

Niños y jóvenes en el contexto de los patrones de movilidad internacional en México

Silvia E. Giorguli Saucedo
El Colegio de México

Edith Y. Gutiérrez Vázquez
Universidad de Pennsylvania

(resumen en español)

En los últimos cinco años se han observado cambios en las tendencias de los patrones de movilidad internacional en México que se entremezclan con la consolidación de tendencias observadas en las últimas décadas. Se mantiene un proceso histórico de emigración caracterizado por una pérdida de circularidad y un mayor asentamiento en dicho país así como la incorporación a los flujos migratorios de mujeres y niños. Por otro lado, el flujo de salida ha disminuido notablemente y en los últimos cinco años se ha dado un retorno e ingreso inédito de mexicanos e hijos de mexicanos desde Estados Unidos. Asimismo, durante la última década se ha mantenido un proceso de inmigración a México, principalmente de Estados Unidos seguido de Centroamérica como región de origen. Con ello el perfil migratorio se ha vuelto más heterogéneo.

En este trabajo analizamos a la población adolescente e infantil que está expuesta a los diversos tipos de movilidad internacional en México. Con datos del censo de 2010 en México, estudiamos el perfil sociodemográfico de menores que viven en hogares expuestos a la emigración hacia Estados Unidos y/o que reciben remesas. También consideramos a los menores que son migrantes en sus diversas modalidades: mexicanos que retornan de Estados Unidos, hijos de mexicanos nacidos en dicho país que llegan a vivir a México, menores inmigrantes de otros países. Con ello buscamos visibilizar de mejor manera a la población menor de edad que está expuesta a la migración internacional de diversas formas. Dado que la manera en que la migración internacional influye en la vida de los menores está mediada por su situación familiar—la cual se ve afectada por la movilidad de los adultos—también analizamos los arreglos residenciales

y, en particular, la coresidencia con uno o ambos padres de estas distintas subpoblaciones de menores. Finalmente, hacemos una aproximación a la forma en que la movilidad internacional influye en el bienestar de los adolescentes analizando las diferencias en los niveles de asistencia escolar y participación laboral de la población entre 12 y 18 años. Nuestros resultados sugieren que entre 2000 y 2010 ha aumentado notablemente el número de menores expuestos a la migración internacional y, en especial, los menores inmigrantes. Observamos como la movilidad efectivamente genera nuevos arreglos familiares en donde la ausencia de uno (especialmente el padre) o ambos padres es frecuente.

En cuanto a la asistencia escolar y la entrada al mercado de trabajo, los efectos difieren dependiendo de la forma de exposición a la migración internacional y están, en todos los casos, mediados por el tipo de arreglo familiar. En general, los adolescentes que migraron a Estados Unidos y regresaron y los inmigrantes de otros países—en su mayoría de Centroamérica—tienen notablemente mayor probabilidad de dejar la escuela a edades más tempranas. En contraste, los inmigrantes nacidos en Estados Unidos nacidos de padre y/o madre mexicanos permanecen en la escuela durante más tiempo. Esta desigualdad en la asistencia escolar se corresponde con diferencias en la condición de actividad. Claramente, los inmigrantes empiezan a trabajar con mayor frecuencia durante la adolescencia, al igual que los menores migrantes de retorno.

**Children and Youth in the Context of the International Mobility Patterns in
Mexico
(PRELIMINARY VERSION—NOT TO BE CITED WITHOUT AUTHORS
PERMISSION)**

Silvia E. Giorguli Saucedo
El Colegio de México

Edith Y. Gutiérrez Vázquez
University of Pennsylvania

Abstract

In the last years, some of the patterns of the international mobility in Mexico have consolidated. Emigration to US, the incorporation of women and children into the flow and the loss of circularity persist. At the same time, new patterns have emerged. Outmigration flows decreased sharply in the last five years and there is evidence of a new flow of Mexicans and children of Mexicans born in US entering the country after having lived abroad. Within these heterogeneous patterns of mobility, we explore to what extent minors in Mexico are exposed to international mobility either through the migration experience of their parents or other relatives or because they are immigrants or return migrants. Using information from the 2010 Census sample, we looked at the sociodemographic and geographic characteristics of these children. Given that family arrangements and specially whether they live with one, both or neither parent may influence largely the effects of international migration on the well-being of the children, we also analyze this dimension. Finally, we explore whether the educational and labor trajectories of adolescents vary depending on the exposure to international migration. Our results suggest international migration is linked to the absence of one (mainly the father) or both parents in all cases. In addition, the enrollment and labor status of children also vary depending on their exposure to international migration. For Mexican returnees and other immigrants, the probabilities of staying in school and out of work are notoriously lower. This relation is clearly mediated by the type of family arrangement.

**Children and Youth in the Context of the International Mobility Patterns in
Mexico
(PRELIMINARY VERSION—NOT TO BE CITED WITHOUT AUTHORS
PERMISSION)**

Silvia E. Giorguli Saucedo
El Colegio de México

Edith Y. Gutiérrez Vázquez
University of Pennsylvania

The sharp increase of the Mexico-U.S. migration flows during the nineties and the first half of the last decade, the larger duration of stay in U.S. and the loss of circularity of the international migrants has shifted the discussion about the implications of Mexico-U.S. migration in the communities and regions of origin. Along with the increase in the permanent settlement of Mexicans in US and the longer periods of family separation, discussions around the impact of family disruption, the emotional costs of migration and other non-economic costs on migrants and their families started to emerge in the research conducted in Mexico (among others, see Ariza and D'Aubettere, 2009 and López Castro, 2006). In addition, women and children increasingly got involved in some kind of mobility—either as migrants themselves or—in the case of children—via the migration of their parents or other close relatives or friends. It is possible that the new family arrangements, the longer absence of fathers and mothers who have migrated, the changes on household income when remittances are sent and the participation of children of migrants in the flows themselves—probably as a *rite de passage* during their adolescence—influence different aspects of the lives of children in Mexico who are exposed on one way or another to the international migration movements.

In fact, prior literature on international migration and education had explored this question for Mexico looking at the particular case of the link

between educational attainment and remittances or the household migration experience (Pederzini and Meza, 2009; Hanson and Woodruff, 2003; Giorguli and Serratos, 2009; Antman, 2008; Borraz, 2005; McKenzie and Rapoport, 2006). Although the evidence is not conclusive, there are some consistent results that show that children living in communities with high migration prevalence tend to leave school earlier (Kandel and Massey, 2003; Giorguli et al, 2010; Gutiérrez et al, 2011). This line of research has mainly focused on children remaining behind who are exposed to international migration either because someone in their household has migrated, because the household receives remittances or through the migration experience of others in the communities of origin. However, the recent change in the migration profiles in Mexico suggests that the young population exposed to international migration is more heterogeneous (Giorguli and Gutierrez, 2011). On one hand, there has been a recent increase of return migration to Mexico (Zenteno, 2011 and 2012). In some cases, this flow involves parents and their children. In fact, there is a large number of children born in US that have moved to Mexico during the last five years (more than half a million as shown in Table 1). Recent data from the 2010 Mexican census also shows an increase in the number of return migrants under 19 years of age.

Finally, Mexico is considered a country of destination and transit for a number of migrants in their attempt to reach the US. Although still a small proportion, immigrants have increased in the last decade (Castillo, 2012). In the case of young populations, there is a small number of children born outside Mexico who are also exposed to different migration experiences, basically related to their countries of origin. We can expect that those young migrants, many from Central America (about 20% of the group under the category "other migrants"), will be more often undocumented and living in families with an unstable economic situation. Thus, they will face more difficulties to integrate into

the Mexican school system, stay enrolled and they may probably enter earlier into the labor market.

It is of interest in this research to look at how all these populations of children related to international migration on different ways live and, specifically, their family arrangements. In addition, we look at how they fare in school and whether they enter earlier into the labor market. In this paper we describe the different groups of population 18 years old and younger separated by their link to international migration. We also analyze their co-residence status relative to their parents and their school enrollment and labor status. We use the 2010 Mexican Census Sample, which is a large representative sample that gathers information for more than ten percent of the Mexican population. The large sample size allows us to estimate robust models of the enrollment and labor status of these populations.

We hypothesize that the family situation will define to a large extent the possible impacts of international migration on the educational opportunities of the youth. It has been documented that the family context—specifically the co-residence with one or both parents—defines the learning environment and the resources available to children and influences their educational trajectories (Giorguli, 2006). For our specific research interest, we explore whether the family arrangement mediates the potential positive or negative effects of international migration on the lives of children. The Census allows us to explore whether the children are living with their mothers and/or with their fathers. We first look at the different co-residence statuses by migration group and then estimate to what extent the effect of the family arrangement and the exposure to migration at the municipal level vary for each of the subpopulations analyzed. We also hypothesize that the separation from both parents will specifically have a larger negative effect on the probabilities of staying in school and out of the labor force. As the effects are different for girls and boys, our analysis is conducted by sex.

Family reorganization and international mobility in Mexico

The traditional male migration to the US was linked to a temporal reorganization of the household while the husband was away. Either wives used to undertake the role as heads of the household and would remain in nuclear households, taking the decisions around the distribution of resources and the education of the children, or wives would move along with their children to the household of their parents or with their in-laws while the husband was away. This last form of rearrangement of the household implied more supervision over the wives and their children lives and, in some cases, a more limited access and participation in the decisions on how to use the resources received from abroad (Arias, 2009). In this type of flow, wives would “remain behind” and a lot of the literature on gender and migration focused on possible changes in the gender relations due to the mobility of the husband (Mummert, 1988 y 1996; Barrera y Oehmichen 2000; Giorguli, 2006).

As migration flows became more heterogeneous, the family responses to migration have also changed. We probably find now a larger diversity of arrangements, including transnational families with members living at both sides of the border. Among the changes that have been more recently documented are the increase of separations or divorces, that result in the formation of new households and in an increase in monoparental households; the incorporation of women into the flow resulting in “doughnut households”, where children remain with their grandparents and both parents are absent; the formation of mixed households with some children born in Mexico and some children born in US (Arias, 2009).

Within the context of the recent trends in the international mobility between Mexico and the US, it is also possible to consider that the returnees will either form new independent households in Mexico with all members moving from abroad or may move into extended households with relatives living in Mexico. The new family organization may also be

the result of a family separation, in which case, we may see an increase in children living with one parent in the case of returnees or in the case of those who were born in the US that migrated to Mexico with their parents.

In most of the cases, the international mobility of the children and/or their parents or other relatives may be linked to a reorganization of the household composition. The way children respond and adapt to the changing context of their family due to the international mobility of the household members is mediated by the resulting reorganization.

The link between the exposure to international migration and educational trajectories

On most of the research conducted on this topic, there has been an emphasis on how family monetary resources in the communities of origin are modified by the international migration of an adult member—usually the father—and how the resources invested on children's education change. Within most of this literature, remittances are assumed to have a potential positive effect on the enrollment of children as they allow greater resources to be invested in education and may release adolescent children of the need to enter the labor forces at early ages. Thus, receiving remittances may delay leaving school and entering the labor force. The evidence so far of the empirical research conducted in Mexico is not conclusive. Canales and Montiel (2005), for example, proved that households receiving remittances spend about the same on education compared to other households—net of the socioeconomic status. Borraz (2005) found that factors such as the place of residence or the educational attainment of the mother may mediate this potential effect; based on his results there would be some evidence that children in the poorest households, in rural setting or whose mothers have little

education may potentially benefit more from the increase of resources via remittances.

As we review the literature on the research conducted in Mexico we found studies which suggest a positive impact of remittances (Antman, 2008; Hanson and Woodruff, 2003) with others which are more cautious and less optimistic regarding this effect (Meza and Pederzini, 2009; Giorguli and Serratos, 2010). Furthermore, some of the studies even suggest a negative relation between the exposure to international migration and educational attainment at the community level (Kandel and Massey, 2002; Giorguli and Serratos, 2010; Gutierrez et al 2010). If any conclusion can be made from the prior research is that we need to study more comprehensively the interaction between international migration and the educational trajectories of children and to build an analytical framework that allows us to disentangle the different dimensions in this interaction. As much of the literature has concentrated on economic explanations (basically, the resources invested in education), other factors such as changes in the learning environment, the adult supervision over school work, the emotional distress related to family separation or to the arrival to a new place, have been overlooked.

In this paper we analyze several dimensions:

1. If international migration changes the resources available for investing in education and delaying the entrance into the labor force of adolescent children, those children in households receiving remittances will have higher enrollment rates and lower labor participation.
2. To the extent that international migration may disrupt the family dynamic, the adult supervision, the social capital of children remaining behind, we may expect that those children living in households that do not receive remittances and with at least one

member who is an international migrant may have lower probabilities of staying out of the labor market and in school.

3. As their own mobility may disrupt the family dynamic and the educational trajectory of children who moved from US to Mexico, we may expect to find lower enrollment rates and higher labor participation among these migrant children. Nonetheless, the effect may vary depending on the circumstances in the US. Thus, children born in US of Mexican parents may be arriving with higher educational assets and motivations and, thus, may stay longer in school and out of the labor market.
4. We expect to find that other immigrants (coming not from the US but from other countries) will have the greatest disadvantages integrating into—or even having access to—the Mexican educational system.
5. All these effects will be mediated by the family arrangement. For example, the potential positive gains for those receiving remittances may decrease when both parents are absent. Among immigrant children, we may find that those living with both parents may be able to stay longer in school and not work.
6. Finally, as prior research has found, we expect that the migration experience at the community level may be also influencing the consumption, labor and educational expectations of adolescents. Thus, when living in communities with higher migration prevalence, there may be disincentives to stay longer in school—specially among those who have not been in US.

The transitions into the labor force are gendered in Mexico (boys tend to enter the labor market earlier and more often than girls; a large proportion of the girls not studying will be concentrated in domestic work). Furthermore, the expectations around migration and education are also different. Prior research has suggested that there may be more pressure for adolescent men to migrate (as a *rite de passage*) than

among women (Reichert, 1982 cited in Massey et al, 1993). In addition, the absence of the father or the mother also has a different impact among boys and girls (Giorguli, 2004). Thus, we can expect that the effects we are looking at may vary in magnitude and significance (but not in direction) between adolescent men and women. For that reason, we conducted our analysis by sex.

Data and methods

The microdata of the 2010 Mexican Census Sample allow us to classify the population under 19 years old in 6 categories, according to their migration experience: 1) no exposure to international migration, 2) children living in a household with migrants (circular or return migrant)¹, 3) children living in household receiving remittances, 4) children born in U.S., living in Mexico with at least one parent born in Mexico, 5) return migrants, 6) circular migrants, and 7) other immigrants. First we estimate the size of these populations, their basic sociodemographic characteristics (age distribution, sex, place of residence), and their residential status relative to their parents. Afterwards, we analyze the differences in the probabilities of being only studying versus being only working, studying or working or neither of these activities for adolescents 12 to 18 years old depending on their exposure to international migration, by sex. We also use the prevalence of migration index –which captures the proportion of households with any migration experience in a municipality – and the family arrangement (a combination between the relationship to the household head and the parental residence status). To further capture how family arrangements mediate the

¹ . The way it was defined by the Mexican Census, return migrants lived in the US five years before the census year and were living in Mexico when the information was collected; circular migrants might have had one or more trips within the five years prior to the census year. This is a rough way to distinguish between a short term migration (circular) versus a migration that may have implied a longer period of stay in the US.

interaction between international migration and the enrollment and labor status of children, we estimate separated models for the main subpopulations. In the multinomial logistic models estimated we control by the effect of socioeconomic status and cultural capital of the household (household head years of school) and the place of residence.²

International migration exposure and participation of Mexican children and youth

The Mexican census data allow us to analyze the migration exposure of children and youth in several forms: either because they have migrated to U.S. or because they live in contexts with migration experience (they live in households that receive remittances or where a family member had migrated, or in communities with high migration prevalence).

Table 1 shows the distribution of the Mexican population under 19 years of age grouped by their exposure to international migration. In 2010, 6.5% of the children and youth living in Mexico had some exposure to family migration or have been migrants themselves. This proportion represented 2.7 million minors. A large majority, about 1.4 millions, lived in households that were receiving remittances and another 645 thousand were in households with migration experience to the US. These two groups refer to children who did not move. The proportion living in rural and small urban areas is larger than the national average,

² . The models were run in two stages due to multicollinearity issues: one considering if there is any migrant in the household, and other introducing remittances reception. The probabilities presented in Table 5 were estimated with the models of remittances reception –excluding the other household migration experience that was estimated with its own model- because they had systematically a better goodness of fit. We use the mean values of all the variables considered in the model to estimate the probabilities.

which is coherent with the larger prevalence of international migration in these settings. More than 20% (close to 30% in the case of those in households receiving remittances) live in municipalities with a high prevalence of migration.

The third largest group is that of children born in US but whose parents are Mexican. This group represents close to 600,000 minors. Over half a million was born in U.S. and lived with a least one parent born in Mexico and around 310,000 immigrated during the last five years. In most cases, we can expect that their migration is linked to the return of one or both of their parents. They are younger than the other groups (83% are less than 12 years old) and most of them live in large urban or metropolitan areas. More than 45% of these children live in border states, which may suggest some “womb migration”, that is, mothers living in the border that give birth in the US and then return to their hometowns. It may be also reflecting a pattern of forced return migration of their parents who, after having lived in the US for a long period, have lost connection with their places of origin and stay in the border, probably even awaiting to eventually return to the US. The available data do not allow us to explore these hypotheses, but it remains as a topic to be developed in the future. Although there is a large concentration in the border, close to a third of the US born Mexican children³ live in the region with a traditional-historical migration to the US.

Mexican children who are return or circular migrants themselves have a different sociodemographic profile. There is still a large concentration in young children (below 12), but there are also more teenagers in comparison with the other groups. For circular migrants, the sex ratio is less balanced than for the other groups. In this case, we may think that for a group of these children—at least for some of them in the teenage years-- their migration experience in the US may be linked to their own

³. They are American as they were born in US, but also have the right to have the Mexican nationality as one of their parents is Mexican. We can also refer to them as dual citizens.

labor experience and the search of job opportunities for themselves. There is also an important proportion of Mexican migrant minors living in border states (close to one third for return and for circular migrants) and in states with a large tradition of international migration to the US.

The last group we analyzed is that of immigrants from other countries. This is a small group and most of them were born in the US and their parents are also American. The second largest group is that of children born in Central America. Immigration is mainly an urban phenomenon. 87% live in metropolitan or large urban areas and in mostly in municipalities with very low prevalence of migration to the US.

In all cases of migrant children, the results from the 2010 Census show a large increase compared to the year 2000. This is an unexplored phenomenon that implies new challenges and demands policies to respond to the special needs of these children. We need to explore more in detail the way they move between countries and the risks associated to this moves, their conditions at the moment of arrival to Mexico, their special needs in order to integrate successfully to the contexts of destinations—starting with the access to social programs and their incorporation into the school system.

[INSERT TABLE 1 ABOUT HERE]

Parental and family arrangements of children by migration experience

As mentioned early, the migration of others or the migration of children is related to a change in the family organization. Furthermore, the ways families are organized after the migration occurred may also tell us more about the movement itself. Table 2 shows the distribution of all our subpopulations based on the coresidence status of the children relative to their fathers and on their relation to the head. For Mexico, most of the children live with both parents (more than 75%) and the most prevalent

arrangement is that of a nuclear household with both parents living in the same household (67%). For children exposed to international migration, the distribution is different. For example, in households receiving remittances only 30% of the children live with both parents in a nuclear household. A large proportion lives only with their mothers; most of them in independent households (27.3%) and some others with grandparents (5.7%). In this group we see the largest proportion of cases where both parents are absent (16%); these would be most of the cases of the “doughnut households” we refer to in a prior section. For these children, the international migration of adults—presumably mostly their fathers and, to a less extent, their mothers—radically changes the household arrangement. It remains to be tested whether the monetary resources sent from US compensate other aspects that may be affecting the educational trajectory of the child such as the distress related to the family separation or the changes in adult supervision over their school achievement.

For all cases of children who migrate, almost or more than 60% live with both parents and they were mainly children of the head. Although we would need to look more in detail the migration history of their parents, these data point that, for most of these children, their migration is linked to the international mobility of their parents. The second largest arrangement is that of nuclear monoparental households where only the mother is present and, for children born in US, an important proportion (10%) is only living with their mothers in extended households—mostly with their grandparents. One in every five of the children born in US lives with their grandparents; grandparents may be playing an important role for children born in US, specially for those living only with their mothers.

[INSERT TABLE 2 ABOUT HERE]

International migration and school enrollment and working status of the youth in Mexico

In this section, we explore the probabilities of attending school and/or working for adolescents 12 to 18 years of age living in Mexico in 2010 by the exposure to international migration (see Table 3 and the Appendix for the complete models). Table 3 shows that the pattern of school attendance and labor participation varies among youth in Mexico according to their international migration experience. For both men and women, exposure to migration –either because a household member migrated or because they live in context of high migration prevalence –is associated with lower school attendance. In contrast, if the household receives remittances, the probability of school attendance is slightly higher compared to youth without any exposure to migration.

For teenagers who had migrated to Mexico, there is a significant difference depending on the place of birth. Those born in the United States clearly continue their educational careers and, they are indeed the group with the highest probabilities of staying in school without working and with the lowest probabilities of being “only working”. This result is both consistent for men and women. In contrast, other immigrants and those born in Mexico who migrated to the United States in recent years have the lowest odds of remaining in school and out of the labor force (only studying) among all groups. These two groups require greater attention and support in the process of integrating into the educational system in Mexico. They have notoriously large probabilities of combining school and work among young men. However, they are also the largest group—among men and women—with the largest probability of staying out of school and out of the labor force.

(NOTE REGARDING THIS PRELIMINARY VERSION: WE HAVE CONDUCTED A SEPARATED ANALYSIS TAKING INTO ACCOUNT THE PLACE OF RESIDENCE—

RURAL OR URBAN—AND FOR EACH OF THE SUBPOPULATIONS IN ORDER TO CAPTURE HOW THE FAMILY ARRANGEMENT MAY BE CHANGING THE ENROLLMENT AND LABOR STATUS OF CHILDREN. THESE RESULTS WILL BE PRESENTED AT THE ALAP MEETING AND WILL BE INCLUDED IN THE FINAL VERSION OF THIS PAPER).

Preliminary conclusions

As preliminary conclusion, the results indicate that Mexico-U.S. international migration affects the lifestyle of children living in Mexico. They also highlight the participation of minors in the flows between the two countries and stress the need to consider the challenges that international migration represent for the Mexican institutions--such as schools and social programs--in the context of returned flows and immigration to Mexico of children from the United States.

An additional finding is that the probabilities of staying enrolled and delaying the entrance into the labor market linked to international migration are mediated by the parental co-residence with the children and by the place of residence (rural or urban). To a large extent, the absence of one parent may be related to the loss of certain financial security, adult supervision of school work, loss of social capital and may have a negative impact on a child's educational trajectory. Our results suggest that the absence of the mother may have a more detrimental effect over children's enrollment and that the presence of grandparents may also reduce the negative impact of parental separation.

Finally, there seem to be variations in the link of education to international migration by setting (rural or urban). In rural settings, children who remain behind face a more disadvantaged context, lower educational opportunities and lower quality schools. This may discourage children from staying in school and may also have a

negative impact on achievement (Jensen, forthcoming), which may reflect in an early dropout.

This kind of approach, the one that looks at different dimensions of the exposure of children to international migration, needs to be considered for future research and for the definition of policy recommendations on this topic.

References:

Antman, Francisca M. (2008), "Parental Migration and Children's Education in Mexico: How important is Child Age at the Time of Parent's Migration?", ponencia presentada en la Reunión Anual de la Population Association of America, Nueva Orleans, 17-19 de abril, en: <http://paa2008.princeton.edu/download.aspx?submissionId=80796>

Arias, Patricia (2009), *Del arraigo a la diáspora: dilemas de la familia rural*, México, Porrúa, UdeG.

Ariza, Marina y María Eugenia D'Aubeterre 2009 "Contigo a la distancia... Dimensiones de la conyugalidad en migrantes internos e internacionales", en Rabell, Cecilia (coord.), *Tramas familiares en el México contemporáneo. Una perspectiva sociodemográfica*, México, unam/El Colegio de México, pp. 353-391.

Barrera Bassols, Dalia y Cristina Oehmichen (eds.) (2000), *Migración y relaciones de género en México*. Universidad Nacional Autónoma de México – Grupo Multidisciplinario sobre Mujer, Trabajo y Pobreza, 414 pp.

Borraz, Fernando (2005), "Assessing the Impact of Remittances on Schooling: The Mexican Experience", *Global Economy Journal*, vol. 5, núm. 1, pp. 1-30.

Canales, Alejandro e Israel Montiel (2005), "El papel de las remesas en la dinámica económica de los hogares en México", Guadalajara, Centro de Estudios de Población, Universidad de Guadalajara [mimeo].

Castillo, Manuel Ángel (2012), "Extranjeros en México, 2000-2010", in *Coyuntura Demográfica*, 2: 57-61. www.somede.org/coyuntura-demografica/

Giorguli, Silvia (2004), "Transitions from School to Work: Educational Outcomes, Adolescent Labor and Families in Mexico", Ph.D. Dissertation, Brown University.

Giorguli, Silvia (2006), "La migración a Estados Unidos desde la perspectiva de las comunidades de origen. Reflexiones en torno a su impacto social", en Consejo Nacional de Población, *Migración México-Estados Unidos: implicaciones y retos para ambos países*. Distrito Federal. Consejo Nacional de Población, pp. 155-170.

Giorguli, Silvia y Gutiérrez, Edith (2011), "Niños y jóvenes en el contexto de la migración internacional entre México y Estados Unidos" in *Coyuntura Demográfica*, México, pp. 21-25.

Giorguli, Silvia y Serratos, Itzam (2009), "El impacto de la migración internacional sobre la asistencia escolar en México: ¿paradojas de la migración?", in Paula Leite y Silvia E. Giorguli (coords.), *México Las políticas públicas ante los retos de la migración mexicana a Estados Unidos*, National Population Council, pp. 313-344.

Giorguli, Silvia, Vargas, Eunice, Salinas, Viviana, Hubert, Celia y Potter, Joseph (2010). "La dinámica demográfica y la desigualdad educativa en México", *Estudios Demográficos y Urbanos* 25 (1), pp. 7-44.

Gutiérrez, Edith, Sánchez, Landy y Giorguli, Silvia (2011), "Accounting for Spatial Heterogeneity in Educational Outcomes and International Migration in Mexico", *Lecture Notes in Computer Sciences*, vol. 6782, part I, p. 192-206.

Hanson, Gordon H. y Woodruff, Christopher (2003), "Emigration and Educational Attainment in Mexico", University of California, in: <http://cpe.ucsd.edu/assets/022/8772.pdf>

Kandel, William y Douglas S. Massey (2002), "The Culture of Mexican Migration: A Theoretical and Empirical Analysis", en *Social Forces*, vol. 80, núm. 3, p. 981-1004.

López Castro, G. (2006). El síndrome de Penélope. Depresión y ansiedad en mujeres en una región de alta migración a Estados Unidos. Conferencia en el 2º Seminario de Migración Internacional: Efectos de la globalización y las políticas migratorias. UAEM, Toluca, 15 a 17 de noviembre.

McKenzie, David and Hillel Rapoport (2006), "Can migration reduce educational attainment? Depressing Evidence from Mexico?", Working Paper, núm. 274, Stanford, Stanford University, <http://www.stanford.edu/group/siepr/cgi-bin/siepr/?q=system/files/shared/pubs/papers/pdf/SCID274.pdf>

Massey, Douglas, Joaquin Arango, Graeme Hugo, Ali Kouaouci, Adella Pellegrino and Edward Taylor (1993). "Theories of International Migration: A Review and Appraisal" in *Population and Development Review*, 19 (3): 431-466.

Meza, Liliana and Pederzini, Carla (2009), "Migración internacional y escolaridad como medios alternativos de movilidad social: el caso de México", *Estudios Económicos* (Special Issue), p. 163-206.

Mummert, Gail, 1988, "Mujeres de migrantes y mujeres migrantes de Michoacán: nuevos papeles para las que se quedan y para las que se van", en Calvo, Thomas y Gustavo López (coords.), *Movimientos de población en el occidente de México*, El Colegio de Michoacán/Centre d'Etudes Mexicaines, Zamora, Michoacán.

Mummert, Gail (1996), "Cambios en la estructura y organización familiares en un contexto de emigración masculina y trabajo asalariado femenino: estudio de caso en un valle agrícola de Michoacán", en López, María de la Paz (comp.) (1996), *Hogares, familias: desigualdad, conflicto, redes solidarias y parentales*, México, Sociedad Mexicana de Demografía, pp. 39-46.

Reichert, Joshua (1982). "Social stratification in a Mexican sending community: the effect of migration to the United States" in *Social Problems*, 29: 422-433.

Zenteno, René (2011), "Recent trends in Mexican migration to US: the Mexico perspective", document presented in the Population Association of America Annual Meeting:
<http://www.somede.org/publicaciones.html>.

Zenteno, René (2012), "Saldo migratorio nulo: el retorno y la política anti-inmigrante", in *Coyuntura Demográfica*, 2: 17-21.
www.somede.org/coyuntura-demografica.

Figures and tables.

Table 1. Selected characteristics of the population under 19 according to their exposure to international migration. México 2010

<i>Characteristics</i>	<i>Without migration experience</i>	<i>Household with migration experience</i>	<i>Household receiving remittances</i>	<i>Return migrant</i>	<i>Born in U.S. with Mexican household head</i>	<i>Migrated during the last five years</i>	<i>Other immigrants</i>	<i>Total</i>
	38,810,677	645,109	1,375,241	68,881	573,616	14,532	40,782	41,528,838
	93.5	1.6	3.3	0.2	1.4	0.0	0.1	100.0
Sex								
Man	50.7	50.1	50.4	48.7	50.5	53.8	50.4	50.7
Woman	49.3	49.9	49.6	51.3	49.5	46.2	49.6	49.3
Age								
0 a 5	30.5	35.8	27.1	3.1	42.8	11.6	26.4	30.6
6 a 12	37.4	34.6	35.4	45.8	40.2	39.6	38.1	37.3
13 a 15	15.8	14.3	18.1	26.0	9.5	18.5	14.2	15.8
16 a 18	16.3	15.3	19.4	25.2	7.4	30.4	21.3	16.3
Place of residence								
Less than 15 000 hab	7.1	12.2	13.2	8.5	9.0	6.8	2.0	7.4
15 000 a 99 999 hab	18.1	29.3	28.2	21.3	19.0	20.0	10.9	18.6
100 000 and more habitants	30.0	35.8	34.3	34.7	32.0	35.4	31.0	30.2
Metropolitan area	44.8	22.7	24.3	35.5	39.9	37.9	56.1	43.7
Migration region								
Border	19.9	12.8	12.9	31.2	46.7	31.2	24.1	19.9
Traditional	22.9	38.7	43.1	35.0	30.4	44.0	14.4	23.9
Central	39.3	37.4	34.9	26.8	19.0	18.3	33.5	38.8
Southeast	17.9	11.1	9.2	7.0	3.9	6.5	28.0	17.3
Prevalence municipal migration								
Low or null	76.5	42.0	40.1	55.3	56.2	52.9	89.8	74.5
Medium	17.4	35.0	30.3	28.8	27.1	29.0	7.6	18.3
High	6.1	23.0	29.5	15.9	16.7	18.1	2.6	7.3

Source: INEGI. Census sample 2010

Table 2. Family residential status of the population under 19 according to their exposure to international migration. Mexico 2012

<i>Characteristics</i>	<i>Without migration experience</i>	<i>Household with migration experience</i>	<i>Household receiving remittances</i>	<i>Return migrant</i>	<i>Born in U.S. with Mexican household head</i>	<i>Migrated during the last five years</i>	<i>Other immigrants</i>	<i>Total</i>
Total	38.810.677	645.109	1.375.241	68.881	573.616	14.532	40.782	41.528.838
Family organization								
Both parents-child of the head	66,9	67,9	30,0	55,4	56,7	58,9	65,0	65,5
Both parents-other relation	6,8	9,1	9,3	4,2	6,8	3,0	1,3	6,9
Only the mother-child of the head	9,7	5,7	27,3	19,4	13,4	21,4	14,6	10,3
Only the mother-other relation	7,2	7,4	15,6	7,7	11,7	8,0	3,9	7,6
Only the father-any relation	2,2	2,4	1,8	3,0	2,4	2,6	3,4	2,2
Neither of the above	7,1	7,5	15,9	10,3	8,9	6,1	11,8	7,5

Source: INEGI. Census sample 2010

Note: In all cases of children who were not children of the head, more than 90% were grandchildren of the head.

Table 3. Estimated probabilities of labor-school enrollment status for adolescents 12 to 18 years old according to their exposure to international migration and family residential status, México 2010.

<i>Variables</i>	<i>Studying</i>	<u>Only Working</u>		<u>Studying and Working</u>		<u>Neither</u>	
	<i>Probability</i>	<i>Probability</i>	<i>Sig.</i>	<i>Probability</i>	<i>Sig.</i>	<i>Probability</i>	<i>Sig.</i>
Men							
Migration experience							
Without migration experience (<i>reference category</i>)	0,657	0,148	**	0,065	**	0,130	**
Household with migration experience	0,618	0,164	**	0,085	**	0,133	
Household receiving remittances	0,670	0,135	**	0,084	**	0,111	**
Return migrant	0,571	0,160		0,073		0,196	**
Born in U.S. with Mexican household head	0,723	0,085	**	0,069		0,123	
Migrated during the last five years	0,436	0,253	**	0,071		0,240	**
Other immigrants	0,442	0,305	**	0,060		0,193	*
Family residential status							
Both parents-child of the head (<i>reference category</i>)	0,274	0,373	**	0,122	**	0,231	**
Both parents-other relation	0,476	0,238	**	0,102	**	0,184	**
Only the mother-child of the head	0,174	0,405	**	0,149	**	0,272	**
Only the mother-other relation	0,388	0,277	**	0,109	**	0,226	
Only the father-any relation	0,086	0,458	**	0,139	**	0,317	**
Neither of the above	0,153	0,428	**	0,133	**	0,286	**
Prevalence municipal migration							
Low or null (<i>reference category</i>)	0,691	0,136	**	0,058	**	0,115	**
Medium	0,615	0,162	**	0,078	**	0,145	**
High	0,573	0,171	**	0,084	**	0,172	**

(continues...)

<i>Variables</i>	<i>Studying</i>	<i>Only Working</i>		<i>Studying and Working</i>		<i>Neither</i>	
	<i>Probability</i>	<i>Probability</i>	<i>Sig.</i>	<i>Probability</i>	<i>Sig.</i>	<i>Probability</i>	<i>Sig.</i>
Women							
Migration experience							
Without migration experience (<i>reference category</i>)	0,736	0,044	**	0,029	**	0,191	**
Household with migration experience	0,707	0,052	**	0,040	**	0,201	
Household receiving remittances	0,765	0,038	**	0,032	**	0,165	**
Return migrant	0,700	0,047		0,039		0,214	
Born in U.S. with Mexican household head	0,799	0,023	**	0,027		0,151	**
Migrated during the last five years	0,721	0,034		0,045		0,200	
Other immigrants	0,493	0,132	**	0,035		0,340	**
Family residential status							
Both parents-child of the head (<i>reference category</i>)	0,487	0,145	**	0,064	**	0,304	**
Both parents-other relation	0,647	0,088	**	0,060		0,205	**
Only the mother-child of the head	0,399	0,191	**	0,100	**	0,310	*
Only the mother-other relation	0,585	0,115	**	0,065		0,235	**
Only the father-any relation	0,361	0,181	**	0,072		0,386	**
Neither of the above	0,144	0,208	**	0,073	**	0,575	**
Prevalence municipal migration							
Low or null (<i>reference category</i>)	0,751	0,039	**	0,025	**	0,185	**
Medium	0,724	0,050	**	0,035	**	0,191	**
High	0,698	0,056	**	0,036	**	0,210	**

** p<0,001, *p<0.01. Test for significative differences with respect to the reference category

Source: INEGI. Census sample 2010

Annex 1. Descriptive statistics of selected sociodemographic variables of teenagers 12 to 18 years old, México 2010.

<i>Variables</i>	Mean or distribution	
	<i>Men</i>	<i>Women</i>
Migration experience		
Without migration experience (<i>reference category</i>)	0.937	0.934
Household with migration experience	0.014	0.015
Household receiving remittances	0.038	0.039
Return migrant	0.003	0.003
Born in U.S. with Mexican household head	0.007	0.008
Migrated during the last five years	0.001	0.000
Other immigrants	0.001	0.001
Family residential status		
Both parents-child of the head	0.706	0.676
Both parents-other relation	0.020	0.020
Only the mother-child of the head	0.131	0.129
Only the mother-other relation	0.034	0.034
Only the father-any relation	0.028	0.023
Neither of the above	0.081	0.118
Prevalence municipal migration		
Low or null (<i>reference category</i>)	0.604	0.600
Medium	0.249	0.249
High	0.147	0.151
Age	14.966	14.929
Household head years of schooling	6.237	6.253
Place of residence		
Less than 15 000 hab	0.346	0.345
15 000 a 99 999 hab	0.322	0.321
100 000 and more habitants	0.179	0.179
Metropolitan area	0.153	0.154

Source: INEGI. Census sample 2010

Annex 2a. Multinomial logistic model coefficients of labor and school enrollment status (*only studying vs. only working*) for adolescents 12 to 18 years old according to their exposure to international migration and selected characteristics, México 2010*

<i>Variables</i>	Men		Women		Men		Women	
	<i>Coefficient</i>	<i>Standard Error</i>	<i>Coefficient</i>	<i>Standard Error</i>	<i>Coefficient</i>	<i>Standard Error</i>	<i>Coefficient</i>	<i>Standard Error</i>
Migration experience								
Without migration experience (<i>reference category</i>)								
Household with migration experience	0.1281	5.2200	0.1811	5.1900	****	****	****	****
Household receiving remittances	****	****	****	****	-0.1070	-6.8300	-0.1715	-7.4400
Return migrant	0.1035	1.5000	0.0863	0.8000	0.0904	1.3100	0.0643	0.5900
Born in U.S. with Mexican household head	-0.6138	-11.5500	-0.6465	-7.7700	-0.6286	-11.8200	-0.6710	-8.0600
Migrated during the last five years	0.6829	5.8100	-0.2509	-0.8800	0.6706	5.7000	-0.2736	-0.9600
Other immigrants	0.9315	6.2900	1.1896	6.0000	0.9261	6.2500	1.1813	5.9500
Family residential status								
Both parents-child of the head (<i>reference category</i>)								
Both parents-other relation	-0.6521	-22.5600	-0.5731	-12.2600	-0.6488	-22.4400	-0.5678	-12.1500
Only the mother-child of the head	0.1251	12.5600	0.3184	21.9800	0.1328	13.2300	0.3312	22.6200
Only the mother-other relation	-0.4475	-21.2000	-0.2779	-8.8200	-0.4408	-20.8700	-0.2674	-8.4800
Only the father-any relation	0.3490	17.9800	0.2589	7.6600	0.3508	18.0700	0.2617	7.7500
Neither of the above	0.2190	18.5100	0.4267	27.2600	0.2261	19.0300	0.4372	27.8700
Prevalence municipal migration								
Low or null (<i>reference category</i>)								
Medium	0.1977	23.9800	0.2466	19.2600	0.2053	24.8500	0.2595	20.2200
High	0.2480	24.6500	0.3419	21.9500	0.2681	26.1300	0.3754	23.5800
Age	0.6869	354.9100	0.7049	221.3300	0.6869	354.9000	0.7052	221.4100
Household head years of schooling	-0.1250	-61.9800	-0.1091	-40.4200	-0.1251	-62.0400	-0.1094	-40.5200
Place of residence								
Less than 15 000 hab (<i>reference category</i>)								
15 000 a 99 999 hab	0.1354	16.6000	0.2029	15.3600	0.1351	16.5700	0.2026	15.3400
100 000 and more habitants	0.0419	4.0200	0.3655	23.2800	0.0416	4.0000	0.3648	23.2300
Metropolitan area	-0.1686	-12.5800	0.3133	15.9300	-0.1687	-12.5800	0.3129	15.9100
Constant	-3.1436	-250.8100	-4.8319	-228.5200	-3.1418	-250.8000	-4.8298	-228.6500
Log likelihood								
Pseudo R ²								
Total of cases								

* Robust standard errors corrected by cluster within the households

Source: INEGI. Census sample 2010

Annex 2b. Multinomial logistic model coefficients of labor and school enrollment status (*only studying vs. studying and working*) for adolescents 12 to 18 years old according to their exposure to international migration and selected characteristics, México 2010*

<i>Variables</i>	Men		Women		Men		Women	
	<i>Coefficient</i>	<i>Standard Error</i>	<i>Coefficient</i>	<i>Standard Error</i>	<i>Coefficient</i>	<i>Standard Error</i>	<i>Coefficient</i>	<i>Standard Error</i>
Migration experience								
Without migration experience (<i>reference category</i>)								
Household with migration experience	0.2788	7.3000	0.3406	6.7000	****	****	****	****
Household receiving remittances	****	****	****	****	0.2666	11.2700	0.1195	3.5500
Return migrant	0.0998	0.9300	0.3069	2.1700	0.1204	1.1200	0.3097	2.1900
Born in U.S. with Mexican household head	0.0413	0.6700	-0.0517	-0.5800	0.0635	1.0300	-0.0486	-0.5500
Migrated during the last five years	0.0693	0.2800	0.4585	1.7100	0.0889	0.3500	0.4618	1.7200
Other immigrants	-0.1083	-0.4300	0.2086	0.6800	-0.1004	-0.4000	0.2095	0.6800
Family residential status								
Both parents-child of the head (<i>reference category</i>)								
Both parents-other relation	-0.1854	-4.3200	-0.0635	-1.0400	-0.1976	-4.6000	-0.0688	-1.1200
Only the mother-child of the head	0.2603	16.6900	0.5047	24.8700	0.2295	14.4400	0.4896	23.7000
Only the mother-other relation	-0.1095	-3.4500	0.0276	0.6400	-0.1316	-4.1400	0.0180	0.4100
Only the father-any relation	0.1574	4.7200	0.1324	2.5200	0.1534	4.6000	0.1315	2.5100
Neither of the above	0.1236	6.1100	0.1464	5.3100	0.0988	4.8500	0.1395	5.0500
Prevalence municipal migration								
Low or null (<i>reference category</i>)								
Medium	0.3160	23.0800	0.3218	16.6700	0.3080	22.4500	0.3225	16.6700
High	0.4268	25.5200	0.3667	14.9600	0.3954	22.9300	0.3601	14.1900
Age	0.2578	93.5000	0.3181	76.8700	0.2575	93.3400	0.3179	76.8300
Household head years of schooling	-0.0096	-11.3200	-0.0030	-3.5600	-0.0094	-11.1800	-0.0029	-3.4900
Place of residence								
Less than 15 000 hab (<i>reference category</i>)								
15 000 a 99 999 hab	-0.0012	-0.0800	0.1320	6.2800	0.0000	0.0000	0.1323	6.2900
100 000 and more habitants	0.1299	8.0100	0.3474	14.9700	0.1312	8.0800	0.3472	14.9700
Metropolitan area	0.0625	3.4000	0.4015	15.8800	0.0636	3.4600	0.4015	15.8800
Constant	-3.5692	-222.4100	-4.8280	-195.6200	-3.5665	-222.4700	-4.8233	-195.5200
Log likelihood								
Pseudo R ²								
Total of cases								

* Robust standard errors corrected by cluster within the households

Source: INEGI. Census sample 2010