher—13.9 percent.[46]Thus, once women migrate, they are more likely to stay than men. The detailed mechanisms behind this pattern are not directly available from the data but a number of reasons have been offered. Women migrants in the U.S. are more likely to be in

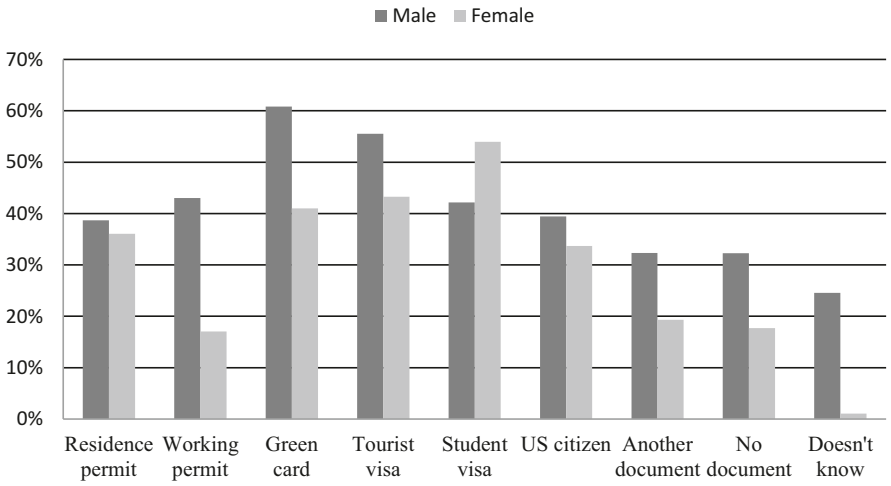

Fig. 1.6 Percentage of returned migrants by gender and type of document at U.S. entry
Source: Encuesta Nacional de la Dinámica Demográfica, 2009

[45] Lowell, L., C. Pederzini & J. S. Passel (2008). The Demography of Mexico-U.S. Migration. In: A. Escobar & S. Martin (eds.). *Mexico-U.S. Migration Management: A Binational Approach* (pp. 1–32). Lanham, Maryland: Lexington Books.

[46] Rates of return calculated with ENADID data are similar for men and slightly lower for women: 33.4.

families with children than male migrants. It is also possible they were less affected by unemployment since the types of jobs they perform were less affected by the economic crisis. Also, the type of activities performed by Mexican women in the U.S., often linked to domestic work, are less visible and, hence, less subject to deportation.

1.6.2 Age

The Mexican-born population in the U.S. has long been dominated by young, working age persons. This continued to be the case in 2010, but there was also evidence that the immigrant population had aged considerably as arrival of new immigrants slowed and the average duration of residence lengthened. In 2000, the plurality of immigrants (16 percent) was in the 25–29 year old age group, and an almost equal share (15 percent) were 30–34. By 2010, the modal age category was 30–34, with 12.9 percent of the Mexican-born population falling into this age range. While this difference in and of itself is not too dramatic, a quick glance across all age groups reveals that the share of the Mexican-born population in every 5-year age group below age 35 was considerably larger in 2000 than in 2010. For instance, in 2000, 13 percent of the Mexican-born population was 20–24, while this number dropped to 8 percent in 2010. Conversely, there have been marked increases in the share of Mexican-born population in each age group above 35 years (see Fig. 1.7). More simply, the median age of Mexican immigrants living in the U.S. increased from 31.0 years in 2000 to 37.1 in 2010.

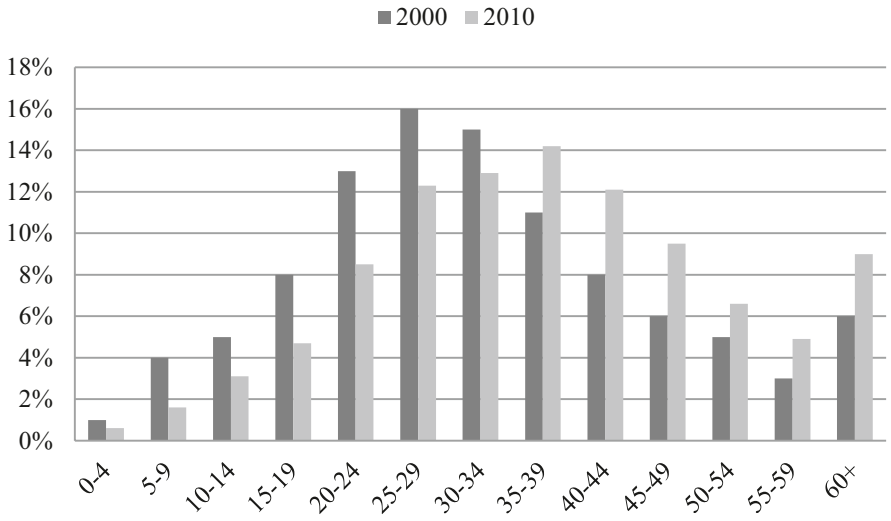

Fig. 1.7 Age composition of the Mexican-born population in the U.S., 2000–2010
Source: U.S. Current Population Survey

The aging of the Mexican population in the U.S. has been accompanied by a smaller shift in ages of return migrants. Among return migrants in Mexico who left and came back over the five-year period before the census, there has been a small increase in the age at departure from 27.3 for 1990–1995 returnees to 28.5 for 1995–2000 returnees to 29.5 for 2005–2010 returnees (see Table 1.1). Although mean age at departure for female returnees over the period is very similar to that of males, the male population is more dispersed in terms of age at departure, with a larger share of older returnees.

The stage in the life cycle of returnees and the relationship between age and gender has different implications for the types of services needed for return migrants in Mexico. For example, health needs clearly differ by age and older return migrants may require specialized services if they are not healthy.[47] However, individuals aged 50 and older constitute a very small proportion (10 percent) of the returnees during the 2005–2010 period. One in every five (20.2 percent) of the population who arrived in Mexico during the last 5 years whose residence was the U.S. in 2005 were in the 5 to 17 year old age group in 2010. This second group is likely to have had experience in the U.S. educational system and will have different reintegration challenges than those of older returnees. Thus, the increase in individuals whose residence 5 years previously was in the U.S. is driven by an increase in the return of males between the ages of 25 to 49 years old.

Mexican population in the U.S. is concentrated in the most productive working age groups. One of every five Mexican men in the age group 25–44 resides in the U.S.[48] When we look at the composition of returnees we find that 75.6 percent[49] of all returned migrants during the period 2005–2010 were in the age group 20–44. Since most Mexican immigrants belong to this age group, it is logical to suppose that young people will comprise the larger percentage of all returned migrants. However, when we examine return rates, we see that the highest is for men in the 25–29 age group—fully 22 percent of Mexican men in the 25–29 age group who were in the U.S. in 2005 had returned to Mexico by 2010 (Fig. 1.8).

There are large gender differences in the age pattern of return migration, as shown by the likelihood of return (Fig. 1.8). Male return rates are higher for every age group and among prime working ages (here defined as 15–54), the men's return rates are much higher than women's. Return rates for men increase up to ages 25–29 from 11.5 percent for ages 15–19 to 22 percent for 25–29. Then they decrease smoothly to 10.4 percent for men in the 50–54 year old age group. For women, the return rates are much lower and vary little by age, falling generally between 3 and 5 percent for adult women. Adult women are less likely to return to Mexico than children in the 5–14-year-old age group.

[47] Palloni, A. & E. Arias (2004). Paradox Lost: Explaining the Hispanic Adult Mortality Advantage. *Demography*, 41(3), 385–415.

[48] Pederzini, C. (2012). Mexican Labour Market Performance and Emigration. *Migration Letters*, 9(1).

[49] In ENADID the percentage is lower: 71 percent.

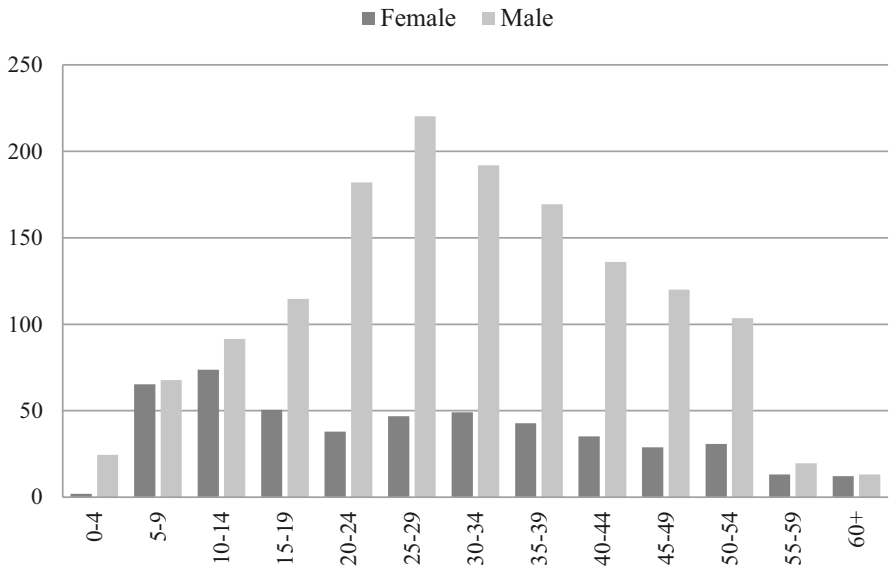

Fig. 1.8 Mexico: Returnees in 2010 out of 1000 Mexicans in the U.S. in 2005 by age group
Source: 2010 Mexican Population Census and 2005 American Community Survey

1.6.3 Level of Education

Since 2000, the educational attainment of the Mexican-born population in the U.S. has gone up notably (see Fig. 1.9). The shape of the distribution is more or less the same, with the plurality of immigrants having some education beyond 6th grade, but lacking a high school diploma. However, there have been large declines in the share of immigrants with less education. In 2000, some 39 percent of immigrants living in the U.S. had gone no further than the 6th grade, and by 2010, that share dropped to 29 percent. The biggest gains are seen among high school graduates. In 2000, 21 percent of immigrants had completed high school, and in 2010, the share had risen to 26 percent. Small increases occurred in the share with more advanced education, as well.

While the exact pattern has changed somewhat over time, in both 2000 and 2010, educational attainment among Mexican immigrants was inversely related to the age at which the immigrant moved to the U.S. (see Table 1.6). For instance, 28 percent of Mexican immigrants who arrived in the U.S. prior to age 6 had not completed high school. This share increases to 36 percent for those arriving between the ages of 6 and 11; 53 percent for those arriving between the ages of 12 and 17 years; and 62 percent for those arriving at age 18 or older. The immigrants who arrive in the U.S. as young children have an educational profile closely resembling U.S. born Hispanics.

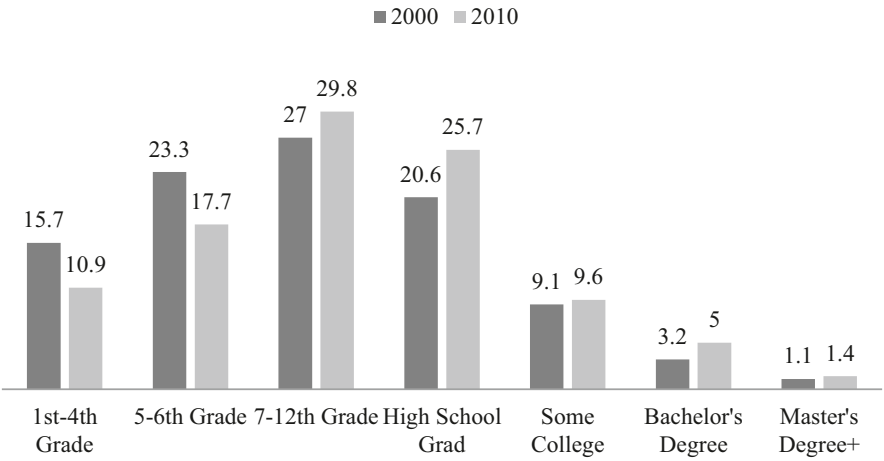

Fig. 1.9 U.S.: Share of U.S. Mexican immigrant population, by educational attainment, 2000–2010
Source: U.S. Current Population Survey, March. Note: Includes persons ages 25 years and older

Table 1.6 Educational attainment of Mexican immigrants by age at entry into the U.S., 2010

	<6 yrs	6-11 yrs	12-17 yrs	18 + yrs
1st-fourth grade	2.9	2.4	5.2	12.8
5-sixth grade	4.6	7.4	12.1	20
7–12th grade	20	26.3	35.3	29.6
High school graduated	34.1	31.7	29	24.2
Some college	21.6	23.4	13.4	7.3
Bachelor's degree	14.6	6.2	3.5	4.7
Master's degree+	2.2	2.5	1.4	1.3

Source: U.S. Current Population Survey, 2010
Note: Includes persons ages 25 years and older

There are very large differences in return migration depending on the educational level of the migrants in the U.S. The comparison of Mexican data on completed education of returned migrants with U.S. data on the immigrants at risk of returning is not perfect because the definitions of completed education differ between the two countries' data systems.[50] However, Mexico and the United States have roughly similar system of education, and we use standard categories from the

[50] Completed education is a preferred measure for many reasons, as contrasted with years of education which is useful as a rough measure of schooling but does not capture the value added of a completed degree).

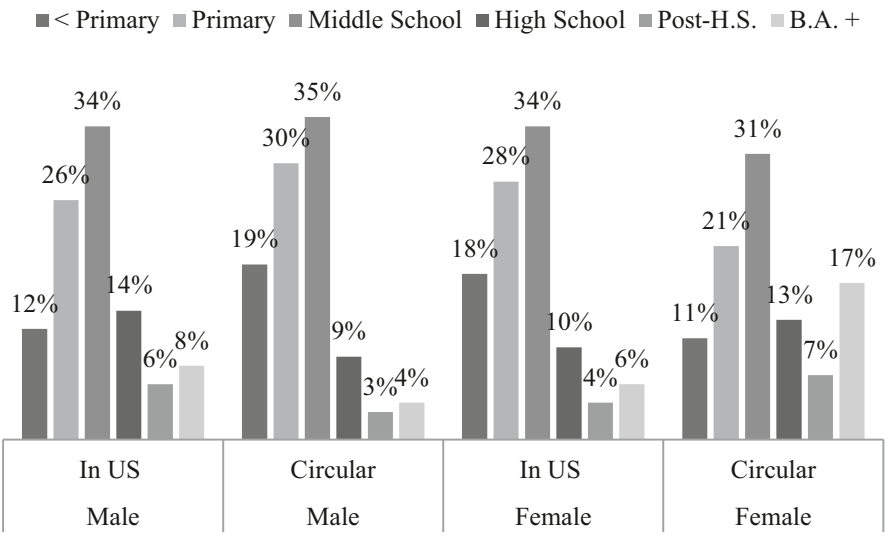

Fig. 1.10 Mexico: Educational attainment by migration status and sex, 2010
Source: 2010 Mexican Population Census

Mexican Census, ENADID and the ACS[51] to generate relatively comparable profiles from both countries.

Middle school graduates comprise the largest share of returned migrants as more than 30 percent fall into this category (see Fig. 1.10). The second largest educational group is comprised of those who attended primary school. Although only a small share of the return migrants have gone beyond high school, the share is much larger among female returnees (27 percent) than males (19 percent). Figure 1.10 also shows a gender difference in terms of educational composition: the share of male circular returnees with lower levels of education is larger than the share for returnees using the definition of residence in the U.S. in 2005. However, for women the opposite is true.

The economic recession of 2008–2009 may have led to changes in the distribution of the educational level of return migrants. Plus, around the same time border and interior enforcement and legislative changes such as Arizona's SB1070 law,

[51] The comparison is made as follows: less than primary education includes all adults who have not completed at least 5 years of education, while primary completers report having completed five or 6 years of education (primaria). Middle school is the first level of secondary education (secundaria) and includes adults who report up to 12 years of education but not having completed high school (preparatoria); and we include here non-tertiary type technical degrees granted in Mexico. A high school or secondary completion includes a "GED" in the United States and is similar in Mexico. A post high school level of completion includes all adults reporting at least 1 year of post-secondary education including technical degrees. A bachelor's degree includes adults reporting having completed that degree, as does a master's degree and the doctorate or professional degree.

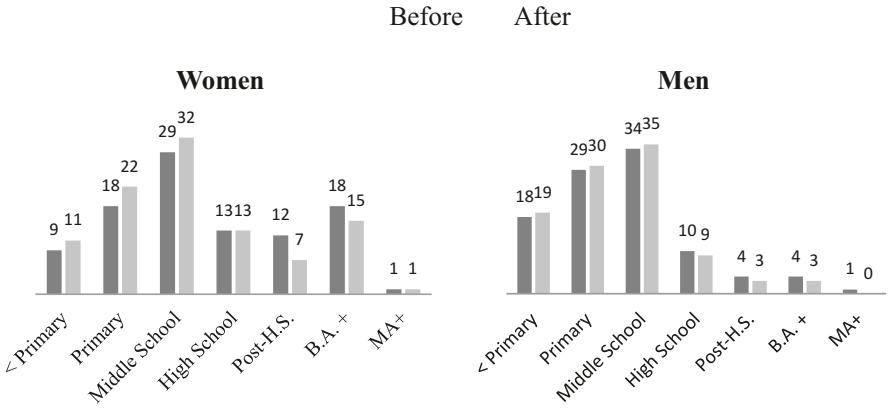

Fig. 1.11 Educational composition by gender and date of return (pre−/post-crisis) for returnees ages 18–59 in 2005–2010
Source: 2010 Mexican Population Census
Note: The pre-crisis period corresponds to 2005–2007 and the post-crisis period corresponds to 2008–2010.

may have differentially influenced return decisions of migrants in different educational groups. In fact, Fig. 1.11 shows that migrants returning after the crisis have less education than those who returned before. This difference is found among return migrants of both sexes but the change is more pronounced for women than men.

These changes suggest that 2008 may be an inflexion point in terms of the patterns of return although further research is needed to test the impacts of the recession and enhanced enforcement environment on different populations. Here we have restricted the analysis to those who left during the period. However, from the previous discussion, we expect to find different impacts for those who had remained in the U.S. longer periods and might have stronger attachments there. Unfortunately, we do not have data on date of arrival and return for the return migrant population that was living in the U.S. in 2005.

The comparisons above relate to the educational distribution across different groups of migrants. However, using information on risks of return offers a clearer perspective on how education affects the decision to return to Mexico. Among Mexican immigrants in the U.S. in 2005, those with the least educational attainment were the most likely to return to Mexico (Fig. 1.12). Male migrants in the U.S. who had not completed high school were very likely to return to Mexico after 2005; about 30 percent of those with less than primary education and 20 percent of those who had gone no further than middle school did so. Return rates are much lower for women with these low levels of education, however. The lowest probabilities of return are found among those who completed high school and those who had some college experience (for both men and women). Interestingly, possession of a bachelor's degree greatly increases the likelihood of return for both men (14.5 percent)

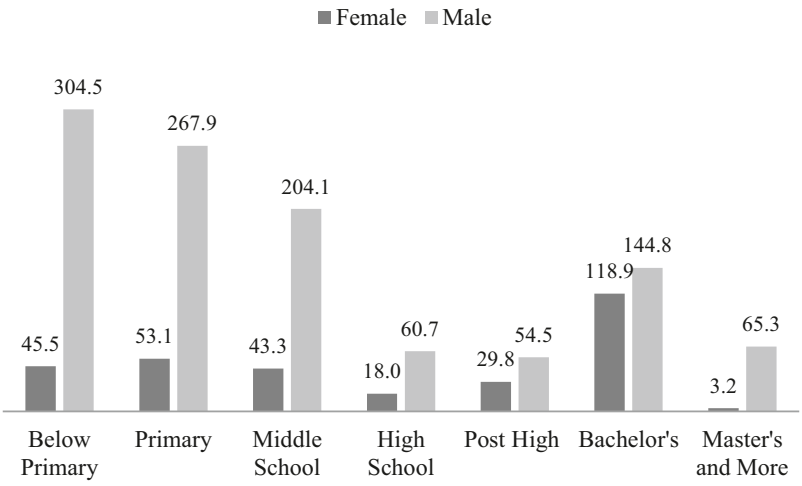

Fig. 1.12 Mexico: Returnees in 2010 out of 1000 Mexicans in U.S. in 2005 by educational level Source: 2010 Mexican Population Census

and especially women (11.9 percent).[52] These differentials may be tied to the economic conditions in the U.S. since migrants in low skilled occupations such as construction apparently lost more jobs during the crisis. In addition, migrants with the lowest educational levels are likely the ones with the highest probability being unauthorized and thus, more vulnerable to enforcement actions.

1.7 Conclusion

1.7.1 Discussion

The changes in the demographic characteristics of the Mexican migrant population on both sides of the border reflect the new conditions affecting the Mexico--U.S. migration system. Greatly reduced movement to the U.S. and increased movement to Mexico have led to a more settled migrant population in the U.S. and a larger number of U.S.-born children in Mexico. Whether the new patterns will persist or are momentary, and due to the adverse economic situation, is yet to be determined. However, the increased deportations, especially under a criminal charge resulting from a minor offense, along with new, local laws targeting immigrants are

[52] This could be tied to graduation of those with study permits since the sample of returnees includes people with a non-immigrant visa (NIV) and immigrants.

likely to be around for at least a few years. Our results show returnees to Mexico are concentrated in active and productive ages. While a significant challenge facing this population is reintegration into the Mexican labor market (if they settle in the country and do not leave again), the arrival of younger returnees and U.S.-born minors with Mexican parents (i.e., U.S.-born Mexicans) presents a different set of challenges to the Mexican educational system. Additionally, although a minority of the return migrants is elderly, their return (and the potential return of more elderly in the future) poses other challenges associated with health care and pension programs. These issues will be discussed more broadly in the next chapters.

1.7.2 Policy Recommendations

As highlighted in this Binational project, the well-being of the Mexican migrant population needs to be understood comprehensively on both sides of the border. With the increase in the United States of a more settled Mexican-born population (i.e., those who have been in the U.S. more than 15 years) and a growing second generation, it is important for policy makers to reconceptualize the Mexican population in the U.S. as families, rather than a group dominated by young, male sojourners.[53] Doing so should bring more attention to the second generation (U.S.-born Mexicans), a group that is increasingly moving into young adulthood and perhaps shift the immigration debate towards a broad definition that includes the U.S.-born Mexicans.

The recently announced program of deferred deportations for unauthorized immigrants who were brought to the U.S. as children[54] and have completed high school (or more) in the U.S. may provide some impetus to move discussions about immigration reform forward. This group is large (up to 1.7 million by some

[53] Results using the National Survey of Labor and Occupation (ENOE, for *Encuesta Nacional de Ocupación y Empleo*) show that the number of persons arriving in Mexico from the United States has not increased, but held steady at 260–430 thousand persons per year over the period 2005–2010 (see pages 12–17 of the Final Report of the Binational Dialogue). One possible explanation may be that return migrants are staying in Mexico. Although it may be a useful source for measuring outflows, the authors of this chapter believe that ENOE presents problems for measuring return flows. Inflows captured in ENOE are limited to returns to *existing* households, but do not capture the arrival and establishment of whole households in Mexico. In other words, ENOE data best reflect the circular or seasonal migration flows or what we refer here as intra-censal migration. Given the increase in the migration of complete households including returnees and their U.S. born children, observed using the 2000 and 2010 Mexican population censuses and 2005 count, and confirmed by the National Survey of Demographic Dynamics (ENADID, for *Encuesta Nacional de Dinámica Demográfica*), we opt to limit the analysis of this chapter to results using the Mexican censuses and ENADID.

[54] U.S. Department of Homeland Security (DHS) (2012). *Memorandum: Exercising Prosecutorial Discretion with Respect to Individuals who Came to the United States as Children*. Washington D.C., <http://www.dhs.gov/xlibrary/assets/s1-exercising-prosecutorial-discretion-individuals-who-came-to-us-as-children.pdf>.

estimates) and dominated by Mexican immigrants.[55] Most discussions to date have focused on the numbers of such immigrants and their impact on U.S. institutions. These young immigrants are, in general, related to other unauthorized immigrants and many to U.S. citizen siblings. Clearly, their participation in this program can have significant implications for their families, but the full impact is, as of today, still unknown.

Current laws and enforcement efforts to punish and remove undocumented immigrants are likely to affect not only those born in Mexico, but, increasingly, those born in the United States as well. U.S.-born children living in mixed-status families are situated in a vulnerable position and live at risk of family separation. U.S. policy makers need to recognize more explicitly and take seriously the demographic profile of the Mexican population in the U.S. and move beyond the old model of male circular labor migrants.

The phenomenon of increased return migration clearly has implications for the Mexican government. One of the major limitations for a public policy regarding return migration is the lack of knowledge about the characteristics of return migrants in Mexico and their needs upon return. Therefore, we suggest that the government design and implement vehicles to collect more data about this new population in Mexico.

Data collection should consider the characteristics of migrant population on both sides of the border in order to learn about the conditions of those who have returned as well as their family members who have stayed behind in the United States. The recent trends show the need to move beyond the conception of migration within the old framework of males migrating to work temporarily where women were left behind. Thus, data collection should take into account the differences between circular migration and return migration, better capturing the migrant trajectories and time of residence in the U.S. Currently this data is only collected for emigrants over the previous five-year period, but not for the population whose residence was the U.S. 5 years before the census.

Although women are less prevalent among return migrants, their numbers are not insignificant. Differences in selectivity of return migration by gender and education indicate the need to better understand female return, which is likely to impact other variables such as fertility, union formation, and family structure. In order to plan and design social policy, both the U.S. and Mexico need to understand and take into account the potential returnee increase, as well as the increase in time spent in the U.S. by those migrants returning to Mexico which makes resettlement more problematic. Thus, we recommend a broad conception of the migrant population that includes Mexican born as well as U.S. born individuals with a Mexican parent, what we have called U.S. born Mexicans.

Changes in demographic patterns of return also have implications for family separation, which is likely to impact children and parents in different ways. Return

[55] Passel, J. S. & M. H. Lopez (2012). *Up to 1.7 Million Unauthorized Immigrant Youth May Benefit from New Deportation Rules*. Washington D.C.: Pew Research Center.

migration could be actually occurring in order to avoid family separation once one member of the family has been deported, for example. But further research is needed to understand more clearly the role of deportation and return of complete households, and its relationship with selectivity patterns due to the U.S. economy, stage in the life course or family-building. The effects of deportation or unprepared return are likely to affect differently the dimensions of migrants' well-being. Not every returnee has been deported. Some could have actually decided that it was the right time to go back in order to settle back where their family members have stayed behind, to open a business, to transfer skills to others, and so on. Thus, beyond labeling return as a success or failure, we suggest that policy should conceive return with an integral perspective promoting reintegration into Mexican society. Educational, financial and occupational policies should be considered in order to help return migrants reintegrate and, thus, contribute to development in Mexico. In this sense, we recommend that Mexican policy-makers consider return migration policy as a tool for reintegration within a similar perspective of that of immigrant integration policy.

Finally, our main recommendation for policy makers on both sides of the border is to conceive the migration phenomenon as a family affair beyond the individual, movement of single males. The mature stage of Mexico-U.S. migration has produced a dynamic and complex phenomenon of return that spans beyond the economic cycles and border enforcement policies. Thus, enforcement, admission and proactive policies impact family ties and dynamics across borders. A clear picture of the demographic and social characteristics of returnees is a first step in the design of an appropriate social policy agenda that takes into account the current complexity of migration and family life.

Chapter 2
Mexico – U.S. Migration: Economic, Labor and Development Issues

Jesús Arroyo, Salvador Berumen, Philip Martin, and Pia Orrenius

2.1 Introduction

This chapter explores the labor dynamics behind the recent downward trend in Mexico – U.S. migration and explores likely future employment scenarios in each country and their consequences for present and future international migration trends. The chapter examines the labor market roles of Mexican-born workers in the United States and return migrants in Mexico, emphasizing changes between 2000 and 2010 in the number and characteristics of Mexican-born workers in the United States, projections to 2022, and the impacts of returned workers on the Mexican labor market. The authors draw on projections, analyses of economic, labor market, and development micro data, as well as case studies.

2.2 Migration Trends and the U.S. and Mexican Labor Markets

Mexico – U.S. migration is a result of many economic and historical factors. Most analysts agree that the volume of Mexico – U.S. migration reflects U.S. labor demand more generally as well as demand in certain labor niches traditionally

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occupied by Mexicans, including agriculture and, more recently, construction and services.[1] Mexican employment trends also matter; they impact the characteristics of the migration flow, including migrants' educational and occupational profiles, and affect the volume of international migration through the availability of jobs, compensation levels, and working conditions. Labor dynamics in both countries are thus key to understanding Mexico – U.S. migration.

Mexican migrants within the United States labor market have changed over time with respect to their age, wage, occupation, education, gender, unemployment, and previous work experience. It is important to note that these characteristics are related to each other and are also directly related to the business cycles and demographic trends in the United States.

In this sense, the single most important factor to understand the trends in Mexican immigration is the performance of specific sectors during various phases of the business cycle; particularly agriculture, construction, manufacturing, and low-wage services, industries where Mexican immigrants tend to be employed. The polarization of the U.S. labor market in the last decade has expanded the demand for workers in high-education, high-wage occupations as well as in low-skilled, low-wage occupations.[2] Low levels of education among the Mexican-born workforce in the United States keeps most employed in low-skill occupations. These occupations are often in highly cyclical sectors where employment is tightly correlated with economic growth.

The Mexican labor market can play an important role in these migration flows in that occupations in their places of origin are also often either seasonal or cyclical or both, as in the case of agriculture, construction, and manufacturing. Demographic, gender, and educational characteristics of Mexico-born workers in the United States are also related to conditions in the Mexican labor market. These factors are also relevant in the role played by return migrants in their places of origin; an increasingly important issue considering the simultaneous increase in deportations and recession-returnees in the post-2007 era.

2.3 Data and Methodology

This chapter uses U.S. and Mexican household survey micro data, case studies and official government statistics to describe and analyze economic and demographic trends over the time period under consideration. We compare labor supply to labor demand, both in terms of education levels among the workforce and employment by

[1] Passel, J. & D. V. Cohn (2011). *Unauthorized Immigrant Population: National and State Trends, 2010*, Washington D.C., <http://www.pewhispanic.org/2011/02/01/unauthorized-immigrant-population-brnational-and-state-trends-2010/>.

[2] Autor, D. (2010). *The Polarization of Job Opportunities in the U.S. Labor Market: Implications for Employment and Earnings*. <https://www.brookings.edu/research/the-polarization-of-job-opportunities-in-the-u-s-labor-market-implications-for-employment-and-earnings/>.

occupation and industry in Mexico and the U.S. We compare the 2000–2010 decade with projected future growth post-2010.

U.S. data sources include the Current Population Survey, American Community Survey and the decennial Census. Mexican data sources include the Encuesta Nacional de Empleo, Encuesta Nacional de Ocupación y Empleo, Encuesta sobre la Migración en la Frontera Norte and the Mexican Census.

2.4 Economic Cycles and Migration: The U.S. Labor Market: 2000–2022

This section reviews recent U.S. economic and labor market developments, how they relate to patterns of international migration, and the impacts of the 2007–09 recession on migration patterns and migrant integration. The key messages include:

1. The 2007–2009 recession, the worst economic downturn since the Great Depression of the 1930s, slowed the influx of unauthorized immigrants and encouraged some to leave the U.S., but did not reduce legal immigration, which primarily admits the relatives of U.S. citizens and legal immigrants.
2. After several years of increasing interior and border enforcement, the Obama administration implemented deferred action for childhood arrivals (DACA) in 2012 and followed up with a 2014 proposal (Deferred Action for Parent Accountability or DAPA) that would give deferred deportation to up to 5 million unauthorized immigrants, granting them temporary legal status and work permits.

The 2000–2010 decade marked a turbulent time for Mexicans participating in the United States labor market. The decade started on a high note with a strong economy and near record-high immigration from Mexico. The high-tech bust followed in 2001 and, while job growth was slow to recover, the recession generally hurt high-skilled workers more than low-skilled workers. A slowdown in the Mexico – U.S. flow was observed during the 2002–2003 so called "jobless recovery," but the pace recovered in the following 5 years. A housing boom between 2004 and 2006 particularly benefited Mexican immigrants, who were overrepresented in construction-related occupations and in states with rising house prices, such as California and Illinois. The subsequent housing bust and financial crisis led to the Great Recession of 2007–2009, which disproportionately hurt low-skilled workers, left hundreds of thousands of construction workers unemployed, and also left many Mexican immigrant homeowners (as well as U.S. native homeowners) owing more on their homes than they were worth.[3]

[3] Escobar, A. & S. F. Martin (eds.) (2008). *Mexico-U.S. Migration Management. A Binational Approach*. Lanham, MD: Lexington Books.

New immigration enforcement initiatives added to the economic malaise in 2007 and, by the end of the decade, interior enforcement measures, such as E-Verify[4] and Secure Communities,[5] were widely implemented. There was a record of almost 400,000 deportations in 2011, mostly to Mexico. Among the Mexican-born population in the United States, about 56 percent are unauthorized. Naturalized Mexican immigrants comprise 23 percent and the rest have either temporary or permanent visa (green card) status.[6]

In addition to the cyclical fluctuations in the economy from 2000 to 2010, long-standing labor market trends continued to play out over the decade; blue-collar wages declined in inflation-adjusted terms and, although real wages of other workers also stagnated or fell, income and wage inequality increased.

2.4.1 Recession and Unemployment

The U.S. and world economies endured their most severe recessions in half a century in 2007–09. U.S. employment peaked at over 147 million in July 2007 and fell to 138 million in December 2009. Nine million jobs were lost in 2 years, which wiped out the job gains of the previous 4 years. The unemployment rate hit a 16-year high of 10.2 percent in October 2009. Including the underemployed, who work part time because they cannot get full-time work, the rate was about 17 percent.

The sectors most affected by job losses included manufacturing and construction, with 2.2 and 1.9 million jobs lost in 2008–09, respectively. These sectors employ mostly men, which is one reason why women exceeded 50 percent of employed persons in the United States during some of 2009 and 2010, prompting some commentators to use the "mancession" label to describe the crisis. By comparison, in 1964, women were only a third of U.S. employed workers.

Sustained private-sector job growth resumed in spring 2010, but reduced public sector employment and labor force growth kept the unemployment rate high by historical standards; the unemployment rate is projected to remain above 5 percent over the next decade.[7] The U.S. jobless rate does not normally fall significantly until GDP growth exceeds 2.5 percent for several quarters, which raises the question of what factors will spur faster economic and job growth. The main driver of economic

[4] E-Verify is a federally administered program used by employers to electronically verify the work authorization of their employees who are new hires.

[5] Secure Communities was a federal program where Immigration and Customs Enforcement (ICE) agents identify, locate, and deport removable aliens who have been arrested, typically by local police as a result of charges unrelated to their immigration status. As of late 2014, Secure Communities is no longer in effect.

[6] Passel, J. S. & D. V. Cohn (2011). *How Many Hispanics? Comparing New Census Counts with the Latest Census Estimates*. Washington DC: Pew Research Center.

[7] Council of Economic Advisers (CEA) (2011). *Economic Report of the President*, <http://www.whitehouse.gov/administration/eop/cea/economic-report-of-the-President>.

growth between 2001 and 2005—consumption spending fueled in part by housing-price appreciation[8]—appears unlikely to lead another recovery, and neither business investment nor exports has so far picked up the slack.[9] As a result, employment has recovered more slowly from the 2007–09 recession than from the 2001 and 1990–91 recessions.

Much of U.S. job growth between 2003 and 2007, when employment rose from less than 138 million to 147 million, was in economic sectors that employ high shares of Mexican-born migrants, including construction and low-wage services. Employment increased by over 8 million in 4 years, adding a net 2.5 million jobs in both 2005 and 2006, or an additional 10,000 jobs each work day (5 days × 50 weeks). Employers such as meatpackers and landscapers formed the Essential Worker Immigration Coalition (www.ewic.org) and requested easier access to foreign workers, and for some time helped block immigration reforms that would further tighten federal enforcement of laws against employing unauthorized workers.

A standard prescription to achieve faster economic growth is to promote business investment, innovation, and human capital acquisition with more education and training. Most data suggest a widening wage premium between workers with a college education and those with less schooling. In 2009, those with a bachelor's degree earned more than twice as much as those with a high-school diploma, and the wage premium for college degrees has been increasing[10] (see Fig. 2.1). In 2009, almost half of non-Hispanic whites aged 25–34 had a postsecondary degree, compared with 30 percent of Blacks and only 20 percent of Hispanics. This points both to an increasing wage gap between Blacks and Hispanics and other groups, as well as to the need to speed the acquisition of schooling among these groups as one factor promoting growth.

Foreign-Born U.S. Residents and Workers

The U.S. had 40 million foreign-born residents in 2010, making immigrants almost 13 percent of the 304 million U.S. residents. Between 2000 and 2010, the number of foreign-born U.S. residents rose by nine million, from 31 million to 40 million, while the number of U.S.-born residents rose by 20 million, from 250 million to 270 million. Between 1990 and 2010, the number of foreign-born U.S. residents

[8] From a base of 100 in January 2003, the housing price index rose to over 150 in 2006 before declining to about 105 again since 2009, with cycles around this new and stable norm. About two-thirds of owner-occupied US homes have mortgages, and those who bought homes near the 2006 peak in home prices often owe more than their homes are worth; they collectively owed $750 billion more than their homes were worth in 2010. See: Council of Economic Advisers (CEA) (2011). *Economic Report of the President*, <http://www.whitehouse.gov/administration/eop/cea/economic-report-of-the-President>.

[9] Council of Economic Advisers (CEA) (2011). *Economic Report of the President*, <http://www.whitehouse.gov/administration/eop/cea/economic-report-of-the-President>.

[10] Council of Economic Advisers (CEA) (2011). *Economic Report of the President*, <http://www.whitehouse.gov/administration/eop/cea/economic-report-of-the-President>.

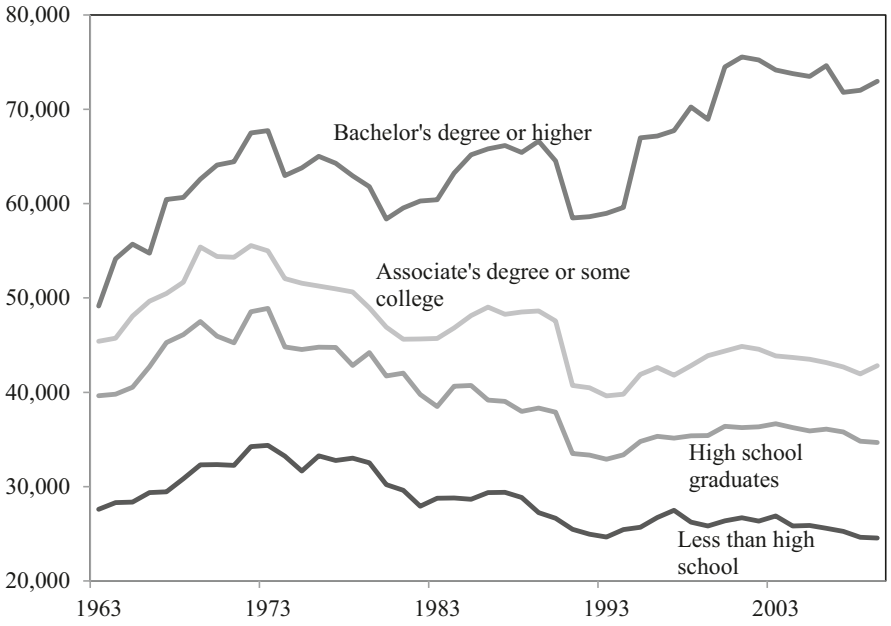

Fig. 2.1 Total wage and salary income by education, 1963–2009 (2009 dollars)
Source: Current Population Survey 1964–2010
Notes: Calculations are for full-time workers aged 25–65 who worked 50–52 weeks in the calendar year. Education groups are defined by a recoded education variable and is comparable across all years. Incomes are deflated using the CPI-U

doubled. In other words, in spite of a significant slowdown in undocumented Mexican immigration to the U.S. after 2007, the total immigrant population grew faster than the native born population for the decade as a whole.

Mexico is the leading source of foreign-born U.S. residents. By 2010, thirty percent of immigrants (12 million) were born in Mexico, followed by 11 million born in Asia and 7 million born in Central America and the Caribbean. After Mexico, the leading sources of immigrants were China, 2.2 million, India and the Philippines, 1.8 million each, Vietnam and El Salvador, 1.2 million each, and Cuba and Korea, 1.1 million each. These eight countries, each accounting for over a million foreign-born U.S. residents, were the source of over half of U.S. immigrants.

Labor economists point to two trends underlying a polarization of the U.S. labor market: a rise in the demand for high-skilled workers in professional, technical, and managerial occupations and an increase in the demand for low-skilled workers in food services, building maintenance, and personal care occupations.[11] Job

[11] Autor, D. (2010). *The Polarization of Job Opportunities in the U.S. Labor Market: Implications for Employment and Earnings*. <https://www.brookings.edu/research/the-polarization-of-job-opportunities-in-the-u-s-labor-market-implications-for-employment-and-earnings/>.

opportunities in the middle of the skill distribution, however, have contracted, adversely affecting white-collar clerical, administrative, and sales occupations and blue-collar production, craft, and operative occupations.[12] As a result, relative wages and labor force participation rates have declined the most among workers in medium-skilled occupations, particularly among men who lack a college degree.

The two-pronged evolution of the U.S. labor market has favored the structural demand of Mexican immigrant workers, who tend to have relatively low education levels and work in low-skilled, low-wage occupations. A 2007 Pew Hispanic Report documented rising wages among foreign-born Latinos during the 1995–2005 period.[13] The improvement was particularly significant among Mexican immigrants whose worker share in the lowest of five wage classes fell from 48 to 40 percent between 1995 and 2005 while the share in the middle wage class rose from 15 to 19 percent. Only 8 and 4 percent of Mexican workers were in the high-middle and high wage classes, respectively, but these groups were the second and third fastest growing.

This improvement is nevertheless limited by the educational profile of the immigrant worker population, and specifically Mexican immigrant workers. The number of years of education is the best single predictor of U.S. earnings. Foreign-born U.S. residents who are 25 and older have a very different educational profile than U.S.-born adults. U.S.-born adults, when arrayed by years of education, have a diamond-shape, with the wide bulge representing the 61 percent in 2010 who had a high-school diploma and some college, but not a Bachelor's degree. Just over 28 percent of U.S. adults have a college degree, and 11 percent do not have a high-school diploma.[14]

Among foreign-born U.S. adults, the education distribution has a much smaller bulge in the middle. A little more than 41 percent of foreign-born U.S. adults had a high school diploma and some college in 2010, 27 percent at least a college degree, and 32 percent lack a high-school diploma.

The extremes of the education distribution highlight differences between foreign- and U.S.-born adults—11 percent of the foreign-born,[15] versus 10 percent of the U.S. born, had an advanced degree, while 20 percent of the foreign-born, compared with 3 percent of the U.S. born, did not complete ninth grade. These

[12] Autor, D. (2010). *The Polarization of Job Opportunities in the U.S. Labor Market: Implications for Employment and Earnings*. <https://www.brookings.edu/research/the-polarization-of-job-opportunities-in-the-u-s-labor-market-implications-for-employment-and-earnings/>.

[13] Kochhar, R. (2007). *1995–2005: Foreign-Born Latinos Make Progress on Wages*. Retrieved from Washington D.C.: Pew Hispanic Center, <http://www.pewhispanic.org/2007/08/21/1995-2005-foreign-born-latinos-make-progress-on-wages/>.

[14] Patten, E. (2012). *2010, Foreign-Born Population in the United States Statistical Portrait.* Washington D.C., <http://www.pewhispanic.org/2012/02/21/statistical-portrait-of-the-foreign-born-population-in-the-united-states-2010/>.

[15] Foreign-born workers are 16 percent of US workers, but 28 percent of US workers with PhDs were born abroad (Newburger, E. & T. Gryn (2009). *The Foreign-Born Labor Force in the United States: 2007*, <http://www.census.gov/prod /2009pubs/acs-10.pdf>). Over 55 percent of foreign-born PhD holders in the U.S. labor force were born in Asia.

extremes are even more pronounced when comparing those born in Mexico and Asia. Only 1 percent of the U.S. residents born in Mexico had advanced degrees, while 40 percent did not finish ninth grade. By contrast, 21 percent of the U.S. residents born in Asia had advanced degrees and 10 percent did not complete ninth grade.[16] This educational profile indicates in general terms a different positioning of these groups within the structure of the U.S. labor market, where a very significant proportion of Mexican immigration responds to the demand for low-skilled workers, and many Asians are occupied in relatively high-skilled occupations.

In 2010, 25 million foreign-born workers represented 16 percent of U.S. workers; an estimated 8 million—nearly a third of the foreign-born—were unauthorized.[17] Foreign-born low skilled workers have lower earnings and are more exposed to unemployment during recession because they are concentrated in industries and occupations that are more sensitive to the business cycle. Additionally, unauthorized foreign-born workers have restricted access to social safety net programs such as unemployment insurance and means-tested anti-poverty programs.

Foreign-born employment and unemployment rates were particularly sensitive to the economic cycle. Foreign-born workers had higher employment rates than U.S.-born workers before 2007, but lower employment rates after the 2007–2009 recession. The Current Population Survey (CPS) began recording place of birth each month in 1994 and reported lower employment rates between 1994 and 2000 among immigrants, relative to U.S.-born residents 16 and older (the employment rate is the share of the population 16 and older in employment). However, after 2002, the share of employed foreign-born residents exceeded the share of U.S.-born residents 16 and older who were employed.[18] Before the full effect of the recession was felt, 66 percent of foreign-born adults were employed, versus 63 percent for U.S.-born adults. Employment rates of foreign-born adults were again lower than U.S. born adults after the ensuing recession.

At that time (2004–2007), the immigrant unemployment rate dipped below the rate for U.S.-born workers, but jumped above the rate for the latter as the recession deepened. By 2009, the employment rate of immigrants was lower than for U.S.-born workers, and their unemployment rate was higher. Foreign-born employment and unemployment rates were particularly sensitive to the economic cycle.

Foreign-born workers earn about 20 percent less than U.S.-born workers, about $530 a week compared to $650 a week in 2009, reflecting the overrepresentation of foreign-born workers in low-wage industries. According to the Current Population Survey (CPS), 26 percent of workers employed for wages in agriculture in 2007

[16] Patten, E. (2012). *2010, Foreign-Born Population in the United States Statistical Portrait.* Washington D.C., <http://www.pewhispanic.org/2012/02/21/statistical-portrait-of-the-foreign-born-population-in-the-united-states-2010/>.

[17] Passel, J. & D. V. Cohn (2011). *Unauthorized Immigrant Population: National and State Trends, 2010*, Washington D.C., <http://www.pewhispanic.org/2011/02/01/unauthorized-immigrant-population-brnational-and-state-trends-2010/>.

[18] Although a smaller share of immigrant workers is 65 and older, this did not change after the 2007–2010 recession.

were foreign-born, as were 24 percent of workers in accommodation and food services and support and waste management,[19] although other specialized surveys, such as NAWS, show a much higher participation of the foreign-born in this industry. Workers in migrant-intensive industries have median earnings well below the $31,500 for all U.S. workers,[20] for example, median earnings are $13,400 in accommodation and food services.

In all, while structural changes benefited Mexican immigrants by providing ample job opportunities until 2007, recent cyclical changes have hurt them.[21] To compound the problem of rising unemployment during the recent recession, Mexican immigrants have limited access to the social safety net. Lack of legal immigration status limits access to public assistance, such as unemployment benefits, traditional welfare or public health care coverage, such as Medicaid. Remittances to Mexico declined significantly during the recession and some remittances even reversed direction, flowing northward. The media reported on these "reverse remittances,[22]" but the most likely explanation was that some immigrants simply tapped savings they had remitted to Mexico in past years to supplement their reduced U.S. income.

2.4.2 *Characteristics and Labor Market Outcomes of Mexican-Born Workers*

The volume and composition of Mexico – U.S. migration has evolved in response to the temporary and long-running forces discussed above. Although data from the American Community Survey (ACS) and the CPS differ slightly, the annual flow of Mexican immigrants to the U.S. stayed relatively high between 2001 and 2005. Between 2005 and 2010 both U.S. surveys (CPS and ACS) and the National Employment and Occupation Survey (ENOE) in Mexico consistently registered a decrease in the annual flow of Mexican immigrants into the U.S. To observe more closely how the demographics and labor market outcomes changed among Mexican immigrants see Table 2.1, which compares the characteristics of U.S. workers ages 16–54 in three groups: U.S.-born (natives), all Mexican-born, and recently arrived Mexican-born (who arrived within the prior 5 years). Census and American

[19] Surveys of hired farm workers find far higher shares of foreign-born workers, topping 75 percent. See: United States Department of Labor (DOL) (s.a.). National Agricultural Workers Survey (NAWS), <http://www.doleta.gov/agworker/naws.cfm>.

[20] Newburger, E. & T. Gryn (2009). *The Foreign-Born Labor Force in the United States: 2007*, <http://www.census.gov/prod/2009pubs/acs-10.pdf>.

[21] Orrenius, P. M. & M. Zavodny (2010). Mexican Immigrant Employment Outcomes over the Business Cycle. *The American Economic Review,* 100(2), 316–320, <doi:10.2307/27805011>.

[22] Lacey, M. (2009). Money Trickles North as Mexicans Help Relatives. *The New York Times*, November 16, p. A1, <http://www.nytimes.com/2009/11/16/world/americas/16mexico.html?_r=3&pagewanted=all&>.

Table 2.1 U.S.: Characteristics of workers by origin and year, ages 16–54

	Natives		Mexican Immigrants		Recent Mexican Immigrants	
	2000	2010	2000	2010	2000	2010
Observations (mil)	104.2	104.7	4.6	7	1.2	0.9
Demographics						
Male (%)	53	52	68	65	74	73
Age	35.8	36.1	32.7	35.9	27	29.4
Married (%)	54.3	47	60	56.9	44.5	39.6
Number of children	0.87	0.81	1.3	1.3	0.53	0.56
Years in U.S.			13.3	16.6	2.6	3.3
Speaks English well	99.5	99.7	50.5	52.2	27.4	27.6
Education (%)						
Less than high school	8.4	6.1	65.6	55	68.1	54.6
High school graduate	27.5	26.3	17.3	25.8	17.3	27.5
Some college	33.6	34.1	11.9	13.2	8.4	9.3
College or above	30.4	33.5	5.1	6	6.3	8.6
Labor market						
Median wage ($)	32,728	30,494	18,851	18,296	14,139	15,247
Median income ($)	35,347	33,137	19,637	20,329	14,400	15,247
Median fam. Income ($)	70,510	66,070	43,201	38,625	32,728	28,766
Employed (%)	94.2	88.4	90.6	89	90.3	89.5
Self-employed (%)	8.4	7.8	6.4	9.1	4	5.8
Hours worked	39.6	39	38	38.5	35	38.5

Source: Census 2000; American Community Survey 2010

Community Survey (ACS) data include the unauthorized population although demographers believe they are undercounted by 10–20 percent.

In 2010, Mexican immigrant workers numbered 7 million, up from 4.6 million in 2000. Over time, the share of males dropped from 68 percent in 2000 to 65 percent in 2010. Some of this change may reflect the recession-related decline in employment in male-dominated occupations, such as construction, that occurred at the end of this time period. Higher return migration and deportations likely also affected men more than women, and women entering the workforce in greater numbers also may have contributed to a falling share of men in the Mexican-born workforce.

Among prime-aged workers, the Mexican immigrant group aged faster than natives over this period. By 2010, Mexican immigrants in this cohort had a mean age of 36, the same as natives. Since young workers do not replenish the Mexican immigrant population as readily as the native population, particularly if immigration declines, more rapid aging of the overall immigrant segment is to be expected (the children of immigrants are natives). Recently arrived Mexican immigrant workers reached 29.4 years of age, up from 27 in 2000. Consistent with aging, immigrant groups in 2010 had been in the United States longer than those in the United States in 2000. Other demographic characteristics point to a reduced

incidence of marriage in all three groups. Despite this, prime-aged workers had about the same number of children in 2010 as in 2000, reflecting perhaps the rise in non-marital births, which is more pronounced among Hispanics.

As mentioned above, Mexican immigrants tend to have comparatively low educational levels (see Chap. 3 for a comprehensive discussion of the education of Mexican migrants and their children; this chapter focuses exclusively on workers). Nevertheless, these have changed significantly over time. In general, education levels rose over the decade, but much more so for Mexican immigrants than for natives. The share of prime-age Mexican immigrant workers without a high school degree fell more than 10 percentage points to 55 percent, admittedly still a very high share when compared to 6.1 percent of similarly aged U.S.-born workers who lack a high school degree. The decline was even more pronounced among recent arrivals, where the share lacking a high school degree fell more than 13 percentage points to 54.6 percent. The other education categories were stable for U.S. natives but rose for Mexican immigrants, both overall and among recent arrivals. In 2010, more than a quarter had a high school degree and more than 18 percent had some college or a college degree. Perhaps surprisingly, higher education levels are not reflected in similar increases in shares of Mexican immigrants reported to "speak English well, very well, or speak only English." Among all Mexican immigrants, this share rose only two percentage points to 52.2 percent. Among recent Mexican immigrants, there was no statistically significant change in the share reporting they speak English well when comparing 2000–2010.

Factors contributing to rising education levels among Mexican immigrants include rising education levels in Mexico and U.S. immigration policy that favors high-skilled immigrants through the H-1B and TN visa programs. Under NAFTA, there are no quotas that limit temporary high-skilled immigration from Mexico and Canada, at least as long as the immigrants are employed in "specialty" occupations as listed under the provisions of the TN visa.[23]

Wage levels in Table 2.1 refer to the beginning and the end of a decade in which there was a substantial worsening for all workers due to the 2007–2009 recession. Although wages for Mexican immigrants were noted to be significantly lower than those of prime-aged U.S. workers (up to 40 percent lower), wages for Mexican workers held up better during the decade. Mexican immigrant wages declined about 3 percent between 2000 and 2010 in inflation-adjusted terms, whereas native wages fell 7 percent. Wages among recent arrivals were low, only $15,247 per year, but rose about 8 percent over the decade. Differential access to unemployment benefits and other social assistance programs partly explain the fact that immigrant wages held up better despite the recession. Laid off immigrants had to find new jobs, while displaced natives were better able to sustain a period of unemployment. This is borne out by the employment rates, which changed little for Mexican immigrants in

[23] Specialty occupations under the 3-year TN visa include accountants, architects, computer programmers, engineers, nurses, physicians, professors, scientists, and social workers among others. See Organization of American States (OAS) (1994). Agreements: NAFTA, Chapter 16, <http://www.sice.oas.org/trade/nafta/chap-161.asp#Chap.XVI> for full list.

the two groups but fell substantially for natives. Self-employment also rose among immigrants while falling among natives, suggesting immigrants who couldn't find an employer to hire them were more likely to start their own businesses.

As has been mentioned above, income changes reflect more than wages, they also incorporate natives' superior access to alternative sources of income, such as unemployment benefits, cash welfare, and interest and dividend income. Over the decade, the largest family income declines were among recent arrivals, down 12 percent, and the smallest declines among natives, down 6 percent. Among all Mexican immigrants, inflation-adjusted median income fell nearly 11 percent from 2000 to 2010.

There were 2.4 million prime-age female workers in the 2010 Mexican immigrant workforce, up from 1.5 million in 2000. Over the 2000–2010 decade, changes among female workers mirrored those among males although education levels showed a slightly more pronounced increase. In both 2000 and 2010, Mexican immigrant women were more educated than the men but the gap increased. By 2010, fully 24.1 percent of Mexican women workers had some college or a college degree compared with only 16.6 percent of male workers. Despite higher education levels, median wages, hours worked, and employment rates were all substantially lower for women than men.

2.4.3 Occupational Distributions of Mexican-Born Workers

Over the decade, the change in occupational distribution mirrors the structural changes in the U.S. labor market. Recent Mexican immigrants in 2010 are more concentrated in low-education and high-education occupations than they were in 2000 (see Table 2.2 for men and Table 2.3 for women). Nevertheless, fully 84 percent of recent male Mexican immigrants were in low-education occupations in 2010 and only 1 percent in high-education occupations. Female Mexican immigrants are more educated than their male counterparts, however, and this is reflected in their occupational distribution. Sixty two percent of recent female immigrants were in low-education occupations and 2.8 percent in high-education occupations. While high-skilled occupations are growing relatively quickly, the great majority of Mexican immigrants continue to work in the occupations that require the least formal education.

Mexican male immigrants are concentrated in just six occupational categories: construction, manufacturing, food service, maintenance, transportation, and farming and fishing. Over the decade, the most dramatic occupational shift was the decline in the share of recent Mexican male immigrants in manufacturing jobs, which include machine operators and assemblers, and the steep rise in the share working in food service jobs. Female Mexican immigrant workers similarly increased their ranks in food service jobs and decreased their representation in

Table 2.2 U.S.: Share of workers in top 20 occupations by education and nativity: Men

Mexican Immigrants			Recent Mexican Immigrants			Natives		
Occupation	2000	2010	Occupation	2000	2010	Occupation	2000	2010
Less than 12 years of education								
Construction	21.4	24.4	Construction	25.7	24.9	Construction	9.8	9.3
Manufacturing	16.4	11.9	Manufacturing	16.4	9.8	Manufacturing	9.2	8.1
Food service	9.7	11.4	Food service	12.9	19	Food service	3.9	5
Maintenance	9.1	10.6	Maintenance	10.5	12.4	Maintenance	3	3.6
Transport	8.7	8.6	Transport	6.3	6.1	Transport	7.5	6.9
Farm/fish	8.4	8.3	Farm/fish	9.1	11.1	Other	2.1	2.1
Domestic service	0.5	0.5	Domestic service	0.6	0.7			
Other	0.1	0.3	Other	0.1	0.2			
Subtotal	74.3	76	Subtotal	81.6	84.2	Subtotal	35.5	35
From 12 to 15 years of education								
Repair	5.3	4.8	Repair	3.4	3.2	Repair	6.9	5.9
Sales/buyers	4	4.4	Sales/buyers	2.8	2.8	Sales/buyers	11.1	11.2
Precision production	4.4	3.1	Precision production	3.3	1.8	Precision production	3.5	2.5
Managers	2.2	2.7	Managers	1.1	1.4	Managers	9.3	9.6
Other office/mail	2.5	2.2	Other office/mail	2	1.5	Other office/mail	3.7	3.6
Admin	1.2	0.9	Admin	0.8	0.4	Admin	2.7	2.7
Protection	0.6	0.6	Protection	0.3	0.2	Protection	3.1	3.6
Customer service	0.5	0.6	Customer service	0.4	0.3	Customer service	1.3	1.6
Writers/ performers	0.5	0.5	Writers/ performers	0.4	0.4	Writers/ performers	1.7	1.8
Technicians	0.6	0.5	Technicians	0.4	0.3	Technicians	2.9	2.6
Nurses/other	0.4	0.4	Personal service	0.3	0.4	Nurses/other	1.6	2
Personal service	0.4	0.4	Other	0.8	0.6	Computer	2	2.2
Other	0.9	0.7				Other	4.4	4.7
Subtotal	23.5	21.8	Subtotal	16	13.3	Subtotal	54.2	54
16 years of education or more								
Education	0.5	0.5	Engineers	0.2	0.4	Education	2.8	3.1
Other	0.7	0.7	Education	0.3	0.4	Other	2.5	2.2
			Other	0.3	0.2	Accountants	1.9	1.9
						Engineers	2.2	1.9
Subtotal	1.2	1.2	Subtotal	0.8	1	Subtotal	9.4	9.1

Source: Census 2000 and American Community Survey 2010

manufacturing jobs. Native workers' shares in manufacturing jobs also fell, but the decline was not as dramatic as that for recent Mexican immigrants.

Table 2.3 U.S.: Share of workers in top 20 occupations by education and nativity: Women

Mexican Immigrants			Recent Mexican Immigrants			Natives		
Occupation	2000	2010	Occupation	2000	2010	Occupation	2000	2010
Less than 12 years of education								
Food service	10.3	13.8	Food service	15.3	20.3	Food service	5.9	6.8
Domestic service	8.6	11.8	Domestic service	10.3	13.7	Domestic service	1.1	1.1
Manufacturing	19.2	11.4	Manufacturing	20	11.4	Manufacturing	4.7	2.8
Maintenance	4.5	5.3	Maintenance	5.4	6.2	Maintenance	1	1
Farm/fish	5.7	4.6	Farm/fish	6.4	5.8	Transport	1.5	1.3
Transport	4.1	4.3	Transport	4.6	5	Other	0.4	0.4
Other	0	0	Other	0	0			
Subtotal	52.4	51.2	Subtotal	62	62.4	Subtotal	14.6	13.4
From 12 to 15 years of education								
Sales/buyers	9.3	10.7	Sales/buyers	8.1	8.8	Sales/buyers	12.7	12.9
Admin	7.7	6.2	Admin	4.4	3.2	Admin	18	15
Nurses/other	4.4	5.9	Nurses/other	2	2.6	Nurses/other	10.2	12.2
Personal service	4.7	4.7	Personal service	4.6	4.2	Personal service	4.4	4.7
Managers	2.4	2.8	Managers	1.4	1.2	Managers	7	7.7
PrecisionProduction	2.9	2.5	Precision production	2.7	2.3	Precision production	1.5	1.4
Other office/mail	2.2	2.4	Other office/ mail	1.8	2.3	Other office/ mail	2.8	2.4
Customer service	2.4	2.2	Customer service	1.6	1.1	Customer service	4.6	4.3
Other	1.5	1.1	Other	1.2	0.7	Other	2.2	1.8
Accountants	0.8	0.8	Accountants	0.3	0.7	Accountants	3.1	3.2
Writers/performers	0.7	0.7	Writers/ performers	0.7	0.9	Writers/ performers	1.8	1.7
Construction	0.8	0.7	Construction	1.3	1	Social workers	1.3	1.5
Social workers	0.4	0.4	Protection	0.1	0.3	HR/agents	1.4	1.3
Technicians	0.3	0.3	Computer	0.2	0.3	Protection	0.9	1.2
						Computer	1.2	1.1
Subtotal	40.5		Subtotal	30.4	29.6	Subtotal	73.1	72.4
16 years of education or more								
Education	3.3	3.6	Education	1.5	2.4	Education	9.5	9.9
Other	2.9	3.1	Other	0.2	0.4	Other	1.8	2.2
Subtotal	6.2	6.7	Subtotal	1.7	2.8	Subtotal	11.3	12.1

Source: Census 2000; American Community Survey 2010

2.4.4 *Two Examples of Specific Labor Demands: The Cases of U.S. Construction and Meatpacking*

Construction and manufacturing were associated with unionized blue collar workers earning higher than average wages in the 1950s and 1960s, when sons often followed fathers into apprenticeship programs to learn construction jobs and into factories to work on assembly lines that produced cars and appliances. With only high-school educations, carpenters, auto workers, and steel workers represented by unions enjoyed middle class lifestyles.

Construction and manufacturing changed in the 1970s, and employment trends diverged in these goods-producing industries. Since 1970, U.S. construction employment more than doubled to a peak 7.7 million in 2006 before falling sharply during the 2007–2009 recession. Manufacturing employment peaked at almost 20 million in 1979 and fell to 11 million in 2012 due to rising productivity and increasing imports of manufactured goods.[24] In construction and manufacturing, the share of foreign-born workers exceeds the 16 percent average in the US labor force. Particular segments of each sector, including laborers in residential building and production workers in food processing and garment production, have above-average shares of foreign-born workers.

The rising share of foreign-born workers in some sub-sectors of construction and manufacturing has been facilitated by industry and labor market changes. Construction brings together a variety of specialists on one building site, and businesses specializing in drywall, roofing, and similar trades often hire migrants to help build private homes. The rising tide of foreign-born workers in meatpacking, the largest manufacturing industry in rural America, is linked to the shift of meatpacking firms from urban to rural areas, where large plants often operate two shifts in places with many animals and few residents.

The construction boom drew Hispanic immigrants into urban areas, while the rising share of Hispanic immigrants in meatpacking induced migration from rural Mexico to rural America or from one part of agricultural America to another.[25] Many immigrant construction workers find it hard to afford housing in the urban areas where they work (despite relatively high wages), while some seasonal farm workers moved from California to Midwestern and Southeastern meatpacking plants to find year-round jobs and affordable housing.

Construction firms and meatpackers belong to associations that asked for easier access to foreign guest workers during the economic boom. For example, the Associated General Contractors in 2005 called for immigration reforms that

[24] Manufacturing employment as a share of U.S. employment peaked at one-third in the early 1940s. Manufacturing employment declined every year for a decade before increasing by 109,000 in 2010 and 237,000 in 2011. Some manufacturers in 2012 complained of labor shortages, asserting that they were unable to find enough machinists and technicians.

[25] Parrado, E. A. & W. A. Kandel (2010). Hispanic Population Growth and Rural Income Inequality. *Social Forces*, 88(3), 1421–1450, <doi:10.1353/sof.0.0291>.

included "a new guest worker program that … can help address the shortage of skilled and unskilled workers which continues to face the construction industry." The National Association of Home Builders complained of "a chronic shortage of skilled workers" in the housing industry and endorsed "legislation and regulation that will facilitate and expand opportunities for foreign-born workers to be employed in the United States."[26] The construction industry did not get the guest workers it requested, and did not need additional workers when the recession sharply reduced construction employment.

The story is different in meatpacking, where the share of unauthorized workers increased between 2000 and 2005 and then fell as a result of sustained immigration enforcement, the recession, and higher wages. During the late 1990s, when a quarter of meatpacking workers were believed to be unauthorized, the then Immigration and Naturalization Service (INS) launched Operation Vanguard to check the I-9 forms completed by employers and newly hired workers. The INS obtained data from employers, flagged the employees who appeared to be unauthorized, and instructed employers to have these workers correct their data or appear for interviews when INS agents visited the plant. The resulting terminations slowed meatpacking "dis-assembly lines" and prompted complaints from migrant advocates and farmers. Former Nebraska Governor Ben Nelson complained in 1999 that: "It was ill-advised for Operation Vanguard to start out in a state with such low employment and an already big problem with a shortage of labor... There has been an adverse economic impact on agriculture because of this."[27]

Operation Vanguard was stopped in 2000, and the share of unauthorized workers rose. However, meatpacking plants became the focus of large-scale enforcement efforts after 2006, when Immigration and Customs Enforcement (ICE) agents arrested 1300 of the 7000 workers employed on the day shift in six plants owned by Swift on December 12. This enforcement, plus wage increases at some plants, the 2007–2009 recession, and most meatpackers enrolling in E-Verify, reduced the Hispanic share of laborers in meatpacking from 48 percent in 2005 to 38 percent in 2010. The meatpacking experience suggests that enforcement and other changes can quickly change the race and ethnicity of an industry's labor force.

Construction and meatpacking illustrate the processes that introduce migrant workers into an industry; pioneering migrants, who prove to be good workers, forge networks that enable current workers to refer and train friends and relatives subsequently hired to fill vacant jobs. During booms, employers complain about enforcement of laws against hiring unauthorized workers, arguing employing too few immigrant workers has spillover effects and reduces economic activity and jobs for

[26] AGC of America (2007). "AGC's Top Legislative Issues for the 19th Congress", <https://web.archive.org/web/20060614224054/http://www.bipac.net/page.asp?g=agc&content=topissue>; and National Association of Home Builders (NAHB) (2008). Workforce Development, <https://web.archive.org/web/20081119162724/www.nahb.org/generic.aspx?sectionID=198&genericContentID=3515&print=true>.

[27] Quoted in Rural Migration News (1999). Operation Vanguard, IBP. *Rural Migration News*, 5(3), <https://migration.ucdavis.edu/rmn/more.php?id=377_0_2_0>.

U.S.-born workers. During busts, newly hired migrant workers are often first to be laid off, and they often struggle to find other jobs. Meatpacking provides a rare example of how enforcement combined with wage increases during a recession reduced the employment of unauthorized workers.

2.4.5 *Economic Cycles and the Geography of Mexican Immigration*

While the bulk of Mexican immigrants still reside in just a few states, there has been significant geographic dispersion since the 1990s. California, Texas, and Illinois are home to nearly two-thirds of the nation's Mexican immigrants. California has the largest share, 37 percent, down from 43 percent in 2000. Meanwhile, the share of Mexicans living in Texas, 21 percent, rose one percentage point over the decade. The share residing in Illinois fell from about 7 percent in 2000 to 6 percent in 2010.

Mexican immigrant mobility, particularly among recent immigrants, correlates well with the geography of economic growth. In the 1990s, Mexicans moved to the South and Mountain West states where employment growth outstripped the national average. The Mexican foreign-born population skyrocketed in states such as Tennessee, Alabama, Georgia, and North Carolina. Some of these trends continued into the 2000s, albeit at a considerably reduced pace, while others reversed direction as a result of the financial crisis and housing bust, which hit certain regions more severely than others. Figure 2.2 shows changes over the decade in the shares of

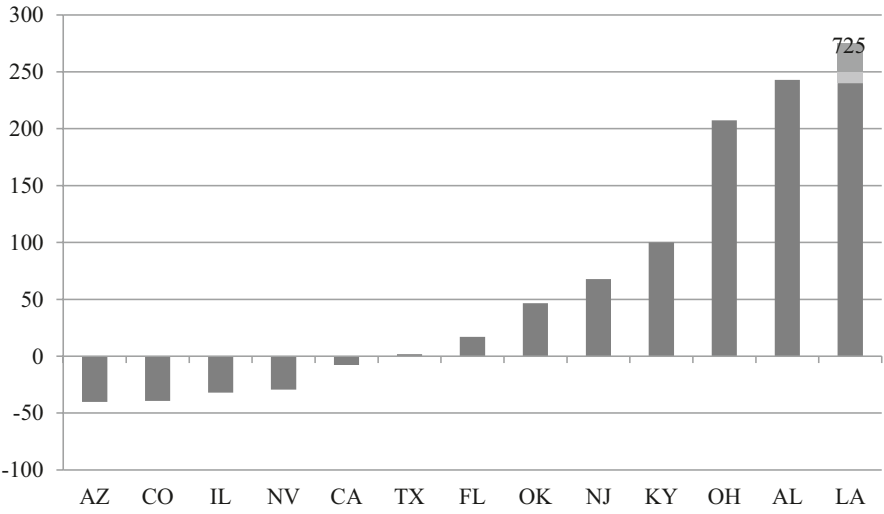

Fig. 2.2 U.S.: Percent change between 2000 and 2010 in population of recent Mexican immigrant workers ages 16–54 for selected states
Sources: Census 2000, American Community Survey 2010

recent Mexican immigrant workers for a select group of states. Arizona, Colorado, Illinois, Nevada, and California are examples of states that experienced reductions in the shares of recent immigrant workers from Mexico. These states suffered severe housing price declines and marked falloffs in residential construction activity, two developments that likely deflected new immigrants in the late 2000s.

New immigrants went instead to states such as Kentucky, Ohio, Alabama, and Louisiana. Louisiana became a major destination in the wake of Hurricane Katrina in 2005, which led to a surge in labor demand to clean and reconstruct buildings and infrastructure destroyed by the floods. Other significant growth states with non-negligible shares of Mexican immigrants (that are not pictured below) include Arkansas, Maryland, Mississippi, New Mexico, New York, and Pennsylvania.

2.4.6 The Role of Immigration Policy

The labor market outcomes of Mexican migrants to the United States are influenced by a number of factors, as discussed above. Immigrants' characteristics, most importantly education, English-speaking ability, immigration status and, to some extent, immigrants' willingness to relocate within the United States, are all important to increasing wages and employment opportunities. Another factor is labor demand, whether the U.S. economy is in expansion or contraction, as well as the nature of structural changes in the labor market, such as aging of the native-born population and the shifting occupation-skill distribution.

Labor supply changes are also important. If the Mexican economy improves and migrant inflows taper off, prior immigrants may benefit from reduced labor market competition. Tougher border enforcement, to the extent that it keeps out potential migrants, could also result in relatively higher wage and employment opportunities for existing migrants.[28] Recent years have seen both improved conditions in Mexico relative to the United States and more border enforcement, which should have provided some economic benefit to Mexican immigrants in the United States.

In contrast to border enforcement, interior enforcement measures, such as E-Verify, are harmful to immigrants' outcomes. Although only about half of Mexican immigrants are unauthorized, many live in mixed-status families, so the

[28] Hanson, G. H. & A. Spilimbergo (1999). Illegal Immigration, Border Enforcement, and Relative Wages: Evidence from Apprehensions at the U.S.-Mexico Border. *American Economic Review*, 89(5), 1337–1357, <doi:doi: 10.1257/aer.89.5.1337> found that tougher border enforcement was correlated with lower wages in Mexican border cities, suggesting enforcement has a deterrent effect. Gathmann, and Amuedo-Dorantes & Bansak also find border enforcement drives up smuggler prices and lowers the probability of attempting an illegal crossing. See: Gathmann, C. (2008). Effects of Enforcement on Illegal Markets: Evidence from Migrant Smuggling Along the Southwestern Border. *Journal of Public Economics*, 92(10–11), 1926–1941, <doi:https://doi.org/10.1016/j.jpubeco.2008.04.006>; and Amuedo-Dorantes, C. & C. Bansak (2011). *The Effectiveness of Border Enforcement in Deterring Repetitive Illegal Crossing Attempts*. San Diego State University, Department of Economics.

misfortunes of a spouse likely affect the economic status of the entire family. Moreover, from the experience of Hispanic immigrants in the wake of IRCA, even legal immigrants suffered earnings declines from the employer sanctions provision as some employers likely discriminated more against foreign-born Latinos than they had prior to the law's implementation.[29]

Research has found adverse labor market effects of the no-match and E-Verify programs on likely unauthorized workers. After 9/11, the government ramped up the Social Security Administration's no match program and sent out letters to almost a million employers providing them a list of all employees with invalid or mismatched Social Security numbers. Likely unauthorized workers suffered relative declines in employment and earnings as a result.[30] Arizona's 2007 law mandating that employers use E-Verify to check the work authorization of new hires resulted in lower employment rates among likely unauthorized workers, higher self-employment, and an overall reduction in the state's unauthorized population.[31] Another paper looking more broadly at E-Verify provisions across several states also found that mandating electronic verification of work authorization resulted in significant declines in employment rates and wages of likely unauthorized men.[32]

President Obama halted workplace raids but did not end interior enforcement, resulting in the deportation or removal of almost 400,000 foreigners a year, mostly Mexicans. In summer 2012, President Obama ordered DHS to stop deporting unauthorized foreigners who arrived in the United States before age 16, lived illegally in the United States at least 5 years and were under 31 on June 15, 2012, and were enrolled in school or have a high school diploma, or are honorably discharged veterans. The Deferred Action for Childhood Arrivals (DACA) has allowed almost 600,000 unauthorized foreigners brought to the US as children to become temporary legal residents and workers, still far short of the expected 1 million when it was put in place.

In November 2014, Obama created the Deferred Action for Parental Accountability (DAPA) program and expanded DACA, so that up to 5 million of the estimated 11 million unauthorized foreigners could become temporary legal residents and workers., However, 26 states sued to block implementation of DAPA and the expansion of DACA, and in February 2015 a federal judge issued an injunction that has so far prevented DAPA from going into effect. Youth with DACA status report that their new legal status has enabled them to get driver's licenses and better jobs.

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[29] Bansak, C. & S. Raphael (2001). Immigration Reform and the Earnings of Latino Workers: Do Employer Sanctions Cause Discrimination? *Industrial and Labor Relations Review*, 54(2), 275–295, <doi:10.2307/2696011>.

[30] Orrenius, P. M. & M. Zavodny (2009). The Effects of Tougher Enforcement on the Job Prospects of Recent Latin American Immigrants. *Journal of Policy Analysis and Management*, 28(2), 239-257, <doi:10.1002/pam.20425>.

[31] Lofstrom, M., S. Bohn & S. Raphael (2011). *Lessons from the 2007 Legal Arizona Workers Act*. San Francisco: Public Policy Institute of California.

[32] Amuedo-Dorantes, C. & C. Bansak (2012). The Labor Market Impact of Mandated Employment Verification Systems. *American Economic Review*, 102(3), 543–548.

U.S. Labor Projections 2010–2022 and the Future of Migration

While the past decade can be clearly summarized in terms of a sustained increase in the demand for Mexican authorized and unauthorized workers until 2007, it was followed by a marked reduction in employment rates, and hence the fate of these Mexican workers in the United States during the next decade must be projected and is open to debate. Two labor market issues affect the immigration reform debate: (1) will the U.S. have "enough" workers, and (2) how does the presence of foreign-born workers affect U.S.-born workers? The United States Bureau of Labor Statistics (BLS) projections are a good basis on which to base forecasts of their performance.

BLS projected in 2013 that real or inflation-adjusted Gross Domestic Product (GDP) would increase by 2.6 percent a year between then and 2022, up sharply from 1.6 percent annual growth between 2000 and 2010, and that productivity would rise by 2 percent a year. BLS then estimated industry output and the number of jobs needed to produce this output, and this number of jobs is estimated employment. Labor supply and demand depend on wages, which BLS does not project, instead relying on "expert assessment" of productivity trends in particular industries and occupations to estimate the number of jobs each will have a decade in the future.

Population is the starting point for the labor and employment projections. BLS projected the number of residents 16 and older, and the share of 136 age, gender, and race or ethnic groups expected to participate in the labor force, which sets an upper bound on US GDP growth. Projected GDP is disaggregated into commodities, and an input-output model is used to estimate employment by industry after adjusting for productivity growth.

U.S. labor force growth is expected to slow to 0.5 percent per year between 2012 and 2022, down from 0.7 percent per year between 2002 and 2012. This means that the U.S. labor force is expected to increase by 15.6 million occupations or 8.4 million workers during the 2012–2022 decade, down from the pre-recession 16.6 million worker increase between 1998 and 2008, and still lower than the 10.1 million worker increase between 2002 and 2012, a figure that already takes the recession's effect into account. The labor force participation rate, the share of those 16 and older employed or looking for work, is expected to fall from 63.7 percent in 2012 to 61.6 percent in 2022 because of an aging population.

Hispanics and Asians are the ethnic/race groups whose share of the labor force is expected to rise fastest. There were 24.3 million Hispanic workers in 2012, and they are projected to be 31.1 million in 2022. Similarly, there were 8.1 million Asian workers in 2012, projected to be 10.1 million in 2022, reflecting annual growth rates of 2.5 percent for Hispanic workers and 2.2 percent for Asians. The number of white, non-Hispanic workers is expected to shrink slightly, from 101.8 million in 2012 to 99.4 million in 2022.

U.S. employment is projected to rise from 145.3 million in 2012 to 160.9 million in 2022, adding 10 percent or 15.6 million workers, (exceeding the number of workers because some workers will hold two or more jobs). Most of the fastest-growing occupations are expected to be health-related, where job growth is expected to be 3

percent a year. According to the BLS 2012–2022 projections, registered nurses (RNs), personal care aides, home health aides, nursing assistants and medical secretaries will collectively add over 2 million jobs, with RNs accounting for over half a million of these. Construction is expected to have a period of significant jobs growth but the rise from 5.6 million in 2012 to 7.2 million jobs in 2022 will still keep the sector below the pre-recession peak of 7.7 million in 2006.

Manufacturing (employment down slightly from 11.5 million in 2010) and agriculture (employment down slightly from 2.1 million in 2010) are examples of industries expected to experience productivity, but not job, growth. Health care and education are expected to have rising employment with declining productivity.

BLS projections have historically been reasonably accurate because of offsetting errors. The U.S. population has grown more than projected, but the share of residents 16 and older that are employed or looking for work has been smaller than projected. Errors increase for particular industries and occupations: BLS has consistently projected more doctors than are actually employed and fewer health care service workers such as nurses and health-care aides than are actually employed. The major reason is that BLS failed to anticipate the effects of health-care cost controls that led to faster growth of the lower-paid occupations in the health sector, perhaps highlighting the lack of wages in BLS projections of labor demand and supply.

What do BLS projections for 2012–2022 mean for Mexican-born workers seeking U.S. jobs? Some of the occupations expected to add large numbers of jobs in this decade require less than a high-school education. In some cases, there are established networks that have been bringing Mexican-born workers into particular occupations, such as home health care aides, an occupation projected to add over 700,000 jobs, personal care aides, over 600,000, food preparation workers, 400,000, and laborers, over 300,000.[33] Janitors and landscaper jobs are expected to increase by almost 250,000 jobs in the next decade, and construction laborers and carpenters by over 200,000. There will be even more job openings in some of these occupations to replace workers who leave, including in food preparation, janitorial services, and agriculture. In summary, in these industries, BLS projects 2.5 million new jobs in occupations typically held by Mexican workers. Nevertheless, this figure needs to be taken with caution, as explained above.

In sum, at the same time that the U.S. labor force is expected to expand at a lower rate than previously, the number of jobs typically occupied by Mexicans in the recent past will grow appreciably, although at a lower rate than during the period 2003–2007. Further, if Mexico-born immigrants change their educational profile and become qualified to take jobs in the health care industry, scope for immigration growth and labor demand from the United States could be larger than so far expected. Registered Nurses, for example, could provide new occupational opportunities in a niche sector with a fast-growing demand for labor.

[33] Lockard, C. B. & M. Wolf (2012). Occupational employment projections to 2020. *Monthly Labour Review*, 135, 84–108.

2.4.7 The Mexican Labor Market: 2000–2020

Mexico – U.S. Migration and the Role of Mexican Labor Markets

Labor markets in Mexico have gone through different periods closely related to the country's economic development phases. When referring to Mexican migration to the United States, Bustamante suggested that this migration flow is the direct result of the US business cycle.[34] He concluded that the level of Mexican migration to the United States has been directly related to the demand for low-wage labor and inversely related to the unemployment rate. Both the 1954 findings of Thomas and the 1975 findings of Bustamante on the relationship between the United States' business cycle and Mexican migration are still valid as shown by Passel and Cohn (2011).[35]

On the other hand, empirical evidence suggests that during the last 40 years, Mexico's migration trends do not correlate closely with its own economic cycles. This lack of close correlation seems to occur because Mexico has great structural differences with the U.S. economy and labor market. Mexico lags behind the United States in employment conditions, wages, and personal and social development so preconditions for emigration are present regardless of the business cycle. As a result, in general terms, labor demand in specific economic sectors in the United States tends to outweigh other causal push factors. Table 2.4 shows that during the last three decades of the past century there was rapid and sustained growth of Mexican migration, regardless of economic performance in Mexico. For example, the

Table 2.4 Mexico: Different indicators of population, economic activity and migration, 1970–2010

	Population (thousands)	Labor force (thousands)	Net migration (thousands)	Net migration/ Labor force (thousands)	GDP growth rate	Annual population growth	GDP per capita growth rate
1970–1980	57,536	17,511	144	8.22	6.47	3.27	3.2
1980–1990	74,049	23,065	230	9.98	1.86	1.95	−0.1
1990–2000	89,367	32,112	494	15.4	3.55	1.82	1.73
2000–2010	104,910	43,412	288	6.63	1.66	1.42	0.24

Source: Instituto Nacional de Estadística y Geografía and Secretaría del Trabajo y Previsión Social

[34] Bustamante J. (1975). *Espaldas mojadas: materia prima para la expansión del capitalismo*. Mexico City: El Colegio de México.

[35] Passel, J. & D. V. Cohn (2011). *Unauthorized Immigrant Population: National and State Trends, 2010*, Washington D.C., <http://www.pewhispanic.org/2011/02/01/unauthorized-immigrant-population-brnational-and-state-trends-2010/>.

average annual per capita GDP growth rate in Mexico was nearly zero during the 1980s. But, in spite of higher growth in the nineties (average annual per capita GDP growth rate of 1.73 percent), net emigration rose to 15.4 individuals for every thousand members of the labor force.

The 1990s coincided also with an outstanding performance of the United States economy and the signing of the North American Free Trade Agreement (NAFTA). High hopes were placed on this agreement, but although it consolidated the already existing economic and commercial interdependence and integration, it did not solve the structural inequalities that existed between the two countries. Although emigration flows to the U.S. grew significantly until the year 2006, the trend mentioned in the previous paragraphs has continued into the first decade of the twenty-first century, where the relationship between the Mexican economy and migration flows can be characterized as erratic: per capita GDP growth rates fell to near-zero levels (average annual growth rate of 0.24 percent) in the 2000s, while the net migration rate, with respect to the prior decade, fell from an average annual rate of 15.4 to 6.6 thousand. In other words, conditions in the Mexican economic cycle expected to produce more Mexico-U.S. emigration failed to do so, in a likely confirmation of an outweighing demand factor in the United States As explained in the previous section and in Chap. 1, during the U.S. boom emigration rose to unprecedented levels, then fell to near – zero.

Figure 2.3 presents annualized information on the migration rate against per capita GDP growth and the rate of participation for the period of 1995–2011. In

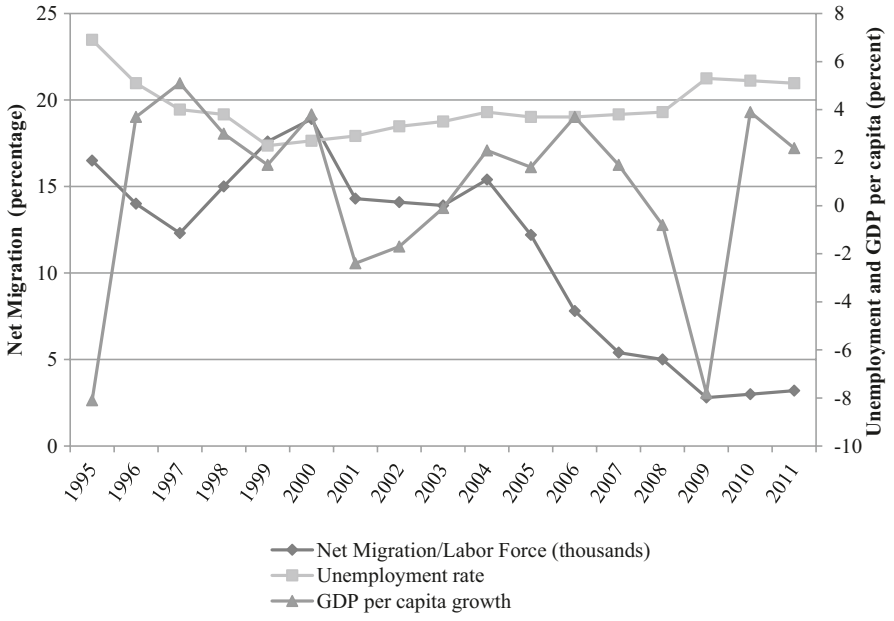

Fig. 2.3 Mexico: Migration, economic activity and unemployment, 1995–2011
Source: Encuesta Nacional de Empleo y Encuesta Nacional de Ocupación y Empleo 1995–2011

theory, one should expect an inverse relationship between Mexican GDP growth and migration rates and a direct relationship between Mexican unemployment and migration rates. This relationship is observed during the first years of the period 1995–2011, but after that the behavior goes against expectations. The general trends of GDP growth and migration rates are similar from 2000 on, again suggesting that changes in Mexican economic activity have a smaller influence on migration flows. This may be because these economic trends in Mexico do not alter the underlying structural differences between the labor markets in Mexico and the U.S. Similarly, the unemployment rate shows an increasing trend from the year 2000 onwards, which initially coincides with the increase in emigration until 2007, when the decline in labor demand due to the beginning of the crisis in the construction sector leads to a decrease in migration rates.

These general results suggest that Mexico's economic conditions are not the main drivers of migration flows to the U.S. From a Mexican standpoint, results suggest that the decline in migration may have increased pressure on the Mexican labor market in recent years. As pointed out throughout this book, there is controversy regarding the precise balance of the contributions of the weakening U.S. economy and the interior enforcement programs to the decline in Mexico – U.S. migration.

In Mexico, the recent economic crisis (2008–2009) had lasting effects on employment. The U.S.'s equally recessive economic environment curtailed migration flows and, as a result, the Mexican labor market recovery was different than the one observed after the 1995 crisis. This is arguably due in part to the increase in the number of young men who used to migrate and become part of the United States labor market (approximately 400 thousand per year during the 1990–2005 period), but now stay in Mexico and pressure the job market. One percentage point of the unemployment rate in Mexico is equivalent to approximately half a million jobs (a figure that is equivalent to the net migration balance). Following the crisis, unemployment and other indicators of labor precariousness remained high for at least 3 years (see Fig. 2.4).

The 2008–2009 global economic crisis affected different demographic groups in different ways. In Fig. 2.5, it can be seen that, regardless of the age group, women have higher non-participation and partial labor force participation rates than men. On the other hand, both men and women between 14 and 19 years of age are the most vulnerable, followed by individuals between 20 and 29 years of age. These are the groups that, in the past, have had the highest migration rates and that now may be staying in Mexico. Women aged 60 or more also have a high non-participation and partial participation rate.

The labor force participation rate of women increased gradually during the last 40 years, from 16 to 42 percent between 1970 and 2010 (Fig. 2.6). This is a substantial element to understanding labor markets in Mexico and their relationship with Mexican migration to the United States; a higher percentage of employed women, or women looking for jobs, means fewer available jobs for both men and women and is likely to contribute to maintaining low wage levels. Be that as it may, the participation gap between men and women is still high, since the participation rate for men has fluctuated between 70 and 80 percent during the same period.

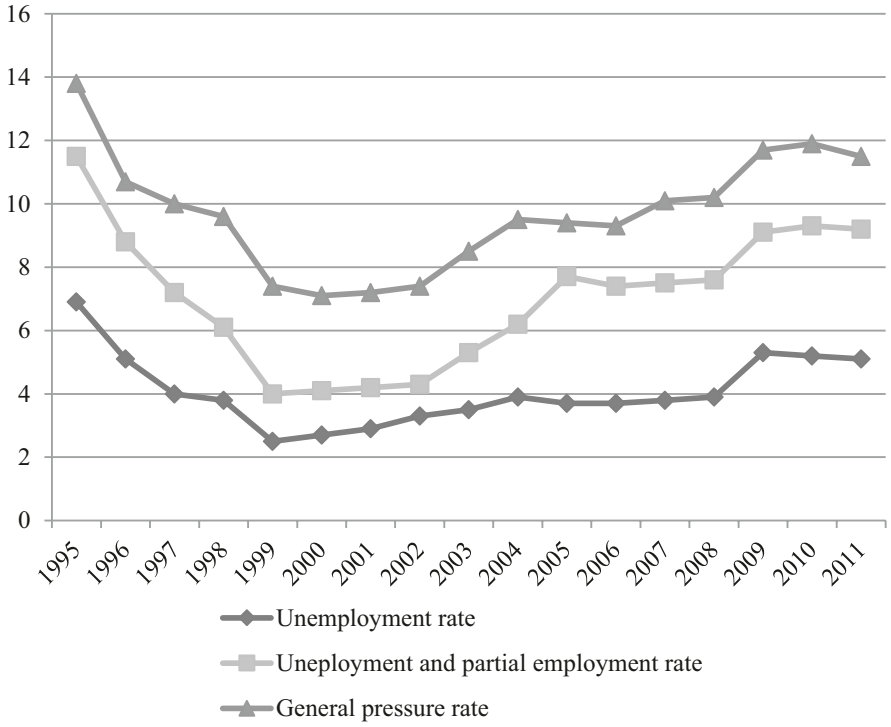

Fig. 2.4 Mexico: Indicators of employment, 1995–2011
Source: Encuesta Nacional de Empleo and Encuesta Nacional de Ocupación y Empleo, 1995–2011

The labor force participation rate of Mexican undocumented male migrants in the United States is approximately 10 points higher than the one for the total male resident population in Mexico. The lack of well-paid jobs in origin communities has a disproportionate effect on positively selected migrants.[36] Mexico's EMIF Norte is a large, recurring migrant survey along Mexico's northern border. It interviews migrants headed north to the U.S. as well as those who are returning. According to this survey, undocumented Mexican women migrants used to also have labor force rates that were higher than those of the total female resident population in Mexico. However, after 2003, the rates decreased below those for the total female population. Data from the same source suggest that given the increasing difficulty of crossing the US – Mexico border, the number of women who migrate for job reasons has decreased.

[36] Berumen, S. & J. S. Hernández (2009). ¿Quiénes son los que se van? La selectividad de la emigración mexicana. In: J. Arroyo & S. Berumen (eds.). *Migración a Estados Unidos: remesas, autoempleo e informalidad laboral* (pp. 179–200). Guadalajara: Universidad de Guadalajara / Secretaría de Gobernación / Instituto Nacional de Migración, Centro de Estudios Migratorios / DGE Ediciones.

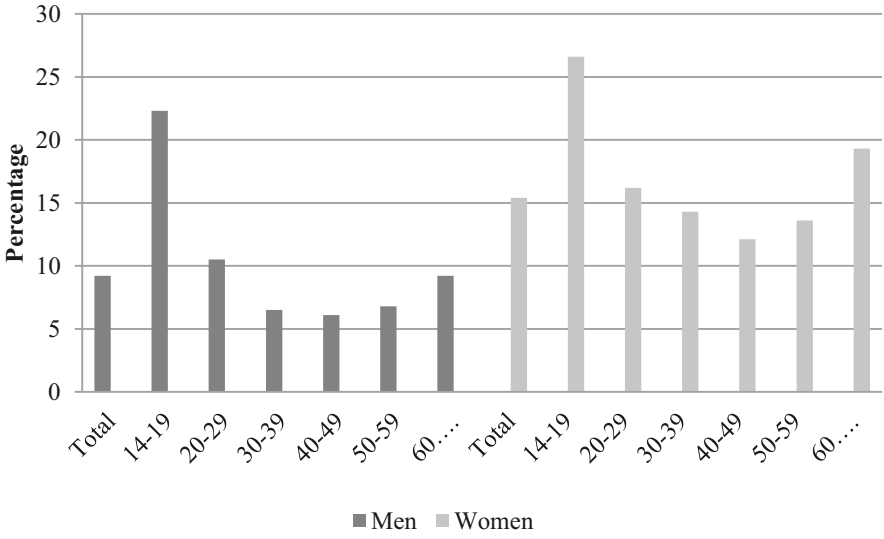

Fig. 2.5 Mexico: Unemployment and partial employment rate by sex and age group, 2011
Source: Encuesta Nacional de Ocupación y Empleo 2011

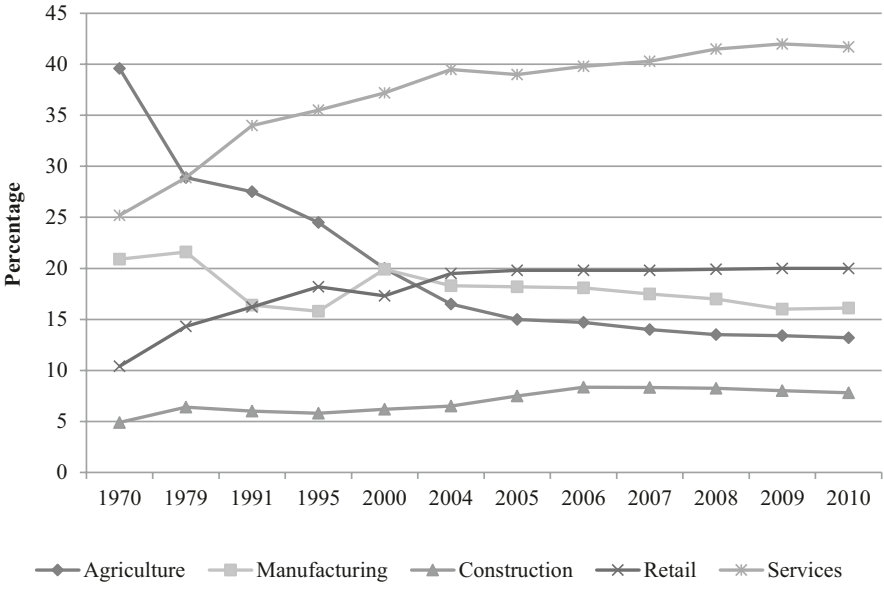

Fig. 2.6 Mexico: Working-age population by activity, 1970–2010
Source: Encuesta Nacional de Empleo y Encuesta Nacional de Ocupación y Empleo, 1970–2010

Other elements that contribute to explain the behavior of migration flows during the last decades are the changes within the occupational sectors in Mexico during the 1970–2010 period (Fig. 2.6), which can be summarized as follows: (1) a primary sector that has lost relative weight through time (from 39 percent of employment to 13 percent of employment between 1970 and 2010); (2) a trend by which the tertiary sector has become more important; and (3) The relatively low levels of employment in the secondary sector, which has only experienced moderate increases during the period.

When migrants return from the U.S., EMIF Norte collects information on their occupation in Mexico prior to departure as well as their occupation while in the United States. The data indicated that unauthorized immigrants were particularly likely to be employed in farm jobs prior to migrating. An agricultural sector background has increased in importance among undocumented migrants, as has the contribution to migration flows from poor and rural states of Southern and Eastern Mexico where an agriculture-based economy still prevails.

The percentage of migrants previously employed in the Mexican construction sector also stands out because it has increased in the last few years and has doubled the levels prevalent at the national level in Mexico. Undocumented migrants with prior jobs in the manufacturing and services sectors have shown a decreasing trend. Thus, migrants are leaving in larger numbers from Mexico's lowest-income sector of employment (subsistence agriculture), and from the construction sector, which is probably explained by demand and high wages in the United States, and in much smaller numbers from other urban, higher-paid Mexican industries (manufacturing and the services). This makes sense if one considers that precisely those sectors, especially services, have gained importance in the last few years as a source of employment for the Mexican population. Agriculture has for decades lost the capacity to absorb workers as its share of the economy has been shrinking, and it is forcing individuals out of the sector and into other sectors of the Mexican labor market and the United States (Fig. 2.7).

The EMIF Norte survey also asks these same migrants about their sector of employment in the United States. Currently, the most dynamic sectors of employment in the United States, in terms of growth and levels, are construction and services jobs. Growth in these sectors is driven by the recovery from the recession.[37] It should be mentioned that there were differential rates of return between migrants from various U.S. industries since inspections and deportations were selective. In contrast to construction, undocumented migrants in U.S. agriculture were less affected by the business cycle and, for this reason, a lower proportion of these migrants returned during the periods of crisis (Fig. 2.7).

Table 2.5 shows an origin-destination matrix of undocumented return migrants' occupations in Mexico – prior to migration – and the United States. Along the diagonal line of the matrix are migrants whose occupational sector in Mexico (before

[37] Between January 2011 and January 2014 the construction industry gained more than half a million workers.

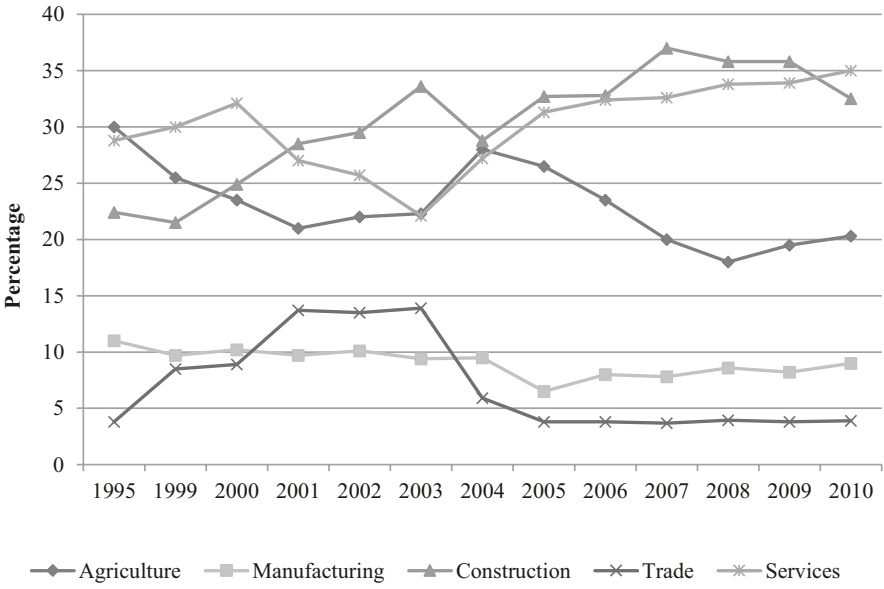

Fig. 2.7 Sector of employment in the U.S. of undocumented male migrants that returned to Mexico, 1995, 1999–2010
Source: Encuesta sobre Migración en la Frontera Norte de México 1995, 1999–2010

Table 2.5 Sector of activity in Mexico prior to migration and in the U.S. of undocumented male return migrants, 1995, 1999–2010

		Activity sector in U.S.					
Activity sector in Mexico	Total	Agriculture	Manufacturing	Construction	Trade	Services	No work in U.S.
Percentage by column	**100**	100	100	100	100	100	100
Agriculture	**37.1**	75.8	18.1	17.2	12.2	34.7	58.8
Manufacturing	**9.1**	7.9	27.4	5.3	23.2	7.4	1.3
Construction	**31**	6.7	27.8	62.9	7.8	21.9	28.3
Trade	**8.7**	6.7	9	7.5	44.6	7.3	3.2
Services	**14.1**	2.9	17.7	7.2	12.2	28.7	8.4
Percentage by row	**100**	23.4	8.6	30.7	3.9	31.6	1.9
Agriculture	**100**	47.7	4.2	14.2	1.3	29.6	3.1
Manufacturing	**100**	20.2	25.9	17.9	10	25.8	0.3
Construction	**100**	5.1	7.7	62.3	1	22.3	1.8
Trade	**100**	18	8.9	26.2	19.9	26.3	0.7
Services	**100**	10.8	10.8	15.6	3.4	64.2	1.2

Source: Encuesta sobre Migración en la Frontera Norte de México 1995, 1999–2010

migrating) is the same as their occupational sector in the United States. In the case of agriculture, for example, it must be noted that three out of four migrants that worked in this sector within the United States have also worked in that sector before leaving Mexico. When seen from the origin perspective, nearly half of the migrants who came from the agricultural sector in Mexico ended up working in the same sector within the United States. However, previous work experience in Mexico does not always define the specific economic sector and occupation of Mexican workers in the United States, as is the case in agriculture and construction. When employment in the United States takes place in a totally different sector it seems that work experience acquired in Mexico is of little to no use, especially when immigrants face language barriers and a lack of job networks. This, together with the lower levels of education discussed here and in other chapters, explains to a great extent why Mexican-born workers in the United States are employed at the lowest occupational levels. Further, when workers change occupations between the U.S. and Mexico, it is more difficult for them to profit from the experiences and abilities acquired in the United States when they return.

Apart from the significant changes in immigration policy made in the wake of the 9/11 attacks in 2001,[38] Mexico – U.S. migration flows have been largely dependent on U.S. economic cycles and employment growth. Mexico – U.S. migration is therefore likely to remain low until there is a clear growth in the demand of labor in the economic sectors linked to Mexican immigration. In the meantime, U.S. migration may not be an option for a large group of Mexicans.[39] Current trends suggest the informal economy in Mexico[40] will continue to expand and may absorb some of this labor force. Increased return migration may also impact the economies and populations of sending areas. Some of these effects are already evident. Change from high emigration in the first half of the past decade to a much lower flow in the second half, in conjunction with higher return of many Mexican migrants, has resulted in higher formal and informal sector employment in many sub-national regions.

[38] Arroyo, J., S. Berumen & D. Rodríguez (2010). Nuevas tendencias de largo plazo de la emigración de mexicanos a Estados Unidos y sus remesas. *Papeles de Poblacion*, 16(63), 9–48.

[39] Arroyo, J., S. Berumen & D. Rodríguez (2010). Nuevas tendencias de largo plazo de la emigración de mexicanos a Estados Unidos y sus remesas. *Papeles de Poblacion*, 16(63), 9–48; and Quittre, A. (2010). La crisis y sus consecuencias en Michoacán: migración, narcotráfico y clientelismo. *New Cultural Frontiers*, 1(1), 27–44.

[40] Mexico's national accounts define "informal economy" based on three characteristics. One, activity is made up of a micro business or small-scale operation. Two, goods and services generated and sold are not proscribed by law or subject to an exemption. Three, the assets and business expenses are indistinguishable from those of the operator; that is, the business has no status independent of its owner.

2.5 Trends and Projections in U.S.-Mexico Migration

As Chap. 1 explained, according to both U.S. and Mexican data (CPS and ACS in the United States and Mexico's National Survey of Occupation and Employment, ENOE), gross migration flows decreased after 2001, dropping sharply after 2005. Emigration estimates from ENOE fell 86 percent from 2005 to 2010, while estimates based on the ACS fell by an almost-identical 88 percent (Fig. 2.8).

If changing migration patterns are mostly explained in terms of trends and events in the United States, it follows that these changes do not readily adapt themselves to Mexican circumstances. The fact is that if there are additional workers in Mexico, then more job creation in Mexico will be necessary to include both working age returnees and deterred migrants. The latter were estimated to be around 309,000 per year based on estimates that subtract actual annual emigration between 2005 and 2010 from the emigration rates projected by Mexico's National Population Council (CONAPO) in 2005.

We estimate additional growth required in Mexico to accommodate these non-migrants. First we estimate additional workers remaining in Mexico. This amounts to 1.4 million in 2015 and 1.8 million by 2020. We then estimate additional GDP growth needed to accommodate these additional workers. The figure is just over 0.4 percent. Of the nearly 1.8 million people who are projected to remain in Mexico under this low-emigration scenario by 2020, we project 32.33 percent (549,000) to

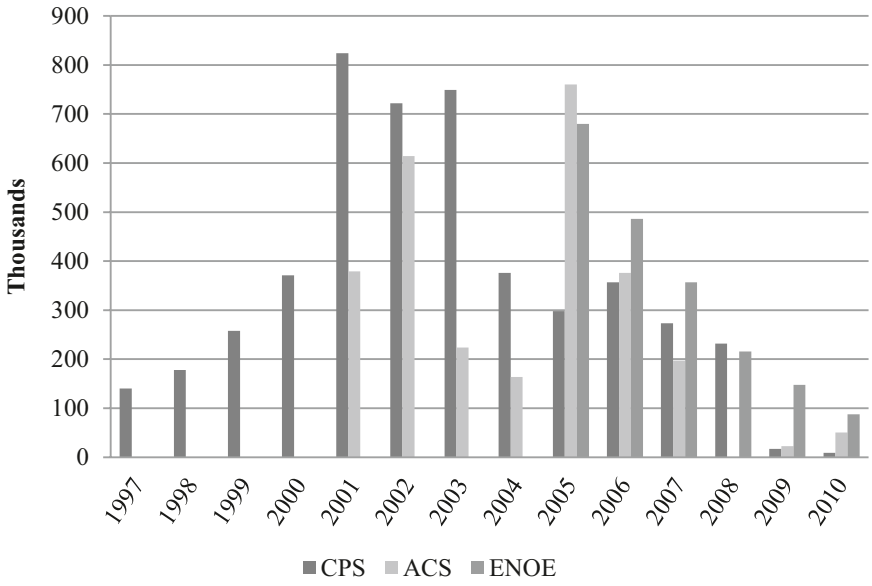

Fig. 2.8 Mexican migration to U.S., annual Flow, 1997–2010
Sources: Current Population Survey and American Community Survey (U.S.); Encuesta Nacional de Ocupación y Empleo (Mexico)

be employed in the urban informal sector, given the ratio of formal and informal employment estimated by ENOE. The implicit assumption is that between 2012 and 2020, the proportion of formal and informal employment remains the same as that observed from 2005 to 2011. The rest, 1.25 million, will be employed in the formal economy and in agriculture.[41]

2.6 Return Mexicans: Employment and Well-being

2.6.1 The Numbers

Many Mexicans return to Mexico, including a large number who are deported. Deportations amounted to nearly half a million in 2010, according to estimates from Mexico's National Migration Institute (INM), although one person can be deported more than once and U.S immigration data differ from this figure.[42] Return migrants constitute an important increase in the supply of workers in many parts of Mexico.

Return migrants registered by the Mexican census of 2000 and 2010 are 527,998 in the 1995–2000 period and 960,981 in the 2005–2010 period. There were 6 migrants returned per 1000 inhabitants of the country in 2000, compared with 9 in 2010.[43] Since the majority of return migrants are of working age, they have an impact on the labor market in certain sectors and regions.

The census data show a large increase in return migration during the 2005–2010 period with respect to the 1995–2000 period. Albeit with a different approach (and, hence, result) from that of the census, ENOE allows for the observation of changes within those 5 years. It shows that during the 2005–2008 period, returning migrants maintained a relatively constant level of approximately 400,000 events per year, but between 2009 and 2011, the number of events decreased to 330,000, 280,000 and 200,000 per year, respectively. The decreasing level of return migration registered by the ENOE, which includes temporary and permanent migrants, coincides with the decreasing trend of migration flows from Mexico to the United States.

The data lead us to conclude that Mexican migration to the United States has decreased in recent years and that it has tended to stabilize with a net loss that goes from 100,000 to 200,000 people per year. By reconciling both sources, it is possible

[41] However, unemployment estimation does not take into account properly the informal agricultural employment. If this employment is included, informality could rise about 10 percent.

[42] See Berumen, S., L. F. Ramos & I. Ureta (2011). Migrantes mexicanos aprehendidos y devueltos por Estados Unidos. Estimaciones y características generales. *Apuntes sobre Migración*, (2, September), 1–10.

[43] Return migrants are Mexicans who resided in the United States 5 years previous to Mexican census and those defined as circular migrants for years 2000 and 2010. The figure for 2010 was adjusted to exclude those born in the U.S. who have Mexican parents, as well as those falling in the intersection of circular migrants and return migrants 5 years previous to the census. See Tables 1.1 and 1.2 of Chap. 1 in this book for further discussions and analysis.

to assert that the 5-year migration of the last census doubled when compared to the levels registered in the previous census, but if one considers the last 3 years it shows a stabilizing trend, that is, return migration reached its peak during the period 2005–2008. This does not qualify as a massive return, and it is not anticipated that it will continue to increase in the following years.

2.6.2 *Occupations of Return Migrants in Mexico*

A higher percentage of return migrants worked in agriculture than the rest of the employed population in 2000 and 2010 (Table 2.6). Agricultural employment fell from 16 percent of total employment in 2000 to 13 percent in 2010, while return migrants employed in agriculture increased from 21 percent in 2000 to 25 percent in 2010. The total employed population experienced higher growth in the services sector, while return migrants in this sector fell from 46 percent in 2000 to 44 percent in 2010. This is probably because return migrants tend to reside in rural or semi-urban settlements. Moreover, in the country as a whole, some return migrants created their own businesses in the services, particularly in small cities, as many case studies report.[44]

Figure 2.9 shows a comparison between the occupation of rural (less than 2500 inhabitants), semi-urban areas (2500 to 14,999 inhabitants), and that of urban localities (over 15,000 inhabitants) for return migrants and total employment. A number of findings are highlighted from this comparison:

Table 2.6 Mexico: Employed population and employed return migrants by economic sector activity, 2000 and 2010

	Total population				Returned migrants			
	2000		2010		2000		2010	
	Employed population	%	Employed population	%	Employed population	%	Employed population	%
Agriculture	5,338,299	16	5,705,703	13	29,727	21	155,780	25
Manufacture	9,384,109	28	10,437,685	24	41,037	30	182,779	30
Services	17,995,223	53	25,993,398	61	63,993	46	271,400	44
Not specified	1,012,579	3	562,785	1	4087	3	5183	1
Total	33,730,210	100	42,669,675	100	138,844	100	615,142	100

Source: XII Censo General de Población y Vivienda 2000 and Censo de Población y Vivienda 2010

[44] Arroyo, J. & J. Papail (eds.) (2004). *Los dólares de la migración*. Guadalajara: Universidad de Guadalajara / Institut de Recherche pour le Développement / Profmex / Casa Juan Pablosolp; and Papail, J. & J. Arroyo (2009). *Migración a Estados Unidos y autoempleo: doce ciudades pequeñas de la reguón centro-occidente de México*. Guadalajara: Universidad de Guadalajara / Profmex / Casa Juan Pablos.

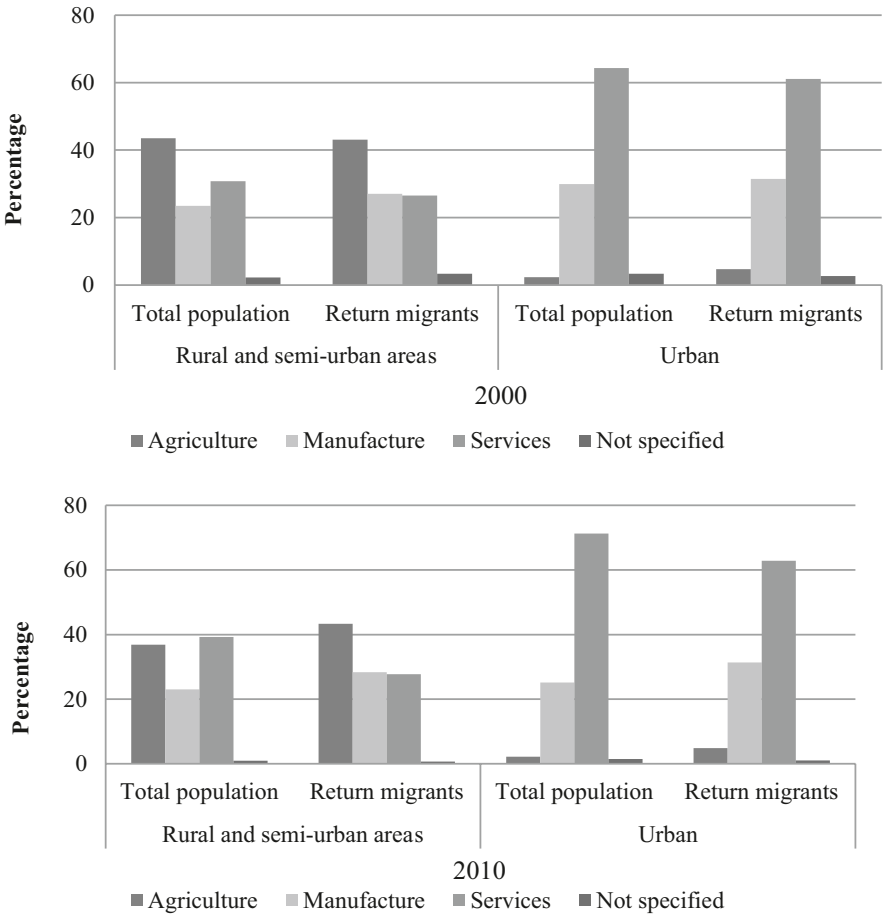

Fig. 2.9 Mexico: Employed population and employed return migrants by economic sector activity and type of locality, 2000 and 2010
Source: XII Censo General de Población y Vivienda 2000 and Censo de Población y Vivienda 2010

- In general, the structure of sectorial employment of return migrants and total employment is quite similar for the rural, semi-urban, and urban localities.
- The employed population has a similar sectorial structure, albeit with a reduction in manufacturing in the urban context and increase in services in both localities over the same period.
- If the proportion of return migrants is compared with the proportion among total employed workers in 2000, there is a slight difference in services jobs between rural/ semi-urban, and urban contexts. In both locations, the proportion of return migrants in manufacturing is a bit higher.

- The service sector shows a higher percentage of total employment of return migrants in 2010. In both contexts, the proportion of return migrants in manufacturing is greater than the proportion among all employed workers.

Despite the large increase in return migrants, the occupational structure is maintained without significant changes over time, while total employment has changed in the three sectors. While many of the returning rural and semi-urban migrants go to work in agriculture, persons occupied in manufacturing and services are increasing in this geographical context.

Most return migrants work as manual laborers, but their share is less than the percentage of the total employed population. The second largest share of return migrants are self-employed workers, accounting for 27.4 percent of return migrants compared to 24.2 percent of total employed population; the share of return migrants who work as laborers in agriculture doubled from 2000 to 2010 and is twice that of the total employed population in 2010. This demonstrates the importance of return migration in rural and semi-urban areas (see Table 2.7).

Table 2.7 Mexico: Employed population and employed return migrants by job status, 2000 and 2010

	2000			2010		
	Total	Rural and semi-urban	Urban	Total	Rural and semi-urban	Urban
Employed population						
Wage earner	60.5	36.3	70.7	57.5	38.8	66.4
Day laborer or farmhand	7.9	19.3	2.4	10.2	20.2	5.3
Employer[a]	2.5	1.5	3	2.9	2	3.3
Self-employed[b]	21.9	29.6	19.8	24.2	29.7	21.6
Family worker without pay	4.1	9.5	2	3.2	7.2	1.2
Not specified	3.1	3.8	2.1	2.1	2.1	2.2
Total	100	100	100	100	100	100
Return migrants						
Wage earner	48.3	30.3	62.2	44.7	31.7	59.5
Day laborer or farmhand	9.5	17.7	3.2	18.3	27	8.5
Employer	4.5	3.5	5.2	3.4	2.6	4.3
Self-employed	28.2	33.2	24.4	27.4	29.7	24.7
Family worker without pay	6	10.7	2.4	4.6	7.5	1.3
Not specified	3.5	4.5	2.6	1.6	1.5	1.6
Total	100	100	100	100	100	100

Source: XII Censo General de Población y Vivienda 2000 and Censo de Población y Vivienda 2010
Notes
[a]According to the Mexican census, a self-employed person work in his or her own business but does not have an employer. In Spanish, this is called *autoempleado*; most of them work in the informal sector.
[b]Employer is a person who works in her or his own business but has employees.

Job type among the total employed population remains the same from 2000 to 2010 both in rural/semi-urban and urban settings. In the two contexts, the proportion of day laborer or farmhand grew significantly, and the manual laborer (a working-class person defined by hourly rates of pay and manual labor) employees or workers decreased slightly, especially in urban areas. Proportion of unpaid family workers fell, especially in the rural and semi-urban context. The return migrant population highlights the increase in the proportion of day laborer or farmhand in both contexts in 2010.

Comparing the two types of population in 2000, Fig. 2.10 shows a higher proportion of manual laborers in total employment, while the returned population has a higher proportion than the self-employed in both contexts. The same is true in 2010.

The Mexican economy maintained a stable employment structure during 2000–2010. A higher proportion of both return and total employed population worked in the service sector in 2010. Similar to the labor market, the Mexican economy seems to change little. At present, the informal economy is a more dependable

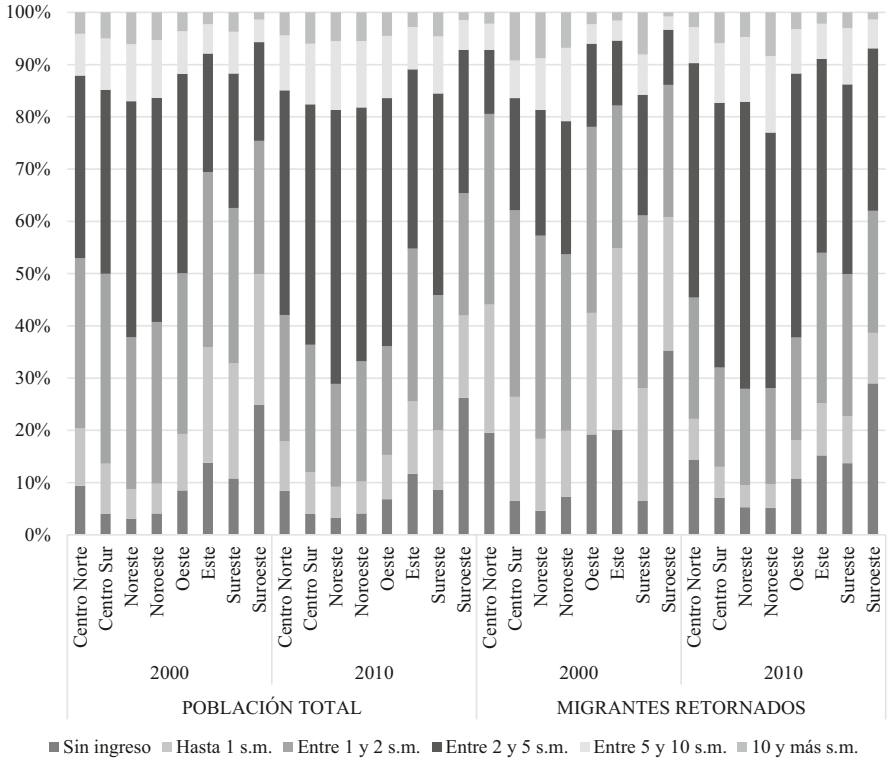

Fig. 2.10 Mexico: Employed population and employed return migrants by minimum wage (m. w.) and region, 2000 and 2010
Source: XII Censo General de Población y Vivienda 2000 and Censo de Población y Vivienda 2010

escape from unemployment and poverty than international migration, although presumably the latter leads to greater social mobility.

The percentage of employed return migrants and that of the total occupied population is high in the Southwest, East, North Central and West regions in both 2000 and 2010. This proportion is higher for return migrants, except in the Southeast region. In both populations and years, the proportion of employed persons with no income decreased. In the income range of up to twice the minimum wage,[45] including those who work without salary, the proportion of total employed population and that of return migrants in 2010 is lower than in 2000 in all regions, so fewer people have low incomes. In this case, the Center North and West regions stand out. Return migrants in this income range experienced a greater reduction of the proportion of the employed than that of the total population. Furthermore, the differences were reduced, and the proportions tend to converge in most regions. However, in all regions the proportion of employed population with low income is high (about 40 percent, and about 60 percent in Southwest region in 2010), even for return migrants. The proportion of both total and return population that earn more than 10 times the minimum wage is about of 4.5 percent in all regions in 2000 (see Figs. 2.10 and 2.11).

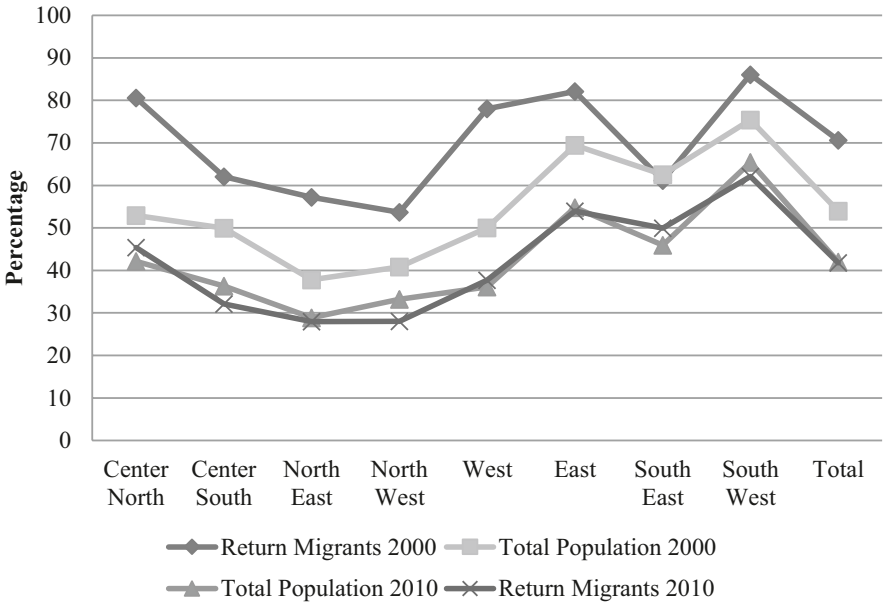

Fig. 2.11 Mexico: Employed total and return population earning up to two times minimal wages and without salary
Source: XII Censo General de Población y Vivienda 2000 and Censo de Población y Vivienda 2010

[45] In 2012, Mexican minimum wage was 4.8 dollars per day.

2.7 Conclusions and Recommendations

2.7.1 Conclusions

Mexico – U.S. migration is driven primarily by employment opportunities in the U.S. labor market. Developments over the last decade have resulted in a dramatic slowing of these migrant flows, driven primarily by the responsiveness of unauthorized migration to the U.S. housing bust, recession, and weak economic recovery. The pause in labor flows is an opportunity for policymakers to reform laws.

As Mexican migration wanes, and return migration and deportations increase, the onus is on job creation in the Mexican labor market. But since Mexican labor supply is abundant, especially in small and medium size cities, many return migrants are unable to join the formal sector; and those entering the workforce must often create their own jobs, mainly in the informal sector.

The major findings include:

1. U.S. employment growth is projected to slow significantly in the 2012–2022 decade compared to 2000–2010. The slow economic recovery from the 2007–09 recession and an even slower recovery in the U.S. housing sector is likely to reduce growth in the types of jobs that have been filled by large numbers of low-skilled Mexican-born workers. The period between 2003 and 2007 may turn out to be the peak of job creation in sectors such as construction. In service sectors such as gardening and domestic service, a supply of willing workers can create a demand for their services by lowering prices and stimulating demand, making net job creation contingent on the interaction of immigration, demographics, enforcement, and tax and related policies.
2. Unauthorized Mexican-born workers with little education are struggling in the U.S. labor market, as reflected in lower employment rates and higher unemployment rates in 2010–11 compared to earlier periods as well as declining real wages. Jobs that provided upward mobility for low-skilled Mexican-born workers, such as those who moved from agriculture to construction or meatpacking, may be harder to find due to the rising use of E-Verify to check new hires. Responses of unauthorized workers who remain in the United States include more self-employment despite efforts to curb misclassification of employees as independent contractors or finding jobs with intermediaries such as labor contractors who assemble crews and bring them into workplaces while accepting the risk of enforcement penalties.
3. The human capital of Mexican-born workers in the United States aged 16–54 has improved significantly but nonetheless, in 2010, most had not finished high school and only half spoke English well.[46] Mexican-born workers are shifting from production occupations to services: a higher share was employed in ser-

[46] There were 4.6 million Mexican-born workers in the US in 2000 and 7 million in 2010. About two-thirds did not complete high school in 2000, and 55 percent did not complete high school in 2010. The number who arrived in the previous 5 years was 1.2 million in 2000 and 900,000 in 2010.

vices such as food preparation and materials handling than in manufacturing-related occupations in 2010. It should be emphasized that neither 2000 nor 2010 were "normal" years, since 2000 marked the peak of a U.S. economic boom while 2010 reflects the effects of the worst recession in over half a century.

4. The immigration status quo remains the most probable outcome for the next few years, as the U.S. Congress appears unwilling to approve a comprehensive immigration reform that includes new enforcement measures and legalization, and federal courts are blocking the Obama Administration's attempts at extending DACA and implementing DAPA. In states with E-Verify laws, unauthorized Mexican workers may increasingly circulate between U.S. employers, with some pushed into self-employment and others into jobs with risk-absorbing intermediaries, steps that will likely make it harder for Mexican immigrants to obtain the experience and training necessary to climb the U.S. job ladder. However, with almost five U.S.-born children for every unauthorized child in families with an unauthorized parent, most of the unauthorized are likely to stay in the United States although they may move out of E-Verify states to areas without such laws.
5. Annual wages among Mexican immigrants are 40 percent lower than among prime-age native workers but, surprisingly, held up better during the decade. Mexican immigrant wages declined about 3 percent between 2000 and 2010 in inflation-adjusted terms, whereas native wages fell nearly 7 percent.
6. Over the decade, the largest income declines were among recent arrivals, down 12 percent, and the smallest declines among natives, down 6 percent. Among all Mexican immigrants, median income fell nearly 11 percent from 2000 to 2010.
7. There are nearly 2.5 million female workers in the 2010 Mexican immigrant workforce, up from 1.5 million in 2000. Over the last decade, changes among female workers mirrored those among males although education levels showed a more pronounced increase. In both 2000 and 2010, Mexican immigrant women were more educated than the men and the gap increased.
8. Mexican male immigrants are overwhelmingly concentrated in just six occupational categories: construction, manufacturing, food service, maintenance, transportation, and farming and fishing.
9. Due to slower job growth, increased control along the U.S. – Mexico border, state anti-immigrant laws and stricter enforcement of U.S. labor law, it is estimated that during the years 2010–2020, 1.8 million Mexicans will not emigrate to the U.S, of whom 580,000 will presumably be incorporated into the informal sector of the Mexican economy. Therefore, the Mexican informal sector is currently a more significant "safety valve" for jobs than migration.
10. According to existing trends and projections of migration and Mexico's economic growth, GDP needs to grow by about a half percentage point more per

year to absorb the increase in the number of workers who will not be able to migrate to U.S.

11. Even though the number of return migrants is large, their occupational structure remained largely unchanged during the first decade of this century, as opposed to the total employed population that experienced a significant shift from agriculture to services.
12. As for the work status of return migrants, there is a noticeable increase in the proportion of farmhands in rural and semi-urban regions. There is some wage improvement in 2010 compared to 2000 in both populations in almost all regions. Return migrants have similar incomes as the rest of the workforce, but in regions with a migration tradition their incomes are slightly higher. Past scarcity caused by emigration seems to benefit these large return flows.
13. In comparatively better-off Western Mexico, where labor had become scarce as a result of massive emigration, return migrants have easily entered formal and informal jobs. This is not the case in poorer areas of the country.
14. During the study period there was no significant progress in educational levels of return migrants. The urban population has a slightly larger percentage with at least 1 year of higher education compared to that of return migrants.

2.7.2 Recommendations

The major recommendations include:

1. Reconsider the assumptions in some U.S. sectors that low-skilled unauthorized or guest workers will continue to be available, and decide how labor, tax, trade, and migration policies can and should interact to shape the demand for low-skilled Mexican and other migrant workers. For example, in a world of freer trade, should immigration policies support private decisions to plant apple trees in remote areas that will be profitable only if foreign workers are available at near the minimum wage to harvest them?
2. Consider the implications of current federal and state interior enforcement efforts, including circulating unauthorized workers between employers, pushing workers off payrolls and into self-employment, and rising document fraud. Most unauthorized workers detected by current workplace enforcement efforts are not removed from the U.S., but those who remain are more likely to need public assistance and less likely to gain the experience that would enable them to climb the U.S. job ladder, which may make it harder for their U.S.-born children to achieve economic mobility.

3. If Mexican emigration pressures continue to decline for economic growth and fertility reasons, U.S. employers could seek low-skilled workers elsewhere and policies could be put in place to enable such labor migration. On the other hand, U.S. labor, tax, trade, and migration policies could be changed to reduce the demand for low-skilled workers in some sectors such as agriculture by curbing tax and irrigation subsidies that encourage labor-intensive production or, alternatively, imports could be allowed to increase.
4. It is expected that Mexican emigrants will number less than the almost half a million per year reached during 1990–2005. Also return migration may continue along with the slow growth in the U.S. and the relatively improved conditions in Mexico. Thus, there will be continued pressure on the labor market in Mexico. We urge Mexican lawmakers to design policies to increase employment in those sectors and poorer regions with large migration intensity, that is, in rural and semi-urban areas, focusing on agriculture, construction, and services. Along with these policies, programs will be needed for training and education in order to increase the number of skilled workers and the level of schooling of the population. Additionally, the quality of education at all levels has to be improved, including English language instruction. In this scenario, Mexico can no longer sustain an isolated and limited migration policy; it has to be integrated with industrial, regional, and educational policies. At the same time, specific programs for returnees should be intensified from near-insignificance and their management decentralized to allow the participation of local governments and NGOs.
5. The Mexican economy needs to grow more than 5 percent annually to fully employ the population of working age plus deterred migrants mostly in the formal sector. A sound strategy could be to encourage micro, small, and medium size informal enterprises to become formal-sector firms. Also, private and public investment may be concentrated in "nodal regions" that already experience dynamic growth; these may attract domestic migrants from surrounding, depressed areas.
6. The U.S. and Mexican governments could explore new creative strategies to take advantage of policy changes in Mexico and the U.S. For example, could family participation in Mexico's "*Prospera*" (previously *Oportunidades*) or other public assistance program, combined with refunds of U.S. Social Security and UI taxes, support a bi-national guest worker program that provides workers who return at the end of their contracts with payments that could be matched by government funds to encourage development?[47]

[47] See Escobar, A. (2008). Mexican Policy and Mexico-U.S. Migration. In: A. Escobar & S. Martin (eds.). *Mexico-U.S. Migration Management: A Binational Approach* (pp. 179–216). Lanham, MD: Lexington Books.

Chapter 3
Educating Across Borders: The Well-Being of Students from Mexican Immigrant Families in the United States and in Mexico

Silvia Giorguli, Bryant Jensen, Frank Bean, Susan Brown, Adam Sawyer, and Víctor Zúñiga

3.1 Introduction

Often lost in the deluge of policy opinions regarding international migration management is the development and well-being of children and youth who in one way or another are affected by their parents' decisions to leave communities of origin in Mexico for opportunities in the United States. The experiences of these students are diverse. Some migrate at an early age with their parents, others take on solitary migratory journeys during adolescence, and yet others cross the border over and again, leading truly transnational lives. Most, however, are affected by migration less directly, through the international migration experiences of their parents and/or

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other relatives (resulting, among other things, in stresses associated with family separation).

This chapter documents the "educational well-being" of Mexican-origin children and youth who have been affected—whether directly or less directly—by international migration. Our definition of well-being includes the quantity and quality of schooling children of Mexican immigrants receive in both U.S. and Mexican settings. We measure "quantity of schooling" through enrollment rates and years of educational attainment. Quality includes *how well* Mexican-origin children perform while attending school, primarily through standardized scores on tests of academic achievement. Though the demands for and our understanding of other competencies like social skills and emotional functioning are increasing in importance to school and academic success,[1] we do not discuss these outcomes in this chapter because much less representative information is currently available. To the extent possible, however, we do discuss some of the family, school, and community conditions surrounding the indices of well-being we report. Because we end with a series of education policy recommendations for immigrant children and youth in both countries, we also include some description of the institutions, programs, and policies designed to benefit each of the four student groups described.

These groups include a) those remaining in Mexico while family members work and reside in the U.S., b) immigrant returnees to Mexico, c) first-generation immigrants in the U.S., and d) the children and grandchildren of Mexican immigrants in the U.S. (including 2nd, 3rd, and subsequent generations).[2] Whereas this taxonomy is by no means perfect (e.g., transnational students who frequently border cross do not fit well), it allows us to make some assertions, draw comparisons, and highlight relative educational needs vis-à-vis program and policy initiatives. Indeed, no system that seeks to categorize millions of students across two countries into a few, neat groups is problem free. Thus, it is important to keep in mind while reviewing the data we report and associated conclusions that there is likely a great deal of variation in educational well-being within each group, including student outcomes and the experiences that lead to these outcomes.

Our purpose is to provide a general description of a complex educational landscape for Mexican-origin students affected by immigration across not only two countries, but also among different states, communities, and sociocultural dynamics. For each of the four student groups mentioned we provide some basic demographics (mostly from 2010 decennial census data) to understand how many there are and where they are concentrated geographically. We review relevant literature and, where possible, provide additional information (mostly descriptive) on school

[1] Jensen, B. (2013). Finding Synergy to Improve Learning Opportunities for Mexican-Origin Children and Youth. In: B. Jensen & A. Sawyer (eds.). *Regarding Educación: Mexican-American Schooling, Immigration, and Bi-National Improvement* (pp. 299–324). New York: Teachers College Press.

[2] The methodological appendix at the end of this document includes a brief description of the databases used and a specific definition of each of the subgroups as included in the analysis presented throughout the chapter.

enrollments, educational attainment, and academic achievement. We discuss relevant policies and/or programs for each group, and conclude with a series of policy recommendations for ongoing improvements.

We should be clear that relationships between immigration and educational well-being for Mexican-origin students are multifaceted and understudied. Topics range from the effects of family migration on students' school interest and performance to questions of curricular and instructional compatibility between U.S. and Mexican school settings. Our intent here is not necessarily to provide all of the important questions or answers, but to offer a snapshot in order to unify an emergent and largely disjointed literature. We know that migration and bilateral agreements since the 1960s have deeply connected the U.S. and Mexico economically, socially, and culturally. But to date it is not clear how migration has connected the two countries in terms of educational opportunities for children and adolescents. Without some basic, cross-national information it is difficult to know how to envision educational improvements that lead to improved bilateral relationships through shared economic security and stronger social well-being of our citizens.

We begin by presenting an analytical framework that describes how educational well-being for Mexican-origin students is nested within a series of attributes in formal and informal environments. Home and school settings interact to provide school opportunities along a wide spectrum of quality. The effects of migration variables on educational well-being in sending and receiving communities should be interpreted within this framework.

We then provide a brief description of Mexican and U.S. school systems, drawing comparisons and contrasts. This includes some discussion of the institutional infrastructure between countries, historical developments, current challenges, and major policy debates. We review literature and offer some new analyses to document the educational well-being and basic demographics of each of the four student groups mentioned. We conclude with a set of bi-national policy recommendations to advance the educational well-being of Mexican-origin students affected by U.S.-Mexico migration.

3.2 Framing Contexts for Educational Well-being

When children and/or their family members move to a new place there is a process of adaptation to the new environment—a new neighborhood, a new peer group, and different institutions with their own set of corresponding values, practices, and expectations.[3] Family dynamics also change as a result of this movement, particularly when it leads to household reorganization (e.g., when one or both parents migrate, leaving children behind). This movement and the associated changes to

[3] Reese, L. (2013). Cultural Change and Continuity in U.S. and Mexican Settings. In: B. Jensen & A. Sawyer (eds.). *Regarding Educación: Mexican-American Schooling, Immigration, and Bi-National Improvement* (pp. 213–233). New York: Teachers College Press.

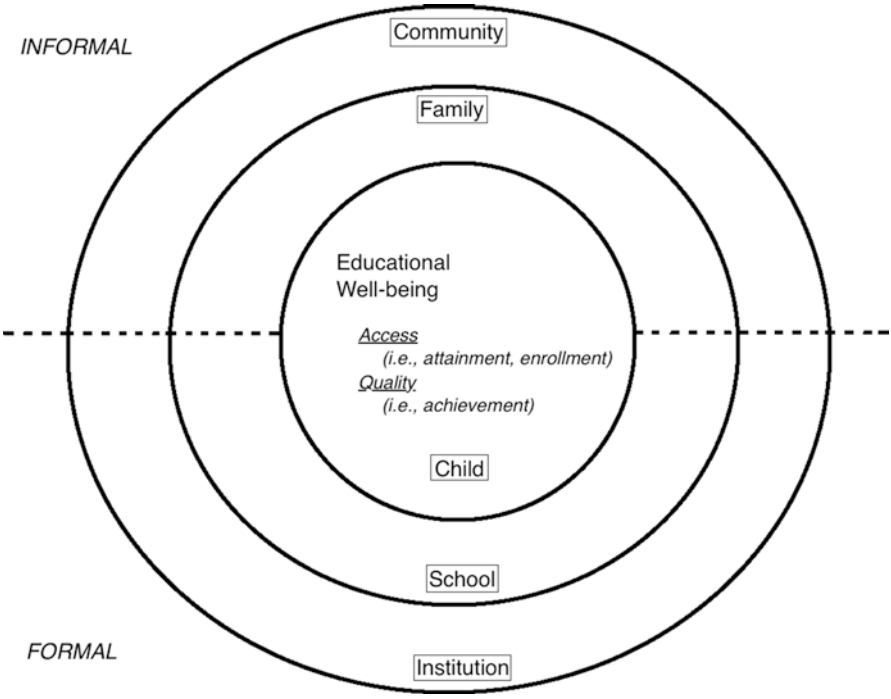

Fig. 3.1 Framing the influence of environmental factors on children's educational well-being

children's environments (in and out of school) influence their educational well-being in diverse and complex ways.[4]

The effects of these environmental changes are mediated by several factors. In Fig. 3.1 we propose a simple framework to organize the simultaneous influences of formal and informal setting variables on the educational well-being of children of Mexican immigration. Whereas an ecological framework is relevant to understand how a wide range of factors interact to shape school access and quality for all children,[5] we focus particularly on how migration-related variables interact to garner influence. It is important to understand, for example, that the effects of family separation on literacy learning might depend on school programs and practices designed to support students from migrant communities. As another illustration, Sawyer recently found that the effects of remittance income on high school

[4] Sawyer, A. (2013). The Schooling of Youth Impacted by Migration: A Bi-National Case Study. In: B. Jensen & A. Sawyer (eds.). *Regarding Educación: Mexican-American Schooling Immigration, and Bi-national Improvement* (pp. 189–212). New York: Teachers College Press.

[5] Bronfenbrenner, U. (1979). *The Ecology of Human Development: Experiments by Nature and Design.* Cambridge: Harvard University Press.

completion in rural Oaxaca depended on the educational levels of students' mothers.[6] Those whose mothers had higher levels of formal schooling demonstrated significant benefits of remittance income on high school completion rates, whereas those whose mothers had little formal schooling did not.

According to our model, not only do migration variables interact to influence children's educational well-being, but they are "nested" within each other as well. That is, family and school variables are shaped by larger institutional and community processes, respectively, so that the educational well-being of children are functions of local *and* more global factors. School procedures are driven by state mandates, just as family routines and practices are associated with infrastructure and opportunities afforded in the community.

Of course, there is much we do not understand to date about the relationship between transnational migration and educational well-being. The research literature remains limited. Thus, the framework we propose and subsequent literature we review is as much a call for further research as it is a synthesis of the current state of knowledge. We need to know much more about how the movement of individuals and families across the U.S.-Mexico border facilitate and inhibit educational opportunities for minors. We need to know, for example, how:

- the "culture of migration"[7] is associated with the educational expectations and aspirations of youth and their families in both Mexico and the United States[8];
- the emotional costs of international migration influence academic learning opportunities;
- local labor opportunities influence educational well-being;
- migration variables interact with other family characteristics (like socioeconomic status) to influence educational well-being; and
- school programs and classroom practices can better respond to the specific needs of Mexican-origin children from immigrant families.

To begin to grapple with these issues, it is helpful to draw some contrasts and comparisons between U.S. and Mexican educational systems. In the section that follows we describe the two systems, focusing on the structures, programs, and practices of particular relevance to Mexican-origin children of immigration, on both sides of the border.

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[6] Sawyer, A. (2010). In Mexico, Mother's Education and Remittances Matter in Schoool Outcomes. *Migration Information Source*. Washington D.C.: Migration Policy Institute, <http://www.migrationinformation.org/Feature/display.cfm?ID=775#top>.

[7] Kandel, W. & D. S. Massey (2002). The Culture of Mexican Migration: A Theoretical and Empirical Analysis. *Social Force*, 80(3), 981–1004.

[8] Bachmeier, J. D. & F. D. Bean (2011). Ethnoracial Patterns of Schooling and Work among Adolescents: Implications for Mexican Immigration Incorporation. *Social Science Research*, 40(6), 1579–1595.

3.3 Comparing Mexican and U.S. School Systems

3.3.1 Ambitious Expansion of the Mexican System

Mexico's educational system has rapidly expanded in the last few decades responding to the growth of the school age population, but mainly as a result of an assertive policy focused on increasing enrollment at all levels. Indeed, the population enrolled in primary and secondary school increased from 11.5 million in 1970 to close to 35 million in 2010.[9] The country reached nearly universal coverage for those ages 5–14 years old (94%) and enrollment is still increasing for those in preschool, upper secondary, and postsecondary education. According to census data, in 2010, 57% of the population ages 15–19 were attending school,[10] which represents an increase of more than ten percentage points compared to 2000.[11] Enrollment in post-secondary education, however, remains relatively low and is increasing at a slower pace. By 2010, 22% of the population 20–24 was attending college.[12]

This expansion has been associated with adjustments to the educational system's infrastructure. Most of the education is provided by the state (90%).[13] Since the 1990s, the years of compulsory education have increased gradually from 6–15 years (three of preschool, six of primary education; three of lower secondary and three of upper secondary; on the structure of the educational system and compulsory levels, see Fig. 3.2). In February 2012, upper secondary became compulsory and the current government has set the goal of reaching universal coverage at this level by the year 2030.

Another important change has been the decentralization of the educational administration. In 1992, elementary and lower educational systems were partially decentralized to state education ministries. This change granted greater control to the states over educational budgets, and it increased their participation in education policymaking.[14] However, decentralization did not change the national curriculum, designed by federal authorities, which states and associated schools are required to

[9] Secretaría de Educación Pública (SEP) (2012). Estadística e Indicadores Educativos por Entidad Federativa. Sistema Nacional de Información Educativa, <http://www.snie.sep.gob.mx/indicadores_x_entidad_federativa.html>.

[10] Instituto Nacional de Estadística, Geografía e Informática (INEGI) (2010). *Censo de Población y Vivienda 2010*, <http://www.censo2010.org.mx/>.

[11] Organisation for Economic Co-Operation and Development (OECD) (2011). *Education at a Glance 2011: OECD Indicators*. s.l.: OECD Publishing.

[12] Instituto Nacional de Estadística, Geografía e Informática (INEGI) (2010), Metodología del Censo de Población y Vivienda 2010, <http://www.censo2010.org.mx/http://www.inegi.org.mx/est/contenidos/español/metodologias/censos/cat-cpv2000.pdf>.

[13] Secretaría de Educación Pública (SEP) (2012). Estadística e Indicadores Educativos por Entidad Federativa. Sistema Nacional de Información Educativa, <http://www.snie.sep.gob.mx/indicadores_x_entidad_federativa.html>.

[14] Santibañez, L., G. Vernez & P. Razquin (2005). *Education in Mexico: Challenges and Opportunities* (pp. 8–9). Santa Monica: RAND Corporation.

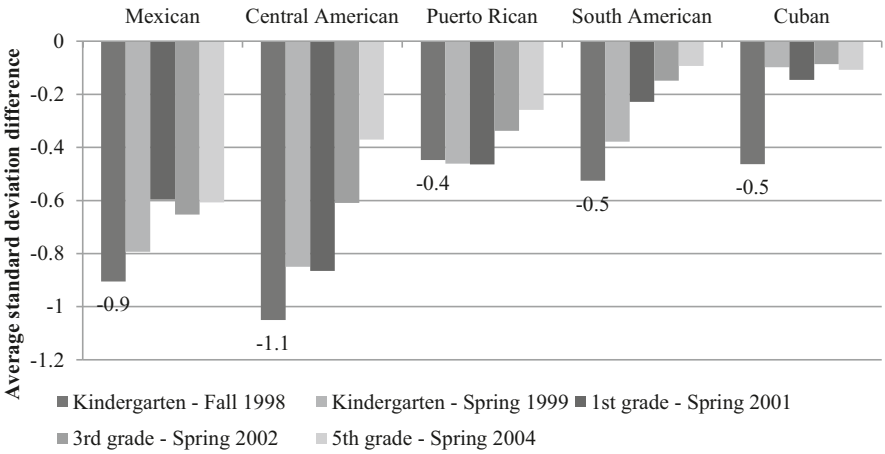

Fig. 3.2 Estimated math performance gaps, by country of origin—standard deviations below the White, non-Hispanic performance. (Source: Galindo 2013, 66)

follow. Moreover, teachers and administrators still have little autonomy to make curricular, instructional, or personnel decisions.[15]

This restriction of decision-making authority at the local level and curricular inflexibility are paradoxical in a socially heterogeneous and unequal country.[16] The current curriculum does not respond to the educational needs of minority student populations like those who move from the U.S. and integrate into Mexican schools.[17] The system is simply not prepared to incorporate this growing population. Although the absolute numbers of immigrants from the U.S. may seem small and will not necessarily have an impact at the national level, in certain regions and municipalities they have a greater relative importance.

Since its conception, the educational system in Mexico has been characterized by unequal access and quality—particularly between rural and urban communities

[15] Santibañez, L., G. Vernez & P. Razquin (2005). *Education in Mexico: Challenges and Opportunities* (p. 10). Santa Monica: RAND Corporation.

[16] Arnaut, A. & S. Giorguli (2010). Introducción general. In: A. Arnaut & S. Giorguli (eds.). *Los grandes problemas de México: educación* (vol. vii, pp. 13–32). Mexico: El Colegio de México.

[17] Zúñiga, V., E. T. Hamann & J. Sánchez (2008). *Alumnos transnacionales: escuelas mexicanas frente a la globalización*. Mexico: Secretaría de Educación Pública; Zúñiga, V. & E. T. Hamann (2009). Sojourners in Mexico with U.S. School Experience: A New Taxonomy for Transnational Students. *Comparative Education Review*, 53(3), 329–353; Hamann, E. T. & V. Zúñiga (2011). Schooling and the Everyday Ruptures Transnational Children Encounter in the United States and Mexico. In: C. Coe, R. R. Reynolds, D. A. Boehm, J. M. Hess & H. Rae-Espinoza (eds.). *Everyday Ruptures: Children, Youth, and Migration in Global Perspective* (pp. 141–160). Nashville: Vanderbilt University Press; and Zúñiga, V. & E. T. Hamann (2013). Understanding Mexican-American Children. In: B. Jensen & A. Sawyer (eds.). *Regarding Educación: Mexican-American Schooling, Immigration, and Bi-National Improvement* (pp. 172–188). New York: Teachers College Press.

and between indigenous and non-indigenous students.[18] In spite of the educational gains in enrollment in rural areas and among indigenous groups during recent decades, the lack of efficient compensatory policies in education resulted in the maintenance of a pattern of inequality similar to that of the mid- seventies.[19] The emphasis on the expansion of the educational system over its quality created a new line of social stratification.[20]

This is reflected in the differentiated access to schools of higher quality—increasingly associated with the divide between public and prestigious private schools.[21] Differences in school quality also occur within the public educational system. Resources available to schools vary greatly, for example, between rural and urban areas and depending on the school type (e.g., "General" vs. "Technical" vs. Multigrade schools).

The expansion of lower secondary school (or "middle school") illustrates the creation of different options with different levels of school quality. Growth in lower secondary enrollments have been mainly attained by increasing the capacity of distance-learning through the *telesecundarias*,[22] which consist of satellite lectures in rural schools via TV programs with the assistance of one teacher per grade who accompanies students in their lessons and schoolwork.[23] These schools grew much faster than the other lower secondary options and, in 2010, they accounted for 20%

[18] Mier & Terán, M. & C. Rabell (2003). Inequalities in Mexican Children's Schooling. *Journal of Comparative Family Studies*, 34(3), 415–454; Solís, P. (2010). La desigualdad de oportunidades y las brechas de escolaridad. In: A. Arnaut & S. Giorguli (eds.). *Los grandes problemas de México: educación* (vol. vii, pp. 599–622). Mexico: El Colegio de México; and Treviño, E. (2013). Learning Inequality among Indigenous Students in Mexico. In: B. Jensen & A. Sawyer (eds.). *Regarding Educación: Mexican-American Schooling, Immigration, and Bi-National Improvement* (p. 95). New York: Teachers College Press.

[19] Martínez, F. (2002). Nueva visita al país de la desigualdad: la distribución de la escolaridad en México, 1970-2000. *Revista Mexicana de Investigación Educativa*, 7(16), 415–443.

[20] Solís, P. (2010). La desigualdad de oportunidades y las brechas de escolaridad. In: A. Arnaut & S. Giorguli (eds.). *Los grandes problemas de México: educación* (vol. vii, p. 599). Mexico: El Colegio de México.

[21] Reimers, F. (2006). Education and Social Progress. In: V. Bulmer-Thomas, J. H. Coatsworth & R. Cortés (eds.). *The Cambridge Economic History of Latin America* (vol. 2, pp. 427). New York: Cambridge University Press.

[22] In rural settings, the implementation of compensatory social programs (mainly *Progresa/*Oportunidades) based on cash transfers conditional on the attendance of children under 21 years of age may have also been important in raising the enrollment, in particular in lower secondary and for women. See Meza, L. & C. Pederzini (2009). Migración internacional y escolaridad como medios alternativos de movilidad social: el caso de México. *Estudios Económicos*, 1, 163–206.

[23] Santibañez, L., G. Vernez & P. Razquin (2005). *Education in Mexico: Challenges and Opportunities* (pp. 8–9). Santa Monica: RAND Corporation; and Cárdenas, C. (2010). Modalidades diferenciadas: educación comunitaria y telesecundaria. In: A. Arnaut & S. Giorguli (eds.). *Los grandes problemas de México: educación* (vol. vii, pp. 547–576). Mexico: El Colegio de México.

of the total enrollment.[24] In poor states, like Chiapas or Oaxaca, this percentage is even higher (45% and 40%, respectively).[25] Though *telesecundarias* have made it possible to provide lower secondary education to isolated rural communities, they do not compensate for socioeconomic and educational disadvantages of students in these areas. Moreover, some argue that the poor quality of rural school programs not only reproduce the structure of social inequality in Mexico, but actually create even wider social divides. The results in terms of achievement of students in *telesecundaria* are far below those of other lower-secondary options.[26]

The rural-urban divide in school quality is particularly relevant to the educational well-being of children of Mexico-U.S. migration. The prevalence of households with migration experiences in rural settings is substantially higher than the national level (see Table 3.1). Thus the local setting influences the way the exposure to international migration is associated with the educational trajectories of children in Mexico. Policy recommendation should be mindful of this point.[27]

Table 3.1 Structure of the Mexican educational system and students enrolled in 2010–2011

Levels and duration			Students enrolled (2011)
Tertiary education (4–5 years)			2,705,190
Compulsory education	Upper secondary (3 years)	Technical education	376,035
		Academic track	3,811,473
	Lower secondary (3 years)	General	3,143,106
		Technical	1,731,517
		Distance learning (Telesecundaria)	1262, 923
	Elementary (6 years)		14,887,845
	Pre-school (3 years)		4,641,060

Source: Authors' elaboration based. Data for the number of students enrolled for the 2010–2011 academic year come from SEP (2012)

[24] Secretaría de Educación Pública (SEP) (2012). Estadística e Indicadores Educativos por Entidad Federativa. Sistema Nacional de Información Educativa, <http://www.snie.sep.gob.mx/indicadores_x_entidad_federativa.html>.

[25] Secretaría de Educación Pública (SEP) (2012). Estadística e Indicadores Educativos por Entidad Federativa. Sistema Nacional de Información Educativa, <http://www.snie.sep.gob.mx/indicadores_x_entidad_federativa.html>.

[26] Cárdenas, C. (2010). Modalidades diferenciadas: educación comunitaria y telesecundaria. In: A. Arnaut & S. Giorguli (eds.). *Los grandes problemas de México: educación* (vol. vii, pp. 547–576). Mexico: El Colegio de México; and Santibañez, L. & J. F. Martínez (2010). Políticas de incentivos para maestros: Carrera Magisterial y opciones de reforma. In: A. Arnaut & S. Giorguli (eds.). *Los grandes problemas de México: educación* (vol. vii, pp. 125–158). Mexico: El Colegio de México.

[27] Gender inequalities are not treated in this section as there are very small differences in enrollment and attainment between men and women in the younger generation. In fact, there may even be some advantage in terms of enrollment for women in upper secondary and tertiary education. See Mier y Terán, M. & C. Pederzini (2010). Cambio sociodemográfico y desigualdades educati-

The participation of Mexico in international assessments of student academic achievement also displays the school quality problem across public and the private sectors. The Program for International Student Assessment (PISA) by the Organization for Economic Co-operation and Development (OECD) is the most common of these. On these tests, Mexico consistently falls among the lowest levels of academic performance compared to other OECD countries.[28]

Mexico currently conducts regular, nationally representative assessments of student achievement of its own, across grade levels and content areas. Results from these large-scale assessments demonstrate large and consistent differences in learning quality across school type.[29] Students in private schools (primary and secondary alike) perform much higher than those in public schools, while those in urban public schools perform substantially better than those in rural and indigenous (or multilingual) schools.

Improving student achievement has become a goal of recent programs in Mexico. For example, teachers are now being evaluated for their content and pedagogical knowledge, and the program *Carrera Magisterial* provides teachers with economic compensations based on the results of their evaluations. Other programs and actions—such as *Programa Escuelas de Calidad* through the *Consejo Nacional de Fomento Educativo*[30]—focus on increasing the participation of local actors (such as teachers and school administrators) in the educational process. To date, specialists seem to be skeptical on the medium- and long-term benefits of these programs on student achievement.[31] On the other hand, they should not be altogether dismissed.

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vas. In A. Arnaut & S. Giorguli (eds.). *Los grandes problemas de México: educación* (vol. vii, pp. 623–658). México: El Colegio de México.

[28] Instituto Nacional para la Evaluación de la Educación (INEE) (2011). México en PISA 2009, <http://www.inee.edu.mx/images/stories/Publicaciones/Estudios_internacionales/PISA_2009/Completo/pisa2009.pdf>; and Organisation for Economic Co-Operation and Development (OECD), (2010). PISA 2009. Results: What Students Know and Can Do. Student Performance in Reading, Mathematics and Science, vol. 1, <http://www.oecd.org/pisa/pisaproducts/48852548.pdf>.

[29] Instituto Nacional para la Evaluación de la Educación (INEE) (2011). México en PISA 2009, <http://www.inee.edu.mx/images/stories/Publicaciones/Estudios_internacionales/PISA_2009/Completo/pisa2009.pdf>; Organisation for Economic Co-Operation and Development (OECD), (2010). PISA 2009. Results: What Students Know and Can Do. Student Performance in Reading, Mathematics and Science, vol. 1, <http://www.oecd.org/pisa/pisaproducts/48852548.pdf>; and Santibañez, L., G. Vernez & P. Razquin (2005). *Education in Mexico: Challenges and Opportunities* (pp. 8–9). Santa Monica: RAND Corporation.

[30] The *Consejo Nacional de Fomento Educativo* (National Council for the Promotion of Education) is a decentralized public organization that designs actions and programs to improve the learning environment at schools and to increase the social participation in the planning and implementation of educational programs.

[31] On *Carrera Magisterial,* see Santibañez, L. & J. F. Martínez (2010). Políticas de incentivos para maestros: Carrera Magisterial y opciones de reforma. In: A. Arnaut & S. Giorguli (eds.). *Los grandes problemas de México: educación* (vol. vii, pp. 125–158). Mexico: El Colegio de México. For a review of the program *Escuelas de Calidad*, see Bracho, T. (2010), Política educativa y relaciones intergubernamentales. Aprendizajes desde el Programa Escuelas de Calidad. In: A. Arnaut & S. Giorguli (eds.). *Los grandes problemas de México: educación* (vol. vii, pp. 209–232). México: El Colegio de México.

Such programs have the potential to address the needs of schools and teachers to retain and improve the performance of children in Mexican communities impacted by international migration.

Finally, aside from the need to improve the school quality and student achievement, the educational system in Mexico faces a pervasive student retention problem from middle school (i.e., lower secondary) through the upper grades. Whereas most students who start elementary school (grades 1 through 6) finish (above 95%), 85% of those who enrolled in lower secondary finish, and the proportion notoriously decreases for upper secondary (54%).[32] Public policies like the provision of cash transfers for those who move from one grade to the other or the flexibility of the system (for example, the variety of options to finish upper secondary) have been implemented in the recent years. However, retention remains a major challenge across the country, especially among low-income households and in rural communities. More research is needed to understand how school, family, and other factors interact to produce the inordinate amount of dropouts.

3.3.2 Mexican Initiatives for Migrant Children

For the last 40 years, the Mexican government has been increasingly engaged in efforts to cultivate the relationships with Mexicans living and working abroad.[33] The explosion of family migration to U.S. in recent decades and the increasing number of Mexican children moving across the border has led the Mexican government to establish a series of educational initiatives for these children. Since the 1970s, the Mexican education ministry, *Secretaría de Educación Pública* (SEP), has developed and implemented programs intended to address the educational needs of Mexican nationals in U.S. These initiatives became institutionalized through the *Programa para las Comunidades en el Exterior,* which started in 1990, and later with the formation of the *Instituto para los Mexicanos en el Exterior*, founded in 2003. Both had among their main goals to strengthen ties with the Mexican diaspora and to create mechanisms to improve the conditions of Mexicans living in U.S.[34]

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[32] Secretaría de Educación Pública (SEP) (2012). Estadística e Indicadores Educativos por Entidad Federativa. Sistema Nacional de Información Educativa, <http://www.snie.sep.gob.mx/indicadores_x_entidad_federativa.html>.

[33] LeBlanc, J. (ed.) (1996). *Children of La Frontera: Binational Efforts to Serve Mexican Migrant and Immigrant Students.* Charleston: eric Clearinghouse on Rural Education and Small Schools; and Martínez-Wenzl, M. (2013). Bi-National Education Initiatives: A Brief History. In: B. Jensen & A. Sawyer (eds.). *Regarding Educación: Mexican-American Schooling, Immigration, and Bi-National Improvement* (pp. 279–298). New York: Teachers College Press.

[34] LeBlanc, J. (ed.) (1996). *Children of La Frontera: Binational Efforts to Serve Mexican Migrant and Immigrant Students.* Charleston: eric Clearinghouse on Rural Education and Small Schools; and Martínez-Wenzl, M. (2013). Bi-National Education Initiatives: A Brief History. In: B. Jensen & A. Sawyer (eds.). *Regarding Educación: Mexican-American Schooling, Immigration, and Bi-National Improvement* (pp. 279–298). New York: Teachers College Press.

The *Programa Binacional de Educación Migrante* (or PROBEM) was created to improve educational well-being for children of immigrants by reducing differences in educational experiences between Mexican- and U.S.-born students. PROBEM included a bi-national teacher exchange program, adult education, bilingual training for teachers, donations of school materials in Spanish (mainly, free text books), and on-line high school curricula, and transfer documents for students attending school in both countries.[35] Furthermore, the Mexican government has negotiated different collaborative efforts at the state level. To date, there are official educational partnerships with California, North Carolina and Oregon.[36]

Graciela Orozco points that, although important, these programs since their conception have lacked continuity, visibility, and adequate financing to substantively address the educational needs of Mexican populations in the U.S.[37] They lack a fixed budget, and coordination among the institutions involved is inadequate. Additionally, rigorous program evaluations do not exist.[38]

Most of the educational programs developed to support children of immigrants have focused on Mexican-origin children living in U.S. Little has been done from the U.S. or Mexican side to address educational needs of migrant children who returned to Mexico after living and attending school in the U.S. Many of these children are U.S.-born citizens and are proficient in English.[39] In spite of the growing number of transnational students, they are in many cases invisible to the teachers

[35] LeBlanc, J. (ed.) (1996). *Children of La Frontera: Binational Efforts to Serve Mexican Migrant and Immigrant Students.* Charleston: eric Clearinghouse on Rural Education and Small Schools; and Martínez-Wenzl, M. (2013). Bi-National Education Initiatives: A Brief History. In: B. Jensen & A. Sawyer (eds.). *Regarding Educación: Mexican-American Schooling, Immigration, and Bi-National Improvement* (pp. 279–298). New York: Teachers College Press.

[36] Miller, R. (1996). Mexico's Role in U.S. Education: A Well-Kept Secret, en J. LeBlanc (ed.). *Mexican Migrant and Immigrant Students* (pp. 103–116). Charleston: eric Clearinghouse on Rural Education and Small Schools; and Martínez-Wenzl, M. (2013). Bi-National Education Initiatives: A Brief History. In: B. Jensen & A. Sawyer (eds.). *Regarding Educación: Mexican-American Schooling, Immigration, and Bi-National Improvement* (pp. 279–298). New York: Teachers College Press.

[37] Orozco, G. (2010). Antecedentes en la colaboración binacional, documento presentado en Students We Share Binational Conference. Mexico, January 15, <http://civilrightsproject.ucla.edu/research/k-12-education/language-minority-students/the-students-we-share-a-binational-conference>.

[38] For a detailed description of the different educational programs designed and implemented by the Mexican government for Mexicans in US, see Martínez-Wenzl, M. (2013). Bi-National Education Initiatives: A Brief History. In: B. Jensen & A. Sawyer (eds.). *Regarding Educación: Mexican-American Schooling, Immigration, and Bi-National Improvement* (pp. 279–298). New York: Teachers College Press.

[39] Hamann, E. T., V. Zúñiga & J. Sánchez (2010). Transnational Student's Perspectives on Schooling in the United States and Mexico: The Salience of School Experience and Country of Birth. In: M. O. Ensor & E. Gózdziak (eds.). *Children and Migration: At the Crossroads of Resiliency and Vulnerability* (pp. 230–252). New York: Palgrave Macmillan; and Zúñiga, V. & E. T. Hamann (2013). Understanding Mexican-American Children. In: B. Jensen & A. Sawyer (eds.). *Regarding Educación: Mexican-American Schooling, Immigration, and Bi-National Improvement* (pp. 172–188). New York: Teachers College Press.

and school administrators.[40] Part of the reason is that we know very little about these transnational students. Greater research and policy attention is needed to develop effective programs, curricula, and pedagogical tools for these students.

3.3.3 U.S. System at a Crossroads

Unlike Mexican schools, the elementary and secondary school system in the United States is administered mostly at the local level. The U.S. Department of Education provides grants and develops initiatives to address nationwide educational problems, but most educational policy-making occurs at the state level, either by public vote or congressional legislation. Local educators who are supervised by school district administrators and school principals then enact state policies and programs. School districts range widely in size, from a couple thousand to nearly 700,000 students in the Los Angeles Unified School District. Some districts include elementary and secondary schools. Others include one or the other.

School districts have a wide range of autonomy to select curricular materials and employ instructional and professional development models. All approaches, however, are expected to address the curricular standards outlined by state legislators. Currently there is a movement, sponsored by the National Governors Association and the Council of Chief State School Officers, to align diverse curricular standards of the states with each other in order to devise a set of "common core state standards." All but seven U.S. states (Alaska, Indiana, Minnesota, Nebraska, Oklahoma, Texas, and Virginia) are members of the initiative.[41]

Schooling in the United States tends to begin at kindergarten (age 5 years), though more children are enrolling each year in preschool programs (ages 3 and 4 years). The last decade saw a large growth in preschool enrollments. In 2002, 14 percent of 4-year-old children in the United States were enrolled in preschool, compared to 28 percent in 2011. Enrollment rates are higher among young children from low-income families due to the Head Start program, a federal preschool program originally launched in 1964 and expanded in subsequent decades to improve the health conditions and educational opportunities of U.S. children living in poverty.

U.S. schooling is compulsory through high school (age 18 years). But every year in the U.S. about 1 in 5 students who should graduate from high school do not. The high school completion rate of U.S. students is significantly lower than in most

[40] Soriano, M. (2010). Alumnos transnacionales en escuelas mexicanas. In: P. Leite & S. Giorguli (eds.). *Reflexiones en torno a la emigración mexicana como objeto de políticas públicas* (pp. 57–66). México: Conapo.

[41] Achieve (2013). Closing the Expectations Gap. Annual Report on the Alignment of State K-12 Policies and Practice with the Demands of College and Careers, <http://www.achieve.org/files/2013ClosingtheExpectationsGapReport.pdf>.

other developed countries. As we discuss later, graduation rates are even lower for Mexican-origin students, and these differences have important historical roots.[42]

Indeed, the most pervasive problem historically and currently facing American education is the underperformance of racial and ethnic minorities,[43] including not only Mexican American students and other Hispanics, but also African American, Native American, and Pacific Islander students. For Mexican American students, an historical review of twentieth-century schooling presents a picture of inadequate resources, school segregation, and an inconsistent incorporation of students' native language and culture into academic activities.[44] Whereas opportunistic education policies in the 1960s and 1970s—embraced by national figures like President Lyndon Johnson who himself taught at a rural Texas school for Mexican American students in the late 1920s—opened up a number of bilingual education programs for Mexican American and other language minority students,[45] the overwhelming focus of these programs was not to value cultural diversity or preserve native language maintenance as much as to have students to learn English and quickly assimilate.[46]

A heightened focus nationally on academic underachievement through the 1980s and the development of accountability systems in the 1990s in the U.S. translated into a number of dismissive policies for Mexican American and other language minority students. Restrictive language policies in California proliferated to other states as financial support for states from the federal government became contingent on the enactment of curricular standards and accountability systems outlined in the No Child Left Behind (NLCB) Act of 2001.[47]

The NCLB Act was reauthorized it 2015 as the Every Student Succeeds Act (ESSA). Essentially no evidence exists to suggest that the era of high-stakes testing and accountability systems improved the educational well-being of Mexican American[48] or other ethnic- or racial-minority students.[49] Several considerations are

[42] Jensen, B. & A. Sawyer (eds.) (2013). *Regarding Educación: Mexican-American Schooling, Immigration, and Bi-National Improvement.* New York: Teachers College Press.

[43] Miller, L. S. (1997). *An American Imperative: Accelerating Minority Educational Advancement.* New Haven: Yale University Press.

[44] Jensen, B. & A. Sawyer (eds.) (2013). *Regarding Educación: Mexican-American Schooling, Immigration, and Bi-National Improvement.* New York: Teachers College Press.

[45] Jensen, B. (2008). Immigration and Language Policy. In: J. M. González (ed.). *Encyclopedia of Bilingual Education* (pp. 372–377). Thousand Oaks: Sage Publications.

[46] Blanton, C. K. (2004). *The Strange Career of Bilingual Education in Texas, 1836-1981*. College Station: Texas A&M University Press; and Carter, T. P. & R. D. Segura (1979). *Mexican Americans in School: A Decade of Change*. New York: College Entrance Examination Board.

[47] Gándara, P. C. & M. Hopkins (2010). *Forbidden Language: English Learners and Restrictive Language Policies.* New York: Teachers College Press.

[48] Gándara, P. C. & F. Contreras (2009). *The Latino Education Crisis: The Consequences of Failed Social Policies*. Cambridge: Harvard University Press; and Jensen, B. & A. Sawyer (eds.) (2013). *Regarding Educación: Mexican-American Schooling, Immigration, and Bi-National Improvement.* New York: Teachers College Press.

[49] Fuller, B., J. Wright, K. Gesicki & E. Kang (2007). Gauging Growth: How to Judge No Child Left Behind? *Educational Researcher*, 36(5), 268–278.

important as ongoing proposals for federal legislation are presented and debated, such as a) assessment accommodations for English Language Learners (ELLs), b) teacher training focused on the needs of culturally and linguistically diverse students, and c) the need to consider a broader array of student competencies (e.g., cooperation, communication) for success in the job market and civic society.[50]

3.4 Educational Wellbeing of Children of International Migrants in Mexico

Migration from Mexico to U.S. and return migration from U.S. to Mexico have been generally seen as geographic movements of adults who participate as actors of the interplay of labor markets in both countries. This traditional view overlooks an emergent process: the involvement of children in migratory flows that follow the general trends and changes in the mobility patterns of adults between Mexico and U.S. Whereas return migration of children to Mexico has increased since 1990, the past 5 years have seen notable increases. Some of these children were born in Mexico, others in U.S. Regardless the country of birth, some began their schooling in Mexico, and then they attended American schools. Among those children, some returned to Mexico and they are attending the schools of Mexico. There are other children who began their schooling in U.S. and, for different reasons, they moved to the Mexican educational system. School trajectories are significantly impacted by the migratory decisions of parents and other family members.[51]

There are also important numbers of students who have never moved from Mexico to the U.S. but they and their educational experiences are affected by international migration decisions because they belong to families divided by national borders or because they are exposed to different values and perceptions about education through migrant relatives.[52] Family resources may be also changed by the migration experience of others[53] as it may imply a loss of social capital and support

[50] Jensen, B. (2013). Finding Synergy to Improve Learning Opportunities for Mexican-Origin Children and Youth. In: B. Jensen & A. Sawyer (eds.). *Regarding Educación: Mexican-American Schooling, Immigration, and Bi-National Improvement* (pp. 299–324). New York: Teachers College Press.

[51] Zúñiga, V., E. T. Hamann & J. Sánchez (2008). *Alumnos transnacionales: escuelas mexicanas frente a la globalización*. México: Secretaría de Educación Pública.

[52] Dreby, J. (2010). *Divided by Borders: Migrants and their Children*. Berkeley: University of California Press; Dreby, J. & L. Stutz (2012). Making Something of the Sacrifice: Gender, Migration and Mexican Children's Educational Aspirations. *Global Networks*, 12(1), pp. 71–90; and Dreby, J. & T. Adkins (2012). The Strength of Family Ties: how US Migration Shapes Children's Ideas of Family. *Childhood*, 19(2), 169–187.

[53] Sawyer, A. (2013). The Schooling of Youth Impacted by Migration: A Bi-National Case Study. In: B. Jensen & A. Sawyer (eds.). *Regarding Educación: Mexican-American Schooling, Immigration, and Bi-national Improvement* (pp. 189–212). New York: Teachers College Press.

for the child or through the reception of remittances.[54] This may modify the opportunities for children remaining behind and their decisions about whether or not to stay in school during crucial stages in their lives.

In this section we explore the sociodemographic and family characteristics of children who are migrants themselves (returnees or children born in U.S.) and of children exposed to migration through the geographical mobility of their parents or other relatives (children remaining behind). Then, based on a variety of results from recent research on the field, we present some evidence of how the exposure to international migration is associated with the educational well-being of children in Mexico.

3.4.1 Population Definitions

As the migratory flows between Mexico and the U.S. have become more heterogeneous, so do the different situations of the children linked to international migration. For the purpose of this chapter, we looked separately at two main groups: a) children remaining behind, and b) immigrant children/returnee children.

Children Remaining Behind

These children are exposed to the migratory flows between Mexico and the U.S. through the experience of others. The way migration influences their daily lives depends on who migrates (their father, their mother, both or other relatives), the amount of separation time, and the quality of family interactions during separation. The 2000 and 2010 census data in Mexico allow us to analyze how many children live in households with recent migration experience to the U.S. (see Table 3.1).[55] In 2000, 5% of the children lived in households where at least one member had recent migration experience in the U.S. In total, they represented more than two million children. Most of them (4.5% of the total) lived in households receiving remittances. By 2010, the number of children in households that received remittances had decreased (from 1.9 million to 1.4 million) and the children in households with at least one return migrant from the U.S. more than tripled. This change between 2000 and 2010 reflect the increase of adult return migration during

[54] Sawyer, A. (2010). *Money is not Enough: Remittances and Other Determinants of Youth Educational Attainment in a Southern-American Migrant-Sending Community.* Doctoral dissertation, Harvard Graduate School of Education.

[55] This chapter gathers information from different datasets: census data (2000 and 2010), the achievement results from *Enlace* 2008 and survey data on transnational students in Jalisco gathered in 2009. The type of information on international migration that each dataset collects is different and is not comparable. This represented a challenge for the integration of the chapter. The methodological appendix describes in detail the datasets and how they capture the international migration of children or of their relatives.

Table 3.2 Population in Mexico under 19 years of age by their exposure to international migration – México, 2000 and 2010

Categories	2000		2010	
	Total	%	Total	%
No migration experience	38,641,798	94.2	38,810,677	93.6
Households with migration experience	191,842	0.5	645,109	1.6
Households receiving remittances	1,851,361	4.5	1,375,241	3.3
Born in US and living in a Mexican headed household	254,718	0.6	563,377	1.4
Return migrants	37,933	0.1	68,881	0.2
Circular migrants	n.a.	n.a.	14,532	0.0
Total	41,012,892	100.0	41,477,817	100.0

Source: INEGI. Mexico General Population and Housing Census 2000 and 2010. For 2010, see also Giorguli and Gutiérrez 2012

Note: Return migrants are those who lived in US 5 years before the census year (2010) and moved to Mexico at some point between 2005 and 2010. Circular migrants refer to those who moved to Mexico and return within the 5 year periods. In the 2000 Census, it is not possible to capture the sociodemographic profile of the population under 19 who were circular migrants

the last 3 years and coincides with the decrease in remittances that has been documented in other studies.[56]

Compared to the national averages, in 2010 there was a greater proportion of children in these households who lived in rural areas and small cities (see Table 3.2). Furthermore, in spite of the geographic dispersion of international migration during the last decade, they were mainly concentrated in the states with a greater migratory tradition (around 40%). In municipalities (Mexico's equivalent to U.S. counties) with a high prevalence of international migration, children remaining behind represented 19% of the population 19 years and younger in 2010.

Census information also captures the exposure to recent migrations for children remaining behind (i.e., movements during the last 5 years). When we look at lifetime exposure—e.g., whether the parents or other relatives ever migrated—the proportions may be higher. For example, according to a nationally representative sample of 9th grade students in Mexico in 2008, only 29% reported to have no relative or parent with migration experience. Another 45% had a relative (not a parent) who had migrated to the U.S. and 25% of the students reported having at least one parent who had ever migrated to the United States. A more detailed look by school type shows that the proportion with parents with migration experience is larger for students in *telesecundarias* (32.5%), suggesting that in rural areas the absence of a parent due to migration may be more frequent (see Table 3.3).

[56] Ruiz, I. & C. Vargas-Silva (2012). Exploring the causes of the slowdown in remittances to Mexico. *Empirical Economics*, 42(3), 745–766.

Table 3.3 Selected characteristics of the population in Mexico under 19 years by international migration exposure. México, 2010

Categories	No migration experience	Households with migration experience	Households receiving remittances	Born in US and living in a Mexican headed household	Return migrants	Circular migrants	Total
Total	**38,810,677**	**645,109**	**1,375,241**	**563,377**	**68,881**	**14,532**	**41,477,817**
	93.6	1.6	3.3	1.4	0.2	0.0	100.0
Sex							
Men	50.7	50.1	50.4	50.5	48.7	53.8	50.7
Women	49.3	49.9	49.6	49.5	51.3	46.2	49.3
Age							
0 to 5	30.5	35.8	27.1	42.8	3.1	11.6	30.6
6 to 12	37.4	34.6	35.4	40.2	45.8	39.6	37.3
13 to 15	15.8	14.3	18.1	9.5	26.0	18.5	15.8
16 to 18	16.3	15.3	19.4	7.5	25.2	30.4	16.3
Place of residence							
Less than 15,000	7.1	12.2	13.2	9.1	8.5	6.8	7.4
15,000 to 99,999	18.1	29.3	28.2	19.3	21.3	20.0	18.6
100,000 +	30.0	35.8	34.3	31.9	34.7	35.4	30.2
Metropolitan area	44.8	22.7	24.3	39.8	35.5	37.9	43.7
Migratory region							
North	19.9	12.8	12.9	46.3	31.2	31.2	19.9
Traditional	22.9	38.7	43.1	30.6	35.0	44.0	23.9
Center	39.3	37.4	34.9	19.2	26.8	18.3	38.8
Southeast	17.9	11.1	9.2	3.9	7.0	6.5	17.3
Municipal migration prevalence							
Low or null	76.5	42.0	40.1	56.0	55.3	52.9	74.5
Medium	17.4	35.0	30.3	27.1	28.8	29.0	18.3
High	6.1	23.0	29.5	16.9	15.9	18.1	7.3

Source: INEGI. Mexico General Population and Housing Census 2000 and 2010. For 2010, see Giorguli and Gutiérrez 2012

Note: Return migrants are those who lived in US 5 years before the census year (2010) and moved to Mexico at some point between 2005 and 2010. Circular migrants refer to those who moved to Mexico and return within the 5 year periods. The 2000 Census does not allow to estimate the information for this group

States were divided in regions in the following way: North region includes Baja California, Baja California Sur, Chihuahua, Coahuila, Nuevo León, Sinaloa, Sonora and Tamaulipas. The traditional region is formed by Aguascalientes, Colima, Durango, Guanajuato, Jalisco, Michoacán de Ocampo, Nayarit, San Luis Potosí and Zacatecas. The Central region includes the Federal District, Guerrero, Hidalgo, México, Morelos, Oaxaca, Puebla, Querétaro and Tlaxcala. The Southeast region incorporates Campeche, Chiapas, Quintana Roo, Tabasco, Veracruz and Yucatán

Immigrant Children and Children Returnees

In 2010, around 650,000 minors reported to have migrated from the U.S. to Mexico. This represents a substantive increase in U.S. to Mexico migration from 2000 (see Table 3.1). As Zúñiga and Hamann argue, children migrating to Mexico have different school experiences.[57] Some are returning to Mexican schools, and others have only attended school in the U.S. Thus they demonstrate different skill levels in Spanish and English. All these factors along with the age at migration back to Mexico influence the way they integrate into Mexican schools, as well as the impact of international migration on their educational well-being.

Children migrating from the U.S. to Mexico, thus, should be considered two groups: a) those born in U.S. who migrate to Mexico with their parents and b) those born in Mexico who lived in the U.S. and returned to Mexico. The first group is larger (see Table 3.1). Around 310,000 of the more than half million children born in the U.S. arrived in Mexico between 2005 and 2010. Their migration is most probably related to the 2008 recession and increase in return migration. They are young children (83% are 12 years or younger), living mainly in urban areas. Most of them probably moved before starting school in Mexico. A large proportion (46%) live in the northern states, but 30% moved to states in the region with a historical and traditional migration to the U.S. (see Table 3.2).[58] The geographic distribution of this population is important as they may represent a larger proportion of the student population in certain states or municipalities. For example, census data show that in some of the northern municipalities, between 15 and 20% of households with children have at least one child living in the U.S.

Young returnees have a different sociodemographic profile from those born in the U.S. They are older; close to 50% are in their teen years. Some of them may have moved with their parents to the U.S. at some point in their lives. Others may have migrated in search of employment. This is especially the case for the oldest group (those between 16 and 18 years of age). Though nearly one in three returnee or circular migrants stay in the northern states in Mexico, most still live in the "traditional" migration region (see Table 3.2).

Nationally representative data do not allow us to explore why young immigrant and returnee populations move. In a study conducted in schools in Jalisco in 2009, children were asked about the migratory decisions of their parents. The most frequent reason respondents gave was family reunification (31 percent). Among the

[57] Zúñiga, V. & E. T. Hamann (2009). Sojourners in Mexico with U.S. School Experience: A New Taxonomy for Transnational Students. *Comparative Education Review*, 53(3), 329–353.

[58] There is a need to explore more in detail this new flow of American children. The large concentration in the North may be a result of an increase in the number of women living close to the border who cross and have their children in the U.S. It is also possible that, as a result of the forced returned migration of adults, some of them stay in the North while awaiting to go back to the U.S. when the situation improves, bringing their children along with them. Both hypotheses remain to be tested in future studies.

other answers given, one is particularly interesting: 8 percent of migrant children stated they moved or returned to Mexico to meet their father, sometimes for the first time in their lives ("I wanted to meet my father, I didn't know him"). Children did not clarify if their fathers were deported or feared deportation. It was clear, however, that their fathers could not cross the border and live with their families. Some children indicated returning because of deportation or fear of deportation (12 percent). Thus, legal status and enforced borders not only separate families but also reunited them in Mexico in some cases.

Another important reason for moving to Mexico was related with family concerns like death, illness, or drug abuse of a family member (13 percent). Others included unfavorable economic/labor conditions in the U.S. (12 percent), and divorce or parental separation/marital troubles (5 percent). When related to a divorce or separation, most children returned to Mexico with their mothers.

Family Arrangements

As previously mentioned, family arrangements mediate to a large extent the way international migration influences children's educational well-being. In all cases, migration alters family organization. We find that most children have experienced periods of separation from their parents, especially from their fathers. In almost all cases with recent migration experiences, the proportion of children living with both of their parents decreases (Table 3.4). In households receiving remittances, children tend to live with their mothers only (42.6%) and within this group we also find the largest proportion of children whose parents are absent (16.8%); in this cases, most of them live with their grandparents. There is a large group of children in a traditional migratory arrangement where the father migrates to the U.S. and sends money back to the mother. It remains to be seen whether the money sent back compensates for the negative effects of the father's absence on their children's educational well-being. Further research is needed to know more about the conditions by which

Table 3.4 Percent distribution of ninth grade students by family migration exposure and type of school. Mexico, 2008

Characteristics	*National*	*Middle school types*			
		General	*Technical*	*Telesecundaria*	*Private*
Total	**1,800,517**	**798,617**	**499,545**	**369,150**	**133,205**
	100.0	**100.0**	**100.0**	**100.0**	**100.0**
Family migration exposure					
None	28.5	30.1	29.3	22.9	31.7
Relatives migrated	44.6	46.0	45.4	39.1	48.0
One parent only	22.5	20.0	21.0	32.8	13.6
Both parents	4.4	3.9	4.3	5.2	6.7

remittances can positively influence children's school enrollment, attainment, and achievement.[59]

Migrant children, immigrants and returnees, in most cases live with both parents (around 60%). Of those who do not, the majority live only with their mothers (between 25 and 29 percent). This first analysis indicates that within the recent increase of the adult return migration, for children in most cases it was related to a family movement where both parents participated. The large proportion of children living with their mother only may be indicative family separation that is driven by increased economic and/or political hardship in the U.S., where the father stays in the U.S. to work and the mother and children return to Mexico. Exploring these patterns and their reasons may be important to anticipate to what extent the stay of returnees and immigrants is temporary or permanent.

Mexican census data allow us to see the current family arrangement. However, in order to analyze how the family movements are linked to children's school outcomes, we would need more information on the separation from the parents. As Table 3.3 shows, in most cases children are separated from only one of their parents (22.5%), typically the father. Although we do not have nationally representative data, a study conducted in schools in Jalisco in 2010 suggested that about 320,000 students (first to ninth graders) were experiencing or had experienced separation from their fathers because of emigration to the U.S. (24%) and about 34,000 from their mothers (2.5%). From the same dataset, we found that migrant children were more exposed to periods of separation from their fathers and mothers than children remaining behind. Among returnees in Jalisco, 61% reported to have been ever separated from their fathers and 27% from their mothers; the same proportions were 54% and 21% respectively among U.S.-born immigrant children. Furthermore, the study also shows that the periods of separation from the mother are more often of less than 2 years (65% of those who reported being apart from their mothers), but for fathers the separation tends to be longer (in half of the cases, of more than 2 years).

3.4.2 Educational Wellbeing

School Enrollment and Educational Attainment

Linking international migration with children's educational wellbeing requires the consideration of several outcomes. First we analyze the impact on school access (i.e., school enrollment and educational attainment). As the enrollment to primary school (through sixth grade) is practically universal, the impact of international migration on enrollment may be seen during the secondary grades (7–12). Given

[59] Sawyer, A. (2010). *Money is not Enough: Remittances and Other Determinants of Youth Educational Attainment in a Southern-American Migrant-Sending Community.* Doctoral dissertation, Harvard Graduate School of Education.

that the teen years represent a crucial stage in terms of the educational career of the youth in Mexico, most of the research conducted on school access has concentrated adolescent enrollment and attainment.[60] Moreover, most of the studies have concentrated on children remaining behind and, more specifically, on the impact of remittances. On the one side, a bulk of the literature has suggested that the income received via remittances may delay the need to start working among Mexican adolescents, allows children to remain longer in school, and may increase children's educational aspirations to the extent that it increases family resources.[61] The argument is that, after covering the expenses of shelter, food and other basic needs, remittance-recipient households may increase the expenditure on education, which may be especially important for entering high school, where school expenses (such as books and other materials) increase and are not covered by the federal government.

Based on his work in Oaxaca, Sawyer also found educational aspirations may be higher among mothers of children in households receiving remittances, regardless of their educational background.[62] Nonetheless, the author also points out that "money is not enough" and that children of more educated mothers have higher probabilities of having success in school and moving into higher educational levels—including college.

Summarizing the results on the research on remittances and educational outcomes (enrollment and attainment), it remains uncertain whether on the whole

[60] See for example: Sawyer, A. (2010). *Money is not Enough: Remittances and Other Determinants of Youth Educational Attainment in a Southern-American Migrant-Sending Community.* Doctoral dissertation, Harvard Graduate School of Education; Sawyer, A. (2013). The Schooling of Youth Impacted by Migration: A Bi-National Case Study, In: B. Jensen & A. Sawyer (eds.). *Regarding Educación: Mexican-American Schooling*; Giorguli, S. E. & I. Serratos (2009). El impacto de la migración internacional sobre la asistencia escolar en México: ¿paradojas de la migración?. In: P. Leite & S. E. Giorguli (eds.). *El estado de la migración: las políticas públicas ante los retos de la migración mexicana a Estados Unidos* (pp. 313–344). Mexico: Consejo Nacional de Población; Hanson, G. H. & C. Woodruff (2003). Emigration and Educational Attainment in Mexico. San Diego: University of California; Kandel, W. & D. S. Massey (2002). The Culture of Mexican Migration: A Theoretical and Empirical Analysis. *Social Force*, 80(3), 981–1004. < http://cpe.ucsd.edu/assets/022/8772.pdf>; McKenzie, D. & H. Rapoport (2006). *Can Migration Reduce Educational Attainment? Evidence from Mexico*. World Bank, Policy Research Working Paper Series, no. 3952; and Meza, L. & C. Pederzini (2009). Migración internacional y escolaridad como medios alternativos de movilidad social: el caso de México. *Estudios Económicos*, 1, 163–206.

[61] Hanson, G. H. & C. Woodruff (2003). Emigration and Educational Attainment in Mexico. San Diego: University of California; Kandel, W. & G. Kao (2001). The Impact of Temporary Labor Migration on Mexican Children's Educational Aspirations and Performance. *International Migration Review*, 35(4), 1205–1231; Sawyer, A. (2010). In Mexico, Mother's Education and Remittances Matter in Schoool Outcomes. *Migration Information Source*. Washington D.C.: Migration Policy Institute, <http://www.migrationinformation.org/Feature/display.cfm?ID=775#top>; and Sawyer, A. (2010). *Money is not Enough: Remittances and Other Determinants of Youth Educational Attainment in a Southern-American Migrant-Sending Community.* Doctoral dissertation, Harvard Graduate School of Education.

[62] Sawyer, A. (2010). *Money is not Enough: Remittances and Other Determinants of Youth Educational Attainment in a Southern-American Migrant-Sending Community.* Doctoral dissertation, Harvard Graduate School of Education.

remittances can buffer the negative impacts of family separation corollary to migration, or if this money alone can incentivize most remittance-receiving adolescents to forego additional schooling in order to migrate to the U.S. Parallel to those studies that point out to a potential benefit in households receiving remittances, others suggest a negative effect—lower outcomes in terms of school enrollment, attainment and transitions between schooling levels when children live in households with migration experience.[63] The argument in this case is that the separation from one or both parents linked to international migration (of the parents or of the children) may be related to a less favorable learning environment. In addition, prior research has found that the separation from at least one parent has an impact on children's well-being and can hinder school motivation and engagement.[64] The link between international migration and the educational trajectories of children remaining behind is mediated by other factors such as the education of the mother, place of residence, and educational opportunities available in the communities of origin.

Another contradictory result is that, although educational aspirations may increase when receiving remittances, migrations intentions may also increase. The "culture of migration," that may develop through family but also through social networks, especially in communities with higher migration rates, generates an environment where the youth may lose interest in school and may spend less effort on school work.[65] In fact, the results from our analyses of *Excale* data showed that, among ninth graders, students' school effort decreases among children whose parents have migrated, especially when both parents (have ever) migrated.

In an analysis based on census data, we observed that the probabilities of staying enrolled in school among Mexican children (14–18 years of age) is slightly higher for boys in homes receiving remittances compared to those with no exposure to family migration and the difference is not significant for women (see Table 3.5). Our results also show that, when there is migration experience in the family and no remittances are received, the probabilities of staying enrolled in school for adolescent boys and girls tend to be lower. In this case whether the family stays in touch

[63] Kandel, W. & D. S. Massey (2002). The Culture of Mexican Migration: A Theoretical and Empirical Analysis. *Social Force*, 80(3), 981–1004; McKenzie, D. & H. Rapoport (2006). *Can Migration Reduce Educational Attainment? Evidence from Mexico*. World Bank, Policy Research Working Paper Series, no. 3952; Miranda, A. (2007). Migrant Networks, Migrant Selection, and High School Graduation in Mexico. iza *Discussion Paper Series*, no. 3204.

[64] Sawyer, A. (2010). In Mexico, Mother's Education and Remittances Matter in Schooxl Outcomes. *Migration Information Source*. Washington D.C.: Migration Policy Institute, <http://www.migrationinformation.org/Feature/display.cfm?ID=775#top>; Sawyer, A. (2010). *Money is not Enough: Remittances and Other Determinants of Youth Educational Attainment in a Southern-American Migrant-Sending Community.* Doctoral dissertation, Harvard Graduate School of Education; and Menjívar, C. & L. Abrego (2009). Parents and Children Across Borders: Legal Instability and Intergenerational Relations in Guatemalan and Salvadoran Families. In: N. Foner (ed.). *Across Generations: Immigrant Families in America* (pp. 160–189). New York: New York University Press.

[65] Kandel, W. & D. S. Massey (2002). The Culture of Mexican Migration: A Theoretical and Empirical Analysis. *Social Force*, 80(3), 981–1004.

Table 3.5 Family arrangements of the population under 19 by exposure to international migration. Mexico 2010

Characteristics	Without migration experience	Household with migration experience	Household receiving remittances	Return migrant	Born in U.S. with Mexican household head	Circular migrant	Total
Total	**38,810,677**	**645,109**	**1,375,241**	**68,881**	**563,377**	**14,532**	**41,477,817**
Living with parents							
Both parents	72.6	75.6	38.8	57.5	62.5	60.0	71.3
Only the mother	17.1	13.4	42.6	26.4	25.6	28.7	18.0
Only the father	2.2	2.3	1.8	3.0	2.4	2.5	2.2
Neither of the above	8.1	8.7	16.8	13.2	9.5	8.8	8.5
Relationship to the household head							
Child	79.5	75.9	61.5	76.3	73.6	82.4	78.8
Grandchild	15.7	17.5	30.8	13.8	22.0	11.3	16.3
Head or spouse	0.9	1.2	0.7	3.0	0.3	2.9	0.9
Other	3.6	5.1	6.5	6.8	3.9	3.3	3.8
None relationship	0.3	0.3	0.4	0.2	0.2	0.0	0.3

Source: Based on estimates from the 2010 Census sample. See Giorguli and Gutiérrez 2012

with the absent relative via remittances makes a difference in the enrollment of adolescent children in Mexico.

Gender also plays a role as men consider migration as a *rite de passage*, seem to be less engaged with schooling when the migrant father is absent, and in general have lower probabilities of staying in school. Regarding the argument on the "culture of migration," a result consistent across different research studies is that as the intensity of migration in the municipality increases, the probabilities of staying in school decrease for both young men and women (Table 3.5).[66]

Different case studies have captured this tension or paradox of the double possible effect of international migration on the schooling of children remaining behind. Teachers and principals in communities with a high prevalence of migration share this perception. Interviewed in 2008, the principal of the high school in a small town in Oaxaca illustrated it clearly: "Fortunately, these kids have resources to be able to study. Most of their parents are in the United States, so they have the resources to

[66] Giorguli, S. E., E. D. Vargas, V. Salinas, C. Hubert & J. E. Potter (2010). La dinámica demográfica y la desigualdad educativa en México. *Estudios Demográficos y Urbanos*, 25(1), 7–44; and Giorguli, S. E. & I. Serratos (2009). El impacto de la migración internacional sobre la asistencia escolar en México: ¿paradojas de la migración?. In: P. Leite & S. E. Giorguli (eds.). *El estado de la migración: las políticas públicas ante los retos de la migración mexicana a Estados Unidos* (pp. 313–344). Mexico: Consejo Nacional de Población

study. The problem is that those students see those in the north living better. They don't want to try hard in their studies because, at the end of the day, those who leave for the north can take care of themselves economically."[67] In all, these results point the special needs of the children in households with migration experience. Within the current discussion on remittances as a factor that may foster development in sending communities, the literature review on education suggests that remittances cannot substitute for formal international and national policies, programs, and other initiatives to promote greater access to high-quality schooling.

As mentioned, limited policy and research attention has been given to the schooling experiences of U.S.-born children of Mexican heritage who migrate to Mexico, or Mexican-born children engaging in circular migration. Our results suggest that experiences vary by place of birth. Among U.S.-born immigrants, the probabilities of staying in school are the highest compared to all the other populations.

Yet, among all immigrant groups, return migrants have the lowest probabilities of school enrollment, which supports the hypotheses that for many of them in their teen years, their own migration may be related to other transitions such as leaving school and starting to work. To increase the enrollment and attainment of adolescent return migrants, we need to further explore the causes that prevent them from going back to school. Administrative barriers to matriculate in high school or college in Mexico (for example, lack of a birth certificate or difficulties to transfer the educational credentials obtained in the U.S. to Mexico) may be also among the reasons for such low probabilities of staying enrolled.

For immigrant children and returnees in school, experiencing international migration during early ages not only interrupts traditional linguistic and academic development, but also their schooling trajectories, in two ways.[68] Based on the study on Jalisco, we found that returnees often have experienced school year repetition, both in the U. S. and Mexico; furthermore, one out of four repeated one school year. In addition, five percent of returnees repeated more than one school year (two or three) and, in some cases, returnees have lost entire school years for different reasons. The most important reason for missing a school year is the timing mismatch between the school calendar and migration cycles. Almost 8 percent of young migrant returnees in Jalisco lost a school year because they could not enter school the moment they arrived to Mexico; they had to wait for the new school year to begin. Second, as an inevitable consequence, returnees are often "left behind" one or two years.

However the migratory experiences of returnees, at least for some of them, may include some academic accomplishments. Particularly interesting is the school

[67] Sawyer, A. (2010). *Money is not Enough: Remittances and Other Determinants of Youth Educational Attainment in a Southern-American Migrant-Sending Community.* Doctoral dissertation, Harvard Graduate School of Education.

[68] Hamann, E. T. & V. Zúñiga (2011). Schooling and the Everyday Ruptures Transnational Children Encounter in the United States and Mexico. In: C. Coe, R. R. Reynolds, D. A. Boehm, J. M. Hess & H. Rae-Espinoza (eds.). *Everyday Ruptures: Children, Youth, and Migration in Global Perspective* (pp. 141–160). Nashville: Vanderbilt University Press.

aspirations among this group. In Jalisco, close to 75 percent of them expressed their desire to enroll in college and pursue a professional career (the percentage for students without migratory experience aspiring to college is lower, 67 percent). Equally valuable is the fact that 64 percent of returnees stated they speak English. Often, they even considered English as their first language. The Jalisco survey measured school success or failure by asking children about their grades in Mexican and American schools. The questions were: "In general, how are your grades in the school now?" and "In general, how were your grades in the schools in the U.S. where you were studying?" Respondents classified their answers in four categories: "bad," "average," "good," "excellent." Paradoxically, 31 percent of returnees' students responded they got excellent grades in American schools while only 8 percent of them reported getting excellent grades in Mexico.

Regarding children born in the U.S., according to the data on Jalisco about 50 percent had attended American schools and the other half arrived to Mexico without school experience in the U.S. That experience is an important variable to be considered as children who were born in the U.S. without experiencing schooling in the country did not suffer the school ruptures and transitions that their peers experienced. It explains why international migrant children who attended American schools showed similar rates of grade retention (23 percent repeated at least one school year), and missed enrollment (9 percent lost an entire school year because they could not be admitted to the school) than returnees did. The opposite is evident for international migrant children who had no school experience in the U.S. They present low rates of retention. Also the family arrangement varies depending on the age of arrival to Mexico. As mentioned, the experience of family separation (from the father or the mother) is a common feature for international migrant children. Nevertheless, the survey in Jalisco found a difference between those who attended school in the U.S. and those who did not. Children who were born in the U.S. and moved to Mexico before they began school lived with their mothers all their lives at a much higher rate than those who had received schooling in the U.S.

An issue that remains to be addressed is how we can explain these contradictory results between school enrollment and attainment, in relation to international migration. Some explanations have already been set and are related to the increase of family resources for children remaining behind—and the opposite effects related to the stress due to the family separation on the school engagement and performance in general. Sawyer (2010) has already pointed out the contradiction between building higher educational expectations in households receiving remittances but a lack of consistency with the results on attainment. The competition between educational expectations vis-à-vis the intentions to migrate also affects the attainment and the enrollment.

The nationwide representative data for ninth graders in Mexico provides additional information on the impact of parental separation on how children perform in school. Students' school effort and parental school support are consistently lower when one or both parents has been absent for a certain period (see Table 3.6). Course failure is also more frequent among children remaining behind, especially when both parents have ever migrated.

Table 3.6 Mexico: Probabilities of Being Enrolled in School by Exposure to International Migration, 2010

	Men		Women	
Variables	Probability	*Sig.*	Probability	*Sig.*
Migration experience				
No migration experience (reference)	0.637	*	0.640	
Households with returned migrants	0.618	*	0.586	*
Households that receive remittances	0.675	*	0.672	
Born in US and living in a Mexican headed household	0.707	*	0.692	*
Return migrants	0.542	*	0.567	*
Circular migrants	0.439	*	0.626	
Municipal migration prevalence				
Low or null	0.655	*	0.640	*
Medium	0.620	*	0.621	*
High	0.605	*	0.601	*

Source: INEGI. Mexico General Population and Housing Census 2010. (See Giorguli and Gutiérrez 2012)

Table 3.7 Selected indicators linked to academic performance among 9th grade students by family migration exposure, 2008

	Family exposure to international migration	Student School Effort		Course failure (one or more)		Parental School Support	
	(frequencies)	Mean	SD	Mean	SD	Mean	SD
No migration experience	28.5	0.06	0.99	−0.04	1.00	0.05	0.99
Relatives migrated	44.6	0.00	1.01	−0.03	1.00	0.02	0.99
One parent only	22.5	−0.05	0.99	0.07	1.00	−0.07	1.00
Both parents	4.4	−0.15	1.04	0.14	1.00	−0.13	1.10
Total	100						

Source: INEE 2008

Note: "Student school effort" is a composite variable that includes: student homework completed last semester, reported weekly homework hours, completing ungraded homework and reported attention in the classroom. "Parental school support" is a composite variable that includes: parental verification of school grades, school course options, parental help with homework

The study on Jalisco gives a more detailed picture of how children perform differently in school depending on their family situation. Based on the data from Jalisco, Zúñiga show some differences in grade repetitions, self-reported bad grades, and educational expectations depending on the duration of the separation from the parents. The absence of the mother seems to have a greater negative effect, especially for those who lived away from their mothers for two or more years (Table 3.7). Grade repetition increases to 10.9% compared to 5.7% for those who have never lived separated from their mothers due to international migration. Similar results are observed on the self-report of bad grades (9% versus 3.9%) and the lower

expectations of getting a college education (58% versus 68%). The differentials for those who lived separated from their fathers are smaller although still notable, in particular among those with two or more years of separation.

Achievement

As mentioned earlier, most of the research on education and migration in Mexico has focused on enrollment and attainment. This chapter contributes to the current research literature by exploring the relationship between student achievement on valid, standardized tests and family migration exposure. In general, we find that family migration exposure can be negatively related with student achievement. That is, Mexican ninth graders who report parental migration perform lower on standardized measures of math, writing and reading than those whose parents have not migrated. Table 3.8 shows *Excale* reading performance scores by family migration exposure and school type in Mexico.[69] As shown, the apparent impact of exposure on academic achievement is particularly strong when both parents have migrated. This group has the lowest average scores. In contrast, having other relatives who have migrated to the U.S. seems to be related to higher scores.

Yet these relationships appear to change by school type. Most notably, students attending *telesecundaria* schools (1 in 5 of all 9th graders)—those most likely to be exposed to family migration, as discussed earlier—appear to benefit academically

Table 3.8 Selected indicators of the impact of parental separation due to international migration on educational outcomes. Jalisco, 2010

Separation from	% of students repeating/ missing one school year or more	% of students declaring bad grades	% of students aspiring to study higher education
Mother			
Never (n = 8388)	5.7	3.9	68.0
Less than 2 years (n = 166)	8.2	3.1	68.0
2 or more years (n = 87)	10.9	9.7	58.0
Father			
Never (n = 6488)	5.4	3.8	70.0
Less than 2 years (n = 1198)	5.6	3.6	62.0
2 or more years (n = 1090)	8.5	5.9	61.0

Source: UDEM/Secretaría de Educación de Jalisco survey November-December 2010 (N = 9701)

[69] Instituto Nacional para la Evaluación de la Educación (INEE) (2011). México en PISA 2009, <http://www.inee.edu.mx/images/stories/Publicaciones/Estudios_internacionales/PISA_2009/Completo/pisa2009.pdf>.

from having only one migrant parent. While overall *telesecundaria* students perform substantially lower than their urban peers, the academic achievement of *telesecundaria* students in families with one migrant parent is stronger than those without any family migration. This finding is paradoxical, and could be deeply connected with the benefits of remittances and other resources that could improve educational wellbeing more broadly among children with larger disadvantages. Whatever the causal mechanism(s), they do not appear to hold for *telesecundaria* students with two migrant parents, suggesting academic problems associated with family disintegration.

These patterns deserve further, close scrutinizing. They show how the impact of international migration on educational achievement is mediated by the context and crossed by the stratification in terms of quality in the Mexican educational system. There are several possible explanations to this apparent impact of family migration on achievement. Children may have periods with lower supervision and less schooling motivation and engagement when their parents are away. It may also reflect the social stress that children face due to the separation from their parents.

Clearly these findings should lead to initiatives that leverage the educational resources associated with family migration, on one hand, while creating better quality learning opportunities for rural students, on the other. Though school enrollment and attainment have dramatically improved over the past couple decades for students in rural settings, the same cannot be said about the quality of rural Mexican schooling. This is reflected year after year in national assessments of student achievement where students attending rural schools (including CONAFE, indigenous, and *telesecundaria* schools) perform a third to a half of a standard deviation, on average, lower than the national norm (importantly, the size of these differences varies by state). Thus the strong relationship between family migration exposure and learning opportunity in rural settings is particularly alarming, and merits much more research and policy attention.

3.5 Educational Well-Being of Children of Mexican Immigration in the U.S.

Currently 1 in 10 children in U.S. primary and secondary schools have a Mexican-born parent and about 1 in 7 are Mexican-origin more broadly (meaning they have a Mexican-born grandparent or great-grandparent).[70] A smaller portion themselves were born in Mexico (less than 10% of all Mexican American students). A majority of all these children, however, live with Mexican-born family members at home. Taken together, over eight million Mexican-origin children and youth have

[70] Passel, J. S. (2011). Flujos migratorios México-Estados Unidos de 1990 a 2010: un análisis preliminar basado en las fuentes de informacion estadounidenses. *Coyuntura Demográfica*, 1, 16–21.

Mexican-born parents.[71] In other words, a majority of the largest Hispanic student group in the United States learns and is socialized with the language, values, and traditions of (mostly rural) Mexican communities.[72]

This situation underlies the ongoing educational vulnerabilities of Mexican American students, on one hand, but also the underemphasized linguistic and interpersonal capabilities of these students on the other. School policies and programs in the United States fail historically and generally to afford educational well-being for Mexican American children and youth, though important strides have been made. Approaching the crossroads of what looks like a new era of schooling for Mexican American students,[73] and for U.S. students at large, we review some data on the educational well-being of Mexican American students. We address two groups: a) Mexican-born children, and the b) children and grandchildren of Mexican immigrants. Whereas the underlying educational problems associated with educational well-being for Mexican American students are generally shared, they tend to take different forms for these two groups (because of socioeconomic, acculturative and legal issues). In what follows we present some salient attributes of the two groups before addressing the educational challenges, policies and programs, and relevant capabilities of Mexican-origin students in U.S. schools.

3.5.1 Population Definitions

Mexican-Born Children

Mexico by far accounts for the largest share of immigrant children in the United States. In 2000, 38 percent of all foreign-born children in preschool through 5th grade were from Mexico, and 37 percent of those in 6th through 12th grade.[74] But first-generation students from Mexico do not constitute the largest share of Mexican American children and youth. Indeed, in their analysis of 2000 Census IPUMS data, Hernandez and colleagues found that less than 8 percent of Mexican American children ages 0–8 years old were actually born in Mexico, compared to 59 percent who

[71] Passel, J. S. (2011). Flujos migratorios México-Estados Unidos de 1990 a 2010: un análisis preliminar basado en las fuentes de información estadounidenses. *Coyuntura Demográfica*, 1, 16–21.

[72] Reese, L. (2013). Cultural Change and Continuity in U.S. and Mexican Settings. In: B. Jensen & A. Sawyer (eds.). *Regarding Educación: Mexican-American Schooling, Immigration, and Bi-National Improvement* (pp. 213–233). New York: Teachers College Press.

[73] Jensen, B. & A. Sawyer (eds.) (2013). *Regarding Educación: Mexican-American Schooling, Immigration, and Bi-National Improvement.* New York: Teachers College Press.

[74] Capps, R., M. Fix, J. Murray, J. Ost, J. S. Passel & S. Herwantoro (2005). The New Demography of America's Schools: Immigration and the No Child Left Behind Act. *The Urban Institute*, September, pp. 1–41, <http://www.urban.org/url.cfm?ID=311230>.

were U.S.-born with Mexican-born parents (i.e., second generation), and the remaining 34 percent U.S.-born with U.S.-born parents (third generation plus).[75]

Analyzing a series of general well-being indicators, Hernandez and colleagues also found that children of Mexican immigrants (including first and second generation immigrants) were more likely than their third-plus-generation peers to live in two-parent households, and to have larger families.[76] However, children of Mexican immigrants were less likely than their U.S. native Mexican American peers to have a parent who was a high school graduate, proficient in English, and stably employed. Indeed, Mexican-origin children in immigrant households were more likely to live in poverty and less likely to be take advantage of public services like preschool.

Hernandez and colleagues also found that Mexican immigrant children in 2000 were geographically concentrated. That is, 3 in 4 lived in just four states: Arizona, California, Illinois, and Texas. This state-level concentration, however, was not as intense as in previous decades. Indeed, Capps et al. found that from 1990 to 2000, several states saw rapid increases of Mexican immigrant enrollment in elementary and secondary schools.[77] States with over 100 percent enrollment increases across this decade included Arkansas, Colorado, Georgia, Michigan, Nebraska, Nevada, Oregon, South Carolina, South Dakota, Tennessee, Utah, and Vermont. In 1990, 90 percent of Mexican immigrants were found in the five traditional states (Arizona, California, Illinois, New Mexico, and Texas), compared in 79 percent in 2000.

By 2011, there were nearly 8.5 million children (ages 5–17) of Mexican origin in the United States, distributed across the country (see Table 3.9). Those born in Mexico (i.e. 1.5 generation - see description below) accounted for about 1 in 10 of these students. In term of their geographical distribution, 36 percent of all Mexican-American children ages 5–17 years lived in Southern states, compared to 51 percent in the West, 10 percent in the Midwest, and 3 percent in the East.

First-generation immigrants include all U.S. students born in Mexico, who emigrated at various ages. Many sociologists use the term "1.5 generation" to refer to foreign-born persons who emigrated before or during their early teens.[78] The half generation draws attention to the characteristics immigrants bring from their home country, on one hand, while considering, on the other, the continuation of their assimilation and socialization in the new country.

The cultural and linguistic hybridity of 1.5 generation Mexican-origin students is important to understand their educational well-being. These students are more

[75] Hernandez, D. J., N. A. Denton & S. E. Macartney (2007). Young Hispanic Children in the twenty-first Century. *Journal of Latinos and Education*, 6(3), 209–228.

[76] Hernandez, D. J., N. A. Denton & S. E. Macartney (2007). Young Hispanic Children in the twenty-first Century. *Journal of Latinos and Education*, 6(3), 209–228.

[77] Capps, R., M. Fix, J. Murray, J. Ost, J. S. Passel & S. Herwantoro (2005). The New Demography of America's Schools: Immigration and the No Child Left Behind Act. *The Urban Institute*, September, pp. 1–41, <http://www.urban.org/url.cfm?ID=311230>.

[78] Rumbaut, R. G. (2004). Ages, Life Stages, and Generational Cohorts: Decomposing the Immigrant First and Second Generations in the United States. *International Migration Review*, 38(3), 1160–1205.

Table 3.9 Average score of Mexican 9th grade students on the Excale Exam by exposure to international migration. Mexico, 2008

		School Type		
Spanish writing	**Average score**	**General**	**Technical**	**Distance learning (Telesecundaria)**
No migration experience	493.5	496.6	491.3	446.2
Relatives migrated	511.9	512.6	516.8	471.7
One parent only	481.6	481.5	491.5	459.6
Both parents	481.3	480.0	481.7	429.0
Spanish reading	**Average score**	**Lower secondary**		
		General	**Technical**	**Distance learning (Telesecundaria)**
No migration experience	498.7	504.1	507.7	432.0
Relatives migrated	508.4	515.7	520.0	447.1
One parent only	490.1	496.3	499.5	457.3
Both parents	480.6	491.7	496.8	409.1
Mathematics	**Average score**	**Lower secondary**		
		General	**Technical**	**Distance learning (Telesecundaria)**
No migration experience	500.8	505.7	491.7	468.9
Relatives migrated	514.6	513.9	510.3	487.1
One parent only	491.2	491.9	489.2	481.5
Both parents	492.9	494.4	476.8	473.2

Source: INEE 2008 – National Mean: 500 – National Standard Deviation: 100

likely than their second- and third-plus generation peers to speak Spanish frequently and to benefit from parenting practices that promote social cohesion, respect, and healthy socioemotional functioning.[79] Moreover, recent literature describes the negative consequences of unauthorized migration status on the wellbeing of those 1.5 generation high school students who entered to the U.S. without authorization) as will be discussed below.[80] Also, compared to U.S. African Americans, a much larger proportion of those youth not enrolled in school are in the workforce, suggesting

[79] Crosnoe, R. (2006). *Mexican Roots, American Schools: Helping Mexican Immigrant Children Succeed*. Palo Alto, CA: Stanford University Press; Fuller, B. & C. García (2010). Learning from Latinos: Contexts, Families, and Child Development in Motion. *Developmental Psychology*, 46(3), 559–565; and Livas, G., C. García & N. Huq (2013). Fostering Resilience in Mexican American Youth Through Cultural and Family Assets. In: B. Jensen & A. Sawyer (eds.). *Regarding Educación: Mexican-American Schooling, Immigration, and Bi-National Improvement* (pp. 234–254). New York: Teachers College Press.

[80] Gonzales, R. (2007). Wasted Talent and Broken Dreams: The Lost Potential of Undocumented Students. *Immigration Policy in Focus*, 5(3), 1–11; Gonzales, R. G. (2010). On the Wrong Side of the Tracks: The Understanding the Effects of School Structure and Social Capital in the Educational Porsuits of Undocumented Immigrant Student. *Peabody Journal of Education*, 85(4), 469–485; and Gonzales, R. G. & L. R. Chavez (2012). "Awakening to a Nightmare": Abjectivity and Illegality in the Lives of Undocumented 1.5-Generation Latino Immigrants in the United States. *Current Anthropology*, 53(3), 255–281.

that the necessity of finding employment to assist their families contributes to their non-enrollment.[81]

On the other hand, 1.5 generation students of Mexican origins tend to be raised in lower-income households, and to demonstrate lower levels of academic performance than their second- and third-plus-generation peers.[82] They are less likely than their U.S.-born, Mexican American counterparts to complete high school and attend college, and their educational trajectory is more likely to be encumbered by unauthorized immigrant status.

So while first-generation Mexican-origin children are more likely to be socialized in close-knit families that communicate high educational aspirations,[83] these assets to date have not demonstrated the capacity to protect Mexican immigrant students from poor educational outcomes.[84] Part of the reason for this could be the bifurcated way (i.e., in an either/or fashion) that Mexican-born students seem to perceive schooling and employment, more so than with other U.S. ethnic groups.[85]

Restrictive educational policies toward Mexican-born students in the U.S. also play an important role. For most Mexican American students, Spanish use in schools and classrooms is highly restricted by English-only initiatives in states like California, Arizona, and Massachusetts.[86] And federal support for dual-language curriculum and instruction has largely disappeared, even as decades of research demonstrate the academic advantages of bilingual over English-only approaches, and the limited educational outcomes of ESL (English as Second Language) programs.[87] Indeed, under the George W. Bush administration, the Office of Bilingual

[81] Bachmeier, J. D. & F. D. Bean (2011). Ethnoracial Patterns of Schooling and Work among Adolescents: Implications for Mexican Immigration Incorporation. *Social Science Research*, 40(6), 1579–1595.

[82] Galindo, C. (2013). Math Performance of Young Mexican-Origin Children in the United States: Socioeconomic Status, Immigrant Generation, and English Proficiency. In: B. Jensen & A. Sawyer (eds.). *Regarding Educación: Mexican-American Schooling, Immigration, and Bi-National Improvement* (pp. 66–94). New York: Teachers College Press.

[83] Goldenberg, C., R. Gallimore, L. Reese & H. Garnier (2001). Cause or Effect? A Longitudinal Study of Immigrant Latino Parents' Aspirations and Expectations, and their Children's School Performance. *American Educational Research Journal*, 38(3), 547–582.

[84] Gándara, P. C. & F. Contreras (2009). *The Latino Education Crisis: The Consequences of Failed Social Policies*. Cambridge: Harvard University Press; and Suárez-Orozco, C., M. M. Suárez-Orozco & I. Todorova (2008). *Learning a New Land: Immigrant Students in America Society.* Cambridge: Belknap Press of Harvard University Press.

[85] Bachmeier, J. D. & F. D. Bean (2011). Ethnoracial Patterns of Schooling and Work among Adolescents: Implications for Mexican Immigration Incorporation. *Social Science Research*, 40(6), 1579–1595.

[86] Gándara, P. C. & M. Hopkins (2010). *Forbidden Language: English Learners and Restrictive Language Policies.* New York: Teachers College Press.

[87] See for example: Gándara, P. (1997). *Review of the Research on the Instruction of Limited English Proficient Students.* California: University of California Linguistic Minority Research Institute; Rolstad, K., K. Mahoney & G. V. Glass (2005). The Big Picture: A Meta-Analysis of Program Effectiveness Research on English Language Learners. *Educational Policy*, 19(4), 572–594; Slavin, R. E. & A. Cheung (2003). Effective Reading Programs for English Language

Education and Minority Languages Affairs (OBEMLA) changed to the Office of English Language Acquisition (OELA). These problems are compounded by deepening racial/ethnic and socioeconomic segregation of most of the schools attended by first-generation Mexican-origin students.[88]

Children and Grandchildren of Mexican Immigrants

Of the 8.5 million children (ages 5 to 17) of Mexican origin in the United States, most are children or grandchildren of immigrants (see Table 3.9). The second (and "2.5") immigrant generation (or children of immigrants) constitutes the largest share of the Mexican American student population, nearly half of the overall group. One in 10 are third (or "3.5") generation, meaning at least one grandparent was Mexican born. Interestingly, there are also over 2.5 million Mexican American children who fall under the "4.0+ generation", those whose grandparents were all U.S.-born yet still claim "Mexican" ethnic origin on census records. These numbers do not include those who no longer identify as Mexican-origin because of inter-ethnic marriage and/or other reasons.[89]

Not surprising, children and grandchildren of Mexican immigrants fare better, on average, than their Mexican-born peers in terms of economic well-being, English proficiency, and living situation. In 2000, for example, 73.4% of fathers of the third-generation reported to be working full-time, compared to 66.5% of fathers of second-generation Mexican-origin children, and 58.3% of fathers of first-generation children. Of the same cohort, 64% of third-generation Mexican-origin children had a mother who graduated from high school, compared to 32.9% of second-generation and 22.4% of first-generation Mexican-origin children.[90]

Even with these economic and educational advances across immigrant generations, children and grandchildren of Mexican immigrants continue, as a whole, to demonstrate a disproportional number of risk factors for academic failure and

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Learners: A Best-Evidence Synthesis. Baltimore: Center for Research on the Education of Students Placed At Risk, Report no. 66; Valdés, G. (2001). *Learning and not Learning English: Latino Students in American Schools*. New York: Teachers College Press; Valdés, G., S. Capitelli & L. Alvarez (2011). *Latino Children Learning English: Steps in the Journey*. New York: Teachers College Press.

[88] Orfield, G., G. Siegel-Hawley & J. Kucsera (2011). Divided we Fail: Segregation and Inequality in the Southland's Schools. In: University of California, Los Angeles, *The Civil Rights Project/ Proyecto Derechos Civiles*.

[89] Bean, F. D., S. K. Brown, M. A. Leach, J. D. Bachmeier & R. Tafoya-Estrada (2013). Unauthorized Migration and its Implications for Mexican-American Educational Incorporation. In: B. Jensen & A. Sawyer (eds.). *Regarding Educación: Mexican-American Schooling, Immigration, and Bi-National Improvement* (pp. 43–65). New York: Teachers College Press.

[90] Hernandez, D. J., N. A. Denton & S. E. Macartney (2007). Young Hispanic Children in the twenty-first Century. *Journal of Latinos and Education*, 6(3), 209–228.

socioeconomic disadvantage. As discussed below, the educational attainment and academic performance of third-generation-plus Mexican American children continues substantially below the white, middle-class norms, above and beyond differences in family income, parent education, and other socioeconomic differences. Moreover, many of the sociocultural and linguistic assets of the first immigrant generation are lost by the third.[91] Some scholars have come to define this scenario as "segmented assimilation"[92] where Mexican-American children adopt the norms and social habits of lower socioeconomic status (SES) groups in the US to become a perpetual underclass.[93]

Not all researchers, however, adopt such a pessimistic prognosis.[94] Indeed, linguistic and cultural hybridity continue for many children and grandchildren of Mexican immigrants (or the second and third generation), and many identify ways of integration that promote not only strong educational well-being but a strong family structure and a healthy lifestyle in general. The problem, however, is that this may not characterize the situations of many families. Hybridity beyond the first generation is more erratic, shaped by family and community factors that are inadequately understood. To date, the ideal balance of language and cultural practices to promote the academic interest, performance, and attainment of Mexican American children is not well understood.[95] Some manage to maintain Spanish fluency and the agrarian values of their parents in order to flourish in U.S. schools. Others struggle to assimilate to both U.S. and Mexican "ways of being," often leading to school dropouts and other social problems.[96]

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[91] Fuller, B. & C. García (2010). Learning from Latinos: Contexts, Families, and Child Development in Motion. *Developmental Psychology*, 46(3), 559–565; and Livas, G., C. García & N. Huq (2013). Fostering Resilience in Mexican American Youth Through Cultural and Family Assets. In: B. Jensen & A. Sawyer (eds.). *Regarding Educación: Mexican-American Schooling, Immigration, and Bi-National Improvement* (pp. 234–254). New York: Teachers College Press.

[92] Portes, A. (2003). Ethnicities: Children of Migrants in America. *Development*, 46(3), 42–52.

[93] Telles, E. & V. Ortiz (2013). Intergenerational Assimilation Patterns of Mexican American Students. In: B. Jensen & A. Sawyer (eds.). *Regarding Educación: Mexican-American Schooling, Immigration, and Bi-National Improvement* (pp. 27–42). New York: Teachers College Press.

[94] Bean, F. D., S. K. Brown, M. A. Leach, J. D. Bachmeier & R. Tafoya-Estrada (2013). Unauthorized Migration and its Implications for Mexican-American Educational Incorporation. In: B. Jensen & A. Sawyer (eds.). *Regarding Educación: Mexican-American Schooling, Immigration, and Bi-National Improvement* (pp. 43–65). New York: Teachers College Press.

[95] Jensen, B. & A. Sawyer (eds.) (2013). *Regarding Educación: Mexican-American Schooling, Immigration, and Bi-National Improvement.* New York: Teachers College Press.

[96] Telles, E. & V. Ortiz (2013). Intergenerational Assimilation Patterns of Mexican American Students. In: B. Jensen & A. Sawyer (eds.). *Regarding Educación: Mexican-American Schooling, Immigration, and Bi-National Improvement* (pp. 27–42). New York: Teachers College Press.

3.5.2 Educational Well-Being

Attainment

Assessing inter-generational patterns of educational attainment (i.e., years of school completed, after the fact) following immigration are common ways for sociologists to analyze assimilation trajectories of ethnic populations.[97] Studying Mexican American educational incorporation requires considering that certain methodological issues that can influence research conclusions. For example, intergenerational comparisons are subject to generation/cohort integration problems. From the second to later generations, the educational trajectory among the descendants of Mexican immigrants often appears ambiguous,[98] sometimes suggesting even significantly lower educational attainment for third-plus generation compared to second-generation Mexican Americans.[99] However, research has also often found such ambiguous pattern among non-Hispanic and white immigrant groups, suggesting that research results for third-plus generation categories in general may be problematic.[100]

Among Mexican Americans in particular, birth cohort heterogeneity may occur within generational groups because Mexican immigration has been ongoing for well over a century in the United States. Thus, Jiménez and Fitzgerald note: "Using

[97] Jiménez, T. R. & D. Fitzgerald (2007). Mexican Assimilation: A Temporal and Spatial Reorientation. *Du Bois Review*, 4(2), 337–354.

[98] Farley, R. & R. Alba (2002). The New Second Generation in the United States. *International Migration Review*, 36(3), 669–701; Grogger, J. & S. J. Trejo (2002). *Falling behind or Moving Up? The Intergenerational Progress of Mexican Americans.* San Francisco: Public Policy Institute of California; McKeever, M. & S. L. Klineberg (1999). Generational Differences in Attitudes and Socioeconomic Status among Hispanics in Houston. *Sociological Inquiry*, 69(1), 33–50; Reed, D., L. E. Hill, C. Jepsen & H. P. Johnson (2005). *Educational Progress Across Immigrant Generations in California*. San Francisco: Public Policy Institute of California; and Zsembik, B. A. & D. Llanes (1996). Generational Differences in Educational Attainment among Mexican Americans. *Social Science Quarterly*, 77(2), 363–374.

[99] Bean, F. D., J. Chapa, R. R. Berg & K. A. Sowards (1994). Educational and Sociodemographic Incorporation among Hispanic Immigrants to the United States. In: J. S. Passel & B. Edmonston (eds.). *Immigration and Ethnicity: The Integration of America's Newest Immigrants* (pp. 73–100). Washington D.C.: Urban Institute Press; Keller, U. & K. Harker (2008). Post-Secondary Educational Attainment of Immigrant and Native Youth. *Social Forces*, 87(1), 121–152; and Wojtkiewicz, R. A. & K. M. Donato (1995). Hispanic Educational Attainment: The Effects of Family Background and Nativity. *Social Forces*, 74(2), 559–574.

[100] Boyd, M. (2002). Educational Attainments of Immigrant Offspring: Success or Segmented Assimilation? *International Migration Review*, 36(4), 1037–1060; Chiswick, B. R. & N. Deb-Burman (2004). Educational Attainment: Analysis by Immigrant Generation. *Economics of Education Review*, 23(4), 361–379; Glick, J. E. & M. J. White (2004). Post-secondary School Participation of Immigrant and Native Youth: The Role of Familial Resources and Educational Expectations. *Social Science Research*, 33(2), 272–299; Kao, G. & M. Tienda (1995). Optimism and Achievement: The Educational Performance of Immigrant Youth. *Social Sciences Quarterly*, 76(1), 1–19; and Ramakrishnan, S. K. (2004). Second-Generation Immigrants? The "2.5 Generation" in the United States. *Social Science Quarterly*, 85(2), 380–399.

only a generation as a temporal marker of assimilation is … not enough. Each generation of Mexican-origin individuals is made of people from a mix of birth cohorts, and each birth cohort contains individuals from many immigrant generations."[101] Ways to deal with this include controlling for age, making generational comparisons within relatively narrow age ranges, or using information that closely approximates longitudinal data. Repeated cross-sectional studies comparing parental cohorts with child cohorts, or longitudinal ones comparing actual parents with their children, thus show more consistent evidence of assimilation than do cross-sectional studies. Smith, for example, finds rising levels of education across three generations of men of Mexican origin and a corresponding decrease in the gap between their educational levels and those of non-Hispanic whites; he concludes that Hispanic men have made sizeable strides in improving educational attainment compared to their fathers, even though the socioeconomic gap with whites may not be fully closed.[102] In another example, Telles and Ortíz, using longitudinal data measuring attainment within individual Mexican American families, find increasing education across the first three generations, although more so at the level of high school than college completion.[103] But in the fourth and fifth generations, they find stagnation in educational outcomes.

Ambiguity in the findings of multi-generational studies may also result from problems in the definition of the third generation. Most of the above cited studies use data that aggregate the third and later generations. As a result, a "third-plus" generational measure, which is usually all that is available in large U.S. data sources, actually includes fourth, fifth, sixth, and even later generation persons. Few studies are able to distinguish a true third generation (consisting of those with at least one Mexican-born grandparent) from later generations (consisting of those whose grandparents were all born in the United States). However, we know of two studies that have been able to make this distinction. One directly examines the educational difference that emerges from using a "third-only" generation measure as compared to a "third-plus" measure and finds that the third-only generation shows higher education than the third-plus measure.[104] Frank Bean, Susan Brown and their collaborators have also used a third-only measure and found a deficit of 0.3 years of school

[101] Jiménez, T. R. & D. Fitzgerald (2007). Mexican Assimilation: A Temporal and Spatial Reorientation. *Du Bois Review*, 4(2), 337–354.

[102] Smith, J. P. (2003). Assimilation Across the Latino Generations. *The American Economic Review*, 93(2), 315–319; and Smith, J. P. (2007). Immigrants and their Schooling. In: E. A. Hanushek & F. Welch (eds.). *Handbook of the Economics of Education* (vol. 1, pp. 155–187). Amsterdam: Elsevier/North-Holland.

[103] Telles, E. & V. Ortiz (2008). *Generations of Exclusion: Mexican Americans, Assimilation, and Race*. New York: Russell Sage Foundation.

[104] Alba, R., D. Abdel-Hady, T. Islam & K. Marotz (2011). Downward Assimilation and Mexican Americans: An Examination of Intergenerational Advance and Stagnation in Educational Attainment. In: R. Alba & M. C. Waters (eds.). *The Next Generation: Immigrant Youth in a Comparative Perspective* (pp. 95–109). New York: New York University Press.

for third-plus generation males compared with third-only males.[105] As a percentage of the Mexican third-generation/non-Hispanic schooling gap, such a deficit (of nearly a third of a year) constitutes a substantial component (over one quarter of 1.1). Similarly, calculations of educational gain from the second to the third-plus generation substantially *understate* advancements in schooling. For females, similar results emerge, although not so extreme in magnitude. In sum, when researchers have no alternatives other than to rely on third-plus measures, as is necessarily the case with Current Population Survey (CPS) data (currently the only large-scale national data with information on birthplace of parents), then assessments of education gaps between second- and third-generation Mexican Americans and between third-or-later generation Mexican Americans and non-Hispanic whites, are biased.

To help avoid this, we present research results here using a *third-only* measure. We examine educational comparisons with Mexican Americans, as well as comparisons of the Mexican American third generation with non-Hispanic whites, for young adults (ages 20–40) in Los Angeles, focusing on Mexican immigrants (the first generation) and two groups of Mexican Americans — the second generation, including some who migrated to the United States as young children, and the third-only generation .[106] We adjust results for distortions due to unauthorized entry of parents, and also for distortions due to living in Los Angeles. In order to do the former, we present findings that show to what degree unauthorized status dampens educational attainment among the children of immigrants. Research shows that the main migration status factor affecting second-generation educational attainment involves mother's legal status.[107] Second-generation Mexican American respondents with mothers who entered or became legal attain slightly more than 2 years of schooling (2.04) compared to those with unauthorized mothers. With statistical controls (for both respondent and parental characteristics), this gross difference shrinks to 1.51 years, a gap that is still sizeable (and highly statistically significant). After employing still further statistical procedures to adjust for the possibility that even more factors could affect this difference, Bean and Brown and their collaborators find that the education premium for legal status is reduced slightly, to about one-and-one-quarter years (1.24) years.[108] Thus, a substantial education premium of nearly

[105] Bean, F. D., S. K. Brown, M. A. Leach, J. D. Bachmeier & R. Tafoya-Estrada (2013). Unauthorized Migration and its Implications for Mexican-American Educational Incorporation. In: B. Jensen & A. Sawyer (eds.). *Regarding Educación: Mexican-American Schooling, Immigration, and Bi-National Improvement* (pp. 43–65). New York: Teachers College Press.

[106] Bean, F. D., M. A. Leach, S. K. Brown, J. D. Bachmeier & J. R. Hipp (2011). The Educational Legacy of Unauthorized Migration: Comparisons across U.S.-Immigrant Groups in how Parent's Status Affects their Offspring. *International Migration Review*, 45(2), 348–485.

[107] Bean, F. D., M. A. Leach, S. K. Brown, J. D. Bachmeier & J. R. Hipp (2011). The Educational Legacy of Unauthorized Migration: Comparisons across U.S.-Immigrant Groups in how Parent's Status Affects their Offspring. *International Migration Review*, 45(2), 348–485.

[108] Bean, F. D., M. A. Leach, S. K. Brown, J. D. Bachmeier & J. R. Hipp (2011). The Educational Legacy of Unauthorized Migration: Comparisons across U.S.-Immigrant Groups in how Parent's Status Affects their Offspring. *International Migration Review*, 45(2), 348–485.

one-and-one-quarter years of schooling is connected to immigrant mothers either entering or achieving legal status.

With this as background, we now return to examining the three-generational schooling pattern among Mexican Americans, relying on a third-only group rather than a third-plus group. When we use this measure, we find a higher level of schooling for third-only compared to second-generation respondents (see Table 3.10 and 3.11).

For example, third-only males exhibit 13.4 years of school, a level up from 12.9 years in the second generation. This in turn is 3.3 years higher than the first generation's level of 9.6 years. We can also compare sons directly with their fathers. As in the case of previous research, the gains when examined this way are even bigger. For example, third-only generation males exceed their fathers' levels of schooling on average by 1.7 years. Females show similar cross-generation and intergenerational mobility patterns. When one adjusts this mobility gain for the dampening "legacy" effects of grandparental unauthorized status, it is even larger,

Table 3.10 Number of Mexican-Origin Children, Ages 5–17, by Immigrant Generation and Sub-Region. United States, 2011[a]

		Immigrant Generation					
	Total	*1.5* [b]	2.0[c]	2.5[d]	3.0[e]	3.5[f]	4th + [g]
East							
New England	20,136	3602	5331	5679	959	2194	2371
Middle Atlantic	189,834	27,418	122,516	10,638	1354	9580	18,328
Midwest							
East north central	651,752	73,079	276,187	52,233	32,744	46,057	171,452
West north central	228,143	24,964	85,691	13,062	7320	14,299	82,807
South							
South Atlantic	530,716	63,097	245,541	59,699	21,567	11,382	129,430
East south central	130,023	30,032	68,533	5090	1450	0	24,918
West south central	2,345,314	215,282	616,028	216,988	118,405	227,310	951,301
West							
Mountain	1,156,405	112,660	409,787	87,399	52,137	94,835	399,587
Pacific	3,143,518	247,096	1,541,878	259,788	180,932	152,579	761,245
Total	*8,395,841*	*797,230*	*3,371,492*	*710,576*	*416,868*	*558,236*	*2,541,439*

Source: Frank Bean and Susan Brown tabulations of the 2011 March Current Population Survey
Notes: [a.] Sample limited to Mexican-origin children ages 5–17, residing with at least one parent; [b.] 1.5 generation: Born in Mexico, arrived in the U.S. during youth; [c.] 2.0 generation: Born in the U.S., both parents foreign-born; [d.] 2.5 generation: Born in the U.S., one native- and one foreign-born parent; [e.] 3.0 generation: Born in the U.S. to two U.S.-born parents, all grandparents foreign-born; [f.] 3.5 generation: Born in the U.S. to two U.S.-born parents, some grandparents foreign-born; [g.] 4th + generation: Born in the U.S. to two U.S.-born parents, all grandparents U.S.-born
States Included in U.S. Census Bureau Regional Divisions:
New England Division: CT, ME, MA, NH, RI, VT; Middle Atlantic Division: NJ, NY, PA; East North Central Division: IL, IN, MI, OH, WI; West North Central Division: IA, KS, MN, MO, NE, ND, SD; South Atlantic Division: DC, DE, FL, GA, MD, NC, SC, VA, WV; East South Central Division: AL, KY, MS, TN; West South Central Division: AR, LA, OK, TX; Mountain Division: AZ, CO, ID, MT, NV, NM, UT, WY; Pacific Division: AK, CA, HI, OR, WA

Table 3.11 U.S: Years of Schooling Completed by Generation among Mexican-Origin Respondents and their Parents

	Males		Females	
Generation of Respondent	Father's average education	Respondent's average education	Mother's average education	Respondent's average education
0	5.7	N/A	4.7	N/A
1st	7.4	9.6	6.6	8.5
2nd	11.7	12.9	11.2	12.8
3rd-only	12.6	13.4	11.8	13.6
Approximate period of high school attendance	1950–1980	1980–2000	1950–1980	1980–2000
3rd + non-Hispanic whites	14.6	14.5	14.0	14.9

Source: IIMMLA data (Bean et al. 2011, 348–85)

although still not sizeable enough to close all of the gap with non-Hispanic whites. Nonetheless, third-only generation Mexican origin youth whose parents either were able to enter legally or to adjust to legal permanent resident status show generally small gaps compared to whites.[109] However, it must be recalled that the absence of legalization programs the past 20 years has left most entrants without the beneficial effects of legality.

Academic Achievement

Despite this evidence of intergenerational mobility within families, Mexican origin children, compared to other ethnic/racial groups in the United States, on average are underserved in schools, not only in terms of educational access (or attainment), but also in terms of school performance, or academic achievement. This has been the case for at least four decades.[110] Among U.S. Hispanics generally, children of Mexican origin are consistently the lowest performers on measures of academic

[109] Bean, F. D., S. K. Brown, M. A. Leach, J. D. Bachmeier & R. Tafoya-Estrada (2013). Unauthorized Migration and its Implications for Mexican-American Educational Incorporation. In: B. Jensen & A. Sawyer (eds.). *Regarding Educación: Mexican-American Schooling, Immigration, and Bi-National Improvement* (pp. 43–65). New York: Teachers College Press.

[110] Carter, T. P. (1970). *Mexican Americans in School: A History of Educational Neglect*. New York: College Entrance Examination Board; Carter, T. P. & R. D. Segura (1979). *Mexican Americans in School: A Decade of Change*. New York: College Entrance Examination Board; Coleman, J. S., E. Q. Campbell, C. J. Hobson, J. McPartland, A. M. Mood, F. D. Weinfeld & R. L. York (1966). *Equality of Educational Opportunity*. Washington D.C.: U.S. Government Printing Office; Crosnoe, R. (2006). *Mexican Roots, American Schools: Helping Mexican Immigrant Children Succeed*. Palo Alto, CA: Stanford University Press; and García, E. (ed.) (1983). *The Mexican-American Child: Language, Cognition, and Social Development.* Tempe: Arizona State University Press.

achievement, comparable with children of Central American origins.[111] Student and family background variables of Mexican American students known to influence performance from preschool through high school include parent education, family income, parent English proficiency, mother's marital status,[112] student English proficiency,[113] and immigration status.[114] Lower parent education levels, lower family incomes, limited English proficiency of parents and students, recent migration history, and single marital status of children's mothers are associated with lower student performance across academic disciplines (though mathematics and reading are areas most commonly reported).

These variables are considered risk factors, and are correlated with one another.[115] Thus, rather than pointing to one or two student/family (i.e., personal-level) factors that account for the low performance of children as a whole, it should be understood that early risk is due to a myriad of interrelated factors. The more risk factors descriptive of a child, the lower the probability she will do well in school, in terms of her performance and attainment. Because Mexican American children, on average, exhibit more risk factors than the U.S. student population in general, they are at greater risk for academic underachievement.[116]

In their ethnographic accounts, Valenzuela, Valdés, and others highlight that student and family variables do not work in isolation to shape comparatively low student engagement and learning among Mexican Americans, but these schools and other institutions interact with students' backgrounds to undermine performance

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[111] Crosnoe, R. (2006). *Mexican Roots, American Schools: Helping Mexican Immigrant Children Succeed*. Palo Alto, CA: Stanford University Press; and Reardon, S. F. & C. Galindo (2009). The Hispanic-White Achievement Gap in Math and Reading in the Elementary Grades. *American Educational Research Journal*, 56(3), 853–891.

[112] Jencks, C. & M. Phillips (1998), Introduction. In: C. Jencks & M. Phillips. *The Black-White Test Score Gap.* Washington D.C.: Brookings Institution Press; National Center for Education Statistics (NCES) (2003). Digest of Education Statistics, <http://nces.ed.gov/pubs2003 /2003060.pdf>; and Reardon, S. (2003). Sources of Educational Inequality: The Growth of Racial/Ethnic and Socioeconomic Test Score Gaps in Kindergarten and First Grade. Paper presented at the Center for Human Potential and Public Policy. Chicago: The University of Chicago, May.

[113] Reardon, S. F. & C. Galindo (2006). K-3 Academic Achievement Patterns and Trajectories of Hispanics and Other Racial/Ethnic Groups. Paper presented at the Annual Meeting of the American Educational Research Association. San Francisco, April; and Reardon, S. F. & C. Galindo (2007). Patterns of Hispanic Students' Math Skill Proficiency in the Early Elementary Grades. *Journal of Latinos and Education*, 6(3), 229–251.

[114] Han, W.-J. (2006). Academic Achievements of Children in Immigrant Families. *Educational Research and Review*, 1(8), 286–318; and Reardon, S. F. & C. Galindo (2006). K-3 Academic Achievement Patterns and Trajectories of Hispanics and Other Racial/Ethnic Groups. Paper presented at the Annual Meeting of the American Educational Research Association. San Francisco, April.

[115] National Center for Education Statistics (NCES) (1995). Digest of Education Statistics, <http://nces.ed.gov/pubs95/95029.pdf>.

[116] García, E. (ed.) (1983). *The Mexican-American Child: Language, Cognition, and Social Development.* Tempe: Arizona State University Press; and Hernandez, D. J., N. A. Denton & S. E. Macartney (2007). Young Hispanic Children in the twenty-first Century. *Journal of Latinos and Education*, 6(3), 209–228.

advancement.[117] In her study of ten Mexican immigrant families, Guadalupe Valdés describes how differing value systems between schools and families contribute to student disengagement and poor performance.[118] She demonstrates how school-based interventions, designed to increase parent involvement yet developed without considering family value systems, can be counter-productive rather than helpful. Valenzuela's work with Mexican-American high school students in Texas is consistent with these assertions.[119] She found that students became disengaged in school because of incompatibilities between home and school definitions of education (or *educación*), and because school policies and practices minimized students' natal culture and language.

Using data from the nationally representative Early Childhood Longitudinal Study, Kindergarten Cohort (ECLS-K), Galindo demonstrates how math achievement gaps between Mexican American students and their white, non-Hispanic peers play out over time, from kindergarten through fifth grade.[120] Figures 3.3 and 3.4

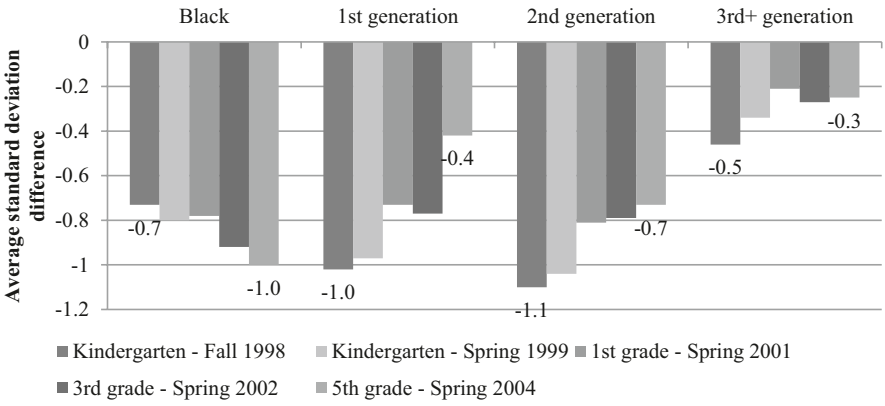

Fig. 3.3 Estimated math performance gaps, by Mexican immigrant generational status—standard deviations below White, non-Hispanic mean performance. (Source: Galindo 2013, 66)

[117] Valenzuela, A. (1999). *Subtractive Schooling: U.S.-Mexican Youth and the Politics of Caring*. Albany: State University of New York Press; and Valdés, G. (1996). *Con Respeto: Bridging the Distances between Culturally Diverse Families and Schools: An Ethnographic Portrait*. New York: Teachers College Press.

[118] Valdés, G. (1996). *Con Respeto: Bridging the Distances between Culturally Diverse Families and Schools: An Ethnographic Portrait*. New York: Teachers College Press.

[119] Valenzuela, A. (1999). *Subtractive Schooling: U.S.-Mexican Youth and the Politics of Caring*. Albany: State University of New York Press.

[120] Galindo, C. (2013). Math Performance of Young Mexican-Origin Children in the United States: Socioeconomic Status, Immigrant Generation, and English Proficiency. In: B. Jensen & A. Sawyer (eds.). *Regarding Educación: Mexican-American Schooling, Immigration, and Bi-National Improvement* (pp. 66–94). New York: Teachers College Press.

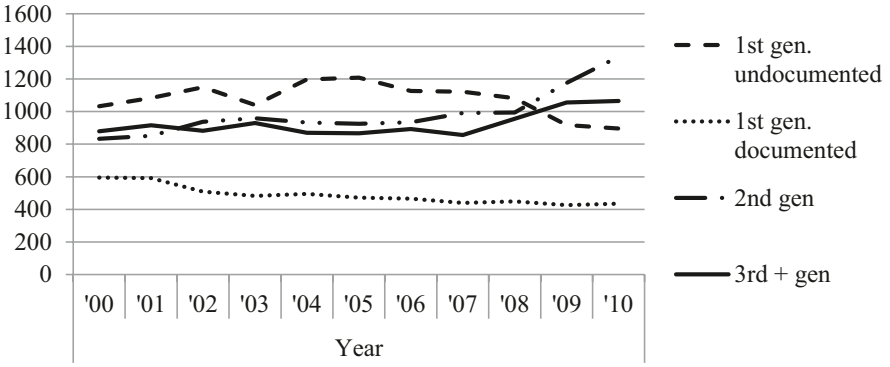

Fig. 3.4 Absolute numbers (in thousands) of Mexican-origin persons ages 18–24 years by generation and authorization status, from 2000 to 2010. (Source: Passel 2011, 15–20)

demonstrate the sizes of these gaps in standard deviation units. The X-axis represents the white, non-Hispanic mean, and the colored bars represent the size of the gaps at five assessment points over this six-year period (fall 1998 to spring 2004).

The first significant trend in Fig. 3.3 is that performance gaps diminish over time, but continue to persist. Second, as mentioned, gaps are largest for Mexican and Central American children. Compared to white, non-Hispanic students, children of South American and Cuban origins in U.S. schools fared the best. Indeed, by the spring of fifth grade performance gaps were around a tenth of a standard deviation. Of course, this figure does not account for the role of socioeconomic status in explaining these gaps. Importantly, however, Reardon and Galindo and others have found that the Mexican-white performance gap persists above and beyond SES indicators, demonstrating that achievement differences are not simply a matter of family income or other material resources.[121]

As mentioned earlier, Mexican-white achievement gaps persist well into the third-plus immigrant generation. Again this is the case above and beyond the role of SES variables in explaining the academic underperformance of Mexican-origin children across immigrant generations. As shown in Fig. 3.3, by the end of fifth grade in 2004, a fifth of a standard deviation difference persisted between the mean performance of third-plus immigrant generation Mexican Americans and their white, non-Hispanic peers.

[121] Reardon, S. F. & C. Galindo (2009). The Hispanic-White Achievement Gap in Math and Reading in the Elementary Grades. *American Educational Research Journal*, 56(3), 853–891.

Authorization Status

Recent analyses demonstrate that part of the enduring low educational outcomes (attainment *and* achievement) of the children and grandchildren of Mexican immigrants is affected by the immigrant authorization status, across generations.[122] As shown in Fig. 3.5 below, most Mexican-born persons of recent school age (ages 18–24 years) are unauthorized immigrants. Interestingly, the overall number of unauthorized Mexican immigrants decreased since the 2008 recession, whereas the bulging second generation continues to grow in absolute and relative numbers. Importantly, the unauthorized young adult population includes the "dreamers"—first-generation Mexican immigrant students who graduate from high school but are limited in their college options because of limited federal financial support, as well as other resources.

Immigrant categories by generation and authorization status are helpful to unpack and further understand the waning school attainment of Mexican-origin students. As shown in Fig. 3.5, the overall high school non-enrollment rate[123] from 2000 to 2010 for Mexican-origin students in the U.S. has decreased. This has been especially true for Mexican-born students: from 2000 to 2010 the first-generation non-enrollment rate decreased from 58 to about 40 percent. In part this decrease is due to expanded school access in Mexico. The differences in non-enrollment rates across immigrant categories, however, persist. Undocumented students are more likely than their immigrant peers to not be enrolled in school. In 2010, for example, 43 percent of undocumented Mexican-origin persons ages 18 to 24 years had not

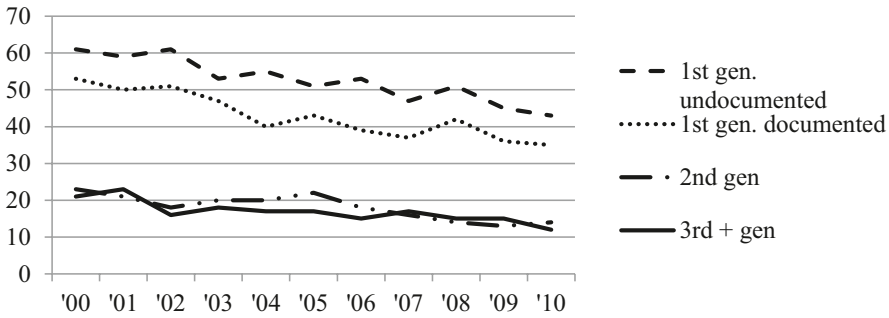

Fig. 3.5 High school dropouts among Mexican-origin persons ages 18–24 years by generation and authorization status, from 2000 to 2010. (Source: Passel 2011, 15–20)

[122] Bean, F. D., S. K. Brown, M. A. Leach, J. D. Bachmeier & R. Tafoya-Estrada (2013). Unauthorized Migration and its Implications for Mexican-American Educational Incorporation. In: B. Jensen & A. Sawyer (eds.). *Regarding Educación: Mexican-American Schooling, Immigration, and Bi-National Improvement* (pp. 43–65). New York: Teachers College Press.

[123] In this analysis, "non-enrollment" is a more accurate term than "drop-out" because many Mexican born youth migrate apart from their families at ages 15–17 just in order to work, thus never enrolling at all in U.S. schools and thus biasing upward estimates about "drop-out" rates.

completed high school, compared to 35 percent of first-generation, 14 percent of second generation, and 12 percent of Mexican-origin peers.

But the influence of authorization status on educational well-being goes beyond the first generation. Recent research indicates that second-generation children of unauthorized Mexican immigrant parents face educational handicaps as well. As adults, these children average fewer years of education, according to survey data from greater Los Angeles. But children whose parents never legalize (either by choice or because they never had the opportunity) average about two fewer years of schooling than those with documented or citizen parents. In other words, the children of long-term unauthorized immigrants typically do not graduate from high school. Statistical controls eliminate only part of the gap. Parents remaining unauthorized thus constitutes a disadvantage, for whatever reason(s), limits educational attainment persisting into later generations. When the educational attainment of those of third generation status are examined (only those with grandparents born in Mexico, not also those of higher generations), almost half of their gap in schooling compared to non-Hispanic whites disappears when the negative intergenerational effects of parental unauthorized status are removed.

Despite evidence of greater educational incorporation using third-only generation data, the schooling levels shown in Table 3.10 nonetheless reflect the dampening effects of unauthorized migration status, as well as distortions unique to Los Angeles owing to city-specific ethnic differences in net migration by education. To account for the former, we ask: what would the schooling levels of the second generation sons look like if all of their mothers had come to the country legally or if they had been able to legalize instead of staying unauthorized? Making this statistical adjustment yields an average schooling level of 13.2 years for second-generation sons (Table 3.8).[124] In the case of the third generation, an adjustment for grandparents' unauthorized status yields an attainment level of 13.7 years of schooling for third-generation sons. This constitutes the estimated level of schooling that would be expected if there were no adverse legacy effects of grandparents' unauthorized status on third-generation attainment. The results of similar statistical adjustments for females are also shown in Table 3.8.

Bean and Brown and their collaborators also estimate the schooling levels that would result from removing the distortion owing to differential selective net migration patterns for Mexican Americans and whites into and out of Los Angeles.[125] They treat this differential as a rough proxy for the degree to which selective migration (and other factors) make for LA-specific educational differences between the

[124] Bean, F. D., S. K. Brown, M. A. Leach, J. D. Bachmeier & R. Tafoya-Estrada (2013). Unauthorized Migration and its Implications for Mexican-American Educational Incorporation. In: B. Jensen & A. Sawyer (eds.). *Regarding Educación: Mexican-American Schooling, Immigration, and Bi-National Improvement* (pp. 43–65). New York: Teachers College Press.

[125] Bean, F. D., S. K. Brown, M. A. Leach, J. D. Bachmeier & R. Tafoya-Estrada (2013). Unauthorized Migration and its Implications for Mexican-American Educational Incorporation. In: B. Jensen & A. Sawyer (eds.). *Regarding Educación: Mexican-American Schooling, Immigration, and Bi-National Improvement* (pp. 43–65). New York: Teachers College Press.

two groups. When they further adjust the education differential between third-only Mexican American and non-Hispanic white males for this kind of distortion, even more of the difference between the two groups in attainment levels for males disappears (as shown in Table 3.10). In sum, removing the legacy effects of grandparents' unauthorized status, as well as adjusting for city-specific differences that affect schooling levels for these two groups in Los Angeles, accounts for a substantial portion of the educational attainment difference between Mexican American and white males by the third generation.[126] For females, much of this same gap is also closed by the third generation. For males, comparing the educational attainment of similar third-only generation Mexican Americans and whites, and removing the legacy effect of unauthorized migration from the former group, accounts for much although not all of the difference in schooling between the two groups.

Immigrant Paradox

For children and youth of all racial and ethnic groups in the US, increased interest and attention is being placed on social and emotional dimensions of educational well-being, especially during the early education years.[127] Some have argued that important social and emotional competencies (including, for example, positive emotional expressiveness, enthusiasm, emotional regulation, social problem solving, and prosocial behavior) should be targeted outcomes of education programs[128] given their growing demand in the labor market and civic society generally.[129] Moreover, others are demonstrating how socioemotional competences are actually associated with growth in traditional cognitive or academic outcomes.[130]

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[126] Bean, F. D., S. K. Brown, M. A. Leach, J. D. Bachmeier & R. Tafoya-Estrada (2013). Unauthorized Migration and its Implications for Mexican-American Educational Incorporation. In: B. Jensen & A. Sawyer (eds.). *Regarding Educación: Mexican-American Schooling, Immigration, and Bi-National Improvement* (pp. 43–65). New York: Teachers College Press.

[127] Denham, S. A. (2006). Social-Emotional Competence as Support for School Readiness: what is it and how do we Assess it? *Early Education and Development*, 17(1), 57–89.

[128] Raver, C. C. & E. F. Zigler (1997). Social Competence: An Untapped Dimension in Evaluating Head Start's Success. *Early Childhood Research Quarterly*, 12(4), 363–385.

[129] Jensen, B. & A. Sawyer (eds.) (2013). *Regarding Educación: Mexican-American Schooling, Immigration, and Bi-National Improvement.* New York: Teachers College Press; and Trilling, B. & C. Fadel (2009). *twenty-first Century Skills: Learning for Life in Our Times*. San Francisco: Jossey-Bass.

[130] Caprara, G. V., C. Barbaranelli, C. Pastorelli, A. Bandura & P. G. Zimbardo (2000). Prosocial Foundations of Children's Academic Achievement. *Psychological Science*, 11(4), 302–306; DiPerna, J. C., R. J. Volpe & S. N. Elliott (2002). A Model of Academic Enablers and Elementary Reading/Language Arts Achievement. *School Psychology Review*, 13(3), 298–312; DiPerna, J. C., R. J. Volpe & S. N. Elliott (2005). A Model of Academic Enablers and Mathematics Achievement in the Elementary Grades. *Journal of School Psychology*, 43(5), 379–392; Galindo, C. & B. Fuller (2010). The Social Competence of Latino Kindergarteners and Growth in Mathematical Understanding. *Developmental Psychology*, 46(3), 579–592; Malecki, C. K. & S. N. Elliott (2002).

The debate around the expansion of student competencies for school success could be central to improving opportunities for children of Mexican immigration in the United States. As mentioned, Mexican-origin children in the U.S. are among lowest performers on academic tasks.[131] Less known, however, Mexican-origin children (particularly first- and second-generation students) are quite strong on interpersonal and social skills like self-regulation, cooperation, and communication.[132] Some refer to this underperformance in academic tasks, on one hand, and the strong demonstration of interpersonal and executive functioning skills, on the other, as an "immigrant paradox."[133]

Identifying specific ways interpersonal competencies (nurtured quite well through the agrarian values and structures of many Mexican-origin families) can be linked with academic learning opportunities through states policies, school initiatives, and classroom activities to improve the academic interests and learning of Mexican American children. Without this, the social and emotional competencies of Mexican-origin children will remain an under-utilized resource.

A new framework is needed for Mexican American school improvement.[134] This framework must address the historical and pervasive underperformance of children and youth from Mexican heritage—applying lessons learned from past successes and failures—not by narrowing definitions of success, but by expanding them. Whereas the data we have shared demonstrate that Mexican American students tend to struggle with academic content through traditional curricular and instructional approaches in schools; emergent evidence points to the agrarian values and practices of rural communities in Mexico as potential assets—as means to build on positive social and emotional competencies in ways that enhance student interest and performance and, in turn, secondary school graduation rates and participation in higher education.

Children's Social Behaviors as Predictors of Academic Achievement: A Longitudinal Analysis. *School Psychology Quarterly*, 17(17), 1–23.

[131] Reardon, S. F. & C. Galindo (2009). The Hispanic-White Achievement Gap in Math and Reading in the Elementary Grades. *American Educational Research Journal*, 56(3), 853–891.

[132] Crosnoe, R. (2006). *Mexican Roots, American Schools: Helping Mexican Immigrant Children Succeed*. Palo Alto, CA: Stanford University Press; and Reardon, S. F. & C. Galindo (2009). The Hispanic-White Achievement Gap in Math and Reading in the Elementary Grades. *American Educational Research Journal*, 56(3), 853–891; and Fuller, B. & C. García (2010). Learning from Latinos: Contexts, Families, and Child Development in Motion. *Developmental Psychology*, 46(3), 559–565.

[133] García, C. & A. K. Marks (2009). *Immigrant Stories: Ethnicity and Academics in Middle Childhood.* New York: Oxford University Press.

[134] Jensen, B. & A. Sawyer (eds.) (2013). *Regarding Educación: Mexican-American Schooling, Immigration, and Bi-National Improvement.* New York: Teachers College Press.

3.6 Summary of Major Findings

Before advancing recommendations to improve educational opportunities for these students, in both countries, we bullet major findings from our analysis and literature review so far:

- Among the millions of primary and secondary students we share between Mexico and US, through generations of family migration, are (a) those remaining in Mexico while family members work and reside in the U.S., (b) immigrant returnees to Mexico, (c) first-generation immigrants in the U.S., and (d) the children and grandchildren of Mexican immigrants in the U.S. (including second, third, and subsequent generations).
- Educational well-being can be understood in terms of the quantity and quality of schooling—i.e., levels of educational attainment as well as oppotunties for academic achievement through high-quality teaching and learning.
- Relationships between family migration and educational well-being for children of Mexican immigrants in US and in Mexico are inextricably associated with histories and systems of entrenched inequality (e.g., social class segregation, resource allocation, teacher preparation).
- Relationships between family migration and educational well-being are also mediated by student-level variables such as educational aspirations and or plans to migrate.
- In Mexico:
  - Rapid increases in secondary school access among (semi-)rural communities have benefited children and youth from migrant families. More schools are available close to home and enrollment and attainment outcomes have dramatically improved.
  - Germane benefits in terms of school quality in (semi-)rural communities have not accompanied access improvements, concerning given students from migrant families are more likely than their non-migrant peers in Mexico to live in a (semi-)rural community. Schools in these communities have shorter school hours, fewer resources, and teachers with less preparation or professional learning supports than schools in urban communities.
  - Evidence on the effects of remittances on schooling for students from migrant families in Mexico is mixed. On one hand, remittances provide greater access to study materials and frees up time for youth in lower-income households to focus on school. On the other, the allure of earning money now often disincentivizes youth, especially young men, from staying in school. Adolescents in these contexts often see education and migration as alternatives. Moreover, it is not clear that the educational benefits of remittances offset negative effects of family separation.
  - Students from immigrant families in Mexico are more likely to be retained a grade in school than their non-migrant peers. Grade retentions has a strong negative effect on students' academic performance in years following.

- In U.S.
  - From the first to the third generation following migration, students from Mexican origins demonstrate intergenerational gains in educational attainment as well as academic achievement in the U.S. After the third generation little gains are made, and some evidence suggests ongoing opportunity gaps are due to systemic inequities in the U.S. educational system.
  - Children and youth of Mexican families in the U.S. are much likelier than their white, middle-class, and non-migrant peers to attend racially and socioeconomically segregated schools with fewer resources and underprepared, underpaid, and overworked teachers.
  - No evidence suggests that the accountability movement beginning at the turn of the twenty-first century reduced opportunity gaps for Mexican-origin students in the U.S. or for other marginalized students of color. Racial and ethnic achievement gaps have not budged for over 20 years.
  - Family authorization status has negative effects on the educational attainment and achievement of Mexican-origin students in the U.S. Some evidence suggests having an undocumented grandparent bears significant negative effects. The stress and uncertainty of living in mixed status families, especially during heighted immigration enforcement, undermine student focus and learning in school.
  - Empirical research identifies a host of development assets of children and youth from Mexican immigrant families such as respect, communication, collaboration, comportment, and composure. Unless educators are prepared to discern and incorporate these strengths into classroom activity, they go underutilized. More work is needed to develop curriculum and to prepare teachers and school leaders to identify and integrate students' assets to enhance their educational opportunities.

3.7 Policy Recommendations

Policy initiatives intending to address the educational well-being of Mexican-origin students affected by cross-national migration should be mindful of recent advances, on one hand, while addressing current needs on the other. Achievement and attainment data across immigrant generations of Mexican-American students, for example, show improvements over time, but significant gaps still remain by the third and fourth generations. These gaps contribute to poor college participation and persistence rates.

On the other side of the border, access to elementary schools in migrant-sending communities is virtually universal, and secondary school enrollment has skyrocketed over the past couple decades even if high school attainment rates have not. Less has been done in Mexico, however, to improve school quality, particularly in rural communities where family migration exposure is especially high.

Below we articulate a series of policy recommendations to ameliorate stated challenges and enhance the educational well-being of Mexican-origin children and youth who are affected by migration flows both ways. A bi-national migration management perspective understands that, due to the deep and historic relationship between our two nations, social developments within our respective countries induce mutual benefits. Educational improvement is certainly no exception.

3.7.1 Bi-National Recommendations

Recommendation 1. Deepen the commitment of bi-national institutions to understand and improve educational well-being of children of immigrants in both countries. This can be done by the following:

1a. Establishing an education task force within the Binational Commission currently maintained by the U.S. and Mexico State departments. This task force would work closely with respective education ministries to communicate relevant statistical reports and legislative initiatives in order to understand particular challenges and promising opportunities related to the educational well-being of children of immigrants in both countries.
1b. Expanding the budgets, evaluation, and, thereby, impact of bi-national programs designed by the Instituto para Mexicanos en el Exterior (IME) or by the Secretaría de Educación Pública in Mexico such as the Programa Binacional de Educación Migrante (PROBEM) and the Programa de Educación Básica sin Fronteras to improve educational well-being of Mexican immigrant children and their families in the U.S. and their counterparts in Mexico. These programs include teacher exchanges, transfer document, online high school programs, and more.

Mexico Recommendations

Recommendation 2. Strengthen existing and establish new funding mechanisms to research relationships between educational well-being and migration culture in Mexican communities. Public funding institutions like Consejo Nacional de Ciencia y Tecnología (CONACYT) and the Secretaría de Educación Publica (SEP) should establish research grant competitions designed around specific gaps in the research, and incentives should be provided for private and non-profit foundations to do the same. Important gaps include:

2a. Identifying regions, municipalities, and schools where immigrant returnees and those remaining behind are concentrated;
2b. Better understanding relationships between family migration exposure and educational well-being;

2c. Identifying the curricular and instructional supports that returnees and children remaining behind need in order to stay enrolled and succeed in school.

Recommendation 3. Enhance the quality of learning opportunities in rural Mexican schools, including CONAFE, indigenous, and *telesecundaria* schools. A decade of sound data in Mexico demonstrates that rural children perform much lower on tests of academic performance than their urban and suburban peers. Children in rural schools with migrant parents perform even worse. This is not simply a matter of socioeconomic differences between students and their families. Targeted federal initiatives should improve learning opportunities by doing the following:

3a. Better distributing learning materials across schools. This means providing classroom libraries, more computers, and adequate buildings in rural and remote schools. Abolishment of unofficial school-based fees (such as those for Parent Associations) should be undertaken.
3b. Increasing the amount of instructional time in the classroom. This means possibly lengthening the school day as well as improving teacher attendance, student attendance, percentage of days school is actually open, percentage of class time on instruction, and student time on task.
3c. Linking school curricula and instruction with future and concurrent labor opportunities. This way students are more likely to find immediate relevance to their schoolwork, and less likely to view school and work as competing alternatives.
3d. Training pre- and in-service teachers to associate school curricula with the lives and interests of rural students through high-quality instruction. This means addressing students' family migration experiences and their related migrant ambitions.
3e. Scaling up of innovative pedagogical strategies in rural settings.
3 f. Increasing public and non-governmental financing for research and innovation activities to support the above-mentioned initiatives through rigorous strategy development, measurement, and testing.

Recommendation 4. Evaluate and strengthen current federal programs designed to improve educational well-being for children in migrant-sending communities. In addition to the programs mentioned in recommendation 2, this includes:

4a. *Oportunidades*. A cash transfer program designed to improve school attendance in rural areas. Evaluations should determine ongoing cost effectiveness of this program and explore ways of linking program participation with improvements in school performance. In addition, with the information already available from prior evaluations, it would be necessary to analyze to what extent the current rules of operation facilitate or discourage the participation of migrant children in the program.
4b. *Programa Escuelas de Calidad (PEC)*. A staff development program organized by local schools to improve teaching and learning. With the ongoing impact and cost effectiveness evaluations it would be possible to explore how PEC can better meet the particular needs of returnees and children remaining behind.

4c. *Tres Por Uno*. A rural infrastructure development program leveraging the resources of remittance income in migrant communities. Ways by which this money could address educational well-being for students in these communities has not been addressed.
4d. *Carrera Magisterial (CM).* A large teacher-training program designed to improve instructional quality through ongoing professional development. In addition to strengthening accountability and cost effectiveness dimensions of the program, CM should explore ways of addressing the curricular and instructional needs of returnees and children remaining behind.

Recommendation 5. Identify and address the immediate administrative challenges faced by school personnel in Mexico to integrate the increasing number of immigrant returnees. It is clear that a growing number of school leaders and teachers in Mexico are tasked with incorporating students with experiences in the U.S. (most of them with school experiences in the U.S.) in their classrooms. These include curricular, language, and possibly some cultural challenges. We recommend the *Secretaría de Educación Pública* (SEP), and Secretarías de Educación at state level to work with local actors to identify and address these challenges by:

5a. Using extant SEP data to identify regions where returnee students are concentrated;
5b. Surveying teachers, school leaders, parents, and possibly students to identify the particular challenges associated with returnee integration;
5c. Specifying and facilitating administrative procedures for returnee school enrollment in Mexico in order to avoid all forms of bureaucratic exclusion;
5d. Designing assessment protocols to understand content and linguistic competencies of returnees upon arrival;
5e. Designing and implementing pre and in-service teacher's training for improving their capacities for better serving returnee students;
5f. Designing transition programs to support school success of returnee students.

U.S. Recommendations

Recommendation 6. Thoughtfully integrate the educational needs of Mexican (and other) immigrant students into the accountability and assessment systems associated with the reauthorization of the Every Student Succeeds Act (ESSA). This can be accomplished by:

6a. Including national origin and self and parent birth information of students on state and federal student assessments, in order to track performance differences across immigrant generations;
6b. Requiring states to establish common and rigorous English language learner (ELL) membership criteria (and high-quality assessments) for accountability purposes, and to track educational well-being across levels of English proficiency;

6c. Making explicit the amount of time ELL students need to acquire English language proficiency, requiring states honor these timelines through English and content instruction;
6d. Allowing states with an interest in bilingualism to make appropriate adaptations to assessment and accountability systems;
6e. Requiring teacher credentialing programs in states receiving Title II and Title III funds to address the language, academic, and cultural needs of Mexican American students and other ELLs; and
6f. Provide monetary incentives for teachers to serve and remain in districts and schools with high immigrant and ELL student populations.

Recommendation 7. Increase investment in research and innovation activities that address the educational needs of Mexican American students. Specifically, we recommend:

7a. Identifying the causes and consequences of lower school attainment and achievement outcomes among unauthorized students;
7b. Conducting research and deriving policy recommendations based on successful experiences of bilingual education and on successful cases of Mexican-born students integration into the educational system;
7c. Understanding relationships between academic, language, and socioemotional competencies of Mexican American students;
7d. Designing, testing, and evaluating pre- and in-service teacher training initiatives that improve student performance by addressing the socioemotional, language, academic, and cultural needs of Mexican American students;
7e. Designing, testing, and evaluating programs for Mexican American adolescents that link school curricula and instruction with future and concurrent labor opportunities; and
7f. Incentivizing local innovations that address the above activities through public-private partnerships that seek to improve student achievement and attainment.

Recommendation 8. Pass federal legislation designed to improve high school and college completion for Mexican-origin and other underrepresented groups in the U.S. This includes:

8a. Passing the Development, Relief and Education for Alien Minors (DREAM) Act, initially introduced to the US Senate in 2001, as part of comprehensive immigration reform;
8b. Establishing a fair path to citizenship for Mexican-origin students (and possibly their parents) who meet a series of character qualifications;
8c. Increasing Pell grant and other federal funding options for Mexican American college students and other underrepresented groups;
8d. Incentivizing states and school districts to desegregate schools by student ethnicity, language, and poverty status; and
8e. Attracting and retaining high-quality teachers to high-needs primary and secondary schools.

3.8 Methodological Appendix

3.8.1 For the Study of Educational Well Being of Children of Migrants in Mexico

For the first sociodemographic analysis, we draw information for 2000 and 2010 from the 10% samples of the Mexican censuses on those specific years. These datasets allow us to locate households with migration experience in the last 5 years. We can also explore whether the household receives remittances or not. Finally, the census samples give information on the migration status of the children. For those 5 years and older, we know whether they were living in the US 5 years before the census year (returned migrants) or whether they went to live in the US within the five-year period prior to the census (circular migrants). We use these definitions for our analysis. These large datasets also allow us to analyze variations in the enrollment status by exposure to international migration.

We complement the nationwide information from the censuses with data on ninth grade achievement from the 2008 results of *Excale*, a standardized test applied to a randomly selected sample that is representative at the national and state levels supervised by the National Institute of Educational Evaluation (INEE). Along with the academic assessment, the Excale database includes a context questionnaire in which nearly 85,000 ninth grade students were asked about parents and family migration experiences to the U.S. The *Excale* questionnaire explores whether (a) nobody; (b) other family, not a parent; (c) one parent only; (d) both parents ever migrated to the U.S. It does not allow us to locate the exact time of the migration, and whether the child is currently separated from one or both parents.

It also included information on students' own future migration intentions. With these data, it is possible to explore the link between the family exposure to international migration, migration intentions and achievement results—a unique opportunity to analyze the potential impact of international migration on other educational wellbeing rarely seen in research literature (in this case achievement measured through the results of the standardized tests).

To address the consequences of international migration on educational trajectories of students in Mexico we decided to use the results of a survey conducted in the school system of Jalisco (Migración Internacional y Educación en Jalisco UDEM/Secretaría de Educación de Jalisco database 2010).[135] From this survey, we have information about a representative sample of 9701 students attending 4th to 9th grades of 183 public and private schools of the state. These data provide useful

[135] Although the study included other states (Zacatecas and Puebla), we use the data from Jalisco because it matches with the 2010 Population Census in Mexico. However, along the paper, some of the results reported are applicable or refer to the similar survey conducted over the school system of Puebla in 2009 (n = 12,064 students from 4th to 9th grades) and of Zacatecas in 2005-2006 (n = 7619 students 4th to 9th grade). See Zúñiga, V. & E. T. Hamann (2009). Sojourners in Mexico with U.S. School Experience: A New Taxonomy for Transnational Students. *Comparative Education Review*, 53(3), 329–353.

details on the school experience of transnational students. They capture, for example, whether returnee children attended school in U.S., language use (English/Spanish), self-reported grades, and interruption of educational trajectories. It also captures whether the child has lived separated from his/her father and mother and for how long (less than 2 years, 2 years of more). With this information it is possible to explore whether the time separated from the father and/or the mother has an impact on how children fare in school.

Finally, some of the interpretations of the results for the children remaining behind are based on the study conducted in San Miguel Tlacotepec, Oaxaca in December 2007. The study used an ethno-survey design which was administered to all residents aged 15 to 65 in the community. It also included semi-structured life history interviews to selected participants. A total of 636 surveys were completed. The data allows looking at the years of completed schooling, own and parental educational aspirations, reasons for school desertion, parental education levels. Information on the link to migrant relatives and on the perception around migration was gathered in the in depth interviews.

3.8.2 For the Study of Educational Well Being of Children of Migrants in the U.S.

The national representative information used for this study comes from the *Current Population Survey* (CPS). This yearly survey conducted by the Census Bureau collects information on its March supplement on year of arrival and of the place of birth of parents, allowing the construction of the different generations. For the data on the size and geographic distribution of the Mexican origin minors, we selected a sample limited to Mexican-origin children ages 5–17, residing with at least one parent. The generations were built as follows: 1.5 generation: born in Mexico, arrived in the U.S. during youth; 2.0 generation: born in the U.S., both parents foreign-born; 2.5 generation: born in the U.S., one native- and one foreign-born parent; 3.0 generation: born in the U.S. to two U.S.-born parents, all grandparents foreign-born; 3.5 generation: born in the U.S. to two U.S.-born parents, some grandparents foreign-born; 4th + generation: born in the U.S. to two U.S.-born parents, all grandparents U.S.-born but self-reported as Mexican. The information presented by generation and region of residence is based on the 2011 CPS.

The analysis for the Mexican-origin persons ages 18–24 by generation and authorization status comes from the CPS from 2000 to 2010. The distinction between documented and undocumented Mexicans in the U.S. was elaborated by Jeffrey Passel, following the methodology used in other documents.[136]

[136] See Passel, J. S. (2011). Flujos migratorios México-Estados Unidos de 1990 a 2010: un análisis preliminar basado en las fuentes de información estadounidenses. *Coyuntura Demográfica*, 1, 16–21.

For the analysis of the generational changes in education, we used the results from the Immigration and Intergenerational Mobility in Metropolitan Los Angeles. The study collects information from nearly 5000 young adult children of different generational and ethnic backgrounds in Los Angeles. It focuses on the mobility among a cohort of young adult (20–39 years of age) children of immigrants (1.5 and second generation) from six different origins (Mexicans, Vietnamese, Filipinos, Koreans, Chinese and Central Americans). It also includes interviews to three native-born and native-parentage comparison groups (third and plus generation Mexican Americans, and non-Hispanic Whites and Blacks). The survey includes information on sociodemographic profile, sociocultural orientation, social, economic and geographical mobility and on civic engagement and politics. The information was gathered in 2004. The study allows looking at the gains in educational attainment comparing across parent and children generations (instead of using cross-sectional data, which is the traditional approach based on national representative data, such as CPS).

The Early Childhood Longitudinal Study-Kindergarten Cohort (ECLS-K)[137] was used to analyze academic achievement patterns of Mexican American students. The ECLS-K is a longitudinal, nationally representative study that focuses on children's early school experiences beginning with kindergarten and following children through middle school. The ECLS-K data provide descriptive information on children's status at entry to school, their transition into school, and their progression through eighth grade. Children, their families, their teachers, and their schools provided information on children's cognitive, social, emotional, and physical development. Information on children's home environment, home educational activities, school environment, classroom environment, classroom curriculum, and teacher qualifications also was collected. Rather than assessing performance at one point in time, the longitudinal nature of the ECLS-K data enables researchers to study how a wide range of family, school, community, and individual factors are associated with student achievement from age 5 through early adolescence. Also, the ECLS-K sample includes a sizable group of Latino and Mexican-origin children, and extensive information on students' language and socioeconomic characteristics. Using the ECLS-K data, several studies have shown that Mexican American students performed significantly lower in math and reading at the beginning of Kindergarten, in first grade, and in third grade than did their White and other Latino peers.[138] Although achievement gaps narrow significantly during the elementary grades,

[137] National Center for Education Statistics (NCES) (1995). Digest of Education Statistics, <http://nces.ed.gov/pubs95/95029.pdf>; and National Center for Education Statistics (NCES) (2003). Digest of Education Statistics, <http://nces.ed.gov/pubs2003 /2003060.pdf>.

[138] Crosnoe, R. (2006). *Mexican Roots, American Schools: Helping Mexican Immigrant Children Succeed*. Palo Alto, CA: Stanford University Press; Glick, J. & B. Hohmann-Marriott (2007). Academic Performance of Young Children in Immigrant Families: the Significance of Race, Ethnicity, and National Origins. *International Migration Review*, 41(2), 371–402; and Reardon, S. F. & C. Galindo (2009). The Hispanic-White Achievement Gap in Math and Reading in the Elementary Grades. *American Educational Research Journal*, 56(3), 853–891.

Mexican-origin students were still scoring significantly lower than White students on math and reading tests.[139] In addition, Mexican-origin students demonstrated lower academic performance than Latino students from others countries/regions of origin, including South American and Cuban students.

[139] Reardon, S. F. & C. Galindo (2009). The Hispanic-White Achievement Gap in Math and Reading in the Elementary Grades. *American Educational Research Journal*, 56(3), 853–891.

Chapter 4
Migrant Health Vulnerability Through the Migration Process: Implications for Health Policy in Mexico and the United States

V. Nelly Salgado de Snyder, Fernando Riosmena, Miguel Ángel González-Block, and Rebeca Wong

4.1 Introduction

Social vulnerability refers to the relative lack of protection of a group of people when they face potential damage to their health, threats to the satisfaction of their basic needs, and violation of their human rights due to their lesser financial, personal, social and legal resources.[1] Individuals and societies cope with these adverse conditions by mitigating or adapting to hazards in different ways. For instance, people migrate (oftentimes temporarily) seeking better circumstances that allow them to alleviate the worst effects of social vulnerability in the short term or remedy them in the medium-to-long run by allowing them to live in more secure, stable, and salubrious environments.

[1] Cáceres, F. C. (1990). Dimensiones sociales y avances relevantes en la prevención del vih/Sida en América Latina y el Caribe. In J. A. Izazola Licea (ed.). *El sida en América Latina y el Caribe: una visión multidisciplinaria.* Mexico: Fundación Mexicana para la Salud; and Salgado de Snyder, V. N., T. González, I. Bojorquez & C. Infante (2007). Vulnerabilidad social, salud y migración México-Estados Unidos. *Salud Pública de México*, 49, 8–10.

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In theory, international migration may be a more effective strategy to reduce social vulnerability than internal movement. Sending a migrant abroad (as opposed to a domestic destination) may allow households to reduce or spread risk as economic conditions abroad tend to be more weakly correlated with those in alternative domestic markets. Migrants may also seek to save larger amounts of money they can devote to improving their living standards in their places of origin,[2] thus diminishing their degree of social vulnerability. In practice, however, the migration trip(s) and the accompanying move into new social, economic, and legal milieu can also create additional forms of social vulnerability affecting migrants' well-being, most notably including their physical and mental health by impeding regular and timely access to health care. In this sense, although migrants per se are not a vulnerable group, their source of vulnerability lies in the conditions of social inequality under which migration takes place, and the way in which these conditions are interrelated and interact with other social variables, such as gender and ethnicity in particular social contexts.[3] In other words, it is not migration in and of itself that causes a state of vulnerability, but the circumstances under which migration takes place in the origin, during transit, at the destinations and upon return.

Mexican and other Latin American immigrants in the United States have been depicted as vulnerable subjects due to their socioeconomic and legal status.[4] While health-related vulnerability associated with being a migrant is particularly severe during the trek in which migrants attempt to cross into the United States without legal documents,[5] the aforementioned sources of vulnerability also operate in more protracted but pernicious ways during the migrant's tenure in the U.S. Even though migrant health seems resilient to these forces upon arrival to *El Norte*,[6] vulnerability and disadvantage seem to accumulate throughout the process of immigrant adaptation, negatively affecting the health of those with higher levels of experience in, and acculturation to the host country.[7] Return migrants, particularly the elderly, seem to

[2] Lindstrom, D. (1996). Economic Opportunity in Mexico and Return Migration from the United States. *Demography*, 33(3), 357–374.

[3] Bronfman, M., G. Sejenovich & P. Uribe (1998). *Migración y Sida en México y América Central: una revisión de la literatura*. Mexico: Consejo Nacional para la Prevención y Control del VIH/Sida.

[4] Castillo, M. A. (2000). Las políticas hacia la migración centroamericana en países de origen, de destino y de tránsito. *Papeles de Población*, (24), 133–157.; Menjívar, C. (2000). *Fragmented Ties: Salvadoran Immigrant Networks in America*. Berkeley: University of California Press; and Anguiano, M. E. & A. P. Trejo (2007). Vigilance and Control at the U.S.-Mexico Border Region. The New Routes of the International Migration Flows. *Papeles de Población*, 13(51), 45–75.

[5] Cornelius, W. A. (2001). Death at the Border: Efficacy and Unintended Consequences of US Immigration Control Policy. *Population and Development Review*, 27(4), 661–685.; and

Eschbach, K., J. Hagan, N. Rodríguez, R. Hernández-León & S. Bailey (1999). Death at the Border. *International Migration Review*, 33(2), 430–454.

[6] Cunningham, S. A., J. D. Ruben & K. M. V. Narayan (2008). Health of Foreign-Born People in the United States: A Review. *Health & Place*, 14(4), 623–635.

[7] Lara, M., C. Gamboa, M. I. Kahramanian, L. S. Morales & D. E. Hayes (2005). Acculturation and Latino Health in the United States: A Review of the Literature and its Sociopolitical Context. *Annual Review of Public Health*, 26, 367–397.

be in slightly worse health than immigrants remaining in the United States.[8] Further, migration seems to have some negative effects on the health of the families left behind.[9]

This general outlook indicates that migrant health and its associated sources of vulnerability vary conspicuously across different stages of the migration process.[10] Thus, in this first section of the chapter we examine the health-illness status of Mexican migrants along four distinct migration stages, namely: origin, transit, destination and return. Understanding what occurs in these stages separately is essential as migrants confront different social circumstances and sets of health risks, needs, and sector demands regarding healthcare, each stage characterized by an array of health determinants that preclude the establishment of a single health profile for Mexican migrants.[11] In their places of origin, the health of the potential, active, and returning migrants is conditioned by specific risks that affect the nonmigrant residents of their communities as well. In transit to the United States, health is influenced by the circumstances surrounding their mobility in their sojourn in the border area and during the border crossing, such as their legal/immigration status. At destination, their health depends on lifestyles, working conditions, income, social networks and the migrants' capacity to access medical information and services in the United States, in turn mediated by their level of acculturation, and their socioeconomic and legal status.[12] Finally, the cycle ends when (many) migrants return to their communities of origin in Mexico. According to Massey and Espinosa[13] return is contingent upon several factors that include human, social and material resources as well as economic conditions in the communities of origin and

[8] Turra, C. M. & I. T. Elo (2008). The Impact of Salmon Bias on the Hispanic Mortality Advantage: New Evidence from Social Security Data. *Population Research and Policy Review*, 27(5), 515–530; and Riosmena, F., A. Palloni & R. Wong (2010). Migration Selection, Protection, and Acculturation in Health: A Bi-National Perspective on Older Adults. *Demography*, 50(3), 1039–1064.

[9] Martínez-Donate, A. P., M. G. Rangel, M. F. Hovell, J. Santibánez, C. L. Sipan & J. A. Izazola (2005). HIV Infection in Mobile Populations: The Case of Mexican Migrants to the United States. *Revista Panamericana de Salud Pública*, 17(1), 26–29; and Riosmena, F., R. Frank, I. R. Akresh & R. A. Kroeger (2012). U.S. Migration, Translocality, and the Acceleration of the Nutrition Transition in Mexico. *Annals of the Association of American Geographers*, 102(5), 1209–1218.

[10] Salgado de Snyder, V. N., T. González, I. Bojorquez & C. Infante (2007). Vulnerabilidad social, salud y migración México-Estados Unidos. *Salud Pública de México*, 49, 8–10; and Riosmena, F. & W. C. Jochem (2012). Vulnerability, Resiliency, and Adaptation: The Health of Latin Americans during the Migration Process to the United States. *Realidad, Datos y Espacio. Revista Internacional de Estadística y Geografía*, 3(2), 14–31.

[11] Riosmena, F. & W. C. Jochem (2012). Vulnerability, Resiliency, and Adaptation: The Health of Latin Americans during the Migration Process to the United States. *Realidad, Datos y Espacio. Revista Internacional de Estadística y Geografía*, 3(2), 14–31.

[12] Lara, M., C. Gamboa, M. I. Kahramanian, L. S. Morales & D. E. Hayes (2005). Acculturation and Latino Health in the United States: A Review of the Literature and its Sociopolitical Context. *Annual Review of Public Health*, 26, 367–397.

[13] Massey, D. S. & K. E. Espinosa (1997). What's Driving Mexico-U.S. Migration? A Theoretical, Empirical, and Policy Analysis. *American Journal of Sociology*, 102(4), 939–999.

macroeconomic conditions in both countries. Among these varied motivations, some (mostly elderly) immigrants may suffer from health problems that may force them to return to Mexico for care or even medical treatment if they lack access to such care in the United States. The dearth of information on both migrant health and the factors underlying its gradual deterioration during their transit to destination and return poses a challenge to health systems in both sides of the border, owing largely to the complex dynamics of migrant mobility, the variability of the migration routes and the clandestine nature of border crossing.

In this chapter we provide a comprehensive review of the existing literature documenting the health status of migrants and their *de jure* and *de facto* access to health care along the aforementioned different stages. To do so, we conducted an in-depth bibliographic search using six search engines and further supplemented with specialized documents, including technical reports, books, and articles not detected during the search (see Box 1). We also present an assessment of the health status and health insurance coverage in both Mexico and the United States using recent data from the population censuses, according to the migration status of the population in Mexico and the race/ethnic group and country of birth in the United States. Further, we identify the main ways in which migrants' socioeconomic and legal vulnerability affect their health and access to health care throughout the migration stages and conclude by discussing the implications of our overview for health policy in both Mexico and the United States and issuing specific public policy recommendations towards improving the health and well-being of the Mexico-United States migrants and their families.

Box 1. Literature Search Methodology

The literature search for this chapter, conducted in August 2011, comprised material published in scientific journals from 2000 to present, in English and Spanish.

Six separate search exercises were carried out with the following bibliographic search engines: EBSCOhost, PUBMED, LILACS, ARTEMISA, SciELO, and SciVERSE. The descriptors or index terms for the searches were: mig*, immig* vulnerab*, risk, poverty, health care needs, health status, health needs, health conditions, utilization of health services, undocumented, illegal, border, death, accident, Mexico. Identical terms were applied in Spanish for the LILACS and ARTEMISA searches.

Subsequent reviews of the databases allowed filtering articles by title and date to eliminate duplicates, outdated material, articles unrelated to human migration or Mexico-US migration, and articles published in printed media other than scientific journals.

In the second filter, abstracts were reviewed by two independent reviewers.

Articles included were:

Total articles found in the search: 4197.

(continued)

Box 1 (continued)

First filter: 973.
Second filter by independent reviewers: 224.
Third filter (after reading the papers): 109.
In addition to the articles detected in the literature review, we included several articles, books, technical reports and official documents that did not turn up in the original bibliographic search but were considered crucial for developing this chapter.

4.2 Health Conditions

4.2.1 Health at Place of Origin

Overall, Mexican migration to the United States originates in contexts characterized by multiple limitations, reduced opportunities, and economic, social, and infrastructure shortfalls. In these deprived and often geographically isolated areas, contagious infection and nutritional diseases are aggravated by chronic degenerative conditions and contaminated environments. According to the National Health Program 2007-2012[14] (*Programa Nacional de Salud, PNS*), Mexico as a whole is undergoing an epidemiologic transition marked by the prevalence of non-communicable diseases and injuries, with less than 15% of its deaths ensuing from common infections, reproductive problems and malnutrition-related conditions, all of which fall under the epidemiologic gap classification. However, despite the strides made in this sector, important contrasts in the health conditions of Mexicans still translate into widening breaches among different population groups. For instance, the health status tends to be more precarious and access to health services more restricted in the southeastern states, in rural areas, and among indigenous populations. These contrasts stem from inequalities in general living conditions, health resource/service accessibility, and healthcare quality. Rural households in Mexico are affected by their minimal economic capacity and lack of social security.

It follows, then, that in poor areas with high migration rates the loss of health among migrants that begins in their communities of origin persists throughout transit. However, as we discuss in a separate section below, it is paradoxical that these conditions appear relatively favorable upon arrival to the United States, a result of several reinforcing trends, including (a modest degree of) positive emigration selection. Before discussing these (measured upon arrival in the United States and, as such, not always distinguishable from other destination-based mechanisms affecting migrant health), we turn to other links between migration and health vulnerability in sending communities and discuss health during transit.

[14] Secretaría de Salud (SSA) (2008). Programa Sectorial de Salud 2007-2012. Por un México sano: construyendo alianzas para una mejor salud. *Diario Oficial de la Federación*, January 17.

4.2.2 Family Life and Health in the Communities of Origin

In addition, Mexican migration to the United States is a transnational process affecting the lives of migrants and nonmigrants, and changing sending communities beyond only affecting the health of those returning to these places. The continuous and – to a lesser extent - circular character of Mexico-United States migration accounts for its transnational dimension and sets in motion multi-local immigration circuits that stretch beyond both borders. Within these circuits, cultural, social, and economic processes are articulated and reproduced among social communities and institutions that are geographically remote from one another and split between the two countries.[15]

Circular migration and the constant interaction that migrants maintain with their families and members of their communities of origin activates a permanent exchange of ideas, cultures, languages, values, and beliefs, which, in turn, modifies the attitudes, behaviors, and lifestyles of people on both sides of the border,[16] and imposes a significant (positive and negative) impact on the health of those left behind.

The decision of individuals to migrate to the United States in the pursuit of work and a better quality of life for themselves and their families affects the family life of their households in many ways. Although the members of the migrants' families derive important benefits from their migration, such as an increase in purchasing power as a result of received remittances, they also experience alterations in their daily functioning. For example, if the migrant is the male head of the household, the family composition is generally restructured as a form of social control over his partner and children in his community of origin. The subordination of women to the families of origin and families-in-law, a common aspect of the migratory phenomenon, resonates mainly in the procurement of sexual and reproductive health care among women.[17]

In general, women acknowledge that the migration of their partners results in a better quality of life. However, studies have found that women suffer from loneliness, psychological distress, anxiety, and symptoms of depression related to the lack of support from their spouses in both making important decisions that affect their families and exerting the discipline required to raise their children. Over time, the extended absence of the spouses coupled with an irregular provision of remittances cause women to seek their independence and undertake economic activities within their communities, thereby assuming control of their homes and resources.[18]

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[15] Canales, A. & C. Zlolniski (2001). Comunidades transnacionales y migración en la era de la globalización. *Notas de Población*, (73), 221–252.

[16] Levitt, P. (1998). Social Remittances: Migration Driven Local-Level Forms of Cultural Diffusion. *International Migration Review*, 32(4), 926–948.

[17] Caballero, M., R. Leyva-Flores, S. C. Ochoa-Marín, A. Zarco & C. Guerrero (2008). Las mujeres que se quedan: migración e implicación en los procesos de búsqueda de atención de servicios de salud. *Salud Pública de México*, 50(3), 241–250.

[18] Salgado de Snyder, V. N. & R. Díaz-Guerrero (2003). Enduring Separation: The Psychosocial Consequences of Mexican Migration to the United States. In: L. L. Adler & U. P. Gielen (eds.). *Migration: Immigration and Emigration in International Perspective* (pp. 143–158). London: Greenwood Publishers.

First and foremost, remittances appear to benefit child health. According to research, children from migrant households exhibit higher birth weight and lower infant mortality than those from nonmigrant households.[19] Additionally, the households of active migrants who work in the United States and send remittances report children with better health indicators, and are more knowledgeable about health issues.[20] Nevertheless, studies also suggest that school age children in households where migrants are the primary home care provider experience resentment expressed not only in absenteeism, desertion from school, low achievement, and behavior/emotional problems, but also in frequent illnesses and chronic health conditions.[21]

Adolescents affected by the departure of their migrant fathers report behavioral and mental health problems involving acute stress as a source of household hostility and violence in the family, vulnerability, social/family pressures, and concern over the health of their parents. Concurrently, however, they also report positive effects associated with less violence and mistreatment at home, economic improvements derived from their fathers' remittances and social prestige. Ultimately, however, since childhood, adolescents in rural localities with a significant migratory tradition are exposed to unemployment, reduced opportunities, desertion from school, and child labor. These factors appear to contribute to the reproduction of the migratory phenomenon throughout successive generations.[22]

The use of substances such as alcohol, tobacco, and drugs (marijuana and cocaine) among youth residing in rural communities with a high degree of migration to the United States has also been evidenced in the literature. Studies suggest that exposure to and influence from the United States culture is at least partially responsible for the surge in substance use and abuse within rural origin communities.[23] Hence the repercussions of migration on the physical and mental health of

[19] Frank, R., B. Pelcastre, V. N. Salgado de Snyder, W. P. Frisbie, J. E. Potter & M. N. Bronfman-Pertzovsky (2004). Low Birth Weight in Mexico: New Evidence from a Multi-Site Postpartum Hospital Survey. *Salud Pública de México*, 46(1), 23–31.

[20] Hildebrandt, N., D. J. McKenzie, G. Esquivel & E. Schargrodsky (2005). The Effects of Migration on Child Health in Mexico [with Comments]. *Economía*, 6(1), 257–289.

[21] Lahaie, C., J. A. Hayes, T. Markham & J. Heymann (2009). Work and Family Divided Across Borders: The Impact of Parental Migration on Mexican Children in Transnational Families. *Community, Work & Family*, 12(3), 299–312; and Heymann, J., F. Flores-Macías, J. A. Hayes, M. Kennedy, C. Lahaie & A. Earle (2009). The Impact of Migration on the Well-Being of Transnational Families: New Data from Sending Communities in Mexico. *Community, Work & Family*, 12(1), 91–103.

[22] Aguilera-Guzman, R. M., V. N. Salgado de Snyder, M. Romero & M. E. Medina-Mora (2004). Paternal Absence and International Migration: Stressors and Compensators Associated with the Mental Health of Mexican Teenagers of Rural Origin. *Adolescence*, 39(156), 711–723.

[23] Sánchez-Huesca, R., J. L. Arellanez-Hernández, V. Pérez-Islas & S. E. Rodríguez-Kuri (2006). Estudio de la relación entre consumo de drogas y migración a la frontera norte de México y Estados Unidos. *Salud Mental*, 29(1), 35–43; and Borges, G., M. E. Medina-Mora, A. Lown, Y. Ye, M. J. Robertson, C. Cherpitel & T. Greenfield (2006). Alcohol Use Disorders in National Samples of Mexicans and Mexican-Americans: The Mexican National Addiction Survey and the U.S. National Alcohol Survey. *Hispanic Journal of Behavioral Science*, 28(3), 425–449.

the family members remaining in Mexico are extremely complex, with multiple factors operating beyond the family circle.

Concerning infectious diseases, global evidence has consistently indicated that transmission is intimately linked to population movements. Tuberculosis, HIV/AIDS, and STDs are among the most frequently reported infectious conditions among rural sending communities. Tuberculosis, a re-emerging infection, differentially affects population groups with HIV and groups with high poverty levels. Tuberculosis prevails primarily among migrant farm workers and communities residing in extreme poverty, where malnutrition and overcrowding coincide with inaccessible health services.[24] In view of their vulnerability and lack of access to health services during the four phases of their migration process, Mexican migrants can be considered as potential transmitters of the tuberculosis infection.[25]

HIV and sexually transmitted infections have been associated with the migration process as well. Several studies suggest that the ruralization of HIV/AIDS in Mexico is closely linked to the dynamics of circular migration to the United States. Migrants engage in high-risk behavior during transit and at destination, thus favoring the acquisition of infections which, in turn, are spread in their communities of origin through sexual contact.[26]

It has been suggested that, in the migration context, HIV is contracted during two of the migration phases: first, during the stay of migrants in the United States, in situations where men travel alone, engage in high-risk sex behavior, and share needles to administer injectable drugs; second, when the infected migrants return to their communities of origin in Mexico and demand unprotected sex from their partners. The latter may be attributable to religious and cultural beliefs as well as the traditional gender roles permeating many Mexican rural communities.[27]

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[24] Foladori, G., M. Moctezuma & H. Márquez (2004). La vulnerabilidad epidemiológica en la migración México-Estados Unidos. *Migración y Desarrollo*, (3), 19–44.

[25] Talbot, E. A., M. Moore, E. McCray & N. J. Binkin (2000). Tuberculosis among Foreign-Born Persons in the United States, 1993-1998. *Journal of the American Medical Association*, 284(22), 2894–2900.

[26] Hernández-Rosete, D., G. Sánchez, B. Pelcastre & C. Juárez (2005). Del riesgo a la vulnerabilidad. Bases metodológicas para comprender la relación entre violencia sexual e infección por VIH/ITS en migrantes clandestinos. *Salud Mental*, 28(5), 20–26; Hernández-Rosete, D., O. M. García, E. Bernal, X. Castañeda & G. Lemp (2008). Migración y ruralización del Sida: relatos de vulnerabilidad en comunidades indígenas de México. *Revista de Salud Pública*, 42(1), 131–138; Martínez-Donate, A. P., M. G. Rangel, M. F. Hovell, J. Santibánez, C. L. Sipan & J. A. Izazola (2005). HIV Infection in Mobile Populations: The Case of Mexican Migrants to the United States. *Revista Panamericana de Salud Pública*, 17(1), 26–29; and Sánchez, M. A., G. F. Lemp, C. Magis-Rodríguez, E. Bravo-García, S. Carter & J. D. Ruiz (2004). The Epidemiology of HIV among Mexican Migrants and Recent Immigrants in California and Mexico. *Journal of Acquired Immune Deficiency Syndromes*, 37 (Suppl 4), S204-S214.

[27] Hernández-Rosete, D., O. M. García, E. Bernal, X. Castañeda & G. Lemp (2008). Migración y ruralización del Sida: relatos de vulnerabilidad en comunidades indígenas de México. *Revista de Salud Pública*, 42(1), 131–138.

HIV prevails particularly among returning migrants,[28] with one-third of HIV cases detected in high-migration states, thereby suggesting a possible connection between migration to the United States and the spread of the virus in rural areas of Mexico.[29] This apparent association however, needs further research. Studies have revealed that migrant males engage in more high-risk sex (multiple sex partners, sex with prostitutes, varied sexual behavior, injectable drug use, sex with men and alcohol abuse) than nonmigrant males, thus increasing their chances of contracting sexual infections and HIV. However, paradoxically, during their stay in the United States, migrants also broaden their knowledge about HIV and preventive practices, such as condom use, though they do not necessarily apply these practices to their daily lives. In this regard, more condom use has been registered among migrants with greater experience in the United States, particularly among older, single migrants with higher education levels.[30] The risks that the female partners of migrants face with regard to HIV and STI have also been documented.[31] Among these women, insufficient knowledge about HIV/AIDS, traditional gender roles, and the lack of power to engage in sexual negotiation with their spouses render the partners of rural migrants vulnerable to contagion.

Recent studies also point to an imminent surge in the prevalence of risk factors to chronic conditions in areas with well-established migrant networks or high migration

[28] Minichiello, S. N., C. Magis, P. Uribe, L. Anaya & S. Bertozzi (2002). The Mexican HIV/AIDS Surveillance System: 1986-2001. *AIDS,* 16 (Suppl 3), S13-S17; and Sánchez, M. A., G. F. Lemp, C. Magis-Rodríguez, E. Bravo-García, S. Carter & J. D. Ruiz (2004). The Epidemiology of HIV among Mexican Migrants and Recent Immigrants in California and Mexico. *Journal of Acquired Immune Deficiency Syndromes*, 37 (Suppl 4), S204-S214.

[29] Foladori, G., M. Moctezuma & H. Márquez (2004). La vulnerabilidad epidemiológica en la migración México-Estados Unidos. *Migración y Desarrollo*, (3), 19–44; Magis-Rodríguez, C., C. Gayet, M. Negroni, R. Leyva, E. Bravo-García, P. Uribe & M. Bronfman (2004). Migration and AIDS in Mexico: An Overview Based on Recent Evidence. *Journal of Acquired Immune Deficiency Syndrome*, 37(4), S215-S226; and Sánchez, M. A., G. F. Lemp, C. Magis-Rodríguez, E. Bravo-García, S. Carter & J. D. Ruiz (2004). The Epidemiology of HIV among Mexican Migrants and Recent Immigrants in California and Mexico. *Journal of Acquired Immune Deficiency Syndromes*, 37 (Suppl 4), S204-S214.

[30] Fosados, R., R. Caballero-Hoyos, T. Torres-López & T. W. Valente (2006). Condom Use and Migration in a Sample of Mexican Migrants: Potential for HIV/STI Transmission. *Salud Pública de México*, 48(1), 57–61.

[31] Salgado de Snyder, V. N., A. Acevedo, M. de J. Díaz-Pérez & A. Saldivar-Garduño (2000). Understanding the Sexuality of Mexican-Born Women and their Risk for HIV-AIDS. *Psychology Women Quarterly*, 24(1), 100–109; Hirsch, J. S., J. Higgins, M. E. Bentley & C. A. Nathanson (2002). The Social Constructions of Sexuality: Marital Infidelity and Sexually Transmitted Disease-HIV Risk in a Mexican Migrant Community. *American Journal of Public Health*, 92(8), 1227–1237; Hernández-Rosete, D., O. M. García, E. Bernal, X. Castañeda & G. Lemp (2008). Migración y ruralización del Sida: relatos de vulnerabilidad en comunidades indígenas de México. *Revista de Salud Pública*, 42(1), 131–138; and Leyva, R. & M. Caballero (2009). *Las que se quedan: contextos de vulnerabilidad a* ITS *y* VIH*/Sida en mujeres compañeras de migrantes*. Cuernavaca: Instituto Nacional de Salud Pública.

intensities, such as obesity among children and adolescents,[32] and adults,[33] owing mainly to inadequate eating habits, large food portions and low physical activity, particularly among migrant households.[34] In this regard, the remittances received as well as the direct and indirect exposure to the United States culture appear to contribute to changes in eating habits and the development of sedentary lifestyles in migrant households and migrant communities above and beyond those already taking place in Mexico (and many other nations), better known as the nutrition transition.[35]

Finally, it should be mentioned that no relevant articles were detected during the bibliographic search examining chronic conditions in migrant households or communities, thus making it necessary to lean on different (and more tentative) sources of information. On the one hand, the overall prevalence of high blood pressure, obesity and diabetes is significantly *lower* in rural than in urban areas.[36] As such, many migrant sending communities (located in rural areas)[37] may be less vulnerable to chronic conditions than adults in places with lower migration rates. However, according to the views collected during first-hand consultations with researchers from the National Institute of Public Health of Mexico (*INSP* by its Spanish acronym) S. Barquera, PhD, and R. López-Ridaura, PhD, (February 2012), rural dwellers in Mexico, including those living in high-migration states, do display characteristics of concern with regards to chronic disease, such as insufficient control and treatment of chronic conditions, delayed diagnoses and minimal access to services, among other barriers to healthcare. As such, many migrant-sending communities may not be exempt from these problems (or necessarily less likely to experience them than places with lower migration rates). While we are aware that migrants originate in both rural and urban areas, there were no studies conducted in urban settings of Mexico that specifically identified migrants as their units of analysis for the study of chronic conditions, this is why we included information from rural areas of traditional "sending" states.

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[32] Creighton, M. J., N. Goldman, G. Teruel & L. Rubalcava (2011). Migrant Networks and Pathways to Child Obesity in Mexico. *Social Science & Medicine*, 72(5), 685–693.

[33] Riosmena, F., R. Frank, I. R. Akresh & R. A. Kroeger (2012). U.S. Migration, Translocality, and the Acceleration of the Nutrition Transition in Mexico. *Annals of the Association of American Geographers*, 102(5), 1209–1218.

[34] Polanco, G. (2009). La alimentación como remesa social. Familias mexicanas migrantes. In: C. Mendoza & Á. F. Méndez (eds.). *Pan, hambre y trascendencia: diálogo interdisciplinario sobre la construcción simbólica del comer* (pp. 175–182). México: Universidad Iberoamericana: and Carmona, M. & I. Vizcarra-Bordi (2009). Obesidad en escolares de comunidades rurales con alta migración internacional en el México central. *Población y Salud en Mesoamérica*, 6(2), 1–18, <http://ccp.ucr.ac.cr/revista/volumenes/6/6-2/6-2-7/index.htm>.

[35] Popkin, B. M. & P. Gordon-Larsen (2004). The Nutrition Transition: Worldwide Obesity Dynamics and their Determinants. *International Journal of Obesity*, 28(3), S2-S9.

[36] Villalpando, S., V. de la Cruz, R. Rojas, T. Shamah-Levy, M. A. Ávila, B. Gaona, R. Rebollar & L. Hernández (2010). Prevalence and Distribution of Type 2 Diabetes Mellitus in Mexican Adult Population: A Probabilistic Survey. *Salud Pública de México*, 52 (Suppl 1), S19-S26; and Muñoz-Ibarra, A. I. & J. Carranza-Madrigal (2010). Perfil alimentario de una población rural de Michoacán y su asociación con obesidad, diabetes e hipertensión. *Med Int Mex*, 26(1), 24–30.

[37] See Table 2 in Riosmena, F. & D. S. Massey (2012). Pathways to El Norte: Origins, Destinations, and Characteristics of Mexican Migrants to the United States. *International Migration Review*, 46(1), 3–36, <doi:10.1111/j.1747-7379.2012.00879.x>.

4.2.3 Health during Transit

The assessment of health status and access to health services of the immigrants in the border area, while waiting to cross into the United States, is an extremely difficult task. People living in Mexican border towns include thousands of persons with widely divergent statuses, such as Mexican and United States citizens permanently residing in the area, indigenous groups, migrants from all parts of Mexico and other countries (particularly from Central America), and deported migrants. Due to the great diversity of people who live on the border, it is impossible to assess the magnitude and complexity of health problems faced by Mexican immigrants in this geographical area.[38]

We found few articles on migrant health in transit. Most were anecdotal reports and qualitative or cross-sectional studies that did not allow for the identification of systematic alterations in the health of the migrants, especially as they generally lacked any comparison groups to use as counterfactuals. Notwithstanding, it is evident that crossing the Mexico-United States border poses an additional threat to the physical and mental integrity of migrants attempting to enter without documentation that they would have otherwise not faced. These risks during crossing involve factors such as adverse climatic and geographic conditions, abuse of power from Mexican (and, less commonly, American) border patrol and local enforcement officers, abuse from *coyotes*/*polleros* (smugglers of illegal migrants) and other service providers, organized crime groups operating at the border, automobile accidents, falls, injuries, and hypothermia.

Violence during border crossing can take several forms. Verbal and psychological violence is common in both countries during deportation and repatriation, respectively, by service providers, judges, and local police. Forms of violence include extortion, unjustified detention and destruction of personal documents.[39] In spite of knowing the risks associated with undocumented crossing (included environmental dangers, thievery, and detention by border patrols) undocumented immigrants seem to be willing to put themselves and their families at substantial risk in order to seek economic opportunity.[40]

These risks have increased considerably in the last two decades. A rise in undocumented flows in the early 1990s led to a policy of "prevention through deterrence,"

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[38] Hernández, M. & G. Rangel (2009). *Condiciones de salud en la frontera norte de México*. Tijuana: Comisión de Salud Fronteriza México-Estados Unidos/Instituto Nacional de Salud Pública/El Colegio de la Frontera Norte/ Secretaría de Salud; and Comisión de Salud Fronteriza México-Estados Unidos (csf) (2003). *Frontera saludable 2010: una agenda para mejorar la salud en la frontera México-Estados Unidos*, <http://www.borderhealth.org/files/res_819.pdf>.

[39] Infante, C., A. J. Idrovo, M. S. Sánchez-Domínguez, S. Vinhas & T. González-Vázquez (2012). Violence Committed against Migrants in Transit: Experiences on the Northern Mexican Border. *Journal of Immigrant and Minority Health*, 14(3), 449–459, <doi:10.1007/s10903-011-9489-y>.

[40] DeLuca, L. A., M. M. McEwen & S. M. Keim (2010). United States-Mexico Border Crossing: Experiences and Risk Perceptions of Undocumented Male Immigrants. *Journal of Immigrant and Minority Health*, 12(1), 113–123.

in which the border patrol increased and concentrated infrastructure and manpower around on high-transit border corridors. These actions were implemented in several border patrol sectors. Operations Hold the Line, Gatekeeper, Safeguard, and Rio Grande were implemented in El Paso, San Diego, Nogales, and South Texas in 1993, 1994, 1997, and 1997 respectively.

This strategy seems to have led to nearly a five-fold increase in deaths from 1996 to 2000 among unauthorized border-crossers as increased vigilance at the border diverted migrants into more remote, desolated, and dangerous entry routes along the Sonora desert and South Texas.[41] Fatalities due to environmental exposure – such as hypothermia, dehydration, sunstroke and drowning – rose exponentially during the implementation of these border enforcement operations (i.e., 1995-2000), whereas traffic deaths remained stable. More recently published reports show a sustained number of border deaths despite the dramatic decrease in the flow of attempted crossers.[42] In more recent years (around 2005-2010), new types of violence toward undocumented immigrants have arisen, as they now have been taken as hostages by traffickers extorting their families for money, where failure to pay may result in physical violence and even death.[43]

4.2.4 Migrant Health upon Arrival: The Immigrant Health Advantage

Despite the health challenges migrants face during transit, at the border, and (as we discuss below) during the process of adaptation to U.S. society, the health of Mexican immigrants in the United States, especially shortly after arrival, appears more favorable than those of other race/ethnic groups, including United States-born non-Hispanic (NH) whites.[44] Although many other immigrant groups exhibit health advantages with respect to their United States-born coethnics, the U.S. population

[41] Eschbach, K., J. Hagan, N. Rodríguez, R. Hernández-León & S. Bailey (1999). Death at the Border. *International Migration Review*, 33(2), 430–454; Cornelius, W. A. (2001). Death at the Border: Efficacy and Unintended Consequences of US Immigration Control Policy. *Population and Development Review*, 27(4), 661-685; and Pérez-García, N. (2005). Cruces en la frontera: migración indocumentada y muertes en la frontera México-Estados Unidos. In: *Memorias del Seminario Internacional sobre los Derechos Humanos de los Migrantes* (pp. 145–170). Mexico: Secretaría de Relaciones Exteriores, Programa de Cooperación sobre Derechos Humanos México-Comisión Europea.

[42] U.S. Government Accountability Office (GAO) (2006). *Illegal Immigration: Border-Crossing Deaths Have Doubled since 1995; Border Patrol's Efforts to Prevent Deaths Have Not Been Fully Evaluated*. Washington D.C.: <http://www.gao.gov/products/GAO-06-770>.

[43] Fulginiti, L. (2008). Fatal Footsteps: Murder of Undocumented Border Crossers in Maricopa County, Arizona. *Journal of Forensic Sciences*, 53(1), 41–45.

[44] Cunningham, S. A., J. D. Ruben & K. M. V. Narayan (2008). Health of Foreign-Born People in the United States: A Review. *Health & Place*, 14(4), 623–635.

at large, or U.S.-born NH whites,[45] it is particularly striking in the case of Mexicans and other immigrants from Latin America, given that they have relatively low socioeconomic status (SES)[46] and low SES is consistently associated with poor health outcomes.[47]

This paradoxical result was first found among people of Hispanic descent in general (i.e., including both U.S.- and foreign-born), and the phenomenon is commonly known in the literature as the Hispanic Health Paradox (HHP). However, for the most part the health advantage is only found in immigrants and not in U.S.-born Hispanics and, as such, it has also been referred to as the Immigrant Health Advantage (IHA), the term we use here.

The IHA is first and foremost apparent in adult mortality,[48] particularly among Mexican immigrants, who have consistently lower mortality than U.S.-born NH whites.[49] Scholars have been somewhat skeptical of these differences, pointing out that there may be data errors related to the underestimation of migrant status among the deceased and other irregularities when calculating rates based on vital statistics,[50] or to the disproportional mismatching of immigrants in mortality estimates coming from continuous surveys matched to the National Death Index.[51] Despite the fact that these problems do produce lower immigrant mortality estimates, the general conclusion from studies looking at these biases is that they do not entirely explain the immigrant mortality advantage.[52]

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[45] Cunningham, S. A., J. D. Ruben & K. M. V. Narayan (2008). Health of Foreign-Born People in the United States: A Review. *Health & Place*, 14(4), 623–635.

[46] Jiménez, T. R. (2011). *Immigrants in the United States: How Well are They Integrating into Society?* Washington D.C., <http://www.migrationpolicy.org/pubs/integration-Jimenez.pdf>.

[47] Link, B. G. & J. Phelan (1995). Social Conditions as Fundamental Causes of Disease.

[48] Markides, K. S. & K. Eschbach (2005). Aging, Migration, and Mortality: Current Status of Research on the Hispanic Paradox. *Journals of Gerontology: Series V*, 60(2), S68-S75; and Markides, K. S. & K. Eschbach (2011). Hispanic Paradox in Adult Mortality in the United States. In: R. G. Rogers y E. M. Crimmins (eds.). *International Handbook of Adult Mortality* (pp. 227–240). New York: Springer.

[49] Hummer, R. A., R. G. Rogers, S. H. Amir, D. Forbes & W. P. Frisbie (2000). Adult Mortality Differentials among Hispanic Subgroups and Non-Hispanic Whites. *Social Science Quarterly*, 81(1), 459–476; Hummer, R. A., D. A. Powers, S. G. Pullum, G. L. Gossman & W. P. Frisbie (2007). Paradox Found (again): Infant Mortality among the Mexican-Origin Population in the United States. *Demography*, 44(3), 441–457; and Palloni, A. & E. Arias (2004). Paradox Lost: Explaining the Hispanic Adult Mortality Advantage. *Demography*, 41(3), 385–415.

[50] Eschbach, K., Y.-F. Kuo & J. S. Goodwin (2006). Ascertainment of Hispanic Ethnicity on California Death Certificates: Implications for the Explanation of the Hispanic Mortality Advantage. *American Journal of Public Health*, 96(12), 2209–2215.

[51] Patel, K. V., K. Eschbach, L. A. Ray & K. S. Markides (2004). Evaluation of Mortality Data for Older Mexican Americans: Implications for the Hispanic Paradox. *American Journal of Epidemiology*, 159(7), 707–715.

[52] Markides, K. S. & K. Eschbach (2005). Aging, Migration, and Mortality: Current Status of Research on the Hispanic Paradox. *Journals of Gerontology: Series V*, 60(2), S68-S75; and Markides, K. S. & K. Eschbach (2011). Hispanic Paradox in Adult Mortality in the United States.

Better-than-expected survival among immigrants in the U.S should thus derive from a favorable morbidity and associated risk factor profile. Although this is not the case for many health conditions, studies have found an IHA for several other outcomes.[53] Most notably, the foreign-born exhibit a lower prevalence of various chronic conditions, such as hypertension[54] and some types of cancer.[55] Immigrants also exhibit lower rates of smoking[56] and obesity.[57]

Nevertheless, it is notable that the migrant community in the United States also experiences several health disadvantages. Migrants from Latin America disproportionately work in dangerous occupations,[58] resulting in higher rates of work-related accidents[59] due to poor working conditions.[60] A life of repetitive manual work may translate into higher old-age disability rates.[61] Mexican migrant men also experience higher risks of HIV infection,[62] partly related to risky sexual behavior

In: R. G. Rogers & E. M. Crimmins (eds.). *International Handbook of Adult Mortality* (pp. 227–240). New York: Springer.

[53] Cunningham, S. A., J. D. Ruben & K. M. V. Narayan (2008). Health of Foreign-Born People in the United States: A Review. *Health & Place*, 14(4), 623–635.

[54] Singh, G. K. & M. Siahpush (2002). Ethnic-Immigrant Differentials in Health Behaviors, Morbidity, and Cause-Specific Mortality in the United States: An Analysis of Two National Data Bases. *Human Biology*, 74(1), 83–109.

[55] Eschbach, K., J. D. Mahnken & J. S. Goodwin (2005). Neighborhood Composition and Incidence of Cancer among Hispanics in the United States. *Cancer*, 103(5), 1036–1044.

[56] Singh, G. K. & M. Siahpush (2002). Ethnic-Immigrant Differentials in Health Behaviors, Morbidity, and Cause-Specific Mortality in the United States: An Analysis of Two National Data Bases. *Human Biology*, 74(1), 83–109.

[57] Singh, G. K. & R. A. Hiatt (2006). Trends and Disparities in Socioeconomic and Behavioural Characteristics, Life Expectancy, and Cause-Specific Mortality of Native-Born and Foreign-Born Populations in the United States, 1979-2003. *International Journal of Epidemiology*, 35(4), 903–919.

[58] Orrenius, P. & M. Zavodny (2009). Do Immigrants Work in Riskier Jobs? *Demography*, 46(3), 535–551.

[59] Kirschenbaum, A., L. Oigenblick & A. I. Goldberg (2000). Well Being, Work Environment and Work Accidents. *Social Science & Medicine*, 50(5), 631–639.

[60] Griffith, D. C. (2005). Rural Industry and Mexican Immigration and Settlement in North Carolina. In: V. Zúñiga & R. Hernández-León (eds.). *New Destinations: Mexican Immigration in the United States* (pp. 50–75). New York: Russell Sage Foundation.

[61] Eschbach, K., S. Al Snih, K. S. Markides & J. S. Goodwin (2007). Disability and Active Life Expectancy of Older U.S.- and Foreign-Born Mexican Americans. In: J. L. Angel & K. E. Whitfield (eds.). *The Health of Aging Hispanics: The Mexican-Origin Population* (pp. 40–49). New York: Springer.

[62] Martínez-Donate, A. P., M. G. Rangel, M. F. Hovell, J. Santibánez, C. L. Sipan & J. A. Izazola (2005). HIV Infection in Mobile Populations: The Case of Mexican Migrants to the United States. *Revista Panamericana de Salud Pública*, 17(1), 26–29.

following family separation.[63] The prevalence of diabetes is also relatively high in migrant communities[64] as well as in Mexico.[65]

Despite these issues, the relatively advantageous health profile of Mexican migrants in the United States could be a result of good-health selection taking place at the time of emigration or in the United States, or of different kinds of protection mechanisms such as feelings of self-accomplishment, −efficacy, and -confidence, as well as social support from friends and relatives mostly operating immediately after arrival in the United States. Each factor will be discussed.

4.2.5 Leaving in the First Place: Health Selection in Emigration

Migrant health could be favorable in the United States partly due to positive emigration selection, a set of processes whereby good health enables or facilitates migration from sending communities despite the various forms of health-related vulnerability prevalent in them as described above. This is a compelling premise given that most migrants are motivated by engaging in work activities in the United States. Studies that have compared the health of migrants in the United States with that of nonmigrants in sending countries have found evidence consistent with a moderate degree of positive emigration selection.[66] While these differences are not large enough to fully explain the IHA, they do contribute to it along with the types of data problems discussed above.

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[63] Parrado, E. A., C. A. Flippen & C. McQuiston (2004). Use of Commercial Sex Workers among Hispanic Migrants in North Carolina: Implications for the Spread of HIV. *Perspectives on Sexual and Reproductive Health*, 36(4), 150–156.

[64] Beard, H. A., M. Al Ghatrif, R. Samper-Ternent, K. Gerst & K. S. Markides (2005). Trends in Diabetes Prevalence and Diabetes-Related Complications in Older Mexican Americans from 1993-1994 to 2004-2005. *Diabetes Care*, 32(12), 2212–2217.

[65] Barquera, S., V. Tovar-Guzmán, I. Campos-Nonato, C. González-Villalpando & J. Rivera-Dommarco (2003). Geography of Diabetes Mellitus Mortality in Mexico: An Epidemiologic Transition Analysis. *Archives of Medical Research*, 34(5), 407–414.

[66] Barquera, S., V. Tovar-Guzmán, I. Campos-Nonato, C. González-Villalpando & J. Rivera-Dommarco (2003). Geography of Diabetes Mellitus Mortality in Mexico: An Epidemiologic Transition Analysis. *Archives of Medical Research*, 34(5), 407–414; Crimmins, E. M., B. J. Soldo, J. K. Kim & D. Alley (2005). Using Anthropometric Indicators for Mexicans in the United States and Mexico to Understand the Selection of Migrants and the "Hispanic Paradox". *Social Biology*, 52(3-4), 164–177; Riosmena, F., A. Palloni & R. Wong (2010). Migration Selection, Protection, and Acculturation in Health: A Bi-National Perspective on Older Adults. *Demography*, 50(3), 1039–1064; and Rubalcava, L. N., G. M. Teruel, D. Thomas & N. Goldman (2008). The Healthy Migrant Effect: New Findings From the Mexican Family Life Survey. *American Journal of Public Health*, 98(1), 78–84.

4.2.6 The Health of Migrants in the United States: Initial Sociocultural Protection?

Sociocultural protective factors, originating either in the destination[67] or the sending[68] country could enable Mexican migrants to cope better with the stress of daily life and promote better health. These processes could operate through migrant networks given that these tend to be instrumental in facilitating migration[69] and adaptation to the new setting[70] and, as such, could also provide additional forms of support and protection to migrants. This would in turn allow migrants to have more favorable health outcomes or behaviors in the United States relative to their pre-migration health.

As these support networks are oftentimes clustered in space (e.g., operate in neighborhoods and communities), looking at spatial patterns of health among migrants should reveal evidence consistent with some of these processes if, for instance, immigrants living in more tightly-knit neighborhoods and communities had better health than those living in more isolated conditions. Consistent with this notion, several studies have found better health outcomes among Latinos living in neighborhoods with higher concentrations of co-ethnics compared to those living in places with lower Latino densities. Latino and Mexican neighborhood concentration/segregation favors lower mortality,[71] lower cancer,[72] lower depressive symptoms,[73] and better self-rated health.[74] As people living in these neighborhoods have lower average socioeconomic status and, as such, should have worse health

[67] Landale, N. S., R. S. Oropesa & B. K. Gorman (2000). Migration and Infant Death: Assimilation or Selective Migration among Puerto Ricans? *American Sociological Review*, 65(6), 888–909; and Palloni, A. & J. D. Morenoff (2001). Interpreting the Paradoxical in the Hispanic Paradox: Demographic and Epidemiologic Approaches. *Annals of the New York Academyy of Sciences*, 954, 140–174.

[68] Landale, N. S., R. S. Oropesa & B. K. Gorman (2000). Migration and Infant Death: Assimilation or Selective Migration among Puerto Ricans? *American Sociological Review*, 65(6), 888–909.

[69] Curran, S. R. & E. Rivero-Fuentes (2003). Engendering Migrant Networks: The Case of Mexican Migration. *Demography*, 40(2), 289–307.

[70] Munshi, K. (2003). Networks in the Modern Economy: Mexican Migrants in the US Labor Market. *Quarterly Journal of Economics*, 118(2), 549–599.

[71] Eschbach, K., G. V. Ostir, K. V. Patel, K. S. Markides & J. S. Goodwin (2004). Neighborhood Context and Mortality among Older Mexican Americans: Is there a Barrio Advantage? *American Journal of Public Health*, 94(10), 1807–1812.

[72] Eschbach, K., J. D. Mahnken & J. S. Goodwin (2005). Neighborhood Composition and Incidence of Cancer among Hispanics in the United States. *Cancer*, 103(5), 1036–1044.

[73] Patel, K. V., K. Eschbach, L. L. Rudkin, M. K. Peek & K. S. Markides (2003). Neighborhood Context and Self-Rated Health in Older Mexican Americans. *Annals of Epidemiology*, 13(9), 620–628.

[74] Mulvaney-Day, N. E., M. Alegría & W. Sribney (2007). Social Cohesion, Social Support, and Health among Latinos in the United States. *Social Science & Medicine*, 64(2), 477–495; and Patel, K. V., K. Eschbach, L. L. Rudkin, M. K. Peek & K. S. Markides (2003). Neighborhood Context and Self-Rated Health in Older Mexican Americans. *Annals of Epidemiology*, 13(9), 620–628.

outcomes overall, this is interpreted as relatively strong evidence of protection among these communities.

Despite these intriguing results, these studies do not provide *direct* evidence of protection among the foreign-born as they have generally failed to distinguish if the so-called *barrio* effect is beneficial for immigrants and the U.S.-born in similar ways. The evidence coming from studies that have looked at the foreign- and U.S.-born separately (or that have looked exclusively at foreign-born Latinos) is mixed.[75] Overall, positive barrio effects are stronger among U.S.-born Latinos than among Latin American immigrants (despite the more favorable health profiles of the latter relative to the former).[76] As such, protection effects may not explain the IHA as much as the other factors discussed here. Furthermore, even if protection effects exist among the immigrant community, they may be short-lived given that immigrants with (somewhat) longer durations of stay and higher levels of "acculturation" to United States society have worse health profiles, as explained next.

4.2.7 Health Trajectories of Migrants in the United States: Negative Acculturation and Cumulative Disadvantage

Despite the initial IHA, the health of Latin American immigrants seems to deteriorate throughout the process of adaptation to the United States. Studies have shown that immigrant and Hispanic health are negatively correlated with measures of exposure and adaptation to United States society. The most common epidemiological pathway described in the literature through which immigrant adaptation negatively impacts health suggests that increasing exposure and acculturation to the United States are accompanied by the adoption of less healthy habits. Duration of stay and acculturation measures are positively correlated with lower consumption of fruit, vegetables, fiber, and other unfavorable dietary changes.[77] Most likely as a result of these changes, these indicators also are associated with higher body mass.[78]

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[75] Cagney, K. A., C. R. Browning & D. M. Wallace (2007). The Latino Paradox in Neighborhood Context: The Case of Asthma and Other Respiratory Conditions. *American Journal of Public Health*, 97(5), 919–925; and Patel, K. V., K. Eschbach, L. L. Rudkin, M. K. Peek & K. S. Markides (2003). Neighborhood Context and Self-Rated Health in Older Mexican Americans. *Annals of Epidemiology*, 13(9), 620–628.

[76] Cunningham, S. A., J. D. Ruben & K. M. V. Narayan (2008). Health of Foreign-Born People in the United States: A Review. *Health & Place*, 14(4), 623–635.

[77] Akresh, I. R. (2009). Health Service Utilization among Immigrants to the United States. *Population Research and Policy Review*, 28(6), 795–815.

[78] Abraído-Lanza, A. F., M. T. Chao & K. R. Flórez (2005). Do Healthy Behaviors Decline with Greater Acculturation? Implications for the Latino Mortality Paradox. *Social Science & Medicine*, 61(6), 1243–1255; Antecol, H. & K. Bedard (2006). Unhealthy Assimilation: Why do Immigrants Converge to American Health Status Levels? *Demography*, 43(2), 337–360, <doi:10.1353/

Furthermore, smoking and alcohol use behaviors rise with duration in the US and increased acculturation scores.[79] The adoption of unhealthy habits may have an impact on chronic health. Disability rates increase with duration of stay,[80] while chronic disease prevalence increases with both duration[81] and acculturation measures.[82] Allostatic load, an index of cumulative biological risk, is also higher among those with longer durations of stay in the United States and higher acculturation levels.[83] This pathway seems to translate into higher mortality for more experienced immigrants.[84]

However, the association between acculturation and health is not uniformly negative. For example, acculturation is positively associated with exercise and other measures of leisure time physical activity among foreign-born persons.[85] Similarly,

dem.2006.0011>; and Akresh, I. R. (2007). Dietary Assimilation and Health among Hispanic Immigrants to the United States. *Journal of Health and Social Behavior*, 48(4), 404–417.

[79] Abraído-Lanza, A. F., M. T. Chao & K. R. Flórez (2005). Do Healthy Behaviors Decline with Greater Acculturation? Implications for the Latino Mortality Paradox. *Social Science & Medicine*, 61(6), 1243–1255; and López-González, L., V. C. Aravena & R. A. Hummer (2005). Immigrant Acculturation, Gender and Health Behavior: A Research Note. *Social Forces*, 84(1), 581–593.

[80] Singh, G. K. & M. Siahpush (2002). Ethnic-Immigrant Differentials in Health Behaviors, Morbidity, and Cause-Specific Mortality in the United States: An Analysis of Two National Data Bases. *Human Biology*, 74(1), 83–109; and Cho, Y., W. P. Frisbie, R. A. Hummer & R. G. Rogers (2004). Nativity, Duration of Residence, and the Health of Hispanic Adults in the United States. *The International Migration Review*, 38(1), 184–211.

[81] Singh, G. K. & M. Siahpush (2002). Ethnic-Immigrant Differentials in Health Behaviors, Morbidity, and Cause-Specific Mortality in the United States: An Analysis of Two National Data Bases. *Human Biology*, 74(1), 83–109.; and Finch, B. K., D. P. Do, R. Frank & T. Seeman (2009). Could "Acculturation" Effects be Explained by Latent Health Disadvantages among Mexican Immigrants? *International Migration Review*, 43(3), 471–495, <doi:10.1111/j.1747-7379.2009.00774.x>.

[82] Gorman, B. K. & J. N. G. Read (2006). Gender Disparities in Adult Health: An Examination of Three Measures of Morbidity. *Journal of Health and Social Behavior*, 47(2), 95–110, <doi: doi:10.1177/002214650604700201>.

[83] Finch, B. K., D. P. Do, R. Frank & T. Seeman (2009). Could "Acculturation" Effects be Explained by Latent Health Disadvantages among Mexican Immigrants? *International Migration Review*, 43(3), 471–495, <doi:10.1111/j.1747-7379.2009.00774.x>.

[84] Colón-López, V., M. N. Haan, A. E. Aiello & D. Ghosh (2009). The Effect of Age at Migration on Cardiovascular Mortality among Elderly Mexican Immigrants. *Annals of Epidemiology*, 19(1), 8–14; Angel, R. J., J. L. Angel, C. Díaz-Venegas & C. Bonazzo (2010). Shorter Stay, Longer Life: Age at Migration and Mortality among the Older Mexican-Origin Population. *Journal of Aging and Health*, 22(7), 914–931, <doi:doi:10.1177/0898264310376540>; and Riosmena, F., B. G. Everett, R. G. Rogers & J. A. Dennis (2011). Paradox Lost (over Time)? Duration of Stay and Adult Mortality among Major Hispanic Immigrant Groups in the United States. Paper presented at the Annual Meeting of the Population Association of America, Washington D.C.

[85] Abraído-Lanza, A. F., M. T. Chao & K. R. Flórez (2005). Do Healthy Behaviors Decline with Greater Acculturation? Implications for the Latino Mortality Paradox. *Social Science & Medicine*, 61(6), 1243–1255.

Latinos with higher acculturation scores have a lower likelihood of exhibiting depressive symptoms than their counterparts with lower scores.[86]

Given that many of these studies use acculturation scales to measure the degree of immigrant "exposure" to United States society, these results overall are known as the Negative Acculturation hypothesis.[87] These findings are paradoxical given that migrants move to the United States in the first place to improve their standards of living and those of their offspring; culturally "assimilating" into the mainstream should be a signal of the blurring of racial and ethnic boundaries[88] that, in turn, ought to be accompanied by favorable structural changes.[89]

A simple negative acculturation story would imply that the adoption of negative health behaviors by immigrants translates into worse chronic health and, eventually, higher mortality. Although this is indeed a likely pathway by which immigrant adaptation processes are deleterious for their health, it is also likely that both, acculturation and duration of stay measures, are proxies for a general cumulative exposure to unfavorable living and working conditions, which may negatively impact chronic health and survival.[90]

4.2.8 The Health of Return Migrants in Mexico: The Negative Effects of the Migration Experience on Health and the Salmon Bias

Return migrants are individuals found back in Mexico after one or more "trips" (or migrations) to the United States. Because migration from Mexico to the United States is sometimes circular and hence there could be repeated trips over a migrant's lifetime, it is difficult to assess if a return migrant has settled back in Mexico, though it is generally assumed (though not necessarily accurately) that older return migrants who have been living in Mexico for a few years are indeed settled back.

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[86] González, H. M., M. N. Haan & L. Hinton (2001). Acculturation and the Prevalence of Depression in Older Mexican Americans: Baseline Results of the Sacramento Area Latino Study on Aging. *Journal of American Geriatrics Society*, 49(7), 948–953; and Mikolajczyk, R., M. Bredehorst, N. Khelaifat, C. Maier & A. E. Maxwell (2007). Correlates of Depressive Symptoms among Latino and Non-Latino White Adolescents: Findings from the 2003 California Health Interview Survey. *BMC Public Health*, *7*(1), 21.

[87] Lara, M., C. Gamboa, M. I. Kahramanian, L. S. Morales & D. E. Hayes (2005). Acculturation and Latino Health in the United States: A Review of the Literature and its Sociopolitical Context. *Annual Review of Public Health*, 26, 367–397.

[88] Alba, R. & V. Nee (2005). *Remaking the American Mainstream: Assimilation and Contemporary Immigration*. Cambridge: Harvard University Press.

[89] Rumbaut, R. G. (1997). Paradoxes (and Orthodoxies) of Assimilation. *Sociological Perspectives*, 40(3), 483–511.

[90] Abraído-Lanza, A. F., A. N. Armbrister, K. R. Flórez & A. N. Aguirre (2006). Toward a Theory-Driven Model of Acculturation in Public Health Research. *American Journal of Public Health*, 96(8), 1342–1346.

The few studies that examine the health of return migrants tend to compare this group to those who remain in the United States or to nonmigrants who remained in the sending community. As immigrant health tends to worsen with United States experience and as the IHA may be partially caused by the return migration of the unhealthy (also known as the salmon bias[91]), one might expect return migrants may be less healthy than both immigrants remaining behind and (to a lesser extent) nonmigrants living in sending communities in Mexico.

Studies directly testing for the salmon bias have generally found a *moderate* degree of return migration selection for older adults.[92] As in the case of emigration selection, the salmon bias is likely too small to fully explain the IHA in the United States,[93] but seems to be operating along with emigration selection, though it is found mostly in tests using populations of older adults.

In addition, (older) return migrants seem to be slightly unhealthier than nonmigrants in the communities they return to.[94] In a study of older adults, return migrants appear to be less healthy in terms of physical functioning (particularly women) than nonmigrants in Mexico despite having more assets than them. Also, because return migrants are inserted in a network of international exchange, their children are more likely to be migrants as well.[95] Thus the history of migration has a long-term reach; beyond the migrants' trips, and other exchanges associated with United States migration (e.g., remittances), migration further affect the health of the return migrants and the community in sending areas, having both beneficial and detrimental effects. Several authors thus, focus on the life course as analytical strategy to examine the health of migrants, and in this approach calendar time, age at first and last migration, as well as the work, health care, and family conditions in the host country are strong correlates of migrant health.[96]

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[91] The salmon bias is a statistical artifact that overstates the health of a particular immigrant group when researchers observe only those remaining in the host country, as is the case of the vast majority of IHA research.

[92] Palloni, A. & E. Arias (2004). Paradox Lost: Explaining the Hispanic Adult Mortality Advantage. *Demography*, 41(3), 385–415; Turra, C. M. & I. T. Elo (2008). The Impact of Salmon Bias on the Hispanic Mortality Advantage: New Evidence from Social Security Data. *Population Research and Policy Review*, 27(5), 515–530; and Riosmena, F., A. Palloni & R. Wong (2010). Migration Selection, Protection, and Acculturation in Health: A Bi-National Perspective on Older Adults. *Demography*, 50(3), 1039–1064.

[93] Turra, C. M. & I. T. Elo (2008). The Impact of Salmon Bias on the Hispanic Mortality Advantage: New Evidence from Social Security Data. *Population Research and Policy Review*, 27(5), 515–530.

[94] Crimmins, E. M., B. J. Soldo, J. K. Kim & D. Alley (2005). Using Anthropometric Indicators for Mexicans in the United States and Mexico to Understand the Selection of Migrants and the "Hispanic Paradox". *Social Biology*, 52(3-4), 164–177.

[95] Wong, R. & C. Gonzalez-Gonzalez (2010). Old-Age Disability and Wealth among Return Mexican Migrants from the United States. *Journal of Aging and Health*, 22(7), 932–954, <doi: doi:10.1177/0898264310380742>.

[96] Al Hazzouri, A. Z., M. N. Haan, S. Galea & A. E. Aiello (2011). Life-Course Exposure to Early Socioeconomic Environment, Education in Relation to Late-Life Cognitive Function Among Older Mexicans and Mexican Americans. *Journal of Aging and Health*, 23(7), 1027–1049, <doi:10.1177/0898264311421524>; and Montes de Oca, V., T. Ramírez, R. Sáenz & J. Guillén

4.3 Health Policies, Programs and Access to Health Care

4.3.1 Health, Disability, and Health Insurance Access for Migrants on Both Sides of the Border Over the Last Decade

To provide an idea of the overall health status of migrants in both origin and destination, we sought recent sources of data that would be comparable across Mexico and the United States. The upper panel of Table 4.1 presents results of disability rates from the 2010 Census in both countries, grouping persons by age and migration/nativity experience. The Mexico panel refers to groups defined by migration experience: never migrated, migrated only domestically, or international return migrants (who have worked or lived in the United States within the last five years). For the United States, the table shows results for the groups of Hispanics defined by place of birth, citizenship and, as a benchmark, we include the group of non-Hispanic whites.

In Mexico, the overall prevalence of disability limitations are similar across the migration groups. In contrast, in the United States and consistent with the IHA, foreign-born Mexicans report somewhat lower disability rates than both United States-born Mexican-Americans and NH whites between ages 15 and 49. However, also consistent with the notion of negative acculturation and cumulative disadvantage, the immigrant-native gap closes and reverses in older age groups. The risk ratio (RR) between non-citizen immigrants and NH whites is lower among 15-29-year-olds (i.e., 2.4%/5.7% = 0.42) than it is among 30-49- and 50-64-year-olds (RR = 0.47 and 0.87 respectively). Further, this ratio is unfavorable to immigrants relative to whites (RR = 1.12).

As mentioned above when discussing outcomes where immigrants do not have a health advantage in the United States, health risks and exposures may accumulate through their life and affect health, disability, and survival. Hence it is relevant to consider how different sources of vulnerability associated with being a migrant or that are higher among migrants may increase their exposure to risks carrying significant physical and mental health consequences and hinder their access to regular, timely, quality health care.[97] We discuss these trends in more detail in the context of migrants' ability to access health care in both countries during the various stages of migration.

Thus far, we have provided a mixed picture of the health status of migrants throughout the process of getting to, returning from, and adapting to life in the United States. Migrants are highly vulnerable in terms of health during the

(2011). The Linkage of Life Course, Migration, Health, and Aging: Health in Adults and Elderly Mexican Migrants. *Journal of Aging and Health*, 23(7), 1116–1140, <doi: doi:10.1177/0898264311422099>.

[97] Derose, K. P., J. J. Escarce & N. Lurie (2007). Immigrants and Health Care: Sources of Vulnerability. *Health Affairs*, 26(5), 1258–1268.

undocumented crossing; after arriving in somewhat good health in some indicators, they seem to turn vulnerable with increasing experience in the United States and start presenting worse health outcomes as a product of the accumulation of this disadvantage. While migrant vulnerability during the crossing is clearly rooted in the lack of legal status in the country of destination, there are different ways in which legal and socioeconomic status act as the main sources of the vulnerability that migrants face in the United States. In addition to discussing these below, we also underscore that the act of migration might not only be accompanied by the creation of new sources of vulnerability and subsequent elimination of others for migrants themselves, but that the transnational exchanges associated with United States migration might also increase or reduce these kinds of vulnerability for non-migrants in the communities of origin.

Access to health care is a key determinant of receiving preventive and timely curative care among all populations. Thus, lack of heath care insurance can be a key source of vulnerability. The lower panel of Table 4.1 presents the percent of the population lacking health insurance coverage in both Mexico and the United States,

Table 4.1 U.S.: Prevalence of disability and lack of health insurance by migration status in Mexico, and by nativity, race/ethnicity, 2010

Mexico				United States			
	Non-migrants	Domestic migrants	International return migrants	Foreign born Mexican Non U.S. citizen	Foreign born Mexican U.S. citizen	U.S. born Hispanic Mexican U.S. Citizen	U.S. born non Hispanic white U.S. citizen
Percent with at least one disability[a]							
Age 15-29	1.9	1.5	1.7	2.4	3.0	5.1	5.7
30-49	3.6	3.0	3.2	4.0	5.1	9.2	8.6
50-64	10.4	11.1	10.4	14.3	15.4	21.8	16.4
65+	31.6	31.5	26.1	43.0	42.5	45.3	37.8
Percent without health insurance[b]							
Age 15-29	38.3	40.4	55.8	75.2	42.5	34.2	19.4
30-49	32.0	35.3	51.8	67.7	33.5	26.7	15.4
50-64	29.9	34.6	54.3	58.5	33.0	20.3	10.4
65+	26.6	29.0	51.3	20.0	2.5	0.9	0.2

Source: For México, Sample of the Censo de Población y Vivienda 2010. For the U.S., American Community Survey 2010

Notes: Data comes from Riosmena, F., C. González y R. Wong (2012). El retorno reciente de Estados Unidos: salud, bienestar y vulnerabilidad de los adultos mayores. *Coyuntura Demográfica*, 2012(2), 63-67

[a]At least one limitation among: walking or moving up or down; seeing even with glasses; speaking, communicating or conversing; listening even with hearing aid; personal self-care; paying attention or learning simple matters; or having mental limitation

[b] ACS does not consider health insurance through Indian Health Services as health insurance coverage

according to migration experience. In Mexico there is a clear gap across the migrant groups. International return migrants report the highest lack of coverage (around 50%). Likewise, in the United States, foreign-born Mexicans, in particular non-citizens show the highest rates of vulnerability, with 60-75% lacking health insurance for those under age 65. Above age 65, due mostly to Medicare coverage, the percent lacking coverage drops to 20% among foreign-born Mexicans with no United States citizenship, but is still much higher than the other groups of Mexicans or non-Hispanic whites. In summary, this recent national data indicates that lack of coverage is a source of vulnerability for migrants in both countries, particularly for those who may be more likely to be undocumented.

As undocumented migration rose considerably for most of the last decade, Fig. 4.1 presents trends in health insurance coverage over the period for both Mexico and the United States using data from 2000 to 2010 for various groups defined by migration/nativity status. The time trends are similar across age groups, thus we present the data for ages 18-49 as these are prime ages for Mexico-US migration. In the United States, the pattern reflects that health insurance coverage remained relatively unchanged over the decade for most groups, except for a very slight decrease in health insurance coverage by 2009, perhaps as a result of the housing recession and ensuing global financial crisis taking place at the end of the decade. In general, the relative position of migrants also remained unchanged, with foreign-born Mexicans showing the lowest coverage rates, around 30% compared to 60% of native-born Mexicans and 80% of non-Hispanic whites.

On the other hand, there was a noticeable change in health insurance coverage in Mexican territory during the second part of the decade, mostly due to the advent of the Social Health Protection System (Popular Insurance Scheme) better known as *Seguro Popular* or Popular Insurance, established in 2004 with the purpose of providing health service coverage, through voluntary, public insurance for those Mexicans that are not affiliated to any health institution. Members affiliated to the SP have access to the medical, surgical, pharmaceutical, and hospital services providing coverage of a package of 275 general, and 49 highly specialized medical interventions described in the Universal Health Service Catalogue. Services are provided only in national territory within the health centers of the Public Health Systems.

As a result, all population groups show higher rates of health insurance coverage by the end of the decade. In particular, persons with international migration experience over the last 5 years show an increase in coverage from 23% in the year 2000 to 45% in 2010.

Next, we discuss policies and practices aimed to improve the health coverage of migrants at different stages of the migration process in both sides of the border (mainly occurring on the Mexican side) while also examining the *de facto* sources of vulnerability related to access to health care migrants are subject to through these stages.

4.3.2 Health Care Access and Migrant Vulnerability in the United States

Latin American migrants in the United States have difficulties having timely and systematic access to quality health care for several reasons. Most of these are related to their low socioeconomic position in United States society,[98] in turn related to the low human and financial capital they arrive with from the origin country. In addition, the lack of legal status of many immigrants puts them in additional disadvantage in several ways. First, it exerts a penalty on wages.[99] Second, it makes other forms of socioeconomic achievement much more difficult. Most notably, a migrant's legal status limits the types of jobs s/he has access to, regardless of her/his skills. Lack of legal status also makes access to college extremely costly in most of the United States (as unauthorized migrants are not eligible to in-state tuition or federally-funded grants and loans),[100] and makes homeownership and other forms of investment extremely difficult.

The disadvantages brought by having a low socioeconomic position and lacking legal status affect migrant health in two ways. First, as mentioned briefly above, it overly exposes migrants to different sorts of health risks. As already mentioned, Latin American migrants work in more dangerous occupations[101] as the lack of job security[102] seems to translate into poorer working conditions and more dangerous workplaces,[103] and to higher rates of work-related accidents.[104] These risks, along

[98] Jiménez, T. R. (2011). *Immigrants in the United States: How Well are They Integrating into Society?* Washington D.C., <http://www.migrationpolicy.org/pubs/integration-Jimenez.pdf>.

[99] Hall, M., E. Greenman & G. Farkas (2010). Legal Status and Wage Disparities for Mexican Immigrants. *Social Forces*, 89(2), 491–513; and Mukhopadhyay, S. & D. Oxborrow (2012). The Value of an Employment-Based Green Card. *Demography*, 49(1), 219–237.

[100] By 2013, 15 of the 50 states in the U.S. allowed undocumented students that graduated from high school to pay in-state tuition. They include: California, New Mexico, and Texas. In order to do so, they had to create their own laws to allow these students to attend college. At the other extreme, some states prohibit undocumented students to apply to, or attend, public universities. These include South Carolina and Alabama. Still, most states make undocumented students pay out-of-state tuition. <http://www.ncsl.org/research/immigration/in-state-tuition-and-unauthorized-immigrants.aspx>.

[101] Orrenius, P. & M. Zavodny (2009). Do Immigrants Work in Riskier Jobs? *Demography*, 46(3), 535–551.

[102] Undocumented immigrants are indeed entitled to many work protections, but they have no clear way to enforce them in the legal system without risking getting caught by immigration authorities, thus many do not come forward when employers abuse them or provide them with subpar working conditions.

[103] Donato, K. M., M. Stainback & C. L. Bankston (2005). The Economic Incorporation of Mexican Immigrants in Southern Louisiana: A Tale of Two Cities. In: V. Zúñiga & R. Hernández-León (eds.). *New Destinations: Mexican Immigration in the United States* (pp. 76–100). New York: Russell Sage Foundation; and Griffith, D. C. (2005). Rural Industry and Mexican Immigration and Settlement in North Carolina. In: V. Zúñiga & R. Hernández-León (eds.). *New Destinations: Mexican Immigration in the United States* (pp. 50–75). New York: Russell Sage Foundation.

[104] Kirschenbaum, A., L. Oigenblick & A. I. Goldberg (2000). Well Being, Work Environment and Work Accidents. *Social Science & Medicine*, 50(5), 631–639.

with the general consequences of a life of repetitive manual labor, might explain the higher old-age disability rates among migrants relative to U.S.-born individuals,[105] as also shown in the upper panel of Table 4.1.

Low socioeconomic and legal position also impedes systematic, timely access to quality health care. As mentioned above and illustrated in Table 4.1 and Fig. 4.1, Mexican (and other) immigrants consistently report lower levels of health insurance coverage and less access to regular sources of care than other segments of the United

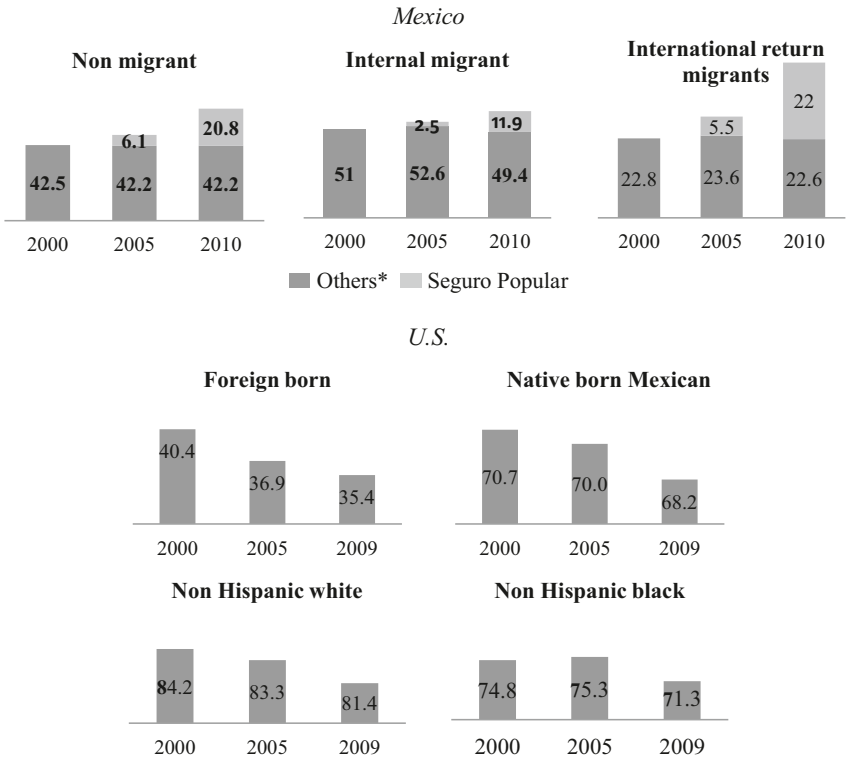

Fig. 4.1 Mexico and U.S. insurance rates (ages 18–49)
Source: Fig. 4.1, Health Chapter. Data for Mexico uses the XII Censo General de Población y Vivienda 2000, Censo de Población y Vivienda 2010, II Conteo de Población y Vivienda 2005and Health Ministry Statistics. For the U.S. data comes from the National Health Interview Survey weighted estimates of any health insurance coverage.
*Insurance coverage "Others" includes IMSS, ISSSTE, ISSSTE at state level, PEMEX, Defense/ Marine; Private and other institutions.

[105] Eschbach, K., S. Al Snih, K. S. Markides & J. S. Goodwin (2007). Disability and Active Life Expectancy of Older U.S.- and Foreign-Born Mexican Americans. In: J. L. Angel & K. E. Whitfield (eds.). *The Health of Aging Hispanics: The Mexican-Origin Population* (pp. 40–49). New York: Springer.

States population.[106] Health service utilization by Mexican immigrants in the United States has been an important source of political controversy and debate over the last three decades. In the last ten years, however, research data has consistently shown that immigrants from Mexico living in the United States use fewer key preventive services than U.S.-born Mexican Americans and non-Hispanic whites. Hispanics in particular report some of the lowest rates of coverage and the trend appears to have worsened in recent years[107] (see also Fig. 4.1).

Such disadvantage is partially due to the lack of health insurance coverage, regular sources of care, or both. These circumstances are major barriers for healthcare and are often associated with inadequate job benefits.[108] The limited types of jobs available to migrants, particularly the undocumented, do not offer employer-sponsored insurance or other benefits,[109] such as access to publicly-funded health insurance options like Medicare (for individuals over age 65) and Medicaid and SCHIP (for low-income families and children) given than only U.S. citizens and immigrants who have been legal permanent residents for at least 5 years are eligible for these benefits.

As insurance is an important enabling factor allowing timely access to regular sources of care and as Latin American migrants have lower insurance rates, they are also less likely to report using health screening tests.[110] Lower screening, in turn, can have serious health consequences if problems are detected later (or at all) and by the severe limits to disease treatment faced by migrants related to their lack of access to health insurance.[111] However, even when insured and eligible for programs, migrants use fewer services and have lower medical expenses than US-born

[106] Singh, G. K. & R. A. Hiatt (2006). Trends and Disparities in Socioeconomic and Behavioural Characteristics, Life Expectancy, and Cause-Specific Mortality of Native-Born and Foreign-Born Populations in the United States, 1979–2003. *International Journal of Epidemiology*, 35(4), 903–919; and Derose, K. P., J. J. Escarce & N. Lurie (2007). Immigrants and Health Care: Sources of Vulnerability. *Health Affairs*, 26(5), 1258–1268.

[107] Rutledge, M. S. & C. G. McLaughlin (2008). Hispanics and Health Insurance Coverage: The Rising Disparity. *Medical Care*, 46(10), 1086–1092.

[108] Wallace, S. P., V. F. Gutiérrez & X. Castañeda (2005). *Health Service Disparities among Mexican Immigrants*. Berkeley: University of California, Los Angeles, Center for Health Policy Research; and Ortega, A. N., H. Fang, V. H. Pérez, J. A. Rizzo, O. Carter-Pokras, S. P. Wallace & L. Gelberg (2007). Health Care Access, Use of Services, and Experiences among Undocumented Mexicans and Other Latinos. *Archives of Internal Medicine*, 167(21), 2354–2360.

[109] Chávez, L. R., E. T. Flores & M. López-Garza (1992). Undocumented Latin American Immigrants and U. S. Health Services: An Approach to a Political Economy of Utilization. *Medical Anthropology Quarterly*, 6(1), 6–26; and Carrasquillo, O., A. I. Carrasquillo & S. Shea (2000). Health Insurance Coverage of Immigrants Living in the United States: Differences by Citizenship Status and Country of Origin. *American Journal of Public Health*, 90(6), 917–923.

[110] Echeverria, S. E. & O. Carrasquillo (2006). The Roles of Citizenship Status, Acculturation, and Health Insurance in Breast and Cervical Cancer Screening among Immigrant Women. *Medical Care*, 44(8), 788–792.

[111] Pagán, J. A., A. Puig & B. J. Soldo (2007). Health Insurance Coverage and the Use of Preventive Services by Mexican Adults. *Health Economics*, 16(12), 1359–1369.

individuals,[112] indicating that they may still face other barriers to care,[113] such as limited English proficiency, geographical isolation, financial constraints, low paying jobs usually in the informal sector, discrimination, cultural differences with service providers, lack of social support, limited knowledge of healthcare systems, and undocumented status.[114]

In response, migrants use a variety of strategies to compensate for this lack of coverage. Responses in the United States include a broad but uneven patchwork of health services provided by local Non-Governmental Organizations (NGOs) and funded through public and private grants through which migrant workers have access to basic screening.[115] In addition, a recent study looking at the alternatives used by Mexican immigrants in the U.S. to cope with their health problems identified six different strategies: self-medication and/or home remedies, telephone consultation with relatives in Mexico, use of private physician's services, travel to border towns to obtain care, return to place of origin in Mexico, and regular medical care during their visits to Mexico. The selection of alternatives depend on the severity of the disease, the length of travel to Mexico, and the migrant's legal status.[116] As such, migrants rely heavily on resources provided by Mexico. We turn to these resources next.

4.3.3 Migration and Health Policies and Programs

While every Mexican citizen is officially entitled to health protection under the Constitution since 1983, migrants face obvious shortfalls in this regard despite government initiatives to implement health programs throughout the 50 Mexican consular offices in the United States. Over the past decade, healthcare policies and programs for Mexican migrants have undergone a series of revisions and developments aimed to improve the situation of Mexican migrants.

The first efforts to provide health service access in Mexico to migrants in the United States and their families in Mexico were introduced in 1990 under the

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[112] Ku, L. (2009). Health Insurance Coverage and Medical Expenditures of Immigrants and Native-Born Citizens in the United States. *American Journal of Public Health*, 99(7), 1322–1328.

[113] Pérez-Escamilla, R. (2010). Health Care Access among Latinos: Implications for Social and Health Care Reforms. *Journal of Hispanic Higher Education*, 9(1), 43–60.

[114] Derose, K. P., J. J. Escarce & N. Lurie (2007). Immigrants and Health Care: Sources of Vulnerability. *Health Affairs*, 26(5), 1258–1268; and Nandi, A., S. Galea, G. López, V. Nandi, S. Strongarone & D. C. Ompad (2008). Access to and Use of Health Services among Undocumented Mexican Immigrants in a US Urban Area. *American Journal of Public Health*, 98(11), 2011–2020, <doi:10.2105/ajph.2006.096222>.

[115] Díaz-Pérez, M. de J., T. Farley & C. M. Cabanis (2004). A Program to Improve Access to Health Care among Mexican Immigrants in Rural Colorado. *Journal of Rural Health*, 20(3), 258–264.

[116] Nigenda, G., J. A. Ruiz-Larios, R. M. Bejarano-Arias, J. E. Alcalde-Rabanal & P. Bonilla-Fernández (2009). Análisis de las alternativas de los migrantes mexicanos en Estados Unidos de América para atender sus problemas de salud. *Salud Pública de México*, 51(5), 407–416.

auspices of the Mexican Institute of Social Security (*Instituto Mexicano del Seguro Social,* IMSS) Migrant Program. Farm worker unions, in agreement with the Mexican government, offered migrants and their families affiliation to IMSS' Family Health Insurance Plan[117] through several Mexican consulates in the United States. With this, a wide range of medical, surgical, pharmaceutical and hospital services were made available to migrants and their families through the *IMSS* network in Mexico. Yet, the program failed to achieve full-scale implementation at the time, due partly to the low priority that *IMSS* assigned to expanding voluntary-affiliation coverage at large,[118] with migrant farm workers thus being one of the groups affected by this lack of action.

During the past 10 years, the Mexican government has rekindled and strengthened its commitment to providing health care to these constituencies and to migrants in particular. As mentioned above, one of the main ways in which this has taken place is through the promotion of *Seguro Popular* (SP) voluntary income-based affiliation.[119] Although SP services are provided only in Mexican territory (within the health centers of the Health Secretariat), since July 2010 the Mexican government has increasingly tried to boost *Seguro Popular* affiliation in United States Consulates as a means of ensuring the health coverage of migrants the moment they return to Mexico and of their family members living in sending communities (as the protection unit of the SP is the family, and not only individuals).

In addition, as part of the 2007-2012 National Health Program (*Programa Nacional de Salud*, *PRONASA*)[120] a Migrant Health Program (*PSM* according to its Spanish acronym) was established with bi-national interventions to improve health service access for migrants in their places of origin, in transit, and at their destinations. *PSM* strategies include: (1) Coordinating, supporting and ensuring the continuance of federal government programs for Mexican migrants; (2) fostering communication and information strategies for migrants in terms of culturally-sensitive education and health promotion; (3) encouraging and strengthening bi-national bonds among service providers in order to broaden medical service access for the migrant population; (4) driving and conducting negotiations towards bi-national agreements with governmental/non-governmental organizations and academic institutions in order to promote health and improve service access and quality for the Mexican migrant population; (5) providing medical and hospital services on

[117] Arboleda-Flores, J., H. L. Stuart, P. Freeman & M. A. González-Block (1999). *Acceso a los servicios de salud en el marco del* tlc/*Access to Health Services under* nafta. Washington D.C.: Organización Panamericana de la Salud.

[118] Arboleda-Flores, J., H. L. Stuart, P. Freeman & M. A. González-Block (1999). *Acceso a los servicios de salud en el marco del* tlc/*Access to Health Services under* nafta. Washington D.C.: Organización Panamericana de la Salud.

[119] Seguro Popular (2010). *Comisión Nacional de Protección Social en Salud*. México, <http://seguro-popular.gob.mx/index.php?option=com_content&view=article&id=220:20111025&catid=5:comunicados&Itemid=46>.

[120] Secretaría de Salud (ssa) (2008). Programa Sectorial de Salud 2007–2012. Por un México sano: construyendo alianzas para una mejor salud. *Diario Oficial de la Federación*, January 17.

both sides of the border for Mexicans with health conditions, and (6) promoting research on migrant health.[121]

The recent health policy developments achieved by the Mexican government have been echoed not only by the civil society collaborating with the public sector, but also by local authorities in the United States. Among them, the California Policy Research Center and the Office of the President of the University of California have been sponsoring the Health Initiative of the Americas (HIA), with debates on a wide range of migrant health policy issues. The Conference Series on Aging in the Americas based at the University of Texas also holds regular exchanges related to migrant health on both sides of the border. As detailed in the following paragraphs, numerous other universities and private agencies have teamed up under programs, academic exchanges, and human resource training groups dealing with migrant healthcare in the United States, all of which are pursuing a comprehensive, robust, bi-national network of service providers.

The Mexico-US-border area, as mentioned before, is comprised by ten pairs of sister cities located in nine out of the ten bordering states, and has been the setting for substantial transborder health interaction. For instance, as early as 1943, at the request of the US Public Health Service, the Pan-American Health Organization (PAHO) set up a field office at the El Paso, Texas border. That same year, the US-Mexico Border Health Association (USMBHA) was established as a nonprofit organization aimed at promoting the development of transnational public health organizations, practices and symbols in the border area.[122] Both PAHO and USMBHA field offices have provided effective mechanisms not only for exchanging information, resources and ideas, but also for developing projects in collaboration with professionals from both countries.

In 1994, with the advent of NAFTA, concern mounted over border health issues and culminated in 2000, with the creation of the United States-Mexico Border Health Commission (BHC). Its 26 members include public health officials and professionals from the ten bordering states, the Ministers of Health from both federal governments and, in the case of Mexico, state-level ministers of health.[123] Between 2000 and 2010, BHC addressed the most prevalent border health needs, on one hand, by organizing the Border Bi-national Health Week (BBHW), the National Infant Immunization Week/Vaccination Week in the Americas, and the US–Mexico Bi-national Infectious Disease Conference; and on the other, by setting up the Bi-national Border Health Research Work Group and Expert Panel.[124]

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[121] Secretaría de Salud (ssa) (2007). *Programa de acción específico 2007–2012. Vete Sano, Regresa Sano*. México: ssa.

[122] Collins-Dogrul, J. (2006). Managing US-Mexico "border health": An Organizational Field Approach. *Social Science & Medicine*, 63, 3199–3211.

[123] Comisión de Salud Fronteriza México-Estados Unidos (CSF) (s.a.). Acerca de la Comisión, <http://www.saludfronterizamx.org/acerca-comision/creacion>.

[124] Comisión de Salud Fronteriza México-Estados Unidos (CSF) (2011). *Metas, acciones y logros*, <http://www.borderhealth.org/files/res_1782.pdf>.

4.3.4 *Mexican Government Initiatives to Improve Health for Migrants and their Families*

Since 2001, the Mexican Health Promotion Directorship at federal level, has been operating a program titled Leave Healthy, Return Healthy (*Vete Sano Regresa Sano, VSRS*) throughout Mexico, with the purpose of affording migrants the resilience they require to weather the severe conditions, social isolation and lifestyle changes imposed by migration. *VSRS* disseminates information on lifestyle changes and contingencies pervading the migration process as well as the health risks to be expected in transit and destination. It is particularly active at health fairs during the winter months, that is, when migrants visit their communities of origin. *VSRS* coordinates its activities with some Mexican immigration and health offices at the state level and the Bi-national Health Week organizing committee.[125]

Additionally, the Mexican Ministries of Health and Foreign Affairs have installed health booths known as *Ventanillas de Salud (VdS)* in 50 Mexican consulates throughout the United States. In 2003, with funds from the California Endowment, *VdS* kicked off as a public-private initiative designed to support the community outreach efforts of the Mexican consulate in Los Angeles. Since then, professional educators have been working from booths in consular halls to promote health among migrants and offer information and referrals to a variety of free and low-cost health programs and centers. During 2010, approximately 873,345 Mexicans in the United States benefited from the *VdS* information services.[126]

As part of these efforts, in July 2010, the Mexican Ministry of Health piloted a *Seguro Popular* project for the families of Mexican migrants in the United States. Operating from the *VdS* booths in Denver, Chicago, San Diego, Seattle, Los Angeles, New York, and Atlanta, project personnel encourage migrants to join *Seguro Popular* and return to Mexico for medical services in case of need.[127] However, by 2011, only 1325 applications had been submitted – a modest figure, considering that an independent survey of migrants visiting the Mexican consulate in Los Angeles at mid-year revealed that only 41% had family members affiliated with *SP* in Mexico.[128]

In 2011, the Ministry of Health in coordination with the Comprehensive Family Development System (*DIF* according to its Spanish acronym) launched a crucial

[125] Secretaría de Salud (ssa) (2007). *Programa de acción específico 2007–2012. Vete Sano, Regresa Sano*. Mexico: ssa.

[126] Secretaría de Relaciones Exteriores (SRE) (2010). Instituto de los Mexicanos en el Exterior, <http://www.ime.gob.mx/index.php?option=com_content&view=article&id=51&Itemid=497&lang=es>.

[127] Seguro Popular (2010). *Comisión Nacional de Protección Social en Salud*. México, <http://seguro-popular.gob.mx/index.php?option=com_content&view=article&id=220:20111025&catid=5:comunicados&Itemid=46>.

[128] González-Block, M. A., A. Vargas, L. A. de la Sierra-de la Vega & A. Martínez (2014). Redressing the Limitations of the Affordable Care Act for Mexican Immigrants Through Bi-National Health Insurance: A Willingness to Pay Study in Los Angeles. *Journal of Immigrant and Minority Health*, 16(2), 179–188, <doi:10.1007/s10903-012-9712-5>.

program denominated Popular Health Insurance for Migrant Children (*SPNM* according to its Spanish acronym). The significance of this initiative lies in its stirring objective, namely: to benefit Mexican children and adolescents who have been repatriated from the United States unaccompanied by adults. The program operates in the six northern Mexican border states, from temporary *DIF* hostels pertaining to the Inter-institutional Program for Border Children and Adolescents.[129] It should be mentioned that *SPNM* does not discriminate against non-Mexican children.[130]

In terms of return migrants, the Ministry of Foreign Affairs has long directed a Repatriation Program for Seriously Ill Nationals (*PRCEG* according to its Spanish acronym) through the Mexican consulates in the United States. The program emanated from the need to provide medical assistance – preferably in their places of origin – to seriously ill Mexican nationals who are repatriated if, for some reason, their conditions cannot continue to be treated at their destinations in the United States. The repatriation process is executed in coordination with the consulates and delegations from the Ministries of Foreign Affairs and Health on a State and Federal basis. A formal agreement has not been signed between the Ministries and rules of operation have not been formulated for *PRCEG* procedures; however, a description of the repatriation routine exists locally for each sector.[131] It is noteworthy, however, that, of the 985 illness-related repatriations processed by *PRCEG* from 2008 to 2010, only 28% were financed by the program; the rest were covered by the migrants with their own resources.[132]

The medical causes for repatriation are restricted to chronic illnesses requiring high-cost treatments. Predominant diagnoses include chronic renal failure, brain disease, paraplegia, cancer and mental illness. Certain hospitalizations – for example, those related to chronic renal failure – are not covered by *Seguro Popular*[133] and thus serve as a wake-up call to reinforce financial protection in cases where treatment is required for dialysis, hemodialysis and chronic disability ensuing from work-related accidents. As the latter is reported frequently by hospitals, and in consideration of the United States Occupational Safety and Health Administration

[129] Seguro Popular (2010). *Comisión Nacional de Protección Social en Salud*. México, <http://seguro-popular.gob.mx/index.php?option=com_content&view=article&id=220:20111025&catid=5:comunicados&Itemid=46>.

[130] Secretaría de Relaciones Exteriores (SRE) (2012). Consulado General de México en Laredo, <http://portal.sre.gob.mx/laredo/index.php?option=displaypage&Itemid=104&op=page&SubMenu=>.

[131] Núñez-Argote, L. C. (2010). *Análisis del proceso de repatriación de connacionales enfermos de Estados Unidos a Guanajuato*. Master's Thesis. Cuernavaca: Escuela de Salud Pública de México; and González-Block, M. A. & L. A. de la Sierra-de la Vega (2011). Hospital Utilization by Mexican Migrants Returning to Mexico Due to Health Needs. *BMC Public Health,* 11, 241.

[132] Secretaría de Relaciones Exteriores (SRE) (s.a.). Dirección General Adjunta de Proteccion, <http://www.sre.gob.mx/index.php>.

[133] Horton, S. y S. Cole (2011). Medical Returns. Seeking Health Care in Mexico. *Social Science Medicine*, 72(11), 1846–1852.

(OSHA) norms,[134] thought should be given to raising the capacity of the health system in Mexico with a view to offset the costs of services borne by the authorities in the United States.

It should be noted that the institutions involved in migrant return processes have not formalized or systematized their interactions, with problems arising from illness-related returns often solved in an improvised manner and without funds specifically designated for that purpose.

4.3.5 Return Migration and Cross-Border Utilization of Health Services in Mexico

As described in more detail below, lack of immigration documents, socio-cultural barriers and gender issues coupled with insufficient insurance and out-of-pocket capacity to cover medical services prevent migrants from seeking timely medical services in the United States.[135] As a result, health care access is still very much a challenge and a source of migrant vulnerability even when compared to the less than ideal health care access of people in origin communities in Mexico.[136] More importantly, delayed diagnoses[137] lead to higher-cost, unsustainable treatments which, in turn, force some migrants to obtain medical care at the Mexican border or in their communities of origin.[138]

The Mexican side of the border offers not only low-cost and acceptable-quality medical services and medications[139] but also more personalized attention[140] as well

[134] Byrd, T. L. & J. G. Law (2009). Cross-Border Utilization of Health Care Services by United States Residents Living Near the Mexican Border. *Revista Panamericana de Salud Pública*, 26(2), 95–100.

[135] Pew Research Center (PRC) (2009). *Mexican Immigrants in the United States 2008. Fact Sheet*, <http://pewhispanic.org/files/factsheets/47.pdf>.

[136] Wong, R., J. J. Díaz & M. Higgins (2006). Health Care Use among Elderly Mexicans in the United States and Mexico. The Role of Health Insurance. *Research on Aging*, 28(3), 393–408.

[137] Leite, P. & X. Castañeda (2008). Mexicanos en Estados Unidos: (falta de) acceso a la salud. In: Consejo Nacional de Población (Conapo) (ed.). *La situación demográfica de México 2008* (pp. 117–128). Mexico: Conapo.

[138] Wallace, S. & X. Castañeda (2008). Demographic Profile of Mexicans in the United States; and Nigenda, G., J. A. Ruiz-Larios, R. M. Bejarano-Arias, J. E. Alcalde-Rabanal & P. Bonilla-Fernández (2009). Análisis de las alternativas de los migrantes mexicanos en Estados Unidos de América para atender sus problemas de salud. *Salud Pública de México*, 51(5), 407–416.

[139] Landeck, M. & C. Garza (2002). Utilization of Physician Health Care Services in Mexico by U.S. Hipanic Border Residents. *Health Marketing Quarterly*, 20(1), 3–16; and Wallace, S., C. Mendez-Luck & X. Castañeda (2009). Heading South: Why Mexican Immigrants in California Seek Health Services in Mexico. *Med Care*, 47(6), 662–669.

[140] Horton, S. & S. Cole (2011). Medical Returns. Seeking Health Care in Mexico. *Social Science Medicine*, 72(11), 1846–1852.

as geographic proximity for those who can cross legally from the United States.[141] In this regard, it has been found that the younger migrants are more inclined to cross the border for medical services than the older ones.[142] According to Landeck et al., 41.2% of the *Latino* households in Laredo, Texas, utilize medical services in Mexico,[143] and studies in California have indicated that up to 28% of health-fair attendees in that state purchase drugs and/or seek medical services in Mexico,[144] with as many as 250,000 health-related crossings reported per month at the San Diego, California-Mexico border.[145] Wallace et al. found that 6.2% of long-stay (≥15 years) and 5.2% of short-stay migrants required medical services in Mexico in 2001, and González-Block et al. related an estimated 1.2% of border public hospital discharges to in-transit migrants.[146]

In a study undertaken in public and private hospitals in the border region and in municipalities with high migratory intensity differences were found in the causes of hospitalization. While in public hospitals in the municipalities of high migratory intensity 80% of the main causes of admissions were injuries followed by diabetes mellitus and HIV-AIDS, in private hospitals in the same region the chief cause was elective surgery. Among the public hospitals along the border the leading cause of admissions also were injuries, followed by dehydration, respiratory diseases and poisonous animal bites, all of them referring to the risk to which migrants are exposed while crossing the border. Private hospitals on the border report their chief causes of admission as elective surgeries, followed by diabetes and other chronic diseases. Records of the Program for the Repatriation of Sick Nationals indicate that the most common ailments triggering repatriations are chronic renal failure, trauma, and psychiatric illness.

Migrants procuring medical services in their communities of origin generally do so because they lack social security at destination, low acculturation, low

[141] Pew Research Center (PRC) (2009). *Mexican Immigrants in the United States 2008. Fact Sheet*, <http://pewhispanic.org/files/factsheets/47.pdf>.

[142] Byrd, T. L. & J. G. Law (2009). Cross-Border Utilization of Health Care Services by United States Residents Living Near the Mexican Border. *Revista Panamericana de Salud Pública*, 26(2), 95–100.

[143] Landeck, M. & C. Garza (2002). Utilization of Physician Health Care Services in Mexico by U.S. Hipanic Border Residents. *Health Marketing Quarterly*, 20(1), 3–16.

[144] Macías, E. P. & L. S. Morales (2001). Crossing the Border for Health Care. *Journal of Health Care for the Poor and Underserved*, 12(1), 77–88.

[145] De Guzman, G. C., M. Khaleghi, R. H. Riffenberg & R. F. Clark (2007). A Survey of the Use of Foreign-Purchased Medications in a Border Community Emergency Department Patient Population. *Journal of Emergency Medicine*, 33, 213–221.

[146] Wallace, S., C. Mendez-Luck & X. Castañeda (2009). Heading South: Why Mexican Immigrants in California Seek Health Services in Mexico. *Med Care*, 47(6), 662–669; and González-Block, M. A., L. A. de la Sierra-de la Vega, J. C. Cruz-Valdez & Y. Rosales-Martínez (2011). *Retorno y hospitalización de migrantes enfermos: la respuesta del Sistema de Salud mexicano ante los retos de la atención médica en Estados Unidos. Resumen Ejecutivo*. Cuernavaca: Instituto Nacional de Salud Pública.

socio-economic levels, and high medical costs.[147] According to González Block and De la Sierra, up to 20% of hospital services required by migrants who keep in touch with economically dependent relations in Mexico are obtained in their communities of origin.[148] While the majority of ill migrants return independently, defraying the expenses from their own resources, others (i.e. Mexicans incarcerated in the United States) receive mandatory assistance from health systems or support from *PRCEG*.[149] Despite being the only formal repatriation channel, *PRCEG* intervenes exclusively in severe cases, where conditions are chronic and require high-cost hospital services that are unsustainable in the United States. For the most part, repatriated migrant diagnoses refer to chronic renal failure, brain damage, and mental illness.[150] González Block and De la Sierra report about 0.9% of discharges from Health Ministry hospitals in high- and very-high-migration municipalities pertain to repatriates with serious health problems.

For those who return to Mexico to reside, their migration may also exacerbate health vulnerability through the return migrants' lack of health insurance eligibility after they return from the United States. Although this situation has somewhat improved with the establishment of the *Seguro Popular* and in principle return migrants are eligible to enroll, this coverage has shown to be lower among older adults who are recent returned migrants from the United States than for nonmigrants in Mexico.[151]

4.3.6 Trans-Border Health Spending

The impact of migrant remittances on dependent household health spending has been analyzed to establish their participation in health financing. According to the Household Income and Expenditure Survey (*Encuesta Nacional de Ingresos y Gasto en Salud*, *ENIGH* according to its Spanish acronym), health expenditures have risen significantly in remittance-receiving households. In fact, data from Amuedo et al. shows that these expenditures now surpass those of households not receiving remittances, from 57% to 69% in general expenses, from 32% to 43% in primary care, from 2% to 3% in hospital care, and from 28% to 34% in

[147] Brown, H. S. (2008). Do Mexican Immigrants Substitute Health Care in Mexico for Health Insurance in the United States? The Role of Distance. *Social Science & Medicine*, 67(12), 2036–2042.

[148] González-Block, M. A. & L. A. de la Sierra-de la Vega (2011). Hospital Utilization by Mexican Migrants Returning to Mexico Due to Health Needs. bmc *Public Health,* 11, 241.

[149] González-Block, M. A. & L. A. de la Sierra-de la Vega (2011). Hospital Utilization by Mexican Migrants Returning to Mexico Due to Health Needs. bmc *Public Health,* 11, 241.

[150] Vesga-López, O., N. Weder, M. Jean-Baptiste & L. Dominguez (2009). Safe Return to Homeland of an Illegal Immigrant with Psychosis. *Journal of Psychiatric Practice*, 15(1), 64–69.

[151] Riosmena, F., C. González & R. Wong (2012). El retorno reciente de Estados Unidos: salud, bienestar y vulnerabilidad de los adultos mayores. *Coyuntura Demográfica*, 2012(2), 63–67.

over-the-counter drugs.[152] According to an analysis conducted in 2005, remittance-receiving households spend 50% more money on healthcare ($1683 pesos on average – approximately US$132) than their counterparts not receiving remittances ($1103 pesos on average – approximately US$87).[153] A study on willingness to pay for bi-national insurance among migrants who visited the Mexican consulate in Los Angeles in 2010 indicated that over half of the respondents sent monthly remittances averaging US$250 to Mexico. The study also displayed that 85% of the receiving households utilized part of their remittances, and 38% of these at least half of their remittances towards health problems, thus suggesting that an amount equal to or exceeding 25% of the money received from migrants is spent on healthcare.[154]

Given the significant impact of remittances on household healthcare spending, it is important to understand how they contribute to the national healthcare expenditure in terms of cash flow. Based on a highly robust methodology for analyzing healthcare expenditure, a study by Amuedo-Dorantes et al. yielded figures totaling 31.8% of remittances. Based on total remittances received in 2007, household healthcare spending can thus be projected at US$7.8 billion dollars. This is equivalent to 0.98% of GDP,[155] one-sixth of the overall healthcare expenditure and one-third of private out-of-pocket spending for healthcare. Healthcare spending from remittances is assumed to be entirely out-of-pocket, in other words, not organized under health plans which would ensure timely diagnoses, quality care, and efficiency. Thus, remittances are a fundamental part of out-of-pocket spending and should be intrinsically considered when formulating social protection policies for health.[156]

The high share of remittances devoted to health services raises the need to analyze how part of this share might be drawn towards acquiring health insurance plans capable of improving service access, efficiency, and quality. In 2007, a wide group of experts and government officials from both sides of the border participated in a study titled Migrant Health: a Proposal for Bi-national Health Insurance (*Salud Migrante. Propuesta de un Seguro Binacional de Salud*).[157] Coordinated by the

[152] Amuedo-Dorantes, C., T. Sainz & S. Pozo (2007). *Remittances and Healthcare Expenditure Patterns of Populations in Origin Communities: Evidence from Mexico*, <http://ideas.repec.org/p/idb/intalp/1450.html>.

[153] Zúñiga, E., X. Castañeda, S. E. Giorguli & S. Wallace (2006). Inmigrantes mexicanos y centroamericanos en Estados Unidos. Acceso a la salud en México/Los Ángeles: SSA, Iniciativa de Salud México/University of California, Center for Health Policy Research.

[154] United Nations Development Program (UNDP) (2007). *Informe sobre desarrollo humano en México 2006-2007: migracion y desarrollo humano*, Mexico, <http://www.cinu.org.mx/prensa/especiales/2007/IDH/IDH%202006-2007.pdf>.

[155] United Nations Development Program (UNDP) (2007). *Informe sobre desarrollo humano en México 2006-2007: migracion y desarrollo humano*, Mexico, <http://www.cinu.org.mx/prensa/especiales/2007/IDH/IDH%202006-2007.pdf>.

[156] Vargas-Bustamante, A., G. Ojeda & X. Castañeda (2008). Willingness to Pay for Cross-Border Health Insurance between the United States and Mexico. *Health Affairs*, 27(1), 169–178.

[157] González-Block, M. A., S. Becker-Dreps, L. A. de la Sierra-de la Vega, P. York Frasier, S. L. Gardner, L. M. González et al. (2008). *Salud Migrante. A Proposal for Binational Health Insurance*. Cuernavaca: Instituto Nacional de Salud Pública.

National Institute of Public Health, the study analyzed the technical and institutional feasibility of enhancing health security through financing under a bi-national insurance proposal involving primary healthcare by community health centers in the United States, and hospital care in Mexico financed by the *Seguro Popular* and provided by state-level Ministry of Health hospitals.

Salud Migrante gave rise to a number of more in-depth studies. For instance, the above-mentioned research on willingness to pay for bi-national insurance examined the determinants of willingness to pay. As expected, the main determinants included lack of health insurance in the United States, reliance on family members for public health services in Mexico, and proposed plan benefits in terms of affordable costs and quality services. The following associated characteristics were reported for those willing to pay US$50 per person per month for the proposed plan: having had difficulties in paying for healthcare in the United States, having used public healthcare services in Mexico, and demographic factors: age, sex, marital status and annual income. Willingness to pay US$100 for a private medical service package in Mexico was associated with cost of health insurance, need due to illness, service quality, and annual income. The latter is consistent with the findings of other studies where the cost of bi-national health insurance constitutes a barrier to acquiring a plan such as *Salud Migrante*.[158]

4.4 Conclusions and Recommendations

4.4.1 Major Findings

Our comprehensive review of the literature on the health conditions of migrants reveals few areas of positive findings and a generally negative outlook. The health conditions of migrants prior to migration are generally poor, and they are also poor in transit, during most of their stay in the United States, and after their return to Mexico (for those who return). To draw these conclusions, researchers usually compare migrants to some other reference group(s), which is either in Mexico or in the United States. The results vary depending on the comparison group and the indicators used for the comparisons. Our extensive review revealed, however, that in all stages of the migration process, and regardless of which comparison group is used; migrants appear to have poor access to health care before, during, and after migration. While recent data shows an improvement in health insurance coverage in Mexico, the relative disadvantaged position of the international migrant compared to other non-migrant groups still prevails.

[158] González-Block, M. A., S. Becker-Dreps, L. A. de la Sierra-de la Vega, P. York Frasier, S. L. Gardner, L. M. González et al. (2008). *Salud Migrante. A Proposal for Binational Health Insurance*. Cuernavaca: Instituto Nacional de Salud Pública.

The review also revealed dramatic gaps in overall knowledge in this field. In general, the study of migration has overlooked health as a topic of emphasis. Migration has economic and social determinants and consequences, and these traditionally receive more research attention. Health as a major source of human capital, however, deserves to be elevated to higher prominence in the collaborative work undertaken by researchers. Several gaps are worth highlighting: 1) the migration process is a transnational phenomenon and yet the approaches used by most research are focused on one or the other country but not on the two combined and generally look at only one stage of the migration process. 2) The health of individuals before emigration and of those migrating during transit (beyond deaths at the border and the health of those staying in the border region for some time) are particularly unknown, with most research focusing on health in the in the destination – during the stay in the host country, and to a lesser extent the origin, particularly among return migrants.

4.4.2 Policy Recommendations

Due to the complexity of the migration phenomenon, it is vital to formulate and implement integrated transnational responses that rise above territorial limits and provide innovative approaches to the different phases of the migration process – origin, transit, destination and return. Such bi-national coordination and integration strategies should involve, on one hand, the concerted and intersectoral participation of decision-makers from the public and private sectors who exert local, national, regional and global influence; on the other, the establishment of new frameworks for designing public policies and health programs responsible for protecting the health and well-being of migrant men and women, particularly those who are undocumented.

Old age chronic diseases and physical disabilities are main sources of health care spending in all societies, but this argument seems to apply particularly to migrants who have worked long portions of their lives in physical labor with poor working conditions and without reliable and continuous health care. Thus, continuous access to preventive and curative health care in both, the origin and destination countries prior to migrating, during migration, and after return should reduce a large source of vulnerability for migrants, with subsequent savings in the long-term care needs of the migrant population.

Lastly, special emphasis should be placed on the binational nature and articulation of these health policies with other multi-sector social policies that guarantee the protection of migrants and their families in both countries. Promoting and protecting the health of migrants and their families requires also an approach that considers the social determinants of health and a wide socio-economic perspective, which presumes actions to modify migration-related conditions, particularly with regard to employment and education in the origin, but also legal and working conditions in the host country.

Chapter 5
Living in Fear and Insecurity: Growing Risks in Mexican Migration Environments

Néstor Rodríguez

5.1 Introduction

Living and working conditions in Mexican migration environments in the United States and Mexico have become increasingly insecure for migrants and their families and communities since the mid-1990s. The enactment of national, state, and local policies in the United States to restrict unauthorized migrants and the emergence of organized criminal violence in Mexico have contributed to this development. After large-scale unauthorized immigration from Mexico surged in the 1970s, the biggest threats Mexican migrants faced until the mid-1990s were mainly apprehensions for illegal entry followed by "voluntary departures" back to the Mexican side of the border or an occasional workplace raid, which interrupted a migrant's employment for several days. Large-scale Border Patrol operations between the mid-1940s and 1954 repatriated large numbers of Mexican migrants,[1] but more than two decades later, in the 1970s and 1980s, studies of Mexican migrants in the United States did not depict deportations, or the fear of deportations, as having major or broad effects in Mexican migration environments.[2]

[1] Hernandez, K. L. (2010). *Migra! A History of the U.S. Border Patrol*. Berkeley: University of California Press.

[2] Browning, H. L. & N. Rodriguez (1985). The Migration of Mexican Indocumentados as a Settlement Process: Implications for Work. In: G. J. Borjas & M. Tienda (eds.). *Hispanics in the U.S. Economy* (pp. 277–297). New York: Academic Press; Massey, D. S., R. Alarcón, J. Durand & H. González (1987). *Return to Aztlan. The Social Process of International Migration from Western Mexico*. Berkeley: University of California Press; and Portes, A. & R. L. Bach (1985). *Latin Journey: Cuban and Mexican Immigrants in the United States*. Berkeley: University of California

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Beginning in the mid-1990s, however, fear and insecurity rose in Mexican migration environments as new policies increased border enforcement, formal deportations, and other risks of being in the United States with unauthorized status. In the first decade of the twenty-first century, attacks against migrants also increased in Mexico as criminal actors kidnapped migrants and held them for ransom or sometimes killed them if they refused to work for cartels. While these assaults targeted primarily Central American transmigrants, Mexican migrants also felt new dangers in the Mexican border towns to which they were deported, as cartel violence affected these settings. In some cases, migrants from southern Mexico were also kidnapped and held for ransom when traveling northward through Mexico. The precarious conditions of Mexican migration environments by 2010 were a stark contrast with the pre mid-1990s when Mexican migration mainly followed the ebb and flows of labor demands in U.S. labor markets, relatively unhampered by enforcement measures or organized criminal violence.

Mexican migration environments affected by new conditions of enforcement and violence included U.S. settlement areas where Mexican migrants and their families lived and worked, Mexican localities on the U.S.-Mexico border where deported Mexican migrants are almost always returned, and Mexican sending communities that remain connected to, and affected by, conditions in Mexican immigrant populations in the United States. What happens in any one of these three settings reverberates to the other two as migrant networks link them all within and between the two countries.

The eight sections below add to the growing research knowledge of the effects of intensified immigration enforcement on immigrant populations in the United States. The first section describes the rise of restrictive U.S. immigration policies, especially the Illegal Immigration Reform and Immigrant Responsibility Act (IIRIRA) enacted in 1996, from the 1980s to the 2010s, and describes the stresses and pressures the polices place on Mexican migrants in the United States. In the second section, a description is given of the studies that provide the information used for the presentation of the chapter. The third section describes the findings of two studies undertaken in urban communities in Texas regarding stress and fear reported by migrants in relation to new restrictive immigration enforcement since the passage of IIRIRA. The section also reports the findings of a Pew Research Center survey concerning fear of deportations among Mexican migrants in the United States. The fourth section describes the dangers faced by Mexicans deported to Mexican border towns given the presence of cartels and gangs that prey on migrants in these towns.

Press. Massey et al. present a Mexican migrant case study in which the migrant and his friends were deported "several times" to a Mexican border location from which they could return to the United States}. It is likely that the use of the word "deported" refers to the process of "voluntary departure" in which a migrant is returned to Mexico after signing a form indicating that he or she has committed an administrative violation by entering the United States without a visa. The actual process of deportation involves a formal order in which migrants are prohibited from re-entering the United States for years or permanently. In 1996 federal legislation, the U.S. government changed the word "deportation" to "removal" to refer to the formal process removing a migrant from U.S. territory.

The fifth section presents survey findings from research in Guadalajara, Jalisco, regarding the uncertainty and challenges many migrants and their school-age children face in the return migration to Mexico. In the sixth section, the discussion elaborates on how stress and fear associated with increased immigration enforcement add to the normal acculturative stress of immigrants, creating higher levels of psychological stress and insecurity among Mexican migrants. The seventh section concludes by emphasizing the need to examine social-psychological effects that restrictive immigration policies have on migrants to better understand migrant conditions in international migration systems. Several policy recommendations are given in the final section to promote the welfare and security of migrants under conditions of increased restrictive immigration enforcement.

The following section describes the rise of restrictive immigration policy since the late twentieth century. Passage of the Illegal Immigration Reform and Immigrant Responsibility Act (IIRIRA) in 1996 was a major source of the toughing of immigration policy.

5.2 Background: Rising Era of Restriction

The surge of large-scale unauthorized Mexican immigration raised concerns among U.S. policy makers in the 1970s and led to the creation of governmental task forces to explore possible legislative measures to curtail the migration flow. The result of lengthy policy discussions and debates was the enactment of the Immigration Reform and Control Act (IRCA) in 1986. IRCA sought to control unauthorized migration, which at the time consisted overwhelmingly of Mexican migrants, through a carrot and stick approach. Under IRCA, unauthorized migrants who had lived in the United States since before 1982 and met other criteria became eligible for amnesty and legalization, but employers who hired unauthorized workers would be subject to federal penalties.[3] A special provision was made to lower the residency requirement for seasonal agricultural workers.

Enactment of sanctions against employers of unauthorized migrants, however, did not dramatically reduce unauthorized Mexican immigration, since enforcement against the hiring of unauthorized workers did not develop into a major government effort.[4] Also, the relative low number of U.S. Border Patrol agents guarding the southwestern borderline until the mid-1990s (80% fewer than in 2010) enabled many unauthorized Mexican migrants to cross into the United States on their own, without having to pay smugglers to guide them into the country.[5]

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[3] Massey, D. S., J. Durand & N. J. Malone (2003). *Beyond Smoke and Mirrors: Mexican Immigration in an Era of Economic Integration*. New York: Russel Sage Foundation.

[4] Brownell, P. (2005). *The Declining Enforcement of Employer Sanctions*, <http://www.migrationpolicy.org/article/declining-enforcement-employer-sanctions>

[5] The number of Border Patrol agents did not exceed 5000 until 1996 when the number of agents increased to 5942. In 2010, the number of Border Patrol agents was 20,558, and in 2011 it was 21,444.

The passage of IIRIRA in 1996 marked a dramatic change, however, in the security conditions of Mexican migrants, families, and communities in the United States and Mexico. The impetus for IIRIRA came partly from rising anti-immigrant sentiments across the United States. In California, anti-immigrant sentiments had led to the passage of Proposition 187 in 1994, a referendum that proposed to severely restrict the unauthorized migrant population in the state. While a federal court invalidated the measures of the Proposition (for overstepping into the federal arena of immigration legislation), the campaigning for the referendum by restrictionist organizations affected national arenas of debate, extending publicity of unauthorized immigration issues in various national arenas (educational, legal, economic, etc.). IIRIRA was signed into law only 5 weeks after another federal law, Personal Responsibility and Work Opportunity Act (PRWORA), was enacted partly to limit the participation of immigrants in tax-supported welfare programs.[6]

IIRIRA broke the pattern of liberal immigration reforms that sought to enhance family unity among immigrants and, instead, provided measures to increase immigration control and facilitate the removal of immigrants through deportations. Among other measures, the new law authorized an increase of Border Patrol agents by 1000 per year, provided $12 million for the construction of border barriers, authorized the training of state and local police in immigration enforcement, increased the number of offenses ("aggravated felonies") for which migrants could be deported, and raised the requirement for cancellation of deportation from "extreme hardship" to "exceptional and extremely unusual hardship."[7] The law also made the deportability for aggravated felonies retroactive without limit to any time prior to its enactment.

The relatively stable lives of mixed Mexican households in the United States (those including legally resident and unauthorized migrants) quickly collapsed after the passage of IIRIRA as the new law raised formal deportations ("removals") sharply and increased the number of Border Patrol agents, giving this police force greater visibility in many immigrant communities. Moreover, the migration environments became more insecure as Border Patrol campaigns closed the most popular crossing points at the southwestern border.[8] After intensified enforcement, such as Operation Hold the Line in El Paso and Operation Gatekeeper in San Ysidro, closed popular border crossing points for unauthorized migration, the number of unauthorized migrants in the United States grew and reached an estimated 11.6

See U.S. Department of Homeland Security (DHS) (2012). *U.S. Border Patrol Fiscal Year Staffing Statistics, 2012*, <http://www.cbp.gov/xp/cgov/border_security/border_patrol/usbp_statistics/>.

[6] Singer, A. (2001). Immigrants, their Families and their Communities in the Aftermath of Welfare Reform. *Research Perspectives on Migration*, 3(1), 1–9.

[7] Rodríguez, N. & J. M. Hagan (2004). Fractured Families and Communities: Effects of Immigration Reform in Texas, Mexico, and El Salvador. *Latino Studies*, 2(3), 328–351, <doi:10.1057/palgrave.lst.8600094>.

[8] Massey, D. S., J. Durand & N. J. Malone (2003). *Beyond Smoke and Mirrors: Mexican Immigration in an Era of Economic Integration*. New York: Russel Sage Foundation.

million by 2008.[9] Intensified border enforcement was the likely cause of this growth because it stopped the regular flows of return migration to Mexico by unauthorized migrants.

Reorganization of immigration enforcement into the Department of Homeland Security (DHS) in 2003 raised the levels of insecurity even more for many Mexican migrants, families, and communities in the United States. This occurred because the formation of DHS, as a reaction to the terrorist attacks of September 11, 2001, included the new bureau of Immigration and Customs Enforcement (ICE), which became a virtual national deportation police force through its aggressive pursuit of its Endgame program, which sought to deport all "removable aliens" by the year 2012.[10] While IIRIRA raised deportations from 69,680 in 1996 to 165,168 migrants by 2002, the formation of ICE helped to further increase deportations to over 390,000 by 2009.[11]

Since the enactment of IIRIRA, the number of migrants deported for immigration violations has annually exceed the number removed for criminal violations. It was not until fiscal year 2011 that the difference between number of deportations for criminal violations and the number removed for immigration violations was less than 10% of total deportations (see Fig. 5.1). As deportations of Mexican migrants climbed to 247,000 in 2008, and as a national economic recession closed down job markets for many migrants, U.S. environments of migration became very insecure for many Mexican migrants and their families.

Moreover, thousands of deported Mexicans faced increased dangers as violence raged among competing drug cartels and between drug cartels and police forces in the Mexican border towns where they were returned. As the violence surged after 2005, deported migrants faced the dangers of being forcefully recruited into the cartels, kidnapped, disappeared, or assassinated.[12] In the new border town environments of violence, deported Mexican migrants had to migrate quickly to interior areas of Mexico or attempt to re-migrate to the United States, facing the possibility of being sentenced to federal prison if they were apprehended for unauthorized reentry after deportation.

Reaching hometowns or other localities in the interior of Mexico, however, does not necessarily reduce the problems of migrants who return to Mexico. New problems may arise for return migrants as they arrive unprepared to enter the local

[9] Passel, J. S. & D. V. Cohn (2010). *U.S. Unauthorized Immigration Flows are Down Sharply since Mid-Decade*, <http://www.pewhispanic.org/2010/09/01/us-unauthorized-immigration-flows-are-down-sharply-since-mid-decade/>.

[10] U.S. Department of Homeland Security (DHS) (2003). *Endgame: Office of Detention and Removal Strategic Plan, 2003–2012. Detention and Removal Strategy for a Secure Homeland*. Washington, D.C., <https://aclum.org/sites/all/files/education/ice/endgame.pdf>.

[11] U.S. Department of Homeland Security (DHS) (2011). Table 38. Aliens Removed by Criminal Status and Region and Country of Nationality: Fiscal Years 2001 to 2010. In: *Yearbook of Immigration Statistics, 2010* (pp. 96–104). Washington, D.C.: DHS, Office of Immigration Statistics.

[12] González, M. de L. (2008). Secuestran los "Zetas" a migrantes. *El Universal*, April 16, <http://archivo.eluniversal.com.mx/nacion/158852.html>.

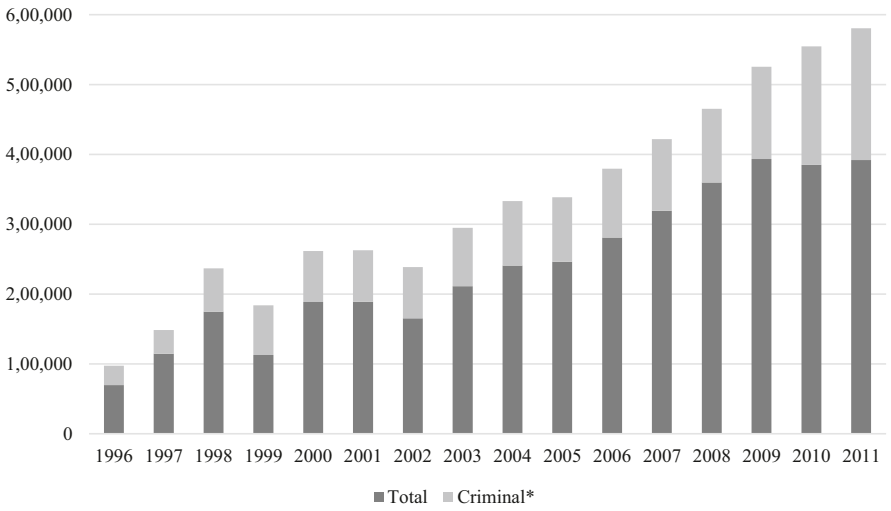

Fig. 5.1 Total U.S. deportations by fiscal year, 1996–2011
Source: U.S. Department of Homeland Security, *Yearbook of Immigration Statistics*: 2004, 2007, and 2011. http://www.dhs.gov/yearbook-immigration-statistics
*Refers to persons removed who have a prior criminal conviction (2004)/Refers to persons removed based on a criminal charge or those with a criminal conviction (2007)

economy.[13] Moreover, U.S.-born children who accompany them may also be unprepared to participate in Mexican local schools.[14] The latter may be a particular problem for U.S.-born children who have little or no skills to participate in Spanish-language school curricula. At a minimum, the forced nature of deportations can place deported migrants and their accompanying families at a disadvantage in the early stage of resettlement in Mexico.

The following section describes surveys conducted in the United States and Mexico to investigate effects of restrictive immigration policies on Mexican immigrant populations. Interviews of Mexican migrants in Texas cities, a national survey by the Pew Research Center in the United States, and surveys in the Mexican border town of Nuevo Laredo and in Guadalajara, Jalisco, demonstrated the hardships experienced by Mexican migrants as consequences of restrictive U.S. immigration policies.

[13] Wheatley, C. (2011). Push Back: U.S. Deportation Policy and the Reincorporation of Involuntary Return Migrants in Mexico. *The Latin Americanist*, 55(4), 35–60, <doi:10.1111/j.1557-203X.2011.01135.x>.

[14] Hamann, E. T. & V. Zúñiga (2011). Schooling and the Everyday Ruptures Transnational Children Encounter in the United States and Mexico. In: C. Coe, R. R. Reynolds, D. A. Boehm, J. M. Hess & H. Rae-Espinoza (eds.). *Everyday Ruptures: Children, Youth, and Migration in Global Perspective* (pp. 141–160). Nashville: Vanderbilt University Press.

5.3 Methods: Data from Studies on Effects of Immigration Restriction

The analysis in this chapter is based on different studies of migrant fear and insecurity in three regions: the United States, the Mexican border town of Nuevo Laredo, and the Mexican return migration site of Guadalajara, Jalisco. Reported findings for the region of the United States come from three studies based on survey research. Two of the studies are non-random surveys that were conducted in Texas sites in the late 1990s after the passage of IIRIRA.[15] The two surveys demonstrate the immediate impact of policy change on a migration population. One survey was conducted in fall 1997 in the cities of Houston, Fort Worth, Laredo, El Paso, and Hidalgo with about 100 households in each site, which were selected through snowball sampling of mainly low-income legally-resident Mexican households. The survey contained questions regarding knowledge of IIRIRA and subsequent behavioral changes immigrant households made soon after the enactment of the new law.[16]

The second non-random survey interviewed 420 married Mexican and Central American immigrants with children in the cities of Houston and Galveston during 1998 to 1999. The survey, in which 66% of the participants were Mexicans, asked questions about individual socio-demographic characteristics of the respondents, family conditions, legal status, and conditions of stress, anxiety and fear of deportation. In addition, the survey used the Immigrant Version of the Hispanic Stress Inventory interview instrument to measure conditions of acculturative stress among respondents.[17]

Surveys conducted by the Pew Hispanic Center in 2007, 2008, and 2010 are also used to describe conditions of fear and insecurity among Mexican migrants in the United States for more recent years. The three surveys interviewed nationally representative samples of Latino respondents, of whom about half were foreign-born. Questions in the surveys included respondent perceptions of immigration impacts on the society and the economy, experiences with discrimination, the role of state and local police in identifying unauthorized migrants, workplace raids, and fear of deportations.[18]

The study used to describe conditions in the Mexican border town of Nuevo Laredo, which is one of several Mexican border towns where Mexicans are deported

[15] Rodríguez, N. & J. M. Hagan (2004). Fractured Families and Communities: Effects of Immigration Reform in Texas, Mexico, and El Salvador. *Latino Studies*, 2(3), 328–351, <doi:10.1057/palgrave.lst.8600094>.

[16] Rodríguez, N. & J. M. Hagan (2004). Fractured Families and Communities: Effects of Immigration Reform in Texas, Mexico, and El Salvador. *Latino Studies*, 2(3), 328–351, <doi:10.1057/palgrave.lst.8600094>.

[17] Cervantes, R. C., A. M. Padilla & N. Salgado de Snyder (1991). The Hispanic Stress Inventory: A Culturally Relevant Approach to Psychosocial Assessment. *Psychological Assessment: A Journal of Consulting and Clinical Psychology*, 3(3), 438–447.

[18] Lopez, M. H. & S. Minushkin (2008). *Hispanics See their Situation in U.S. Deteriorating: Oppose Key Immigration Enforcement Measures*, <http://www.pewhispanic.org/2008/09/18/>.

from the United States, consists of interviews with staff members working in the migrant shelter *Casa del Migrante Nazareth*. The shelter was originally established in the early 2000s to provide food and temporary housing to Central American transmigrants migrating to the United States. After ICE accelerated massive deportations primarily of Mexicans, and after cartel violence surged in northern Mexican border towns, larger numbers of deported Mexican migrants arrived at the shelter to ask for food and lodging.

Finally, data concerning conditions of return migration in Guadalajara, Jalisco, was obtained through interviews of deported and voluntary return migrants, their family members, and community institutions in the region in the summer of 2011. A primary focus of the interviews was to assess the facility or difficulty that return migrants and their family members experienced when they returned to the area of Guadalajara after leaving the United States voluntarily or after being deported. A second focus of the survey was to determine the impacts that return migration had on local community institutions. The survey was conducted through snowball sampling that included 17 interviews of men and women who were migrants or members of migrant families. Researchers in the survey also interviewed staff members in social service agencies that provided assistance to families or to migrants in need of support.[19]

The following section elaborates on the findings of stress and fear among Mexican migrants in the United States interviewed in the studies described above. Return to Mexico did not end the stress and fear for many Mexican migrants.

5.4 Stress and Fear in U.S. Migration Environments

Within a year after IIRIRA was enacted, its effects were reverberating throughout immigrant communities in the United States.[20] Perhaps one of the reasons that the effects were felt so quickly is that the law was a continuation of attempts to restrict immigration in the context of a growing population of unauthorized migrants. The attempts to restrict immigration included the Border Patrol operations mentioned above, as well as the strategy "Prevention through Deterrence" implemented in 1994 to curtail unauthorized immigration by re-directing unauthorized migrant flows at the border to dangerous terrain.[21]

The 1997 study of immigrant households in the five Texas cities of Houston, Fort Worth, Laredo, El Paso, and Hidalgo found that immigrant communities had

[19] Jiménez, D. & R. Rojas (2011). *Consecuencias sociales de las deportaciones estadounidenses para México y Centroamérica. Reporte preliminar de estudio de campo.* Guadalajara.

[20] Rodríguez, N. & J. M. Hagan (2004). Fractured Families and Communities: Effects of Immigration Reform in Texas, Mexico, and El Salvador. *Latino Studies*, 2(3), 328–351, <doi:10.1057/palgrave.lst.8600094>.

[21] Eschbach, K., J. Hagan, N. Rodriguez, R. Hernandez-Leon & S. Bailey (1999). Death at the Border. *International Migration Review*, 33(2), 430–454.

developed conditions of stress and anxiety soon after the passage of IIRIRA.[22] The stress and anxiety were detected among social service agencies and households interviewed in the study. Since IIRIRA was passed just weeks after the passage of PRWORA, which limited the participation of legal immigrants in public services, agency service providers feared that low-income immigrants would stop seeking services for themselves and their children, for which they still qualified.[23] This was not an unfounded expectation as the interviews of legally-resident Mexican households found that many households had stopped seeking assistance from health programs for which they qualified because they feared that doing so would jeopardize their legal status or disqualify them later from being able to acquire citizenship. One health care provider in Houston also reported that Mexican Americans seeking services from the clinic she operated changed their reported identity from "Hispanic" to "White," a shift she attributed to a fear of being identified as an immigrant.[24]

Public school staff in four of the five research sites also reported that school attendance and parent participation had dropped because of the new immigration law.[25] While the Supreme Court ruling in *Plyler v. Doe* gave undocumented children the right to enroll in public schools, according to school administrators and teachers greater Border Patrol visibility after the enactment of IIRIRA created fear among parents who kept their children out of schools and stopped participating in parent-teacher meetings or in other school events. In Fort Worth, a school principal attributed a 15% drop in student enrollment to fear of detection among immigrant parents, who were mainly Mexican.

While Houston and Fort Worth are hundreds of miles away from the U.S.-Mexico border, their growing immigrant populations primarily of Mexican migrants with large numbers of unauthorized migrants attracted the federal agents of the Immigration and Naturalization Service (INS), which was the agency in charge of immigration enforcement before the creation of the Department of Homeland Security in 2003. The two cities experienced INS raids, and had a presence of immigration enforcement agents, which produced fear among unauthorized migrants. The border sites of El Paso, Hidalgo, and Laredo had long experienced the presence of immigration enforcement agents, but the buildup of the Border Patrol force as a

[22] Rodríguez, N. & J. M. Hagan (2004). Fractured Families and Communities: Effects of Immigration Reform in Texas, Mexico, and El Salvador. *Latino Studies*, 2(3), 328–351, <doi:10.1057/palgrave.lst.8600094>.

[23] Hagan, J., N. Rodriguez, R. Capps & N. Kabiri (2003). The Effects of Recent Welfare and Immigration Reforms on Immigrants' Access to Health Care. *International Migration Review*, 37(2), 444–463, <doi:10.1111/j.1747-7379.2003.tb00144.x>.

[24] Rodríguez, N. & J. M. Hagan (2004). Fractured Families and Communities: Effects of Immigration Reform in Texas, Mexico, and El Salvador. *Latino Studies*, 2(3), 328–351, <doi:10.1057/palgrave.lst.8600094>.

[25] Rodríguez, N. & J. M. Hagan (2004). Fractured Families and Communities: Effects of Immigration Reform in Texas, Mexico, and El Salvador. *Latino Studies*, 2(3), 328–351, <doi:10.1057/palgrave.lst.8600094>.

measure of IIRIRA significantly expanded the visibility of border enforcement agents in the border communities.[26]

Findings of the survey of 420 Latino immigrants undertaken in Houston and Galveston in 1998 to 1999 also demonstrated the increased sense of fear and insecurity among migrants after the passage of IIRIRA.[27] In the survey, male migrants reported statistically significant higher levels of fear of deportation than female migrants. Undocumented migrant men also reported higher levels of fear of deportation than unauthorized migrant women. Moreover, 32% of authorized migrants and 80% of unauthorized migrants reported changing their activity for fear of deportation.

When measured for acculturative stress outside the family, fear of deportation accounted for one-fifth of the stress after controlling for other factors.[28] Among the migrant men, who were more likely to be separated from their families, fear of deportation also was found to be positively correlated with acculturative stress inside the family.

The findings of the study indicated that the enactment of IIRIRA created a new experience of fear and insecurity among Mexican and other Latino migrants. Moreover, the findings also indicated a new development in which men demonstrated greater stress and fear than women, a condition not found in previous stress studies.[29] The difference could be attributed to the fact that undocumented men are often found in work activities (e.g., construction and landscaping) with greater visibility than women, and thus they may feel a greater risk and fear of detection. Yet, the survey was nonrandom, and thus the findings cannot be generalized.

Broader generalizations of fear and insecurity due to heightened immigration enforcement, however, can be made from national Latino surveys conducted randomly by the Pew Hispanic Center. National Latino surveys conducted by the Pew Hispanic Center in 2007, 2008, and 2010 included a question concerning how much respondents worried about deportations. In each of the 3 years that the question was asked, about two-thirds or more of the foreign-born Latino respondents worried a lot or somewhat about the possible deportation of themselves, a family member, or a close friend, while only about one-third of U.S.-born Latinos gave a similar

[26] Rodríguez, N. & J. M. Hagan (2004). Fractured Families and Communities: Effects of Immigration Reform in Texas, Mexico, and El Salvador. *Latino Studies*, 2(3), 328–351, <doi:10.1057/palgrave.lst.8600094>.

[27] Arbona, C., N. Olvera, N. Rodriguez, J. Hagan, A. Linares & M. Wiesner (2010). Acculturative Stress among Documented and Undocumented Latino Immigrants in the United States. *Hispanic Journal of Behavioral Sciences*, 32(3), 362–384, <doi:10.1177/0739986310373210>.

[28] Arbona, C., N. Olvera, N. Rodriguez, J. Hagan, A. Linares & M. Wiesner (2010). Acculturative Stress among Documented and Undocumented Latino Immigrants in the United States. *Hispanic Journal of Behavioral Sciences*, 32(3), 362–384, <doi:10.1177/0739986310373210>.

[29] Arbona, C., N. Olvera, N. Rodriguez, J. Hagan, A. Linares & M. Wiesner (2010). Acculturative Stress among Documented and Undocumented Latino Immigrants in the United States. *Hispanic Journal of Behavioral Sciences*, 32(3), 362–384, <doi:10.1177/0739986310373210>.

response in each of the 3 years.[30] In 2010, 84% of the Latino foreign-born respondents who did not have legal status reported worrying a lot or some about deportations.[31] Moreover, in a 2011 Pew Hispanic Center survey, 36% of unauthorized Latino migrants reported that they knew someone who had been deported.[32] Other research suggests that the stress of worrying about deportation can have negative effects on the thoughts, emotions, and social functioning of individuals, including children.[33]

Public access to the Pew Hispanic Center dataset of the 2008 Latino National Survey enables further analysis of the question of fear of deportation and of other enforcement questions for Mexican respondents, controlling for gender and citizen/non-citizen status.[34] While 53% of all Latino immigrants in the 2008 survey stated they worried a lot or some about deportations, 75% of Mexican immigrants gave a similar response. The responses of the Mexican immigrants did not vary significantly by gender, but they did differ significantly by citizen/non-citizen status. As Table 5.1 indicates, a sizeable majority of non-citizen Mexican immigrants responded that they worried "a lot" about deportations, while only a minority of naturalized Mexican immigrants gave a similar response.

Table 5.1 Worry about deportation of one's self, a family member, or a close friend? Mexican immigrant respondents, 2008

	% U.S. citizen (n = 119)	% Not U.S. citizen (n = 288)
Worry a lot	38.7	64.2
Worry some	18.5	18.4
Worry not much	16.8	7.3
Worry not at all	26.1	10.1
Chi-square = 31.865		
Sig. (2-sided) = .000		

Source: Lopez, M. H. & S. Minushkin (2008). *Hispanics See their Situation in U.S. Deteriorating: Oppose Key Immigration Enforcement Measures*, <http://www.pewhispanic.org/2008/09/18/>

[30] Lopez, M. H., R. Morin & P. Taylor. (2010). *Illegal Immigration Backlash Worries, Divides Latinos*, <http://www.pewhispanic.org/2010/10/28/>.

[31] Lopez, M. H., R. Morin & P. Taylor. (2010). *Illegal Immigration Backlash Worries, Divides Latinos*, <http://www.pewhispanic.org/2010/10/28/>.

[32] Lopez, M. H., A. Gonzalez-Barrera y S. Motel (2011). *As Deportations Rise to Record Levels, Most Latinos Oppose Obama's Policy*, <http://www.pewhispanic.org/files/2011/12/Deportations-and-Latinos.pdf>.

[33] Arbona, C., N. Olvera, N. Rodriguez, J. Hagan, A. Linares & M. Wiesner (2010). Acculturative Stress among Documented and Undocumented Latino Immigrants in the United States. *Hispanic Journal of Behavioral Sciences*, 32(3), 362–384, <doi:10.1177/0739986310373210>.

[34] At the time of the writing of this report, the Pew Hispanic Center has made datasets available to the public only up to and including surveys conducted in 2008.

Research indicates migrants worry about deportation especially because of the devastating impact it can have on their families in the United States.[35] If the deported migrant is the sole income-earner in the household, the impact can be severe and force the family into poverty. This causes remaining family members to struggle for survival if joining the deported family member in the home country is not a viable option, e.g., because the whole family has resettled in the United States or because of economic misery back in the home country. Migrant parents also worry that deportation can bring long term or permanent separation from their U.S. born children.[36]

Concerning the question of whether respondents had been stopped by police or other authorities to inquire about their immigration status, immigrant men were three times more likely than women to have been stopped and asked about their immigration status, although large majorities of men and women reported they had not been stopped (see Table 5.2). The responses differed significantly by gender, but not by citizenship status. Further research will have to answer why Mexican immigrant men are stopped more often than Mexican immigrant women and to what extent the reasons have to do with gender characteristics of the migrants or with perceptions of the police or other authorities. While only a minority of the Mexican immigrants reported that they were stopped to have their immigration status checked, it is likely that the small percentage is sufficient to generate fear and concern among the larger immigrant population, given that the consequence of being found without authorization to be in the United States can be deportation back to the home country.

When asked in the 2008 Pew survey whether enforcement against undocumented immigrants had changed in the country "in the past year," 60.0% of the Mexican immigrant respondents stated that the enforcement had increased, 2.4% stated that no change had occurred, and only 8.6% stated that enforcement had decreased,

Table 5.2 Have you been stopped by police or other authorities and asked about your immigration status? Mexican immigrant respondents, 2008, percentages

	% Female (n = 197)	% Male (n = 215)
Yes	5.1	15.8
No	94.9	84.2
Chi-square = 12.425		
Sig, (2-sided) = .000		

Source: Lopez, M. H. & S. Minushkin (2008). *Hispanics See their Situation in U.S. Deteriorating: Oppose Key Immigration Enforcement Measures*, <http://www.pewhispanic.org/2008/09/18/>

[35] Hagan, J., N. Rodriguez, R. Capps & N. Kabiri (2003). The Effects of Recent Welfare and Immigration Reforms on Immigrants' Access to Health Care. *International Migration Review*, 37(2), 444–463, <doi:10.1111/j.1747-7379.2003.tb00144.x>.

[36] Dreby, J. (2012). *How Today's Immigration Enforcement Policies Impact Children, Families, and Communities: A View from the Ground*. Washington, D.C., <https://www.americanprogress.org/wp-content/uploads/2012/08/DrebyImmigrationFamiliesFINAL.pdf>.

while 10.2% did not specify. The responses to the question did not differ significantly by gender or by citizen/no-citizen status. Given that deportations increased from 2007 to 2008 and that state and local government restrictions against unauthorized immigrants also increased in various ways (e.g., through the introduction of new state bills and local ordinances against unauthorized migrants), enforcement measures did indeed increase in many areas of the country. It is logical to expect that the perception and reality of an increase in enforcement made immigrant social environments feel more insecure, as even naturalized immigrants acknowledged it had become increasingly likely for non-citizen immigrant relatives or close friends to be deported or removed, especially if they were unauthorized.

A question in the 2008 Pew Hispanic Center survey asked respondents to compare the situation of Latinos in the United States with conditions "1 year ago." A majority of Mexican immigrants responded that conditions were "worse" (Table 5.3). The responses varied significantly by citizen/non-citizen status but not by gender. Mexican immigrants who had become U.S. citizens reported twice as often as non-citizen Mexican immigrants that conditions had become "better," and several percentage points less often than non-citizen Mexican immigrants that conditions had become "worse." Still, a majority of both Mexican immigrant categories reported that the situation of Latinos in the country had become worse during the previous year.

The new immigration enforcement atmosphere is also putting children in non-citizen immigrant families at risk. Research among refugee populations indicates that the psychological and physical conditions of mothers can affect the mental health conditions of their children.[37] Although Mexican migrants are not normally refugees, the fear and stress of arrest and deportation felt by parents can be passed on to their children. The effects on children include emotional distress and lower academic performance, which can heighten as deportations separate the children

Table 5.3 Compared with 1 year ago, conditions of Latinos in United States today are better, worse, or about the same? Mexican immigrant respondents, 2008, percentages

	% U.S. citizen (n = 227)	% Not U.S. citizen (n = 589)
Better	14.1	6.6
Worse	61.2	66.7
About the same	24.2	24.8
Don't know	0.4	1.9
Chi-square = 13.571		
Sig. (2-sided) = .004		

Source: Lopez, M. H. & S. Minushkin (2008). *Hispanics See their Situation in U.S. Deteriorating: Oppose Key Immigration Enforcement Measures*, <http://www.pewhispanic.org/2008/09/18/>

[37] Perez, R. (2001). When Immigration is Trauma: Guidelines for the Individual and Family Clinician. *American Journal of Orthopsychiatry*, 71(2), 153–170.

from parents.[38] In some public schools, young children of immigrant parents attend classes displaying emotional distress (constant crying) after a parent has been arrested and is in the process of being deported. Moreover, the distress of one child can raise the anxiety and fear of classmates who also have immigrant parents. Numerous studies have reported on the various detrimental effects that deportations of parents have on the psychological and social welfare of the large population of children in immigrant families.[39] This population of children includes 3.5 million U.S-born children with non-citizen Mexican parents.[40]

In addition, according to reports, a number of things can happen to children after parents are deported. For example, in some cases relatives may take charge of children left behind after the deportation of parents, but in other cases the children may be placed with state child protection services or in foster care,[41] which risks permanent separation from parents if the children are put up for adoption. The Applied Research Council estimates that at least 5100 children have been placed in foster care without the possibility of reuniting with detained or deported parents.[42] To protect against being separated from their children, some undocumented migrant parents never go out in public together, deciding instead for one parent to stay at home with the children in case the other parent is unexpectedly apprehended and deported.[43]

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[38] Brabeck, K. & Q. Xu (2010). The Impact of Detention and Deportation on Latino Immigrant Children and Families: A Quantitative Exploration. *Hispanic Journal of Behavioral Sciences*, 32(3), 341–361, <doi:10.1177/0739986310374053>; Capps, R., R. M. Castaneda, A. Chaundry & R. Santos (2007). *Paying the Price: The Impact of Immigration Raids on America's Children*, http://www.urban.org/UploadedPDF/411566_immigration_raids.pdf>; Chiu, B., L. Egyes, P. Markowitz & J. Vasandani (2009). *Constitution on* ice*: A Report on Immigration Home Raid Operations*. New York: Cardozo Immigration Justice Clinic; and Shore, E. S. (2010). *Immigration Enforcement and its Impact on Latino Children in the State of Georgia*. Atlanta.

[39] Baum, J., R. Jones & C. Barry (2010). *In the Child's Best Interest? The Consequences of Losing a Lawful Immigrant Parent to Deportation*, https://www.law.berkeley.edu/files/Human_Rights_report.pdf>; and Shore, E. S. (2010). *Immigration Enforcement and its Impact on Latino Children in the State of Georgia*. Atlanta.

[40] Dreby, J. (2012). *How Today's Immigration Enforcement Policies Impact Children, Families, and Communities: A View from the Ground*. Washington, D.C., https://www.americanprogress.org/wp-content/uploads/2012/08/DrebyImmigrationFamiliesFINAL.pdf>.

[41] Capps, R., R. M. Castaneda, A. Chaundry & R. Santos (2007). *Paying the Price: The Impact of Immigration Raids on America's Children*, http://www.urban.org/UploadedPDF/411566_immigration_raids.pdf>; and Baum, J., R. Jones & C. Barry (2010). *In the Child's Best Interest? The Consequences of Losing a Lawful Immigrant Parent to Deportation*, https://www.law.berkeley.edu/files/Human_Rights_report.pdf>.

[42] This information is cited in Dreby, J. (2012). *How Today's Immigration Enforcement Policies Impact Children, Families, and Communities: A View from the Ground*. Washington, D.C., https://www.americanprogress.org/wp-content/uploads/2012/08/DrebyImmigrationFamiliesFINAL.pdf>.

[43] Author's interview of immigrant parents, Houston, Texas, October 17, 2006.

A DHS report states that between 1998 and 2007 108,434 "alien" parents of U.S.-citizen children were deported[44]; however, this is an undercount, since immigrant parents who are arrested sometimes refuse to identify family members, including children, to authorities for fear they too may be deported.[45] A report coauthored by legal scholars at the University of California campuses at Berkeley and Davis estimates that 103,055 children in the United States were impacted by the deportation of a legally resident mother or father from 1997 to 2007.[46] The number of U.S.-born children vulnerable to impacts by deportations keeps growing through births. From March 2009 to March 2010, 350,000 births in the United States were offspring to at least one unauthorized migrant parent.[47] During the previous 12 months, the number of births to at least one unauthorized migrant parent was 340,000.[48]

As the following section shows, deportation did not end the stress and fear of many Mexican migrants when they were removed to Mexico. Deportations simply changed the environment and causes of stress and fear for many of the deported migrants.

5.5 Danger in Deportation to Border Towns

U.S. deportations of Mexican migrants normally occur along Mexican border towns close to facilities of the U.S. immigration service.[49] The continual deportations strain the Mexican border towns and add to the existent migrant populations of Central Americans, Mexican migrants, and deportees waiting in the towns to cross the border into the United States.[50] The concentrations of migrants in Mexican border towns also attract smugglers who offer to help the migrants cross the border

[44] U.S. Department of Homeland Security (DHS) (2009). *Removals Involving Illegal Alien Parents of United States Citizen Children*. Washington, D.C, http://www.oig.dhs.gov/assets/Mgmt/OIG_09-15_Jan09.pdf>.

[45] Capps, R., R. M. Castaneda, A. Chaundry & R. Santos (2007). *Paying the Price: The Impact of Immigration Raids on America's Children*, http://www.urban.org/UploadedPDF/411566_immigration_raids.pdf>.

[46] Baum, J., R. Jones & C. Barry (2010). *In the Child's Best Interest? The Consequences of Losing a Lawful Immigrant Parent to Deportation*, https://www.law.berkeley.edu/files/Human_Rights_report.pdf>.

[47] Passel, J. & D. V. Cohn (2011). *Unauthorized Immigrant Population: National and State Trends, 2010*. Washington, D.C., http://www.pewhispanic.org/2011/02/01/unauthorized-immigrant-population-brnational-and-state-trends-2010/>.

[48] Passel, J. & D. V. Cohn (2011). *Unauthorized Immigrant Population: National and State Trends, 2010*. Washington, D.C., http://www.pewhispanic.org/2011/02/01/unauthorized-immigrant-population-brnational-and-state-trends-2010/>.

[49] The United States deported 2364 Mexican migrants via air routes to Mexico City through its Interior Repatriation Initiative from October to November, 2012. See Washington, D. (2012). US Repatriation Program to Mexico Ends. *El Paso Times*, December 6, <http://www.elpasotimes.com/news/ci_22133865/repatriation-program-mexico-ends>.

[50] Rodríguez, N. & J. M. Hagan (2004). Fractured Families and Communities: Effects of Immigration Reform in Texas, Mexico, and El Salvador. *Latino Studies*, 2(3), 328–351, <doi:10.1057/palgrave.lst.8600094>.

into the United States for a fee, and the concentrations also attract criminal actors (cartels and gangs) who attempt to victimize the migrants.

Organized criminal groups such as drug cartels seek to recruit migrants to help transport illegal drugs or become assassins and foot soldiers in the armed conflict with other criminal groups.[51] The cartels forcefully take migrants from migration routes through Mexico, sometimes forcing them off buses at gunpoint at cartel-organized "checkpoints."[52] In addition, cartel members kidnap migrants to obtain ransoms from their relatives or to place women into forced sexual work in order to generate income for the cartel. Migrants who resist being inducted into the cartels may be killed. Cartel members kill some migrants in the presence of other migrants simply to intimidate the latter into getting ransoms from their families or to force them into cartel work.[53] According to the Mexican National Human Rights Commission, between September 2008 and February 2009, there were 198 known cases of kidnapping involving 9758 migrants.[54] Local police departments often offer no protection to migrants against the cartels and other gangs because the police are too weak to stand up to them or because they actively collaborate with the cartels.

In 2010 and 2011, in separate incidents, Mexican authorities in the northern Mexican border state of Tamaulipas discovered the remains of migrants killed by members of the dominant cartel.[55] Near the small town of San Fernando, 72 migrants were found in September 2010 killed by cartel members, and in May 2011 authorities found a series of mass graves that held more than 180 bodies believed to include migrants. In May 2011, Mexican soldiers replaced police in 22 municipalities in the state of Tamaulipas because the latter were believed to work for a cartel.[56] For some human-rights advocates the presence of soldiers introduces another of risk and danger, as some military personnel are considered to be overly heavy-handed in the fight against the cartels, causing human rights abuses among innocent people.

As the transmigration of Central Americans headed to the United States surged in Mexico in the 1980s, some religious and human rights workers built shelters to provide temporary lodging and food for the migrants. In the northern Mexican border town of Nuevo Laredo in the state of Tamaulipas, a local priest and a small group of nuns who arrived from Mexico City opened a makeshift shelter in the

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[51] González, M. de L. (2008). Secuestran los "Zetas" a migrantes. *El Universal*, April 16, <http://archivo.eluniversal.com.mx/nacion/158852.html>.

[52] Beaubien, J. (2011). Drug Cartels Prey on Migrants Crossing Mexico. NPR, July 7, <http://www.npr.org/2011/07/07/137626383/drug-cartels-prey-on-migrants-crossing-mexico>.

[53] Beaubien, J. (2011). Drug Cartels Prey on Migrants Crossing Mexico. NPR, July 7, <http://www.npr.org/2011/07/07/137626383/drug-cartels-prey-on-migrants-crossing-mexico>.

[54] Comisión Nacional de los Derechos Humanos (cndh) (2011). *Informe especial sobre secuestro de migrantes en México*. Mexico, <http://www.cndh.org.mx/sites/all/doc/Informes/Especiales/2011_secmigrantes.pdf>.

[55] Padgett, H. (2011). Los desaparecidos en Tamaulipas: su vida antes de toparse con Los Zetas. *Emeequis*, May 2, 31–42.

[56] Beaubien, J. (2011). Mexico Replaces Police with Soldiers in Border Area. NPR, June 24, <http://www.npr.org/2011/06/24/137393901/mexico-replaces-police-with-soldiers-in-border-area>.

Catholic parish in the late 1990s. The shelter was a neighborhood house in which the nuns placed rows of donated mattresses on the floor on which 40 or more men could sleep tightly packed together. The makeshift shelter did not provide comfortable quarters for the men, but it did provide security from the dangers of sleeping on the streets at night where the migrants feared begin preyed upon by local gangs or even by the police, who according to the migrants sometimes robbed them.[57] Moreover, since the Central Americans did not have visas to travel in Mexico, they were also at risk of being deported if they were caught by the police, who turned them over to federal immigration authorities.

In February 2004, the Catholic Diocese in Nuevo Laredo opened the *Casa del Migrante Nazareth*, built mainly with donations, for a capacity of 120 migrants. The new shelter became one of several migrant shelters operated by the Catholic Scalabrini missionary order in Mexico and Central America. In the shelter in Nuevo Laredo, migrants spend an average of 3 days. They are provided with sleeping bunks, showers, meals, and a host of medical, religious, and communication services, as well as information regarding legal and human rights and dangers to expect on their journey to the United States. In the 8 years of operation from February 2004 to February 2012, the shelter provided temporary lodging to 70,000 migrants. From 2004 to 2009, 70% of these migrants were from Central America or southern Mexico and 30% were migrants deported by the U.S. government.[58] But as cartel violence increased in the Nuevo Laredo area, the number of deported Mexican migrants increased at the shelter and became the majority by 2011.[59]

According to administrators at the shelter, cartel violence and other threats have made the Nuevo Laredo area very dangerous for deported migrants, and thus their numbers have increased at the shelter.[60] Before the escalation of the cartel violence, deported migrants took a few days on city streets and plazas to decide what course of action to take after being deported into Nuevo Laredo. After the violence increased dramatically, however, newly deported migrants immediately head for interior areas in Mexico, or attempt to re-migrate into the United States, or seek protection in the migrant shelter to get off the streets at night.

But the shelter cannot provide complete protection. On weekdays, the migrants who stay at the shelter are asked to look for work during the day, which gives the shelter operators time to clean the facility and to organize for the meal and other events in the evenings. This places the migrants at some risk while out on the streets looking for work. Moreover, members of a cartel have posed as migrants in order to enter the shelter to identify migrants who can be kidnapped and held for ransom or forced into criminal activity. Shelter operators have attempted to prevent this by

[57] Interviews of nuns running migrant shelter in Nuevo Laredo, July 12, 2005. Names of nuns running shelter for unauthorized Central Americans withheld.

[58] Rodríguez, O. (2012). Cumple Casa del Migrante ocho años y lo festejan. *El Mañana*, February 24.

[59] Rodríguez, O. (2012). Cumple Casa del Migrante ocho años y lo festejan. *El Mañana*, February 24.

[60] Interview of shelter operators, November 19, 2011.

using photos and background information to identify the migrants who enter the shelter. As a consequence, cartel members have made threatening phone calls to the shelter, and in 2011 attempted to kidnap a human rights lawyer who helped migrants at the facility.[61] A United Nations report on human rights abuses describes how cartel members have threatened staff in other Mexican shelters that help migrants.[62] About the only improvement for the security of migrants that has occurred in Nuevo Laredo in recent years has been that the replacement of the local police force by soldiers. This stopped the extortion of Central American migrants by the police.

The following section discusses how return to interior localities in Mexico brings new conditions of stress for many Mexican migrants. Migrants who return to interior communities can face challenges of social reintegration, which sometimes vary by mode of return either as voluntary returns or through deportation.

5.6 Uncertainty After Returning to Mexico

While voluntary return migrants can arrive in Mexico with well-made plans to begin a new stage in life, deported migrants, by contrast, are more likely to face uncertainty and hardships upon their arrival. Research has yet to determine the ratio of voluntary to forced return migrants, but given that 1.5 million Mexican migrants have been deported back to Mexico in 2006–2011,[63] the number of deported migrants arriving in Mexican localities is quite sizeable. The deportation conditions of many migrants of sudden arrest followed by weeks if not months of detention with limited communication, and removal at night to some Mexican border town are not favorable for planning a successful reintegration into Mexican society, especially when other family members are involved. In some cases, migrants are transferred to border stations hundreds or over a thousand miles away just prior to their deportation, worsening the separation from their families in the United States and lessening the ability to enter Mexico together with their families.

The fact that migrant shelters in northern Mexican border towns contain growing numbers of deported Mexican migrants indicates that many of these migrants do not arrive in Mexico with firm plans to reintegrate into Mexican society. Indeed, many deported migrants have no plans to re-integrate into Mexican society, but instead plan to re-migrate to U.S. communities where they have families, jobs, and other attachments. The total annual numbers of deported migrants that re-enter the United

[61] Amnesty International (AI) (2011). Mexican Migrants Rights Defender Attacked, <http://ua.amnesty.ch/urgent-actions/2011/03/097-11?ua_language=en>.

[62] United Nations (UN) (2011). *Mandato del Relator Especial sobre los derechos humanos de los migrantes y de la Relatora Especial sobre la situación de los defensores de los derechos humanos*.

[63] U.S. Department of Homeland Security (DHS) (2012). Table 41. Aliens Removed by Criminal Status and Region and Country of Nationality: Fiscal Years 2002 to 2011. In *Yearbook of Immigration Statistics, 2011* (pp. 106–114). Washington, D.C.: U.S. Department of Homeland Security, Office of Immigration Statistics.

Table 5.4 Characterizations of return migrants, Guadalajara, Jalisco, 2011

Characterization	Frequency	Percent
Have problems finding work	10	14.9
Have positive impact	9	13.4
Return migrants are vulnerable	7	10.4
Return migrants lack of government policy or community program to help returning migrants	7	10.4
Returning migrants lack documents for jobs and services	6	9.0
Youth in returning migrant families create violence	4	6.0
Return migrants have no impact	4	6.0
Return migrants suffer from low income	4	6.0
Return migrants have difficult time adapting to new setting	4	6.0
Returning migrants add to demand for already scarce services and jobs	3	4.5
Return migrants attract violence and organized crime	3	4.5
Return migration results in family problems in Mexico	3	4.5
Deported migrants have no benefit for Mexico	2	3.0
Return migrants create environmental problems	1	1.5

Source: Jiménez, D. & R. Rojas (2011). *Consecuencias sociales de las deportaciones estadounidenses para México y Centroamérica. Reporte preliminar de estudio de campo.* Guadalajara

States without authorization are unknown, but it is in the thousands annually, and many deported migrants who re-enter without authorization are apprehended and deported again. From 2008 to 2010, the number of migrants charged in the federal justice system for unlawful re-entry after deportation rose from 20,499 to 35,590, respectively.[64]

In the fieldwork conducted in the area of Guadalajara, Jalisco, in the summer of 2011, participants in the interviews gave a total of 90 characterizations of migrants of which 67 characterizations addressed return and deported migrants. The most frequently given characterization was that returning migrants and their families have problems finding work after arriving back in Mexico (Table 5.4). The second most frequent characterization was that return migrants bring positive resources (skills) to Mexico, and the third most frequent characterization was that lack of documents and certificates makes them vulnerable to unemployment or bars them from social assistance and public education (also see, Escobar and González de la Rocha 2012[65]). Cumulatively, characterizations of problematic outcomes accounted for 77.6% of the total characterization of voluntary or deported return migrants, while positive outcomes accounted for only 13.4%.

A theme that emerged in the fieldwork in the Guadalajara area is that some return migrants are unprepared to find employment because they lack the documents

[64] U. S. Department of Justice (DOJ) (2012). *Immigration Offenders in the Federal Justice System, 2010*, <https://www.bjs.gov/content/pub/pdf/iofjs10.pdf>.

[65] Escobar, A. & M. González (2012). *Acceso a la información, servicios y apoyos en zonas de atención prioritaria: Jalisco*. Guadalajara: Centro de Investigaciones y Estudios Superiores en Antropología Social-Occidente.

necessary to provide to employers to get jobs. The migrants either did not have the documents prior to their migration to the United States or left them behind in the United States when they returned voluntarily or were deported. Moreover, family members such as U.S.-born children also lacked documents, e.g., school records, necessary to enroll in Mexican public schools. Another theme that emerged in the fieldwork is that government social services agencies and schools are not prepared to deal with the needs of returning migrants. Respondents in the Guadalajara interviews viewed social service agencies as being unfamiliar with the needs and circumstances of migrants who returned without official Mexican documents or did not have an established residency in the community.

Interviews of community institutions in Guadalajara found views concerning the problematic conditions that youth in returning migrant families experience in their new Mexican environment. The problematic conditions concerned the difficulty of adjusting to new environments and participation in violent behavior. Some institutional respondents in the study also raised concerns that return migrants could contribute to unemployment or attract deviant groups who seek to gain from their recruitment. Yet, as mentioned above, some institutional respondents reported that return migrants brought new skills to Guadalajara or in other ways made positive contributions to the area.

Other research in the Guadalajara area conducted by Wheatley during 2010 and 2011 found striking contrasts between voluntary return migrants and deportees regarding their conditions of return.[66] According to Wheatley, voluntary return migrants described being able to plan their return and bring money back to begin a new life, but deported migrants returned with little or nothing more than the clothes they were wearing. While voluntary return migrants described feeling happy and good about themselves, deported migrants described feeling depressed, frustrated, and angry. Some deported migrants also felt stigmatized by the belief of some community members that deportations were caused by irresponsible or deviant behavior.[67]

Research by Hamann and Zúñiga indicates that school children in migrant families that return to Mexico demonstrate a range of identities.[68] That is to say, the school children do not simply transition into Mexican identities after relocating from U.S.to Mexican schools. According to Hamann and Zúñiga, some students in returning migrant families maintain a U.S. identity ("American"). Female students in migrant families that returned to Mexico, however, were more likely than male

[66] Wheatley, C. (2011). Push Back: U.S. Deportation Policy and the Reincorporation of Involuntary Return Migrants in Mexico. *The Latin Americanist*, 55(4), 35–60, <doi:10.1111/j.1557-203X.2011.01135.x>.

[67] Wheatley, C. (2011). Push Back: U.S. Deportation Policy and the Reincorporation of Involuntary Return Migrants in Mexico. *The Latin Americanist*, 55(4), 35–60, <doi:10.1111/j.1557-203X.2011.01135>.

[68] Hamann, E. T. & V. Zúñiga (2011). Schooling, National Affinity(ies), and Transnational Students in Mexico. In: S. Vandeyar (ed.). *Hyphenated Selves: Immigrant Identities within Education Contexts* (pp. 57–72). Amsterdam/Pretoria: Rozenberg Publishers/Unisa Press.

students to identify only as "Mexican." Moreover, some school children born in either country gave binational identities (Mexican American), although those born in the United States were more likely to identify as Mexican Americans.[69]

Other research reported by Hamann and Zúñiga reveals that children in returning migrant families experience conditions in Mexican schools that contrast with their experiences in U.S. schools.[70] The contrasts include the perceptions that Mexican teachers are more strict, demanding, and punishing, which causes some students to feel out of place in their new educational environments. Interviews with a teacher in a Mexican school found a teaching approach that favored minimal interaction with students arriving from the United States. The teacher stated that the best way to deal with transnational students was to leave them alone and let them find their own way among the students. The teacher did not see a need to provide individualized treatment to transnational students or to meet with their parents.[71] No single pattern, however, emerged in the school children research reported by Hamann and Zúñiga. Some students with prior experiences in the United States felt more comfortable in Mexican schools, even as siblings were described as feeling more comfortable in U.S. schools. Hamann and Zúñiga conclude that school settings should not be places where school children are made to feel ruptures or disconnections, whether in the United States and Mexico.[72]

The following section discusses how restrictive immigration polices add to the normal stress of immigrants in new social and cultural environments. In migrant families, the stress and insecurity experienced under conditions of heightened immigration enforcement can be passed down to the young children in the families.

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[69] Hamann, E. T. & V. Zúñiga (2011). Schooling, National Affinity(ies), and Transnational Students in Mexico. In: S. Vandeyar (ed.). *Hyphenated Selves: Immigrant Identities within Education Contexts* (pp. 57–72). Amsterdam/Pretoria: Rozenberg Publishers/Unisa Press.

[70] Hamann, E. T. & V. Zúñiga (2011). Schooling and the Everyday Ruptures Transnational Children Encounter in the United States and Mexico. In: C. Coe, R. R. Reynolds, D. A. Boehm, J. M. Hess & H. Rae-Espinoza (eds.). *Everyday Ruptures: Children, Youth, and Migration in Global Perspective* (pp. 141–160). Nashville: Vanderbilt University Press.

[71] Hamann, E. T. & V. Zúñiga (2011). Schooling and the Everyday Ruptures Transnational Children Encounter in the United States and Mexico. In: C. Coe, R. R. Reynolds, D. A. Boehm, J. M. Hess & H. Rae-Espinoza (eds.). *Everyday Ruptures: Children, Youth, and Migration in Global Perspective* (pp. 141–160). Nashville: Vanderbilt University Press.

[72] Hamann, E. T. & V. Zúñiga (2011). Schooling and the Everyday Ruptures Transnational Children Encounter in the United States and Mexico. In: C. Coe, R. R. Reynolds, D. A. Boehm, J. M. Hess & H. Rae-Espinoza (eds.). *Everyday Ruptures: Children, Youth, and Migration in Global Perspective* (pp. 141–160). Nashville: Vanderbilt University Press.

5.7 Discussion

The developments described above that contribute to fear and insecurity among Mexican migrants in migration environments are another layer of stress that immigrant populations normally experience. Immigration experiences are normally characterized by what researchers term acculturative stress and tension caused by unfamiliarity with the culture and language of the host society.[73] Research indicates that acculturative stress varies by groups and by social and demographic conditions within groups.[74] Immigrants can also experience stress from conditions related to their occupations. For instance, research conducted in rural areas of North Carolina among farmworkers from Mexico and Central America has found significant levels of stress, anxiety, and depression related to conditions of legality, work, family, social isolation, and substance abuse by others.[75] The restrictive immigration policies that Mexican migrants have experienced since the mid-1990s thus add to the already existing normal sources of psychological stress and insecurity.

It is important to emphasize that the impacts of restrictive immigration policies, and particularly deportations, constitute a risk that is greater than just an interruption of economic plans, which can cause major family hardships. The impacts go beyond economic conditions and affect the mental health of migrant populations. If a single factor such as unauthorized status increases stress, as studies have found,[76] the cumulative effects of multiple factors can logically be expected to create a much greater burden on the mental health of migrants and their families, including young children. One only has to imagine the matrix of coercive enforcement that many migrants and family members face on a daily basis—the possibility of road checkpoints for identification inspections, workplace raids, questioning of children at schools, automobile accidents that bring the police who ask to see driver's licenses, medical emergencies that require going to the hospital where names and addresses are asked, etc.—to understand the social structure of psychological stress that many migrants and their family members experience.

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[73] Arbona, C., N. Olvera, N. Rodriguez, J. Hagan, A. Linares & M. Wiesner (2010). Acculturative Stress among Documented and Undocumented Latino Immigrants in the United States. *Hispanic Journal of Behavioral Sciences*, 32(3), 362–384, <doi:10.1177/0739986310373210>.

[74] Portes, A. & R. G. Rumbaut (2006). *Immigrant America: A Portrait*. Oakland: University of California Press.

[75] Hiott, A. E., J. G. Grzywacz, S. W. Davis, S. A. Quandt & T. A. Arcury (2008). Migrant Farmworker Stress: Mental Health Implications. *The Journal of Rural Health*, 24(1), 32–39, <doi :10.1111/j.1748-0361.2008.00134.x>.

[76] Arbona, C., N. Olvera, N. Rodriguez, J. Hagan, A. Linares & M. Wiesner (2010). Acculturative Stress among Documented and Undocumented Latino Immigrants in the United States. *Hispanic Journal of Behavioral Sciences*, 32(3), 362–384, <doi:10.1177/0739986310373210>; and Hiott, A. E., J. G. Grzywacz, S. W. Davis, S. A. Quandt & T. A. Arcury (2008). Migrant Farmworker Stress: Mental Health Implications. *The Journal of Rural Health*, 24(1), 32–39, <doi:10.1111/j.1748-0361.2008.00134.x>.

While deportations remove migrants from U.S. stressful environments, they place many migrants in even greater conditions of stress and mental duress. Mexican migrants deported to Mexican border towns and who leave families behind in the United States are likely among the deported migrants that experience the greatest amount of mental duress. They experience at least two conditions of stress and anxieties, if not actual depression and trauma. One condition is the desperation of wanting to get back to the family left behind in the United States that may be facing hardships due to the deportation. This stress and anxiety causes many deported migrants to attempt re-entry after deportation to return to their families in the United States, placing the migrants at greater risk of federal imprisonment for illegal re-entry after deportation.

The second condition of desperation is the situation described above of being removed to dangerous Mexican border towns where deported and other migrants are physically assaulted or kidnapped by gangs or cartel members, or even by corrupt police. While some border towns, e.g., Tijuana, have undergone a substantial improvement of violent conditions, deported and other migrants remain targets of crime and violence as they are seen as especially vulnerable given their lack of social linkages in border towns. Although deported migrants seek protection in migrant shelters in Mexican border towns, this is only a short-term solution that lasts only a few days, since the constant demand for assistance by the continual stream of deportees causes shelter operators to limit the number of days a deported migrant can remain in the shelter.

Even reaching hometowns in the Mexican interior does not eliminate uncertainty for all deported migrants. As the discussion above describes, the return experience of deported migrants can bring new stresses for various reasons, due to their lack of preparation to return to Mexico (since they are not given time to put their personal matters in order when they are arrested and detained), the stigma that may come from being deported, and the challenges that family members from the United States face when they join a deported migrant in Mexico.

The fear and uncertainty faced by migrants are passed on to their families, multiplying the effects of restrictive immigration policies. Particularly vulnerable in this respect are the youngest members of family households, that is, the children, many of them young children under the age of 10. Even if the young children are born in the United States, and thus have citizenship status, they will be as psychologically vulnerable and mentally afflicted as immigrant children when immigration enforcement disrupts or threatens their families, such as through the arrest and deportation of a parent.

The following concluding section emphasizes the need to further study how restrictive government policies affect the mental health of migrants and their family members. In the final section, several policy recommendations are given to promote the welfare and security of migrants in settings of restrictive immigration policies.

5.8 Conclusion

The investigation of changing conditions of Mexican migration environments reveals a little-studied dimension of international migration systems. This is a social-psychological dimension of the impacts that restrictive immigration measures have on the mental health conditions of migrants. While much research has focused on the social organization of migration and on the formulation and implementation of immigration policies,[77] less attention has been given to how governmental regulation of migration affects the welfare of the migrants—i.e., the psychological conditions of the migrants and their family members. Government policies enacted to facilitate or restrict immigration impact the emotional state of migrants and subsequently affect their mental health conditions and their performance in all areas of their lives. As millions of unauthorized and even legal immigrants have experienced the increasingly restrictive measures in the United States since the mid-1990s, they have done so at a great psychological cost of fear, stress, and anxiety, if not actual trauma. It is a cost shared by family members, including young children.

5.9 Policy Points

- *Greater Support for Immigrant Populations in the United States*

Research findings in U.S. immigrant communities indicate that it would be most helpful for migrants, as well as for their families and communities, if social institutions in the United States, such as places of worship, health care centers, educational groups, and legal aid centers, played a larger role in providing support to the migrant populations under stress because of increased immigration enforcement activity.

- *Protect the Welfare of Children*

Millions of children in the United States, including U.S.-born children, live with immigrant parents who live in fear of deportation. The fear creates psychological stresses for the parents that are passed on to their children, placing them at risk of mental health injuries and poor school performance. Moreover, research finds that children risk separation from parents, including permanent separation, after the deportation of parents. U.S. governmental agencies should give foremost priority to the welfare of children in deportation cases. The decision to deport a parent of a minor should take into consideration the welfare of the child whenever possible. Moreover, U.S. agencies should be made accountable for the welfare of the children of arrested immigrant parents and do everything possible to prevent permanent separation of the children from their parents under U.S. custody.

- *More Protection and Security in Deportation Sites*

Given that Mexican border communities at the U.S.-Mexico border experience violence waged by cartels and other criminal actors, the U.S. bureau of Immigration

[77] Castles, S. & M. J. Miller (2009). *The Age of Migration: International Population Movements in the Modern World*. New York: Guilford Press.

and Customs Enforcement (ICE) should exercise maximum care for the security of deported migrants when they are removed to the Mexican side of the border. ICE should release deported Mexican migrants to enter Mexico in adherence to the agreements made between the United States and Mexico and specified in the "Local Agreements for the Repatriation of Mexican Nationals."

The Mexican government should prepare procedures to provide deported migrants entering Mexico with at least a 48-hour interval of protection so that the migrants can prepare and undertake a plan of action after their deportation. Deported migrants should not be left to wander in Mexico border towns after their deportation if they need help, and special concern should be given to the welfare of deported migrant women and children.

- *Promote the Re-Integration of Return Migrants*

To assist the reintegration of return migrants in Mexico, Mexican government offices should give special considerations to the needs of deported migrants, who have not normally been given an opportunity to prepare for return to Mexico. Mexican officials should undertake measures to insure that the provisional identification documents given to deported migrants in Mexican government border offices are protected and recognized by all government agencies and transportation industries in order to facilitate the travel of returning deported migrants. It is also recommended that returning deported migrants be provided with temporary official documents that are needed to locate employment, obtain social services, and enroll their children in school until the time they can obtain their permanent documents.

A new era of U.S. restrictions against migrants has brought new challenges and fears to legal and unauthorized migrant populations. All government and community institutions in the United States and Mexico should look for ways to help these migrants and their families survive, especially given that the largest numbers of affected migrants and family members are children and persons who have not committed any criminal violation, but simply attempted to find work without proper status.

Chapter 6
Violence and International Emigration from Mexico: Evidence at a Municipality Level

Liliana Meza González

6.1 Introduction

International Human Rights law considers forced internal and international displacement a human-rights violation. By definition, violence is the trigger of the kind of displacement considered in this paper. The consequences of violence for the affected countries are severe. In sending communities, insecurity problems mix with economic deprivation to create conditions for migration. In receiving areas, it is common to experience increased unemployment, a violent redistribution of land ownership, strong inefficiencies in resource allocation, and the effects of large and unplanned demographic inflows into cities and regions, which act as receptors for the displaced.[1] Leaders of regions affected by violence tend to create programs to deal with the consequences of displacement. However, the trend of displacement, the limited ability of the receptor cities, and the scale of these masses of people make the design of prevention, assistance, and resettlement policies a priority. A *sine qua non* condition for defining such policies is to understand the decision-making process underlying displacement. People react differently to given levels of direct and indirect violence. Frequently, we observe that a substantial portion of the population in violent areas decides to stay despite the risks this implies for them. In

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[1] Sirkeci, I. (2006). *The Environment of Insecurity in Turkey and the Emigration of Turkish Kurds to Germany*. New York: Edwin Mellen Press.

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https://doi.org/10.1007/978-3-030-77810-1_6

a sense, the decision whether to move or not, is a decision between the lesser of two "evils": staying and accepting the everyday risk of being a victim of violence, or leaving behind one's way of life and property and moving on, to an unfamiliar place, having to find new employment in the hope of a better life. Although the theoretical literature is unanimous in predicting a positive relationship between violence and migration, Morrison found a threshold effect of violence such that low levels of violence had no effect on migration, but violence reaching a certain threshold level led people to migrate.[2]

There are many examples in the world that establish an empirical relationship between violence and migration (displacement). A case close to the one analyzed here is Colombia, although most of the population movements in Colombia took place internally.[3] Bohra-Mishra and Massey analyze, with data at a household level, how armed violence during a period of civil conflict in south-central Nepal influenced the likelihood of local, internal, and international migration.[4] They find that violence has a non-linear effect on migration, because low to moderate levels of violence reduce the odds of movement, while at high levels of violence the odds increase. When they consider the influence of violence on micro-level decision-making, they find that the effects of individual and household level determinants are consistent with the contemporary theories of voluntary migration, and that no predictor of migration influenced the decision to migrate differently in the presence of violence.[5]

In another paper, Alvarado and Massey study the effects of structural adjustment and violence on international migration from four countries in Latin America: Mexico, Costa Rica, Guatemala, and Nicaragua.[6] They estimate a series of event history models that predict the likelihood of initial migration to the United States as a function of murder rate, economic openness, and selected controls in the country of origin. The paper finds that only in Nicaragua was lethal violence positively correlated to out-migration. In fact, the authors conclude that rising violence reduced the likelihood of emigration in Mexico, Costa Rica, and Guatemala. Therefore, they say that violence does not appear to have uniform effects on patterns of international migration.

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[2] Morrison, A. R. (1993). Violence or Economics: What Drives Internal Migration in Guatemala? *Economic Development and Cultural Change*, 41(4), 817–831.

[3] See Engel, S. & A. M. Ibáñez (2007). Displacement Due to Violence in Colombia: A Household-Level Analysis. *Economic Development and Cultural Change*, 55(2), 335–365.

[4] Bohra-Mishra, P. & D. S. Massey (2011). Individual Decisions to Migrate during Civil Conflict. *Demography*, 48(2), 401–424.

[5] Bohra-Mishra, P. & D. S. Massey (2011). Individual Decisions to Migrate during Civil Conflict. *Demography*, 48(2), 401–424.

[6] Alvarado, S. E. & D. S. Massey (2010). In Search of Peace: Structural Adjustment, Violence and International Migration. *The Annals of the American Academy of Political and Social Science*, 630(1), 137–161.

Shellman and Stewart, on the other hand, seek to develop a general early-warning model for forced migration with data from Haiti for the 1994–2004 period.[7] They are especially interested in finding the events that lead to population displacement. Their study predicts forced international migration events by predicting civil violence, poor economic conditions, and foreign interventions. They restrict their model to forecast Haitian flight to the United States and succeed in predicting weekly flows as opposed to annual flows. The authors conclude that it is possible to anticipate forced international migration events if economic instability, low-intensity civil conflict, state repression, rebel dissent, and foreign intervention are present.

In an older but seminal paper, Stanley analyzes the impact of political violence on international migration from El Salvador to the United States.[8] He uses time–series analysis and finds that political violence was an important motivation of Salvadorans who migrated to the U.S. since the beginning of 1979. He says that political violence variables account for more than half of the variance of migration, and suggests that fear of political violence is probably the dominant motivation of these migrants. Stanley included economic variables in several of his formulations, but he dropped them because they were not significant.[9] This econometric strategy increases the degrees of freedom in the estimation but at a cost: the effect attributed to political factors may be exaggerated due to the absence of variables controlling for economic factors.[10]

Mexican emigration to the US has taken place for more than a century, and the main reason behind most movements is either employment, the search for a job, or family reunification. During the 2007–2012 period, the increase in violence may have promoted flows of emigration from Mexico that greatly differ from those in previous years and decades. This kind of emigration took place while total flows were decreasing, which may appear paradoxical. It is argued that while the economic downturn in the U.S. is largely responsible for the drop in the total flows, violence may be an incipient but significant force behind the movement of people—especially those living in conflict areas.

People fleeing Mexico for security reasons can be taken as a phenomenon that needs better understanding. Economics are probably still the main force behind

[7] Shellman, S. M. & B. M. Stewart (2007). Predicting Risk Factors Associated with Forced Migration: An Early Warning Model of Haitian Flight. *Civil Wars*, 9(2), 174–199, <doi:10.1080/13698240701207344>.

[8] Stanley, W. D. (1987). Economic Migrants or Refugees from Violence? A Time-Series Analysis of Salvadoran Migration to the United States. *Latin American Research Review*, 22(1), 132–154, <doi:10.2307/2503545>.

[9] Stanley, W. D. (1987). Economic Migrants or Refugees from Violence? A Time-Series Analysis of Salvadoran Migration to the United States. *Latin American Research Review*, 22(1), 132–154, <doi:10.2307/2503545>.

[10] Bohra-Mishra, P. & D. S. Massey (2011). Individual Decisions to Migrate during Civil Conflict. *Demography*, 48(2), 401–424.

population movements from Mexico to the U.S., but this paper seeks to identify correlations between violence and emigration.

The objective of this paper is to understand how violence is affecting international migration decisions in Mexico. In particular, the purpose is to find evidence regarding the influence of violence (proxied by deaths related to organized crime) on international migration intensity at a municipality level. The results indicate that social networks within the U.S. mainly determine the proportion of dwellings that receive remittances and that send migrants to the U.S., but that violence is a small albeit significant force behind remittances and migration movements, at least in the northern border states. They also indicate that violence deters the return of Mexican migrants to their origin communities, despite the lack of jobs Mexicans suffer in receiving communities in the U.S.

This chapter is organized into seven segments. The first segment introduces and the second segment presents data on migration and explains how violence has grown in Mexico, while the third develops the model structure. The fourth part presents the data and some descriptive statistics. The fifth part includes the main empirical findings regarding the relationship between violence and international emigration in Mexico. The sixth part shows descriptive statistics for the northern border municipalities, and includes estimations with data from these municipalities. The seventh part of the text offers concluding thoughts.

6.2 Security and Migration

Security in a broad sense can be described as a function of overarching components such as military security, regime security, and structural security.[11] Essentially in this three-way description, military security addresses preservation of the state; regime security—as the name implies—concerns preservation of the regime; and, structural security pertains to the resilience of life-supporting properties (e.g., protecting the sources of livelihood and quality of life). In this study, we focus on the structural component of security and its relationship to migration between the United States and Mexico.

While structural security can be considered a function of the demands of population, environmental attributes, available resources, and other factors, this research further focus its lens on violence as an environmental attribute. Yet even with this amount of focus—on violence and migration—we remain faced with the realization that a decision to migrate is a severely subjective one.

This subjectivity of migration decision making is due to the varied motivation for migration—e.g., employment, religious, forced, familial. These varied motivations

[11] Choucri, N. (2002). Migration and Security: Some Key Linkages. *Journal of International Affairs*, 56(1), 97–122.

are considered later in this paper when root causes, intervening factors, non-uniformity of responses, and other factors are interpreted.

Emigration from Mexico to the United States has historically been determined by economic and social factors (e.g. social mobility, family reunification), in a context of a relatively open (porous) border. Those factors appear to be present today, with consistent effect on the decision to emigrate. But along with the economic and social forces, there is a perception that violence may be promoting emigration from conflicted areas. This would not be the first time such a relationship occurs. There is a general perception that conflicts such as the *Cristero* war (1926–29), the Mexican revolution (1910–21) and other more localized periods of violence in Mexico may have resulted in the creation of specific Mexican communities in the United States.

Studies of the Colombia conflict indicate that there is a population that under certain conditions takes a preventative decision to migrate in response to the threat of violence.[12] In the Mexican case, it appears the war against organized crime—that was openly recognized by the Federal Government in 2007—has fostered displacement of population, mainly in the northern part of the country. The displacements may include movements to other parts of the country, or even to the U.S., as the mass media have argued. Data from the Mexican National Survey on Employment and Occupation show, for each one of the years of the 2007–2010 period, an increasing trend in the internal and international movements of people due to insecurity at a national level. Graph 1 below shows this trend, but it is important to mention that numbers are not representative of the movements. It is important to point out that the numbers refer to the absent individuals inside the household. In the socio-demographic questionnaire, the Mexican National Statistics Office (INEGI) asks about the reasons why the absent members of the household left (Fig. 6.1).

In some cities in the U.S., and especially along the border, there is also a perception that Mexicans escaping violence are arriving in large numbers. The following quotes give a sense of what is perceived in certain areas of the U.S.:

1. There's a growing number of affluent Mexican citizens fleeing their native land and moving to Texas …they are quickly becoming part of the city's (San Antonio) new class of entrepreneurs. *Texas Public Radio*
2. An executive at Cemex SAB said he can count at least 20 different families from his circle of friends who have left—for nearby Texas. "It's a rush for the exits." *WSJ*
3. "We had a restaurant in Oaxaca …It was just unrest in the city and we went out of business. …no tourist, no life, no money, no restaurant … more people and especially people from the north part of Mexico are moving to the United States." *KVUE* news, *Austin Texas*

The number of Mexicans fleeing their country due to insecurity is still unknown. Data from the American Community Survey indicate that the Mexicans who arrived

[12] Pedersen, D. (2002). Political Violence, Ethnic Conflict, and Contemporary Wars: Broad Implications for Health and Social Well-Being. *Social Science & Medicine*, 55(2), 175–190.

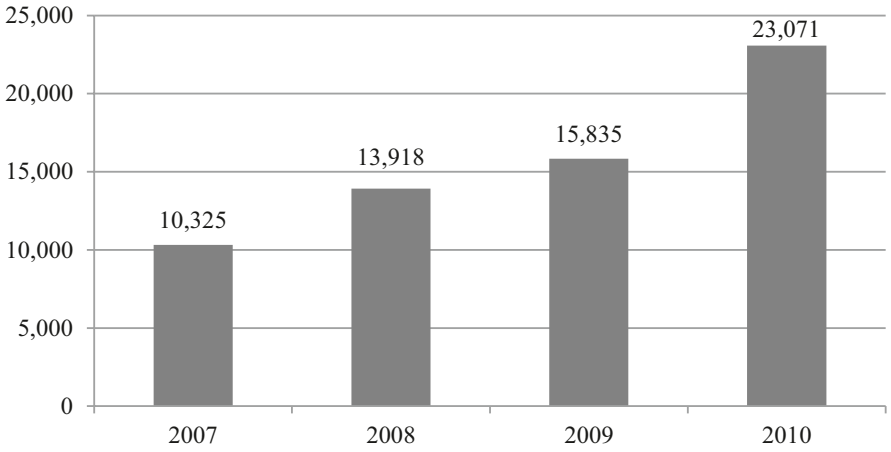

Fig. 6.1 Mexican population that reported moving internally or to another country due to insecurity, 2007–2010 (thousands)
Source: Encuesta Nacional de Ocupación y Empleo. INEGI

into the U.S. southern Border States after 2005 are more affluent, educated, younger, and more prone to be citizens of the U.S., compared to those Mexicans who arrived into the U.S. between 2000 and 2005. Table 6.1 presents some socio-demographic characteristics of people born in Mexico and living in Arizona, California, New Mexico, and Texas in 2011. The data is presented in two groups defined by the date of arrival.

It is worth noticing that the percentage of people who are citizens of the U.S. who moved from Mexico to Arizona between 2006 and 2010 are almost double the percentage of citizens who moved from Mexico to this state between 2000 and 2005. Another fact worth mentioning is that the percentage of people arriving from Mexico with more than high-school education increases in the four states in 2006–2010 relative to the period 2000–2005.

There is also evidence that an environment of insecurity is perceived in Mexico, but especially in regions where drug cartels are fighting for the territory they once used freely. For example, the National Homicide Rate shows a significant increase from 2006 to 2010, as the following graph shows (Fig. 6.2):

According to the newspaper Reforma, during the administration of President Felipe Calderón, there were almost 50,000 deaths related to organized crime in Mexico.[13] It is generally accepted that most of these deaths are explained by struggles among the criminal organizations. It is worth mentioning, however, that the increase in homicides has not been uniform across Mexico, and that some states that were once considered the leading areas for insecurity, have been displaced by states whose rate of violent deaths are increasing. Nearly 84% of all homicides from

[13] Cited in Rosen, J. D. & R. Zepeda (2015). La guerra contra el narcotráfico en México: una guerra perdida. *Revista Reflexiones*, 94(1), 153–168.

Table 6.1 Population born in Mexico and living in the U.S., by demographic characteristics, 2010

	State			
Period of arrival	Arizona	California	New Mexico	Texas
2000–2005				
Sex	*100.0*	*100.0*	*100.0*	*100.0*
Male	50.0	49.9	47.7	50.1
Female	50.0	50.1	52.3	49.9
Average age (years)	*30.3*	*29.4*	*30.1*	*30.1*
Marital status[a]	*100.0*	*100.0*	*100.0*	*100.0*
United	55.3	49.2	58.5	57.3
Not united	44.7	50.8	41.5	42.7
Citizenship	*100.0*	*100.0*	*100.0*	*100.0*
Citizen	6.6	9.8	8.0	8.0
Non citizen	93.4	90.2	92.0	92.0
Education[b]	*100.0*	*100.0*	*100.0*	*100.0*
Less than high school	54.0	63.2	61.8	59.5
High school and more	46.0	36.8	38.2	40.5
Poverty condition	*100.0*	*100.0*	*100.0*	*100.0*
Poor[c]	63.9	56.2	65.5	58.7
Non poor	36.1	43.8	34.5	41.3
2006–2010				
Sex	*100.0*	*100.0*	*100.0*	*100.0*
Male	55.5	52.0	44.3	53.2
Female	44.5	48.0	55.7	46.8
Average age (years)	*27.7*	*27.0*	*33.0*	*27.2*
Marital status[a]	*100.0*	*100.0*	*100.0*	*100.0*
United	55.5	41.9	50.5	52.0
Not united	44.5	58.1	49.5	48.0
Citizenship	*100.0*	*100.0*	*100.0*	*100.0*
Citizen	12.6	11.8	13.1	8.7
Non citizen	87.4	88.2	86.9	91.3
Education[b]	*100.0*	*100.0*	*100.0*	*100.0*
Less than high school	52.1	58.9	57.5	53.8
High school and more	47.9	41.1	42.5	46.2
Poverty condition	*100.0*	*100.0*	*100.0*	*100.0*
Poor[c]	51.6	53.5	74.1	57.8
Non poor	48.4	46.5	25.9	42.2

Source: CONAPO based on American Community Survey 2010
Notes:
[a]Population 15 and above
[b]Population 25 and above
[c]Income below 150% of the Federal Poverty Line of the USA

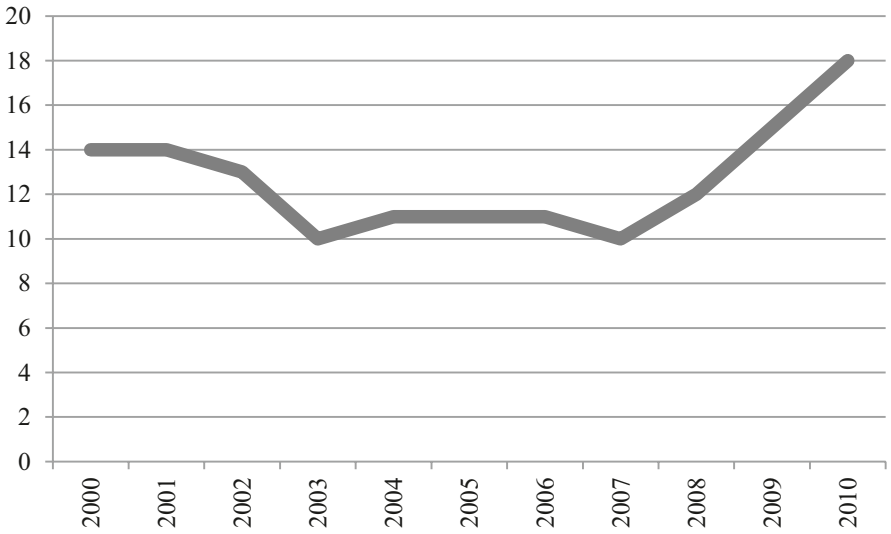

Fig. 6.2 Homicide rate in Mexico (homicides per 100 thousand inhabitants)
Source: INEGI. (https://www.inegi.org.mx/app/buscador/default.html?q=tasa+de+homicidios#tabMCcollapse-Indicadores)

organized crime in 2010 occurred in just four of Mexico's 32 states (Chihuahua, Sinaloa, Guerrero and Baja California) and over 70% occurred in 80 of the country's 2455 municipalities.[14]

Map 6.1, published originally in The Economist, on November 22nd, 2012, presents data of murders related to drug trafficking organizations by Mexican state. It shows that violence is highly concentrated in the northern border of the country. The four states with the most outstanding numbers of drug-related murders in 2011 are Chihuahua, Sinaloa Guerrero, and Nuevo León, and the state with the largest increase in insecurity is, by far, Zacatecas.

Despite the increase in insecurity, Mexico is not as violent as other countries in the continent. Figure 6.3 presents the homicide rates in several countries in the Americas. Homicide rates in El Salvador and Honduras more than double the figures in Mexico.

According to Bailey, the actions of Drug-Trafficking Organizations (DTO) in Mexico are the most pressing symptom of "a growing mix of forms of organized crime rooted in a robust informal economy and a civic culture marked by comparatively little confidence in the police-justice system and low compliance with state's law."[15] Departing from this idea, violence in Mexico can't therefore be considered a

[14] The numbers of deaths related to organized crime at a municipality level were obtained from the Center of Research and National Security (CISEN) and are confidential.

[15] Bailey, J. (2010). Combating Organized Crime and Drug-Trafficking in Mexico: What are Mexican and U.S. Strategies? Are they Working?. In: E. L. Olson, D. A. Shirk & A. Selee (eds.). *Shared Responsibility: US-Mexico Policy Options for Confronting Organized Crime* (pp. 327–349).

Map 6.1 Drug related murders from January 1st to December 31st, 2011
Source: Generated by the author using data from The Economist, November 22nd, 2012. (https://www.economist.com/graphic-detail/2012/11/22/waves-of-violence)

recent problem and will not be solved in the near future. In fact, elements of organized crime threat can be traced at least to the mid-1980s. In the words of Bailey, "What brings violence to a level of threat to democratic governance is its rapid recent growth and aggressiveness. This is due to the confluence of large supplies of violent entrepreneurs and weapons, financed by domestic and foreign markets for illegal drugs, all in the context of slow economic growth."[16]

The role different actors are playing in this scenario suggests this may be a longer-term problem for the Mexican society. Starting in 2007, the Mexican government developed a strategy to confront organized crime in general, and drug-trafficking organizations in particular. The strategy has multiple components. Its central logic, however, is to employ the armed forces, principally the Army, to confront armed bands of criminals in selected areas in order to disrupt their activities and to buy time to implement a long menu of institutional reforms. At some point, the armed forces would return to a secondary, backup role in police functions, and the reformed police-justice system would take the lead against organized crime

Washington, D.C.: Woodrow Wilson International Center for Scholars and Trans-Border Institute, University of San Diego.

[16] Bailey, J. (2010). Combating Organized Crime and Drug-Trafficking in Mexico: What are Mexican and U.S. Strategies? Are they Working? In: E. L. Olson, D. A. Shirk & A. Selee (eds.). *Shared Responsibility: US-Mexico Policy Options for Confronting Organized Crime* (pp. 327–349). Washington, D.C.: Woodrow Wilson International Center for Scholars and Trans-Border Institute, University of San Diego.

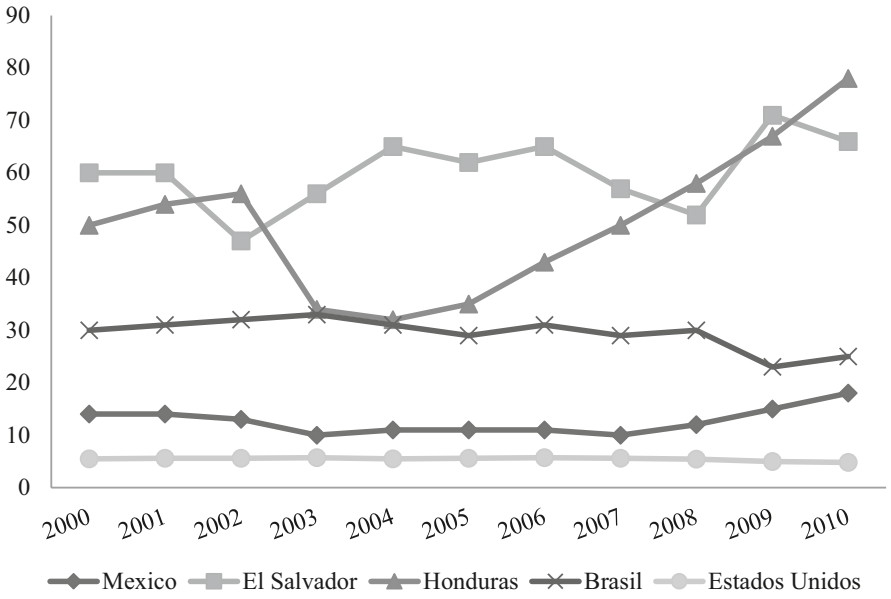

Fig. 6.3 Homicide rates by country (total homicides per 100 thousand inhabitants), 2000–2010
Source: World Bank (https://datos.bancomundial.org/indicador/vc.ihr.psrc.p5?year_high_desc=false)

groups.[17] The most important institutional reforms that have to be implemented in Mexico in order to fight organized crime are, first, to reconstruct Mexican police, along with a reorientation of the justice system and the construction of an intelligence system, all with the acceptance of the three levels of government. These actions certainly take time, which means that public insecurity may not decrease in the short term.

The role the U.S. government is playing in the insecurity problem in Mexico is to respond to the initiatives of the Mexican government. For example, according to Bailey, the Mérida Initiative was crafted by the executive branches in both countries in 2007 in response to Mexico's preferences.[18] This means that as long as the

[17] Bailey, J. (2010). Combating Organized Crime and Drug-Trafficking in Mexico: What are Mexican and U.S. Strategies? Are they Working? In: E. L. Olson, D. A. Shirk & A. Selee (eds.). *Shared Responsibility: US-Mexico Policy Options for Confronting Organized Crime* (pp. 327–349). Washington, D.C.: Woodrow Wilson International Center for Scholars and Trans-Border Institute, University of San Diego.

[18] Bailey, J. (2010). Combating Organized Crime and Drug-Trafficking in Mexico: What are Mexican and U.S. Strategies? Are they Working? In: E. L. Olson, D. A. Shirk & A. Selee (eds.). *Shared Responsibility: US-Mexico Policy Options for Confronting Organized Crime* (pp. 327–349). Washington, D.C.: Woodrow Wilson International Center for Scholars and Trans-Border Institute, University of San Diego.

Mexican government continues fighting organized crime, the U.S. government will continue supporting both federal and local actions.

6.3 Model Structure

International migration is generally associated with the search of a better standard of living in other places. According to economic theory, wage differentials constitute basic incentives to movement. However, families, not individuals, typically make migration decisions in developing countries, and families migrate not only to maximize earnings but also to minimize risks. Economic conditions in developing countries are volatile, and families face serious risks to their well-being from many sources—natural disasters, political upheavals, or economic recessions among others.[19]

The literature on forced migration generally distinguishes between three kinds of determinants of movements: root causes, proximate conditions, and intervening factors.[20]

6.3.1 Root Causes

Poverty, along with unemployment and low wages, yields economic hardships that prompt people to look elsewhere for material sustenance or advancement. The lack of certain services in the dwellings and limited access to resources for investment, combined with problems to access credit and insurance markets, may promote international migration when a certain level of family income is reached. To control for these root causes of migration in our empirical analysis, we use a series of indicators that conform the Marginality Index that is calculated by the Mexican National Population Council (CONAPO) by a principal components methodology. The Marginality Index at a municipality level combines nine indicators of hardship in dwellings.[21] As the indicators are highly correlated among themselves, and we wanted to consider an indicator of economic prosperity in the analysis, we didn't

[19] Massey, D. S. (1994). The Social and Economic Origins of Immigration. *The Social Contract*, 4(3), 183–185.

[20] Bohra-Mishra, P. & D. S. Massey (2011). Individual Decisions to Migrate during Civil Conflict. *Demography*, 48(2), 401–424.

[21] The indicators of the Marginality Index are: Percentage of population 15 and older that is illiterate; percentage of population 15 and older with incomplete elementary school; percentage of people in dwellings without piped water; percentage of people in dwellings without drainage or toilette; percentage of population in dwellings with ground floor; percentage of population in dwellings without electricity; percentage of population in overcrowded dwellings; percentage of occupied people earning less than two minimum wages, and percentage of population in localities with less than 5000 inhabitants.

use the marginality index as an independent variable, but used only those indicators that were significant explaining variability in our migration dependent variables.

6.3.2 Proximate Conditions

The proximate cause of migration of central interest here is the intensity of violence in municipality (time does not vary because we use cross-sectional data). Rational choice theory suggests that as the risk to physical safety rises with the intensity of violence, people will seek to reduce the risk by moving elsewhere. In this paper we define intensity of violence as the rate of deaths related to organized crime in each municipality in 2010. The rate of deaths related to organized crime is calculated as the ratio between the average number of deaths related to organized crime in the 2007–2011 period, divided by the number of inhabitants in the municipality and multiplied by 10,000.[22] The resulting number is then divided by 5 to create an annual average indicator.

We expect to find that municipalities with higher intensity of violence tend to have higher international migration intensity indicators. The international migration intensity indicators constitute our dependent variables.

6.3.3 Intervening Factors

The most important intervening factor influencing the migration decision seems to be the social ties that migrants constitute with other migrants from their families or a close circle of friends. It has been proven that someone with migratory experience can provide information, resources, and assistance to lower the costs of movement of a potential migrant.[23] In the present analysis, we measure migration networks as the proportion of people in the municipality living in dwellings that receive remittances, have a person living in the U.S., or had a person in the U.S. in the past. To avoid correlation with our dependent variables, we use data on migration networks from the 2000 to 2005 period.

The following section analyzes the data from Mexico and sketches a correlation between violence and international migration.

[22] We multiply the number of homicides in the municipality by 10,000 given that the number of inhabitants in the municipality is generally small.

[23] Massey, D. S., J. Arango, G. Hugo, A. Kouaouci, A. Pellegrino & J. E. Taylor (1998). *Worlds in Motion: Understanding International Migration at the End of the Millenium*. New York: Oxford University Press.

6.4 Descriptive Statistics

To test the relationship between violence and international migration described in the first section, we use data from the Center of Research and National Security (CISEN) and from the National Population Council (CONAPO). CISEN measures violence in different ways, but the one used in this work is the rate of deaths related to organized crime. In this exercise, we use data from all the municipalities in the country (2455). These municipalities present different levels of insecurity, measured by the rate of deaths related to organized crime; they also present different levels of development and, therefore, different intensities of migration. Migration is here measured in three different ways: the proportion of dwellings in the municipality in 2010 where remittances from the U.S. are received; the proportion of dwellings in 2010 with a family member living in the U.S.; and the proportion of dwellings in the municipality that in 2010 had a circular migrant.

Table 6.2 presents some descriptive statistics for six different groups of municipalities classified by their migration intensity: those with null, very low, low, medium, high, and very high migration intensity. Migration intensity is here measured by an index created by the Mexican National Population Council (CONAPO) using a principal component technique.[24] The indicators included in the procedure used to obtain the index are as follows: the percentage of people living in the municipality in dwellings with at least one returned migrant (someone who lived in the U.S. in 2005 and returned to Mexico between 2005 and 2010); the percentage of people living in the municipality in dwellings that receive remittances; the percentage of people living in the municipality in dwellings with a family member living in the U.S., and the percentage of people living in the municipality in dwellings with a

Table 6.2 Mexico: sociodemographic characteristics of municipalities, by migration intensity, 2010

	Migration intensity[a]					
	Very high	High	Medium	Low	Very low	Null
Homicide rate (per 10,000 inhabitants)[b]	1.98	3.36	4.00	5.20	2.27	0.33
Gini coefficient (income)	0.423	0.416	0.414	0.419	0.411	0.359
Marginality index[c]	0.163	0.095	0.003	−0.187	0.089	0.799

Source: Own calculations based on CISEN and CONAPO data, for 2455 municipalities
The larger the value, the poorer is the municipality
[a]The migration intensity index is published by CONAPO and elaborated with census data. It goes from a minimum value of −1.16 to a maximum value of 5.04. The larger the value, the more migration we observe in the municipality
[b]Homicide rates related to organized crime below 5 are considered low; between 5 and 10, medium and above 10, high
[c]The marginality index goes from a minimum value of −2.34 to a maximum value of 4.36

[24] Consejo Nacional de Población (Conapo) (2011). Índices de intensidad migratoria México-Estados Unidos 2010, <http://www.conapo.gob.mx/swb/CONAPO/Indices_de_intensidad_migratoria_Mexico-Estados Unidos_2010>.

Table 6.3 Mexico: sociodemographic characteristics of municipalities, by homicide rate, 2010

	Homicide rate[a]		
	High	Medium	Low
Migration intensity[b]	0.004	0.311	−0.024
Gini coefficient (income)	0.438	0.430	0.412
Marginality index[c]	−0.299	−0.265	0.052

Source: Own calculations based on CISEN and CONAPO data for 2455 municipalities
[a]Homicide rates related to organized crime below 5 are considered low; between 5 and 10, medium and above 10, high
[b]The migration intensity index is published by CONAPO and elaborated with census data. It goes from a minimum value of −1.16 to a maximum value of 5.04. The larger the value, the more migration we observe in the municipality
[c]The marginality index goes from a minimum value of −2.34 to a maximum value of 4.36. The larger the value, the poorer is the municipality

circular migrant (someone who lived in the U.S. in 2005, returned to Mexico between 2005 and 2010 and left Mexico again and was living in the U.S. in 2010).

The first row in Table 6.2 shows that the average homicide rate (calculated as the total number of homicides related to organized crime in the municipality per 10,000 inhabitants between 2007 and 2011) is higher in those municipalities within the category of medium and low migration intensity. The homicide rate in municipalities with very high migration intensity is less than half the rate in municipalities with medium migration intensity. This means that, at a national level, homicide rates are not very high in municipalities where migration is more intense. The second row indicates that inequality is higher in those municipalities with very high migration intensity, which suggests that migration promotes more inequality. Mora has found that migration tends to initiate in unequal communities, and that remittances tend to decrease inequality in the medium run.[25] On the other hand, the same author has found that migration takes place in more developed municipalities; i.e., in those where extreme poverty is lower. The following row in Table 6.2 presents the values of the marginality index. The highest value of the marginality index is observed in municipalities with null migration intensity. This suggests that, in Mexico, the poorest municipalities do not generate migratory dynamics due mainly to the lack of resources. The second highest value of the marginality index is observed in municipalities with very high migration intensity. This supports the idea that economic hardship promote emigration, but extreme poverty does not.

Table 6.3 presents some descriptive statistics of municipalities classified by their degree of violence. In this case, municipalities with low homicide rates are those with rates below 5. Municipalities with medium homicide rates are those with rates between 5 and 10, and municipalities with high homicide rates are those with rates above 10. Homicide rates here are calculated as above. The first row of the table indicates that migration intensity is higher in municipalities with medium homicide

[25] Mora, J. J. (2006). *Essays on Migration and Development in Rural Mexico.* Doctoral Dissertation. Mexico: El Colegio de México.

Table 6.4 Mexico: migration variables and homicide rates at a national level

		Homicide rate[a]		
		High	Medium	Low
Percentage of dwellings receiving remittances	Average	8.12	9.37	6.11
	Standard dev	6.77	7.63	7.19
Percentage of dwellings with emigrants to the US	Average	2.75	4.26	3.89
	Standard dev	2.28	4.48	4.22
Percentage of dwellings with circular migrants	Average	1.05	1.42	1.19
	Standard dev	1.01	1.22	1.24
Percentage of dwellings with return migrants	Average	3.86	4.51	3.33
	Standard dev	2.69	2.91	3.07

Source: Own calculations based on CISEN and CONAPO data
Note:
[a]Homicide rates related to organized crime below 5 are considered low; between 5 and 10, medium and above 10, high

rates. This fact suggests the existence of a certain correlation between migration and violence, although the correlation seems to be quadratic. Emigration seems to stop at higher levels of violence and to not happen at all at low levels of violence. However, in order to prove a real correlation, we need to run some regressions that control for other factors that may be correlated with both indicators.

The second row in Table 6.3 suggests that insecurity is higher in more unequal municipalities. The last row includes the marginality index. The data suggest that poverty and economic hardship is higher in more secure municipalities, which suggests that crime is higher in richer regions of the country.

Now, to better understand how violence and migration correlate, in Table 6.4 we present municipalities classified by the homicide rate and the four indicators included in the calculation of the Migration Intensity Index. These indicators are (1) the percentage of population in dwellings[26] receiving remittances, (2) the percentage of population in dwellings with emigrants in the U.S., (3) the percentage of population in dwellings with circular migrants, and (4) the percentage of population in dwellings with returned migrants. The data to calculate the Migration Intensity Index come from the 2010 Census of Population and Dwellings.

According to the data in Table 6.4, the percentage of population in dwellings receiving remittances is higher in municipalities with medium homicide rates. Also, the percentage of population in dwellings with emigrants in the U.S. is higher in municipalities with medium homicide rates. Regarding circular migrants, the percentage of population in dwellings with this kind of emigrants is higher in municipalities which also have medium homicide rates. Finally, the percentage of population in dwellings with returned migrants is also higher in municipalities with medium homicide rates. These results suggest a threshold effect of violence such

[26]Contrary to other data sources, the 2010 Mexican Census does not differentiate dwellings and households.

that low levels of violence have little effect on migration, but the highest levels of violence also seem to deter international movements.

The main results of this section refer that violence is higher in municipalities where migration intensity has a medium level, and that migration intensity is higher in municipalities with a medium degree of violence. These results suggest a non-linear relationship between violence and international migration in Mexico. This is also evident in Table 6.4, where all the indicators included in the Migration Intensity Index reach their highest value in municipalities with a medium homicide rate.

6.5 Estimations at a Municipality Level

To better understand the correlation between violence and migration, we ran a series of cross-section regressions. First, we decided to estimate some models for three different dependent variables: the percentage of population in each municipality that lives in dwellings that receive remittances; the percentage of population in the municipality living in dwellings with an emigrant in the U.S.; and the percentage of population in the municipality living in dwellings with circular migrants. These are the variables in the Migration Intensity Index.

For each of the dependent variables we ran three different models; in the first one, the independent variables are a constant, the rate of deaths related to organized crime in the municipality and the rate of deaths related to organized crime squared. In the second model we keep the first three explanatory variables and include a proxy for migration social networks in the municipality. In the third model we add to the variables included in the second model a variable that reflects the proportion of population in the municipality that earns less than twice the minimum wage, and a variable related to poor housing conditions in the municipality.

Table 6.5 includes the three models estimated for the first one of our dependent variables: the percentage of population in the municipality in dwellings receiving remittances. In the first model we observe that the rate of deaths related to organized crime is positively correlated to the dependent variable. The coefficient is statistically different from zero.

In all three models we include, as an independent variable, the rate of deaths related to organized crime squared, to capture a threshold effect. A threshold effect means that at low levels of violence, migration tends to decrease, and that it may increase as violence rises. The coefficient of this variable is always very close to zero, despite its statistical significance in the first specification of the model. This means that the adjustment of the model to the data takes a quadratic form, but not very obviously. In fact, we can say that the threshold effect is present but it is not strong enough to be taken into account. To conclude the analysis of this first regression we can say that the reception of remittances seems to be higher in municipalities with higher intensity of violence.

Table 6.5 Estimation 1: municipal level model with national data

Independent variables	1	2	3
Intercept	6.300**	1.531**	2.883**
	(39.951)	(11.089)	(6.684)
Rate of deaths related to organized crime[a]	0.067**	0.034**	0.033**
	(3.274)	(2.456)	(2.421)
Rate of deaths related to OC squared	0.000**	0.000	0.000
	(−2.355)	(−0.928)	(−1.154)
Social network in the US[b]	–	0.804**	0.735**
	–	(54.239)	(48.675)
Percentage of population earning up to 2 min wage	–	–	0.082**
	–	–	(13.405)
Percentage of dwellings overcrowded	–	–	−0.134**
	–	–	(−13.347)
R squared	0.005	0.549	0.587
F statistic	5.627	988.691	692.552
Sig. F	0.004	0.000	0.000
N	2455	2442	2442

Source: Own calculations based on data from CISEN and CONAPO for 2455 municipalities
Notes:
Dependent variable: percentage of dwellings receiving remittances
t statistics in parenthesis
[a]Defined as deaths in the 2007–2011 period due to aggressions or executions and in clashes related to organized crime. The rate is calculated as explained above
[b]Percentage of dwellings with emigrants in the U.S. between 1995 and 2000

Given that we can't tell the direction of the causality between violence and remittances, we think we experience a problem of endogeneity. However, our model indicates that in municipalities experiencing more violence, families receive more transfers from members abroad. This may mean that the propensity to migrate is higher in more violent municipalities.

In the second model we include the percentage of population in the municipality in dwellings with migrants in the U.S. between 1995 and 2000. This last variable is used to proxy migrant social networks in the municipality. As we expected, this variable is positive and explains remittances in a significant way. The size of the coefficient is significantly larger than the coefficient of the rate of deaths related to organized crime. This suggests that remittances in this model are mainly explained by social networks, but that violence is correlated with the money transfers between Mexico and the U.S.

In the third model, two other explanatory variables are included: the percentage of population in the municipality earning less than twice the minimum wage, and the percentage of population in the municipality in overcrowded dwellings. A dwelling is considered overcrowded if the ratio of people per room is larger than 2.4. In

this model all the explanatory variables are significant, except the rate of deaths related to organized crime squared. The largest coefficient in this regression corresponds to the variable that proxies social networks, and the second largest corresponds to overcrowding (which presents a negative sign). This suggests that remittances are received mainly in municipalities with previous migration experience, and that municipalities with poorest conditions are not as prone to receive remittances as those more affluent municipalities. The coefficient of the variable that proxies violence is positive and significant, which suggests either that remittances are received, in part, to relieve the violence at a municipality level, or that criminals have targeted municipalities where there is a high proportion of families receiving remittances. Given that we can't distinguish the causality between these two variables, we consider that both explanations make sense. It is important to highlight the value of the R squared in this third regression (0.587), which means that almost 60% of the variation in the dependent variable is explained by the variation in the independent variables.

In Table 6.6 we present the three models estimated for the second dependent variable: the percentage of population in the municipality, in dwellings with a migrant in the U.S. In the first model we observe that the rate of deaths related to organized crime is negatively correlated with the dependent variable, and the rate of

Table 6.6 Estimation 2: municipal level model with national data

Independent variables	1	2	3
Intercept	3.958**	1.841**	−1.569**
	(44.269)	(19.382)	(−6.637)
Rate of deaths related to organized Crime[a]	−0.046**	−0.061**	−0.026**
	(−3.983)	(−6.443)	(−2.870)
Rate of deaths related to OC squared	0.000**	0.000**	0.000**
	(−2.375)	(−4.578)	(2.227)
Social network in the US[b]	–	0.357**	0.367**
	–	(35.011)	(37.600)
Percentage of population earning up to 2 min wage	–	–	0.050**
	–	–	(13.877)
Percentage of indigenous population	–	–	0.046**
	–	–	(5.234)
R squared	0.008	0.340	0.418
F statistic	9.538	418.306	349.603
Sig. F	0.000	0.000	0.000
N	2455	2442	2442

Source: Own calculations based on CISEN and CONAPO data for 2455 municipalities
Notes:
Dependent variable: percentage of dwellings with emigrants to the US
t statistics in parenthesis
[a]Defined as deaths in the 2007–2011 period due to aggressions or executions and in clashes related to organized crime. The rate was calculated as explained above
[b]Percentage of dwellings with emigrants in the US between 1995 and 2000

deaths related to organized crime squared is also negative and significant. This suggests that emigration to the U.S. is lower when violence is higher.[27] In the second model we include a proxy for the migrant social networks in the municipality. In this case, the insecurity variable stays negative and significant, which suggests that violence is negatively correlated to international migration at a municipality level. It is worth noticing, however, that the size of the coefficient is small, relative to the one corresponding to social networks, which in this case is calculated as the percentage of population in dwellings with circular migrants between 2005 and 2010. In the third model we include two other independent variables: the percentage of population in the municipality that earns less than twice the minimum wage and the percentage of population in the municipality self-considered as indigenous. The largest coefficient corresponds to migrant social networks. The results of this model suggest that migration to the U.S. happens mainly in municipalities with migrant social networks, in poor municipalities and in municipalities with high proportions of indigenous population. Regarding the violence associated to organized crime, this model suggests that migration to the U.S. decreases when violence is low, but that it increases as violence rise (notice that the coefficient associated to the violence variable squared is positive and significant, although it is close to zero). The percentage of people earning up to twice the minimum wage in the municipality seems to promote more migration. We know that poor municipalities send migrants abroad only when they have the means to do it, and the fact that a large proportion of families receiving low labor income promote more migration could be explained only if the money from work is used to finance trips to the U.S.

Finally, the results of the models for the third dependent variable: the percentage of dwellings in the municipality with circular migrants, are presented in Table 6.7. The first model only includes an intercept, the insecurity variable, proxied by the rate of deaths related to organized crime, and the rate of deaths related to organized crime squared. In this case, the sign of the violence variable is negative, and the coefficient is significant, which suggests that circularity of migration tends to decrease in insecure municipalities. Once again, the size of the coefficient of the rate of deaths related to organized crime squared is too close to zero to take it into account. In the second model we include a variable that proxies migrant social networks. In this case, as in the other two, this variable presents a positive sign and happens to be significant. This indicates that circularity is more likely in municipalities with a large migration experience. In this case, migration social networks are proxied by the percentage of population in dwellings with circular migrants between 1995 and 2000. It is worth noticing that the size of the coefficient of the social network variable is much smaller in this case that in the previous estimations. This suggests that circularity of migration does not depend too much on the networks but that other variables offer a better explanation. In this second model, the variable that proxies intensity of violence is negative and significant, which suggests that

[27] If we take into account that the coefficient of the rate of deaths related to organized crime squared is close to zero but negative and significant, we can say that migration decreases when violence increases, but that this effect diminishes as violence increases.

Table 6.7 Estimation 3: municipal level model with national data

Independent variables	1	2	3
Intercept	1.216**	0.954**	0.908**
	(45.769)	(35.155)	(11.144)
Rate of deaths related to organized crime[a]	−0.005	−0.013**	−0.012**
	(−1.434)	(−3.945)	(−3.619)
Rate of deaths related to OC squared	0.000	0.000*	0.000*
	(0.051)	(1.906)	(1.678)
Social network in the U.S.[b]	–	0.227**	0.225**
	–	(21.765)	(21.434)
Percentage of population earning up to 2 min wage	–	–	0.002
	–	–	(1.303)
Percentage of dwellings without piped water	–	–	−0.004**
	–	–	(−2.807)
R squared	0.003	0.165	0.168
F statistic	3.294	160.541	98.166
Sig. F	0.037	0.000	0.000
N	2455	2442	2442

Source: Own calculations based on CISEN and CONAPO data for 2455 municipalities
Notes:
Dependent variable: Percentage of dwellings with circular migrants
t statistics in parenthesis
[a]Defined as deaths in the 2007–2011 period due to aggressions or executions and in clashes related to organized crime. The rate is calculated as explained above
[b]Percentage of dwellings with circular migrants in the US between 1995 and 2000

circularity of migration is deterred by insecurity. The squared term is practically zero, again.

In the third model, other two independent variables are included: the percentage of population in the municipality that earns up to twice the minimum wage, and the proportion of population in the municipality in dwellings without piped water. In this regression, circularity seems to decrease with violence and it seems to increase if the municipality had circularity experience between 1995 and 2000. The results also suggest that circularity lower in poorer municipalities.

Our results so far do not show a positive and significant correlation between international migration and intensity of violence. It could be possible that the concentration of violence in a few municipalities in the country obscures the theoretical and common sense explanation: that migration intensity is higher in more violent municipalities. To better understand the effect of violence on international migration, we will proceed to repeat the exercise above, but now only with data from the northern border municipalities.

6.6 Violence and Emigration Along the Border

In this exercise, we use data from all the 275 municipalities in the northern border states of the country: Baja California, Sonora, Chihuahua, Coahuila, Nuevo León, and Tamaulipas. These municipalities present different levels of violence, measured by the rate of deaths related to organized crime; they also present different levels of development and, therefore, different intensities of emigration. Emigration is here measured in the three different ways used above: the proportion of population in dwellings in the municipality where remittances from the U.S. are received; the proportion of population in dwellings with a family member living in the U.S., and the proportion of population in dwellings in the municipality that have a circular migrant.

Table 6.8 includes some descriptive statistics for five different groups of municipalities classified by their migration intensity: those with very low, low, medium, high, and very high migration intensity. It is necessary to clarify that no municipality presented null migration intensity in the northern border states.

The first row in Table 6.8 shows that the average homicide rate (calculated as the average annual number of homicides in the municipality per 10,000 inhabitants between 2007 and 2011) is higher in those municipalities within the category of very-high migration intensity. The homicide rate in municipalities with very high migration intensity is more than double the rate in municipalities with very low migration intensity. This fact is the first evidence of a positive and linear correlation between violence and migration in this subsample of municipalities, but we cannot tell from this evidence whether or not there is some causality between these two phenomena. Notice that homicide levels in border municipalities are much higher than average nationally. The second row indicates that inequality is higher in those municipalities with very low migration intensity, which suggests that migration is associated with more equality. The last row indicates that marginality is lower in municipalities with a very high migration intensity, which implies that migrants

Table 6.8 Border municipalities

	Migration intensity[a]				
	Very high	High	Medium	Low	Very low
Homicide rate (per 10,000 inhabitants)	27.5	14.2	15.2	20.5	12.2
Gini coefficient (income)	0.405	0.405	0.418	0.424	0.426
Marginality index[b]	−0.602	−0.639	−0.853	−1.025	−0.553

Source: Own calculations based on CISEN and CONAPO data for 275 municipalities
Notes:
Sociodemographic characteristics of municipalities, by migration intensity
The larger the value, the poorer is the municipality
[a]The migration intensity index is published by CONAPO and elaborated with census data. It goes from a minimum value of −1.16 to a maximum value of 5.04. The larger the value, the more migration we observe in the municipality
[b]The marginality index goes from a minimum value of −2.34 to a maximum value of 4.36

Table 6.9 Border municipalities

	Homicide rate[a]		
	High	Medium	Low
Migration intensity[b]	−0.384	−0.422	−0.449
Gini coefficient (income)	0.431	0.410	0.418
Marginality index[c]	−0.645	−1.071	−0.949

Source: Own calculations based on CISEN and CONAPO data for 275 municipalities (Baja California, Sonora, Chihuahua, Coahuila, Nuevo León y Tamaulipas)
Notes:
Sociodemographic characteristics of municipalities, by homicide rate
[a]Homicide rates below 5 are considered low; between 5 and 10, medium and above 10, high
[b]The migration intensity index is published by CONAPO and elaborated with census data. It goes from a minimum value of −1.16 to a maximum value of 5.04. The larger the value, the more migration we observe in the municipality
[c]The marginality index goes from a minimum value of −2.34 to a maximum value of 4.36. The larger the value, the poorer is the municipality

come from dynamic regions in the border, or that migration helps to reduce marginality.

Table 6.9 presents some descriptive statistics of municipalities classified by their degree of violence. In this case, municipalities with low homicide rates are those with rates below 5. Municipalities with medium homicide rates are those with rates between 5 and 10, and municipalities with high homicide rates are those with rates above 10. Homicide rates here are calculated, again, as the annual average homicides per 10,000 inhabitants in the municipality in the 2007–2011 period. The first row of the table indicates that migration intensity is higher in municipalities with high homicide rates. This fact constitutes another evidence of the correlation between these two phenomena, at least in the Mexican Northern Border States.

The second row in Table 6.9 suggests that insecurity is higher in more unequal municipalities. The following row includes the marginality index and it indicates that marginality is higher in highly violent municipalities, or vice versa.

Now, to better understand how insecurity and migration correlate, in Table 6.10 we present municipalities classified by the homicide rate and the four indicators included in the calculation of the Migration Intensity Index, from the 2010 Census.[28]

According to the data in Table 6.10, the percentage of population in dwellings receiving remittances is higher in municipalities with higher homicide rates. Also, the percentage of population in dwellings with emigrants in the U.S. is higher in municipalities with high homicide rates. Regarding circular migrants, we have found that the percentage of population in dwellings with these kind of emigrants is higher in municipalities with medium homicide rates. Finally, the percentage of population in dwellings with returned migrants is higher in municipalities with high

[28]These indicators are (1) the percentage of population in dwellings receiving remittances, (2) the percentage of population in dwellings with emigrants in the US, (3) the percentage of population in dwellings with circular migrants and (4) the percentage of population in dwellings with returned migrants.

Table 6.10 Migration variables and homicide rates in municipalities within border states

		Homicide rate[a]		
		High	Medium	Low
% of population in dwellings receiving remittances	Average	5.58	4.11	4.06
	Standard dev	4.87	3.22	3.73
% of population in dwellings with emigrants to the US	Average	1.58	1.43	1.38
	Standard dev	1.24	1.21	1.31
% of population in dwellings with circular migrants	Average	0.54	0.82	0.76
	Standard dev	0.57	0.75	0.68
% of population in dwellings with return migrants	Average	3.03	2.77	2.69
	Standard dev	2.14	2.03	2.12

Source: Own calculations based on CISEN and CONAPO data for the 275 municipalities within the border states

Note:

[a]Homicide rates below 5 are considered low; between 5 and 10, medium and above 10, high

homicide rates. We have then additional evidence of correlation between violence and migration in Border States.

To better understand the correlation between violence and migration in the border, we ran a series of regressions with border municipality data. The models estimated are exactly the same as the ones we performed for the total of municipalities in the country. We estimated models for three different dependent variables: the percentage of population in each northern border municipality that lives in dwellings that receive remittances; the percentage of population in the border municipalities living in dwellings with an emigrant in the U.S.; and the percentage of population in the border municipalities living in dwellings with circular migrants. The three dependent variables are indicators used by the National Population Council (CONAPO) to calculate the Migration Intensity Index. For each of the dependent variables we ran three different models; in the first one, the independent variables are a constant and the rate of deaths explained by the organized crime in the municipality. In the second model we keep the first two explanatory variables and include a proxy for migration social networks in the municipality. In the third model we use the variables included in the second model and add a variable that reflects the proportion of population in the municipality that earns less than twice the minimum wage, and a variable that proxies poverty in the municipality.

In the models estimated in this section we decided not to include the rate of deaths related to the organized crime squared, since it was very close to zero in the national models, and given that the descriptive data suggest a linear relationship between emigration and violence in border municipalities.[29]

Table 6.11 includes the three models estimated for the first one of the dependent variables: the percentage of population in the municipality, in dwellings receiving remittances. In the first model we observe that the rate of deaths related to organized

[29]We ran the regressions with this variable included and it was never significantly different from zero.

Table 6.11 Estimation 1: border states' municipality data

Independent variables	1	2	3
Intercept	4.324**	1.646**	5.327**
	(15.390)	(6.164)	(7.096)
Rate of deaths related to organized crime[a]	0.021**	0.016**	0.011**
	(2.837)	(2.949)	(2.205)
Social network in the U.S.[b]	–	0.734**	0.569**
	–	(15.602)	(11.463)
Percentage of population earning up to 2 min wage	–	–	0.042**
	–	–	(3.889)
Percentage of dwellings overcrowded	–	–	−0.146**
	–	–	(−6.983)
R squared	0.029	0.486	0.567
F statistic	8.049	129.303	88.614
Sig. F	0.005	0.000	0.000
N	275	275	275

Source: Own calculations based on CISEN and CONAPO data for 275 municipalities
Notes:
Dependent variable: percentage of dwellings receiving remittances
t statistics in parenthesis
[a]Defined as deaths in the 2007–2011 period due to aggressions or executions and in clashes related to organized crime per every 10,000 inhabitants. The rate is calculated as explained above
[b]Percentage of dwellings with circular migrants between 2005 and 2010

crime is positively correlated to the dependent variable. The coefficient is statistically different from zero, albeit very small.

In the second model, we include the percentage of population in the municipality in dwellings with migrants in the U.S. between 1995 and 2000. This last variable is used to proxy migrant social networks in the municipality. As we expected, this variable is positive and explains remittances in a significant way. This suggests that remittances in this model are mainly explained by social networks. It is worth noticing, however, that the violence variable remains positive and significantly different from zero even after we include the social network variable.

In the third model, two other explanatory variables are included: the percentage of population in the municipality earning less than twice the minimum wage, and the percentage of population in the municipality in overcrowded dwellings. In this model all the explanatory variables are significant, and all of them, except the one that represents overcrowding, are positive. The largest coefficient in this regression corresponds to the variable that proxies social networks, and the second largest corresponds to overcrowding. This suggests that remittances are received mainly in municipalities with previous migration experience, and that municipalities with poorest conditions are not as prone as those more affluent to receive remittances. The smallest coefficient corresponds to the variable that proxies violence, but this coefficient is positive and significant, which suggests either that remittances are received to relieve in part the violence at a municipality level, or that families receiving remittances constitute a target for criminals.

Table 6.12 Estimation 2: border states' municipality data

Independent variables	1	2	3
Intercept	1.445**	0.660**	0.294*
	(16.922)	(6.516)	(1.674)
Rate of deaths related to organized crime[a]	0.001	0.004**	0.004**
	(0.485)	(2.212)	(2.059)
Social network in the U.S.[b]	–	1.077**	1.003**
	–	(10.940)	(9.982)
Percentage of population earning up to 2 min wage	–	–	0.010**
	–	–	(2.689)
Percentage of indigenous population	–	–	−0.141**
	–	–	(−1.966)
R squared	0.001	0.305	0.327
F statistic	0.235	60.011	32.958
Sig. F	0.628	0.000	0.000
N	275	275	275

Source: Own calculations based on CISEN and CONAPO data for 275 municipalities
Notes:
Dependent variable: percentage of dwellings with emigrants to the U.S.
t statistics in parenthesis
[a]Defined as deaths in the 2007–2011 period due to aggressions or executions and in clashes related to organized crime per every 10,000 inhabitants. The rate was calculated as explained above
[b]Percentage of dwellings with circular migrants between 2005 and 2010

In Table 6.12 we present the three models estimated for the second dependent variable: the percentage of population in the border municipality, in dwellings with a migrant in the U.S. In the first model we observe that the rate of deaths related to organized crime is not correlated with the dependent variable. In the second model we include a proxy for the migrant social networks in the municipality. In this case, the insecurity variable becomes positive and significant, which suggests that violence is positively correlated with international migration at a municipality level.[30] It is worth noticing, however, that the size of the coefficient is small, relative to the one corresponding to social networks, which in this case is calculated as the percentage of population in dwellings with circular migrants between 2005 and 2010. In the third model we include two other independent variables: the percentage of population in the municipality that earns less than twice the minimum wage and the percentage of population in the municipality that self-identified as indigenous. As in the first estimation, all the explanatory variables are positive and significant, except for the one that proxies social lag (in this case, the proportion of indigenous population), that presents a negative sign. The largest coefficient corresponds to migrant social networks. The results of this model suggest that migration to the U.S.

[30]We consider that the explanation of the correlation between violence and migration in this case runs from insecurity to migration, because the alternative explanation would be that insecurity takes place in municipalities with more presence of migrants, which does not seem very plausible.

happens mainly in municipalities with migrant social networks, and in municipalities with low proportions of indigenous population. The percentage of people earning up to twice the minimum wage in the municipality seems also to promote more migration suggesting, as before, that labor income is often used to finance the trip to the U.S. In this regression we also observe that violence is a significant factor to explain, in part, the proportion of migrants in the U.S., which supports our hypothesis that insecurity promotes international migration.

Finally, the results of the models for the third dependent variable: the percentage of dwellings in the border municipality with circular migrants, are presented in Table 6.13. The first model only includes an intercept and the insecurity variable, proxied by the rate of deaths related to organized crime. In this case, the sign of the insecurity variable is negative, and the coefficient is significant, which suggests that circularity of migration tends to decrease in violent municipalities. In the second model we include a variable that proxies migrant social networks. In this case, as in the last two, the variable presents a positive sign and happens to be significant. This indicates that circularity is more likely in municipalities with a large migration experience. In this case, migration social networks are proxied by the percentage of population in dwellings with circular migrants between 1995 and 2000.

In the third model, two other independent variables are included: the percentage of population in the municipality that earns up to twice the minimum wage, and the proportion of population in the municipality in dwellings without piped water. In

Table 6.13 Estimation 3: border states' municipality data

Independent variables	1	2	3
Intercept	0.729**	0.671**	0.275**
	(16.663)	(14.639)	(2.690)
Rate of deaths related to organized crime[a]	−0.003	−0.003**	−0.003**
	(−2.506)	(−2.838)	(−3.187)
Social network in the US[b]	–	0.048**	0.040**
	–	(3.571)	(3.034)
Percentage of population earning up to 2 min wage	–	–	0.011**
	–	–	(4.783)
Percentage of dwellings without piped water	–	–	−0.012**
	–	–	(−3.528)
R squared	.022	.066	0.145
F statistic	6.280	9.652	11.449
Sig. F	0.013	0.000	0.000
N	275	275	275

Source: Own calculations based on CISEN and CONAPO data for 275 municipalities
Notes:
Dependent variable: percentage of dwellings with circular migrants
t statistics in parenthesis
[a]Defined as deaths in the 2006–2011 period due to aggressions or executions and in clashes related to organized crime per every 10,000 inhabitants. The rate was calculated as explained above
[b]Percentage of dwellings with circular migrants in the US between 1995 and 2000

this regression, circularity seems to decrease with violence and it seems to increase if the municipality had circularity experience between 1995 and 2000. The results also suggest that circularity is higher when the proportion of population with labor income below twice the minimum wage is higher, and that circularity is lower in poorer municipalities.

6.7 Concluding Remarks

Mexico is going through a process of aggravated insecurity due to the war on organized crime. This process formally started in 2007, and since then, the homicide rate has increased, with periods of marginal reductions. Theoretically, it is considered that making an emigration decision in an environment of insecurity represents a choice between two "evils": staying and accepting the everyday risk of being a victim of violence; or leaving behind one's way of life and property and moving on, to an unfamiliar place, having to find new employment and a new place to live, risking the loss of all of one's assets to organized crime in your hometown. Those faced with a decision to migrate are assessing the structural security and their ability to take actions to live under an acceptable level of insecurity.

Using data from the 2455 municipalities in the country, the descriptive analysis does not show a linear and strong correlation between migration and insecurity; moreover, the regression analysis indicates that migration to the U.S. declines linearly when violence strikes. The result is different when we study remittances: they seem to increase when violence increases in the municipality. Regarding circular migration at a national level, the results suggest that it decreases when violence increases, suggesting that people don't want to move (or that they can't) when violence strikes. When data from 275 northern border municipalities is used, the descriptive analysis suggests that migration and insecurity are positively correlated. Furthermore, the regression analysis seems to confirm a positive correlation among these two variables, even when we control for development and for social networks. This is true when we measure migration either as the reception of remittances or as the decision to send migrants to the U.S. The results suggest either that violence is more intense in municipalities with migration experience, or that people are emigrating from highly insecure municipalities. We consider that the second explanation is more plausible. As in the analysis with national data, the study suggests that violence restrains circular migration in border municipalities, because these two variables appear negatively correlated.

The hypothesis of a changing profile of migrants from Mexico to the U.S. needs further analysis, but this document suggests that insecurity is, in some manner, influencing the decision to migrate from northern Mexico. The results show that the insecurity effect on migration is still small, but the effect is quite robust to different specifications of the models.

We are aware that violence in Mexico is still recent to show strongly in the data. Our work might, however, start a discussion about a very important question: is the

war against drugs promoting a displacement process that involves the U.S.? And if so, what can the Mexican government do to decrease the impact insecurity has upon selected families and municipalities in Mexico? What might this mean for United States' policy and collaboration with Mexico?

For either country's policy consideration, we do not suggest our findings signal a significant change in the strategic situation. It is likely that "…drugs will continue to flow into the United States, money will continue to flow into Mexico, and violence in Mexico will continue until the cartels achieve a stable peace, as has happened with organized crime in other countries, or until a single group wipes out all the others."[31] However, the results presented in this study are strong enough to say that violence has been promoting migration to the U.S., at least in the border municipalities, which happen to be relatively more affluent than the rest of the municipalities in the country (with some critical exemptions).

For Mexico, the potential for migrants to be departing from affluent municipalities suggests that Mexico could lose some of its most promising potential middle class performers. Today, for trade and economic success with its largest trading partner, Mexico relies more heavily on skilled workers than in the past. For Mexico to protect the potential represented by this group of citizens, leadership should consider how they balance protecting and preserving the more affluent citizens while not neglecting those in the Mexican society that have no option but to rely on the government for security and quality of life. This is no easy choice or prioritization given scarce resources (e.g., police, security, military, intelligence, etc.).

To the U.S., the tactical options related to this group of immigrants are no easier. In the 2011 Presidential primary debates, persons in the United States espoused the merits of encouraging the world's brightest and more productive individuals to legally move to the U.S. and become a part of the economic engine. With respect to capable middle class migration from Mexico, the challenge for the United States is to decide where it is best to have those individuals and families live, work, and contribute to society. In the near term, the U.S. might benefit from increased immigration of people coming from more affluent municipalities. But in the long run, it might be better to have a stronger, growing, and more resilient neighbor. Should the United States encourage (or better said, quietly accept) immigration of the more capable, or should the United States collaborate in security issues in order to assist Mexico to retain a greater potential for future sustained trade? Even if one accepts the strategic future of more of the same (drugs, money, migration), there are tactical level policy choices that can have an impact on the life of citizens in both countries.

[31] Friedman, G. (2011). A Secure Hemisphere. In: G. Friedman (ed.). *The Next Decade: Where We've Been… and Where We're Going* (pp. 194–214). Doubleday.

Chapter 7
Mexican Social Programs, Departures and Return Migration

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7.1 Introduction

Mexico–U.S. migration has been conceived of as triggered by a post-colonial relationship,[1] influenced by economic development and income gaps, and sustained, over the long term, by the social connections arising from the movement itself.[2] The significant shift in Mexico–U.S. net migration rate to a level close to zero between 2008 and 2020 has often been explained by a combination of diminishing market demand—due to the Great Recession, together with the *attrition* in migrant stocks derived in part from more than 1000 anti-immigrant bills after 2001 at the federal, state, and local levels in the U.S., as well as from a large amount of removals and

[1] Portes, A. & R. L. Bach (1985). *Latin Journey: Cuban and Mexican Immigrants in the United States*. Berkeley: University of California Press.

[2] Massey, D. S., R. Alarcón, J. Durand & H. González (1987). *Return to Aztlan. The Social Process of International Migration from Western Mexico*. Berkeley: University of California Press; Massey, D. S., J. Arango, G. Hugo, A. Kouaouci, A. Pellegrino & J. E. Taylor (1993). Theories of International Migration: A Review and Appraisal. *Population and Development Review*, 19(3), 431–466; and Escobar, A., F. D. Bean y S. Weintraub (1999). *The Dynamics of Mexican Emigration.* London: Palgrave.

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deportations.[3] Together, these two factors underline the significance of market forces in the U.S. and more effective removal/deterrence of undocumented immigrants. We believe this view makes a major contribution to an explanation of the change in migrations flows, but stills fails to account for it, both in terms of the non-economic determinants of well-being, and in terms of Mexico's role in migration. These changes take place in a broader set of social policy changes in Mexico, where, from 1997 onwards, there was a significant effort to expand the social protection safety net.

In this chapter, we turn to this non-market force: the provision of social services and cash transfers to Mexico's lower income population. During the late 1990's and the beginning of this century, migration studies found evidence that some migrants identified the provision of social services in the U.S. as a factor fostering settlement there.[4] Mexican and U.S. experts had denied U.S. social services were a factor shaping (labor) flows. However, Gustavo López Castro[5] showed, in his family case studies in Mexico and the U.S., that mothers' perception of the "reality" or "efficacy" of U.S. social services played a role in their families' decisions to leave Mexico or to stay in the U.S. In their view, apart from education, Mexican health and other social services were unsatisfactory, politically biased or outright simulations, while U.S. social services were perceived as accessible and effective.

López Castro's analysis does not show that social services and programs trigger or change migration, but it does strongly suggest that they may change the longer-term behavior of migrant populations, including the country in which they decide to raise their children. If this is the case, evolution in the availability of social services in both countries must be considered to explain migration decisions.

Mexico's social safety net for the poor has been weak. However, it was significantly strengthened since 1997, with the implementation of PROGRESA—*Oportunidades*, a very large cash transfer program. This chapter is devoted to the analysis of the relationship between international migration and access to social programs. Through a reduction in their exposure to short-term risk and a concomitant increase in households' resource base, Mexican social programs may increase households' willingness to run the risk of having a working-age member leave the

[3] The National Conference of State Legislatures analyzes state and local laws and resolutions related to immigration. While the balance until 2011 had been mostly restrictive, in 2013 there were two new developments. Firstly, the number of states allowing the provision of driver licenses to unauthorized residents rose by eight to 11, with a few others passing more limited versions of these bills. Second, in the wake of DACA (Deferred Action for Childhood Arrivals), some states allowed certain benefits to undocumented university students, including access to in-state tuition and sometimes state funding. See Morse, A. (2014). 2013 Immigration Report. *National Conference of State Legislatures*, January 20, <http://www.ncsl.org/research/immigration/2013-immigration-report.aspx>.

[4] Massey, D. S. & K. E. Espinosa (1997). What's Driving Mexico-U.S. Migration? A Theoretical, Empirical, and Policy Analysis. *American Journal of Sociology*, 102(4), 939–999.

[5] López, G. (1999). La educación en la experiencia migratoria de niños migrantes. In: G. Mummert (ed.). *Fronteras fragmentadas* (pp. 359–374). Zamora: El Colegio de Michoacán.

household in order to increase their long-term well-being, while, in the long term, they could foster return to Mexico.

In this chapter we will focus on the three most important social programs in Mexico. *Oportunidades*, the well-known conditional cash transfer program, has been shown to increase and stabilize incomes. Meanwhile, *Seguro Popular*, or Popular Health Insurance, was designed to significantly reduce households' exposure to catastrophic health expenditures. Finally, Mexico's non-contributive pension program lowers the risk of the elderly going income-less, as well as enticing some elderly migrants back to Mexico. All three may therefore modify international labor migration. To inquire into these issues, we use two different approaches.

First, we analyze a cross-section survey of households living in poor and marginalized Mexican regions (or ZAPs by its Spanish acronym). These mostly rural municipalities have poor social infrastructure and high levels of poverty. They are identified as ZAP primarily on the basis of socioeconomic variables in the Mexican census, such as poor quality of housing, high percentage of indigenous language speakers, low schooling, and few household assets. There are two main reasons to concentrate the analysis in these territories and their population. In terms of international migration patterns, it has been shown that poor municipalities are starting to engage in international migration.[6] Also, in the last decade, social programs, in particular cash transfer programs, and access to health services, have successfully targeted this population. In other words, social services and programs in Mexico may alter migration both by lessening poverty, and by helping attach households to a particular Mexican community. A significant issue here is whether increasing resources in a household trigger more migration by allowing the household to afford it, or whether they lower propensity to migrate on account of an increase in their well-being. Additionally, a household in Mexico with access to these programs may attract return migration to a larger extent than others.[7]

Second, in order to advance our understanding of the different mechanisms at play between migration and access to social programs, we discuss an ethnographic enquiry on return migrants and their access to social programs, public health, and education. This research was done in eight municipalities and 12 communities covered by the cross-sectional survey of ZAP municipalities. The rationale of covering return migrants has to do with the fact that there has been a change in international migration patterns, as Mexican migrants with U.S.-born children return to Mexico. Thus, this section contributes to a subject that has not been the focus of migration studies.

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[6] See Escobar, A. (ed.) (2008). *Pobreza y migración internacional*. Mexico: Centro de Investigaciones y Estudios Superiores en Antropología Social.

[7] Angelucci, M. (2004). Aid and Migration: An Analysis of the Impact of Progresa on the Timing and Size of Labour Migration. iza Discussion Papers, 1187; Badillo, C. (2009). *Evaluating the Direct and Indirect Effects of a Conditional Income Support Program: The Case of Progresa*. Doctoral Dissertation. United Kingdom: University of Essex; Stecklov, G., P. Winters, M. Stampini & B. Davis (2005). Do Conditional Cash Transfers Influence Migration? A Study Using Experimental Data from the Mexican Progresa Program. *Demography*, 42(4), 769–790.

7.2 Methodology

The study is centered on Mexico's most vulnerable population living in Priority Attention Zones or ZAPs (by its acronym in Spanish). The relevance of studying this population is the fact that they are the priority for social programs in Mexico, as mandated by Mexico's Social Development Law, and that since the mid-1990's social programs have increasingly adopted novel targeting mechanisms.

The ZAP-2009 survey can identify individuals who report being beneficiaries of *Oportunidades*, *Seguro Popular*, and *Programa 70 y más*. These programs have become the government's main effort to enhance human capital, reduce current income poverty and to enable families to exit poverty; to extend universal access to health services; and to provide social security for the elderly. The last two social programs specifically aim to achieve universal coverage in rural areas; *Oportunidades* targets poor populations more generally. The 2009 ZAP survey shows that even though coverage is high in ZAPs localities there are still opportunities for improvement.

Program coverage estimates derived from the ZAP-2009 survey can vary from administrative reports. This situation is explained in part by the statistical power of the instrument. The survey design focused primarily on the social characteristics of the ZAP population in general, not on their access to programs. Thus, coverage estimates have large confidence intervals. Although the point estimate of the beneficiaries of social programs can vary from the officially reported numbers, the confidence interval includes the official figure, and their profiles are consistent. Therefore, in order to analyze the association between migration and access to social programs this analysis will show relative participation estimates for households with migrants and return migrants versus households with no migration experience.

Lastly, our field work took place in four states of Mexico: Chiapas, Oaxaca, Michoacán and Jalisco. It consisted mainly of long stays in communities with high marginality and emigration. Research comprised a number of steps: first, researchers applied for program enrollment, expenditure and other information from state transparency offices. Secondly, they chose three communities in each state that were in ZAP areas and in which two had high emigration rates. Third, they carried out a random screening of households in those communities, or in larger communities, of the sections of those communities that authorities considered the poorest. Finally, they chose households from the random survey of households in order to carry out case studies detailing their effective access to these social programs.

The *Oportunidades* program used to select households on the basis of their estimated per capita income, and provided conditional cash transfers to families provided they and their children attended school, health check-ups, and informal education workshops. Of all large social programs, *Oportunidades* provides the largest cash transfer. Nationally, there were five million households enrolled in *Oportunidades* in 2009.

Seguro Popular, or Popular Health Insurance,[8] provided non-contributive access to an enhanced health package at Health Ministry clinics and hospitals. In Mexico, employment-based social security includes a health plan, disability insurance, child care, and a pension scheme. Since Mexico's economy faltered in the 1980s, this kind of social security has failed to increase its share of the total population, due to the growth of informal employment. The *Seguro Popular* aims to provide publicly funded health insurance to the remainder of the population. Its explicit aim is to diminish out-of-pocket expenditure on catastrophic health events. Starting in 2004, *Seguro Popular* implemented a massive nationwide affiliation campaign. The per-household cost to the government was greater than *Oportunidades,* but households did not receive any cash.[9] By 2011, *Seguro Popular* administrative records reported enrollment of 52 million individuals in more than 10 million households, or around 45% of Mexico's total population.

Finally, "Seventy and Over" (*70 y más*), is Mexico's non-contributive pension system. It was also intended as a universal program. In 2010 it provided 40 dollars a month in cash to those enrolled. It has tried to incorporate several different conditionalities, such as attendance to medical examinations, or health talks, but can be considered as non-conditional, since they are not enforced.

Of the above three programs, only "seventy and Over" survived the political transition of December, 2018. The other two were closed.

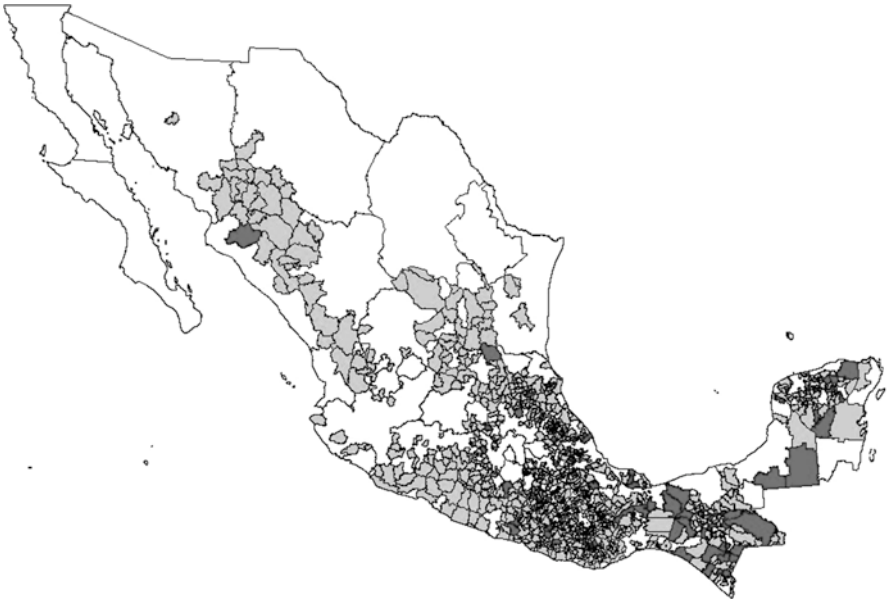
7.3 Poverty, Migration, and Access to Social Programs in Mexico: A Survey of Poor Regions

Approximately 17 million people lived in ZAP municipalities in 2009 and 2011. The 1251 ZAP municipalities represent roughly 51% of the municipalities in Mexico. About 70% of these municipalities are rural, and 47% are classified as municipalities with a high concentration of indigenous population (see Map 7.1).

The ZAP population experiences an accumulation of social deprivations and vulnerabilities. These social deprivations refer to the indicators included in the multidimensional poverty measurement adopted in Mexico: i.e. access to social infrastructure (water and sewage), access to basic social services (education, health), and living conditions (household appliances, number of bedrooms, and floor and roof materials). Half of the households were classified as poor in 2008 and 37% as extremely poor. In comparison, only 38.5% of non-ZAP households were poor, and

[8] It was formally named: *Sistema de Protección Social en Salud*, or Health Social Protection System.

[9] Secretaría de Salud (SSA) (2006). *Sistema de protección social en salud: elementos conceptuales, financieros y operativos*. Mexico: SSA/Instituto Nacional de Salud Pública/Funsalud/Fondo de Cultura Económica.



Map 7.1 Priority Attention Zones (ZAP*) 2009, Mexico
Source: CONEVAL, ZAP 2009 Survey
*ZAP by its acronym in Spanish
Note: Municipalities in black where included in the ZAP 2009 Survey

10.6% extremely poor. They also lag behind other regions in terms of education and social infrastructure.[10]

Nevertheless, increasingly effective targeting poses challenges. Policymakers face many logistical and cost constraints in supplying social programs to the poorest income distribution deciles. High population dispersion in ZAP regions brings about higher information and management costs. It is difficult to access some localities, which in turn requires more staff. Program or service application and selection processes can involve lengthy and bureaucratic procedures far from home, which entails that some households experience many hidden costs in gaining access. Therefore, one should expect to find in the ZAP region a deficit in the coverage of social programs, especially those with intended universal coverage, such as *Seguro Popular*, and *Programa 70 y más*.

The coverage estimated for these social programs in ZAP regions at the individual level shows 23.9% for *Oportunidades*, 46.4% for *Seguro Popular*, and 72.9% for *Programa 70 y más*. Households with at least one beneficiary, respectively, amount to 50.3%, 49.4%, and 74.7% of ZAP households.

[10] Consejo Nacional de Evaluación de la Política de Desarrollo Social (Coneval) (2010). *Dimensiones de la seguridad alimentaria: evaluación estratégica de nutrición y abasto*. Mexico: Coneval.

It should be noted that *Oportunidades* covers households with children enrolled in school between the third and twelfth grades. Nevertheless, some studies have shown that in certain areas, the targeting effort included all households due to their poverty level or because of an emergency caused by natural disasters, regardless of the existence of school-age children.[11]

Nevertheless, if having a member of the household between the ages of 8 and 17 can be viewed as a requisite for accessing *Oportunidades*, only one in three school age members are reported to be beneficiaries. Given the educational deficits present in the ZAP region, this finding should be further studied. One should expect a higher concentration of *Oportunidades* beneficiaries in this age range. It should be noted that one requisite for selecting a community for intervention in *Oportunidades* is the proximity of a school and a health center. Thus, this finding could be further evidence of the isolation of these communities, and their scant access to health and education services.

We estimate coverage for *70 y más* based on the proportion of households with at least one member aged 70 years old or more: approximately 17.5% of all households. As the life expectancy is higher among women, the gender distribution for this program is 48.3% male and 51.7% female. In evaluations, it has been shown that the isolation of the localities and health factors affect the incorporation of beneficiaries.[12] This may explain why in the ZAP-2009 survey shows only about 75% coverage of the target populations.

Finally, about half of the population in ZAPs asserted they possessed Popular Health Insurance coverage (from zero in 2004), which attests to the relative success of this effort. Nevertheless, by 2009 there was still a 39.1% of ZAP population lacking *Seguro Popular* or any other health insurance.[13] This finding shows that, apart from the necessary investment in health infrastructure in the country, it was still far from universal coverage. Only 14.4% of the ZAP population is entitled to access another public or private health insurance service. About 10% are beneficiaries in the national employment-based security system (IMSS by its acronym in Spanish) or the public sector workers security system. An additional 3.3% use a heterogeneous mix of private or philanthropic free clinics (Table 7.1).

Figure 7.1 presents the distribution of beneficiaries of the three programs and a proxy of their socioeconomic situation—their food security index. The index takes

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[11] Skoufias, E., B. Davis & J. Behrman (1999). *An Evaluation of the Selection of Beneficiary Households in the Education, Health, and Nutrition Program (Progresa) of Mexico. Final Report*. Washington, D.C.: International Food Policy Research Institute; and Oportunidades (2006). *Reevaluación de localidades incorporadas en las primeras fases del Programa 1997–1998: justificación*. Internal document. Mexico: Secretaría de Desarrollo Social.

[12] Consejo Nacional de Evaluación de la Política de Desarrollo Social (Coneval) (2010). *Dimensiones de la seguridad alimentaria: evaluación estratégica de nutrición y abasto*. Mexico: Coneval.

[13] In theory, they access "open coverage" services provided by the health ministry, but the services provided there have always been very basic, and quality has dropped recently because the health ministry is also serving the Seguro Popular population, thus crowding out those without that affiliation.

Table 7.1 Access to health services, individuals, ZAP survey 2009

	Percentage
No health service	39.1
Seguro popular	46.4
Private sector health service (IMSS)	7.0
Public service employee health service (ISSSTE)	3.4
Other government sponsored health system (PEMEX, armed forces)	0.3
Private institutions	0.5
Other (not specified)	3.3
Total	100

Source: ZAP-2009 Survey

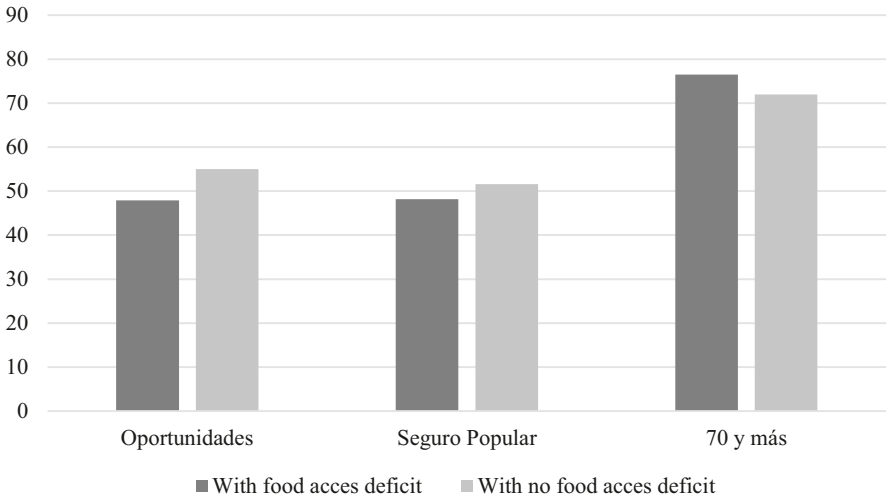

Fig. 7.1 Percentage of households enrolled in Oportunidades, Seguro Popular and 70 y más, by food deprivation
Source: ZAP-2009 Survey

two values: those with "food deprivation" report severe or mild levels of difficulty meeting their food needs; those with "no food deprivations" report slight or none. If targeting was precise at the time of enrolment, the households with food deprivation should have accessed the program. However, since *Oportunidades* raises household incomes (by about 23% when the program was designed), at the time of the survey households in the program could be better off.

The association between enrollment in the program and food deprivation is negative. For *Oportunidades*, about 48% of the households with food deprivation are reported as beneficiaries. In contrast, 55% of households with no food deprivation are reported as beneficiaries. That a higher proportion of beneficiaries have no food access deficits can be explained by the poverty alleviation effect of the program, or by a modest affiliation error.

Something similar happens with *Seguro Popular* and food access deprivation. Relative participation in the program is less among households with food deprivation. (48.2% of households with food access deficits and 51.6% of households without deficit). Finally, households with food deprivation have a higher proportion of *Programa 70 y más* beneficiaries than households with no deficits (76.5% and 72% respectively).[14] In general, households with beneficiaries are slightly better off than non-beneficiary households in the food access index.[15]

7.3.1 Migration and Access to Social Programs

This section presents the association between social program access and the incidence of international migration. On the basis of a cross-section survey it is not possible to analyze time effects of the process of migration due to access to social programs. However, some insights can be gained.

An initial hypothesis concerning the relation between migration and social programs is that money transfers in a household will help pay for migration, an increasingly expensive enterprise. Households with international migrants are the ones with fewer vulnerabilities—in part due to remittances, and because in order to migrate, it is necessary to have a family or extended network, as well as resources to fund the trip. Also, it can be argued that migration via remittances can free household time and resources to enable it to access social programs. Though there is an ample experience in targeting in Mexico, eligibility mechanisms mostly measure assets in the household as an income proxy. Conditional transfer programs are time-consuming for the beneficiaries; they must take time off from work or assign a member of the family to fulfill conditionalities in order to remain in the program.

Much has been studied about the effects of conditional transfers programs as *Oportunidades* on migration and remittances, in evaluations and academic studies worldwide.[16] It has been proposed that cash transfers, as well as human capital

[14] This table includes only those households reporting at least one member who is more than 69 years of age. This is the only program showing this positive association, indicating a more modest improvement in household well-being on the basis of this program, and/or better targeting of the poor.

[15] Two contrasting mechanisms can be at play. First, the analysis of the cross-section data can be accounting for the monetary transfers to beneficiary households (in particular *Oportunidades* and *Programa 70 y más*) that help alleviate food deficits. And second, other studies have shown that access to social programs is affected by information and cost constraints that can bar the poorest households.

[16] Martínez, E. (2000). Emigrar por desesperación: Progresa y la migración interna e internacional. In: A. Escobar y M. González (comps.). *Progresa: Más oportunidades para las familias pobres. Evaluación de Resultados del Programa de Educación, Salud y Alimentación. Impacto a nivel comunitario* (pp. 95–116). Mexico: Secretaría de Desarrollo Social; Tesliuc, E. D. & K. Lindert (2002). *Social Protection, Private Transfers and Poverty: Guatemala Poverty Assessment Program;* Maitra, P. & R. Ray (2003). The Effect of Transfers on Household Expenditure Patterns and

improvement through school enrollment, have made it more feasible for members of the household to migrate. Meager job opportunities for youngsters in their place of origin, once they have finished their elementary or middle school, mean social mobility is extremely difficult without migration.[17]

Figure 7.2 shows that the proportion of beneficiary households of *Oportunidades* with international migrants is slightly greater than those without migrants (51.3% and 50.1% respectively), although this difference is not statistically significant. In this case, it would be appropriate to supplement this approach with other data sources. Fifty-four percent of the households with international migration experience were registered in *Seguro Popular*, compared to 49.4% of those without migration experience. Thus, it is possible that the savings derived from being affiliated in *Seguro Popular* membership provide households resources to enable migration. Regarding *70 y más* program, 79.6% of the households with international migration experience report belonging to this program, compared to 74.9% of those without international migration experience. In sum, affiliation to these public policy actions is positively associated with migration.

When the food security index, as a proxy for wellbeing, is added to the analysis, it can be shown that households with no food deprivation and international migration experience show relatively higher rates of *Oportunidades* affiliation (54%). For households with international migration experience, 42.3% of those with food security deficits are *Oportunidades* beneficiaries, as presented in Fig. 7.3. These results may support, in part, the hypothesis that remittances tend to function as a complementary source of income for the household, which in turn translates into greater well-being *and* continued access to social programs.

Poverty in South Africa. *Journal of Development Economics*, 71(1), 23–49; Angelucci, M. (2004). Aid and Migration: An Analysis of the Impact of Progresa on the Timing and Size of Labour Migration. IZA Discussion Papers, 1187; Giannetti, M., D. Federici & M. Raitano (2009). Migrant Remittances and Inequality in Central-Eastern Europe. *International Review of Applied Economics*, 23(3), 289–307; Van den Berg, M. & N. V. Cuong (2011). Impact of Public and Private Cash Transfers on Poverty and Inequality: Evidence from Vietnam. *Development Policy Review*, 29(6), 689–728, <doi:10.1111/j.1467-7679.2011.00553.x>; and Hagen-Zanker, J. & C. L. Himmelstine (2013). What Do we Know about the Impact of Social Protection Programmes on the Decision to Migrate? *Migration and Development*, 2(1), 117–131.

[17] Angelucci, M. (2004). Aid and Migration: An Analysis of the Impact of Progresa on the Timing and Size of Labour Migration. IZA Discussion Papers, 1187; Carton de Grammont, H. (2003). Migración y pobreza. In: R. Cordera, L. Lomelí & R. E. Montes de Oca (eds.). *La cuestión social: superación de la pobreza y política social a 7 años de Copenhague* (pp. 57–67). Mexico: Universidad Nacional Autónoma de México; Martínez, E. (2000). Emigrar por desesperación: Progresa y la migración interna e internacional. In: A. Escobar & M. González (comps.). *Progresa: Más oportunidades para las familias pobres. Evaluación de Resultados del Programa de Educación, Salud y Alimentación. Impacto a nivel comunitario* (pp. 95–116). Mexico: Secretaría de Desarrollo Social; Escobar, A. & M. González (2012). *La calidad de la rendición de cuentas: transparencia y acceso efectivo al Programa Oportunidades y al Seguro Popular en México*. Guadalajara: Centro de Investigaciones y Estudios Superiores en Antropología Social-Occidente; and Yaschine, I. (2012). *¿Oportunidades? Movilidad social intergeneracional e impacto en México.* Doctoral Dissertation. Mexico: El Colegio de México.

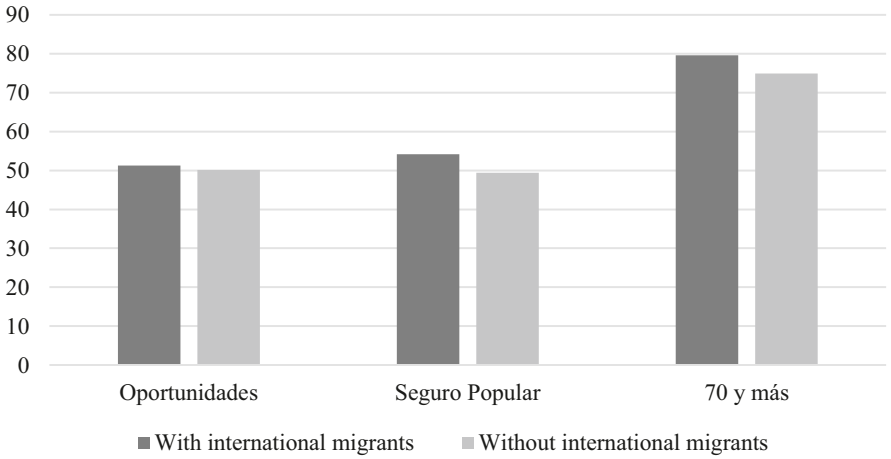

Fig. 7.2 Percentage of households affiliated to Oportunidades, Seguro Popular y 70 y más, by international migration experience
Source: ZAP-2009 Survey

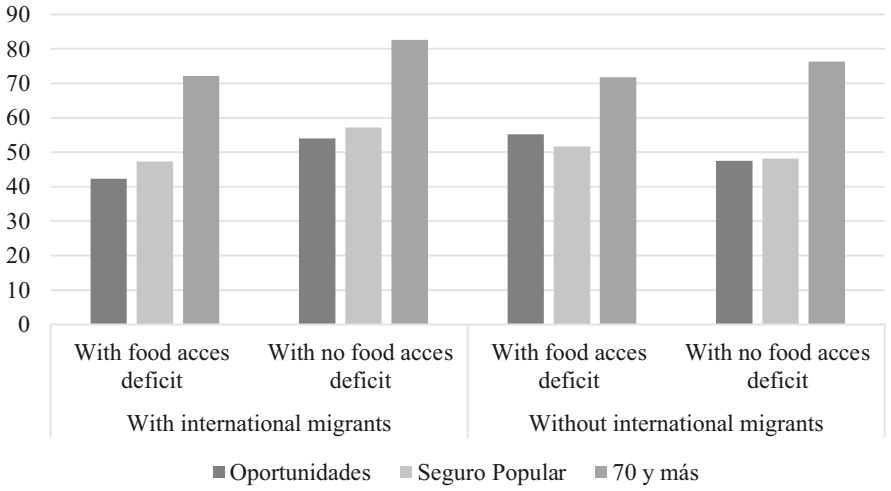

Fig. 7.3 Percentage of entitlement to the Oportunidades, Seguro Popular and 70 y más, households by the presence of international migrants and food security index
Source: ZAP-2009 Survey

Forty-two percent of households with international migration experience and food deprivation are enrolled in *Oportunidades*. Fifty-four percent of the households with no food deprivation are enrolled. These results could in part support the hypothesis that remittances do tend to work as a complementary source of income for the household, which in turn could translate into more wellbeing and access to social programs.

Households with no international migration experiences show an inverse relationship. Those with food security deficits and part of *Oportunidades* have a higher participation than beneficiary households with no food security deficits (55.2% and 47.5% respectively).

There is approximately a ten-point difference between *Seguro Popular* beneficiary households with migration experiences and food security deficits (47.3% and 57.2% respectively). This finding could corroborate that *Seguro Popular* coverage is more effective in localities with fewer wellbeing constraints than in smaller, poorer localities. It could also be argued that having access to this program has the effect of lowering household vulnerabilities by being able to cope with catastrophic health expenditures and therefore, has increased wellbeing.

For households with no international migration experience, the data does not show a clear association between being a beneficiary of *Seguro Popular* and food security deficits. The difference in the proportion of beneficiaries with and without food security deficits is in the order of three points (51.7% with food security deficits and 48.2% with no food security deficits).

The pattern among households with and without international migration presented in Fig. 7.2, holds when food security deprivation is incorporated. Households with beneficiaries of *Programa 70 y más* and with no food security deficits represent 82.6% with international migration experience and 76.3% with no migration experience. The proportional differences of having a beneficiary in the program and food security deficits are significant for households with and without migration experiences. For households that report at least one member as an international migrant and at least one beneficiary to the program, 72.1% have food security deficits versus 82.6% that report not having a food security deficit. For households with no migration experiences this difference is in the order of four points (71.8% with, and 76.3% without food security deficits). This pattern could be the result of the program's nature. It is basically a monetary transfer for old age family members that could help modify the food consumption patterns in the household. This transfer plus remittances from international migration can explain their "better off" situation.

The ZAP-2009 survey supports the findings in other studies that there has been a change in migration patterns in Mexico. Non-traditional migration localities with high incidence of poverty are starting to migrate.[18]

[18] Durand, J. (1998). ¿Nuevas regiones migratorias?, en R. Zenteno (ed.). *Población, desarrollo y globalización: V Reunión de Investigación Sociodemográfica en México* (vol. 2, pp. 101–115). Mexico: Sociedad Mexicana de Demografía/El Colegio de la Frontera Norte; Zenteno, R. (2008). Pobreza, marginación y migración mexicana a Estados Unidos. In: A. Escobar (ed.). *Pobreza y migración internacional* (pp. 85–130). Mexico: Centro de Investigaciones y Estudios Superiores en Antropología Social; and Banegas, I. (2012). *Migración, pobreza y políticas públicas: reporte de investigación, encuesta en zonas de atención prioritaria*, Guadalajara: Centro de Investigaciones y Estudios Superiores en Antropología Social-Occidente.

7.4 Access and Management Trajectories: Ethnographic Evidence

The above analysis shows families with better access to social programs are associated with higher migration rates. This association can be explained in multiple ways. Households in poor and marginalized communities that have better access to social programs may be more inclined to migrate, or they may have a greater ability to run the risk of migration; remittances may allow households to free up time that can be spent successfully joining significant social programs. Nevertheless, this may not apply to individuals or families who are just returning from the U.S.

Our ethnographic evidence derives from a technique we call "access and management trajectories." This technique explores whether or not an individual or a household has sought access to programs and services, and then details all of the actions and resources involved, the institutional responses of various kinds, and the outcomes of this search. It is based on techniques approaching "trajectories of illness" in medical anthropology.[19]

The trajectory and management ethnographic fieldwork shows that municipal public services and other local authorities are a significant gateway to services, and often block access. They discriminate against returning migrant families and their access to social programs. In some cases, municipal authorities deny identity documents (birth, residence, or age certificates) to returning migrants—these documents are indispensable for applying to social programs. Also, poor municipalities, to increase revenue, charge exorbitant fees for urgent documents. Many programs recruit beneficiaries when they visit small towns, and they may demand documents from 1 day to the next.

In high poverty localities, institutions are ill prepared to deal with returning migrants. There are no protocols to apply for services and social programs for returning migrant families. Some teachers expressed that returning migrant children have lower Spanish language aptitudes and knowledge of the Mexican context than native pupils. For some, these children's inability to communicate in Spanish simply means they are poorly performing students. Thus, we found that teachers explicitly ask returning migrant students to refrain from taking the national standardized achievement tests (*ENLACE*), to avoid lowering school test scores. A school principal in Oaxaca told a couple of returning parents that, if they had wanted their children to be Mexican, they should not have left for the U.S., and that he would therefore not accept them in his school. In other instances, schools accept children arriving from the U.S. but refuse to provide them with certificates of completion until they submit official Mexican identity documents.[20]

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[19] Escobar, A. & M. González (2012). *La calidad de la rendición de cuentas: transparencia y acceso efectivo al Programa Oportunidades y al Seguro Popular en México*. Guadalajara: Centro de Investigaciones y Estudios Superiores en Antropología Social-Occidente.

[20] The Constitution establishes that every individual has the right to an education. Nevertheless, regulation and procedures limit this right in various ways, as described in this chapter.

A fellow researcher in Chiapas found that it is easier for immigrant Guatemala children to acquire fraudulent Mexican identity documents than to go through the complex process of being recognized as documented foreign nationals. But these obstacles are not exclusive to high-poverty rural areas. A high school graduate returning to Mexico City had been waiting for 1 year for an opportunity to take an exam to show that he had an education equivalent to Mexico's and was therefore able to apply to university. In the meantime, however, he had taken a full-time job.

After such interruptions, it is sometimes difficult for youths to return to school. Mexican state education ministries have demanded for years that students returning from courses abroad certify, through an embassy stamping procedure, that their studies are valid. This procedure is slow, complex and expensive. In July and September 2015, the federal education ministry decreed that this procedure should no longer be required of students returning from elementary, middle, and high school. It is still required of university schooling. Nevertheless, Mexico decentralized education services in the 1990's. As a result, state education ministries and universities need not comply with federal legal and procedural changes.

Among returning migrants there is a sense of living as second-class citizens with fewer rights than non-migrants. The elderly retiring back to Mexico, and United States-born youths, are particularly affected by this situation. The chapter on education finds that U.S. born children in non-circular migration Mexican households show better-than average school attendance rates, but we found that in poor rural communities this was not the case, at least not for a significant period of time after their arrival in these localities. Among deported persons in Mexico this situation is even worse, as they often lack any identification or U.S. certificates, and are often bereft of a significant local social network.

Our ethnographic evidence suggests that citizenship and rights have to be negotiated at the local level, with municipal governments applying their own notions of rights at times, maximizing their authority and income from fees, or simply acting inefficiently and with little acknowledgment to nationally-defined rights and procedures. This is particularly the case among indigenous communities possessing their own robust notions of ethnic citizenship. Our previous research showed that some indigenous communities in Oaxaca forced migrants in the U.S. to accept community responsibilities in spite of their absence. They therefore had to pay authorities or another person a fee to carry out those duties.[21] Penalties for not complying include depriving their local relatives of basic services such as water, denying them permission to marry someone from the community, or even reclaiming their land. As a result, in a few cases local records of the compliance of international migrants with their community obligations have been burned.

According to Mexico's reformed nationality law of 1998, the children of Mexicans born abroad are Mexican. In other words, any legal proof of birth in the

[21] Escobar, A. (ed.) (2008). *Pobreza y migración internacional*. Mexico: Centro de Investigaciones y Estudios Superiores en Antropología Social.

U.S. to Mexican parents should suffice to access these programs. But specific document lists pay scant attention to the needs of returning migrants and their families. A *Seguro Popular* official at an "information and affiliation module" told our researcher that the U.S. born children of returning migrants were not entitled to membership, contradicting the law and specific program provisions.

Thus, returning migrants are forced to renegotiate their rights in order to access the services and programs they are entitled to according to federal law. The above account should not be taken as an outcome of this process. Survey evidence in the first section of this chapter illustrates that differences between migrants and non-migrants are not very large. More often than not, in the end they gain access. But some are discouraged, or simply interpret these difficulties as final. In summary: although affiliation rates among migrant households are not lower, and are sometimes slightly higher, than among non-migrant households, ethnographic work shows that access is made difficult for them, sometimes as the outcome of simple omissions in current regulations, and often because of specific anti- migrant attitudes among local authorities and service providers.

7.5 Discussion

This chapter was devoted to the analysis of the relationship between international migration and access to Mexican social programs. We explored three specific aspects of this issue. First, is access to social programs associated with household levels of well-being and, indirectly, migration? Second, do return migrants face difficulty accessing these programs and basic social services? And finally, does emigration and return migration vary after a household affiliates to one of these major social programs?

The chapter approached these questions from two perspectives. First, based on a representative survey of Mexico's high-marginality rural areas, or ZAPs. Second, via a summary of fieldwork on the affiliation and service-seeking trajectories of return migrants.

While labor markets and the socio-historical construction of social capital and culture still are major factors in migration (and immigration policy enforcement may also have become a major influence), we expect Mexican social programs and services to play a role in migration for several reasons. Their coverage has increased significantly. Most households under a certain socioeconomic threshold are affiliated to Mexico's main conditional cash transfer program, *Oportunidades*. This program provides the equivalent of 83% of labor income in households in the poorest decile.

This program has been shown to diminish poverty levels, increase schooling and improve nutrition. Roughly 4 million Mexicans exit poverty on account of program transfers, and another 20 million become significantly less poor. Also, studies have

stressed the role it plays in diminishing vulnerability.[22] Non-contributive pensions (*70 y más*) provide an income for the elderly and play a part in a (much more modest) reduction in household poverty levels. Finally, *Seguro Popular* could be replacing the health benefits of (formal) employment-based social security. Its explicit aim is to reduce out-of-pocket catastrophic health expenses, which should mean households' available income also increases.[23]

According to Levy,[24] the implementation of social security substitutes in Mexico via these three programs is a significant force shaping job choices. Individuals have a smaller incentive to seek formal jobs, or to ask for formal job benefits from their employers. Instead, they may seek flexible, informal, cash wages together with program affiliation. Labor migration to the U.S., in our view, is another, very specific, kind of job choice that should be influenced by these social security substitutes. Labor migration to the U.S., from the family's point of view, is akin to informal employment in Mexico. It provides no labor and social security to the family staying in Mexico, and on the contrary increases short-term exposure to risk, such as the

[22] See: González, M. (2009). La vida después de Oportunidades: impacto del programa a diez años de su creación. In: *A diez años de intervención. Evaluación externa del Programa Oportunidades 2008 en zonas rurales (1997–2007). Tomo I: Efectos de Oportunidades en áreas rurales a diez años de intervención* (pp. 125–145). Mexico: Secretaría de Desarrollo Social; Escobar, A. & M. González (2005). Evaluación cualitativa de mediano plazo del Programa Oportunidades en zonas rurales. In: B. Hernández y M. Hernández (eds.). *Evaluación externa de impacto del Programa Oportunidades 2003*. Mexico: Centro de Investigaciones y Estudios Superiores en Antropología Social/Instituto Nacional de Salud Pública; Escobar, A. & M. González (2005). Evaluación cualitativa del Programa Oportunidades en zonas urbanas 2003. In: B. Hernández & M. Hernández (eds.). *Evaluación externa de impacto del Programa Oportunidades 2003*. Mexico: Centro de Investigaciones y Estudios Superiores en Antropología Social/Instituto Nacional de Salud Pública; Escobar, A. & M. González (2003). *Evaluación cualitativa del Programa Oportunidades. Etapa urbana, 2003*, <http://www.oportunidades.gob.mx:8010/index.php>; Escobar, A. & M. González (2002). *Evaluación cualitativa del Programa de Desarrollo Humano Oportunidades. Seguimiento de impacto 2001–2002, comunidades de 2500 a 50 000 habitantes. Evaluación de resultados de impacto del Programa de Desarrollo Humano Oportunidades*, <http://www.oportunidades.gob.mx:8010/index.php>; Escobar, A. y M. González (2001). *Primeros resultados de la Evaluación cualitativa basal del Programa de Educación, Salud y Alimentación (Progresa) semiurbano.* Septiembre-diciembre, Guadalajara, <http://www.oportunidades.gob.mx:8010/index.php>; and Escobar, A. (2000). Progresa y el bienestar de las familias. Los hallazgos. In: A. Escobar & M. González (comps.). *Evaluación de resultados del Programa de Educación, Salud y Alimentación. Impacto a nivel comunitario* (pp. 3–31). Mexico: Secretaría de Desarrollo Social. These evaluations can be consulted at: https://evaluacion.prospera.gob.mx

[23] *Seguro Popular* was created as a pilot program in 2002 and was later established formally (as *Sistema de Protección Social en Salud*) with the 2003 reform to the Law of Health, which established an annual growth in affiliation of 14.3% from 2004 to 2010. *Seguro Popular* represents the most ambitious effort expanding the coverage of basic health protection since the national health system was created in 1943. By the end of 2011, it had almost reached its coverage goal. See, Aguilera, N. & M. Quintana. (2012). *Seguro Popular: Evaluación de consistencia y resultados 2011–2012. Informe final*, <http://portal.salud.gob.mx/codigos/columnas/evaluacion_programas/pdf/ECR1112_SPSS_IFx112x.pdf>.

[24] Levy, S. (2008). *Good Intentions, Bad Outcomes: Social Policy, Informality, and Economic Growth in Mexico*. New York: Brookings Institution Press.

interruption in the regular flow of international wages. Migration has been perceived as a substitute for credit and risk markets in Mexico.[25] In other words, families, rather than individuals, reduce their medium and long-term exposure to risk—and poverty—via the assets (housing, the household economy, land, education) gained through remittances and return migration.

Families may decide to increase their labor migration levels if these programs provide a reduction in their short-term risks. The combination of migration and social programs could prove a significant factor in the reduction of poverty in the medium term. To achieve this outcome, however, families need to access the real services and benefits promised by Mexico's public sector. As the ethnographic sections states, families can't choose to join one of these social programs. They can, however, decide to migrate once the household, or some members, are affiliated.

The two empirical sections could seem contradictory. We believe they are not. First, it is important to stress that program affiliation, well-being as measured by the proxy of food security, and migration, seem to conform one relatively coherent set of characteristics: social programs and actions help improve well-being, provide income stability and protect households from some catastrophic expenditure. Under these circumstances, households are better able to undertake additional risks to further improve their well-being from remittances and savings brought back by returning migrants. But diversification is key: one or two household members can work in the U.S. but the household needs to fulfil various conditionalities, and to avail itself of other income sources. The simplest one is being there and showing up on payday, but others involve attending school, being there for health talks, and performing community service. Households can retain all their benefits if they comply. In other words, the first empirical analysis suggests migration of one or two working household members is highly compatible with program membership, and with increases in well-being, provided other family members perform these activities and provide income from other sources.

It is quite another problem to return, particularly if one returns without proper papers, or without proper contacts and know-how. In this case, entire families can fall through bureaucratic cracks. Lack of open access procedures to *Oportunidades* and *70 y más*, in addition to difficulties regaining an officially valid identity, address, voting card and CURP to join *Seguro Popular*, mean return migrants can suffer a crippling crisis upon their return.

In other words, these three Mexican public policies interact well and even favor one kind of international labor migration. But (1) small households with only one worker would be seriously mistaken to risk all of their independent income through migration, even if they benefit from these programs. We witnessed the hardship these small, young households suffered when the male breadwinner left. For them, it makes far more sense to refrain from risking their benefits. (2) Because of their design, these three social programs can't easily provide a safety net for returning

[25] Taylor, E. J. (1999). The New Economics of Labour Migration and the Role of Remittances in the Migration Process. *International Migration*, 37(1), 63–88, <doi:10.1111/1468-2435.00066>.

migrants. They may do so, but only after a number of other processes have been completed, and the family is a member of the community.

7.6 Future Lines of Research and Policy Recommendations

One line of research that emerges from this work is the identification, through an empirical exercise, of the effects of social programs on migration. The underlying question would be if a household that received social assistance from the government is more likely to emigrate to the United States.

The answer seems to be that these programs interact well with one kind of migration: labor migration in a family that has accessed social programs and possesses several income providers. These households will enjoy a higher level of living. At the same time, program membership would lower the probability of migration for households with only one breadwinner, or in which cash transfers substitute for remittances. In this case there is no point in migrating. Finally, our analysis shows that households may well reincorporate one returning migrant. But returning migrant families are discriminated against both actively (as people who betrayed their community) and passively, through red tape. Although these findings derive from research carried out until 2011–2012, it is still true that Mexico's safety net for returning migrant is severely deficient, both because the net itself is quite basic, and because the needs and wants of returning migrants have never been fully considered by public policy procedures. Even when Mexico's Congress legislated that certification of school diplomas was no longer necessary, many states and many different kinds of educational establishments continued requiring them.

It would be wrong, however, to conclude that this is and will be the kind of interaction we can expect between migration and social policy. The everchanging nature of migration patterns implies that policymakers should require academics to provide updated diagnoses of the challenges faced by migrants and their families. Especially, as the targeting of social programs has been centered on territories with large social deficits, and migration was an option for many.

We have shown that even if national social policy can have a stabilizing income effect on households with migration experiences, there is still a long way to go to secure affective access to basic social needs such as education and health. An effective, accessible safety net would without a doubt diminish the need for migration. Finally, policymakers should work to achieve much better coordination among federal, state and municipal efforts.