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The Relationship Between Employment in Maquiladora Industries in Mexico and Labor Migration to the United States

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Working Paper Based On Research at CCIS in 2005

Introduction:

While an extensive literature has developed in the forty years since export processing began in northern Mexico, very little research has addressed the relationship between maquiladora employment and labor migration to the United States. Those doing research on export led industrialization in Mexico do not usually ask whether people working in this sector migrate to the United States to work. Likewise, those who focus on Mexican migration north pay little attention to the role maquiladora employment might play in a person’s decision to cross the border to work. Exceptions to this pattern usually occur in research sponsored outside of Mexico. For example, the first major study with this focus was carried out by Seligson and William’s in the late seventies, and found that 15% of maquiladora workers surveyed had previously migrated to the United States. Having made one trip north of the border increased their desire and readiness to return. One of the main problems with this and the other studies which exist is that they do not collect data in the United States, where permanent settlers would be located.

In this paper we look at if, how and why those with maquiladora working experience cross the border to work in the United States with survey data gathered all along the border in northern Mexico and also with twenty in-depth interviews in the San Diego-Tijuana area. The paper begins with an analysis of survey data collected in Mexico between 1993 and 1997, and then moves to an analysis of more qualitative interviews on both sides of the border, administered in 2005. The secondary analysis of data introduces findings which can be explored in more depth with the interviews. The secondary analysis permits the comparison of international migratory patterns of those with different occupational experience, especially agricultural migrants, historically among the most plentiful, with those having worked in maquiladoras. The earliest year in which any of those interviewed in depth

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1 The author would like to gratefully acknowledge the Centers for Comparative Immigration Studies and for U.S.-Mexican Studies, UC, San Diego, for their support during this project. Access to the EMIF data was granted by El Colegio de la Frontera Norte, with particularly helpful assistance from Francisco Barraza and Victor Barraza. Donald Kerr’s methodological advice was very helpful and the author is grateful for his feedback. The author would also like to acknowledge Blanca Torres excellent work in helping the author carry out the in-depth interviews. While these institutions and people, and others, improved the quality of this work, any errors or shortcomings are the responsibility of the author.

crossed to work was 1991, and the latest was six months ago in 2005, so that these data are more current.

Theoretical background and previous findings:

There are two major opposing conceptual formulations which may serve as a hypothesis and its null form. Sassen proposes that “there are many distinct Mexican immigrations” and that “the Border Industrialization Program, ... [has] promoted the formation of a new Mexican immigration, distinct from those of the past.”\(^3\) She sees export processing production such as that done in maquiladora industries uprooting people from their traditional forms of existence and creating an urban reserve of wage laborers. The main form of disruption in prevailing work structures is the recruitment of young women into industrial jobs, causing male unemployment. It also removes women from unpaid work in rural areas, making it necessary for men who depended on their labor to migrate. Moreover, foreign investment such as that in maquiladoras has a cultural and ideological effect, making “emigration an option not just for those individuals employed in the new industrial zones but for the wider population as well.” (p. 222)

Using data collected in the eighties, Carrillo found support for a ‘two step’ or ‘trampoline’ process, with Mexicans first migrating from the interior to the north where they worked in maquiladoras, and then later crossing the border to work in the United States\(^4\). Or, it was suggested that after the first move from the interior, a new household was set up in the north, from which male family members would migrate to the United States while their female kin remained behind. Those remaining in Mexico at the border might follow northward later in a third step. In the meantime, they supported themselves and dependent family members via maquiladora employment, which also provided social benefits such as health care, supplemented by remittances when available.

The null form of the hypothesis discussed above is often put forward by Mexican government and industry spokespersons, who tend to argue that maquiladora employment curbs or stops international migration. Then President Carlos Salinas de Gortari, said in his 1990 announcement of NAFTA’s negotiation, that “Mexico wants to export goods, not people.”\(^5\) The “goods” referred to by Salinas are largely produced in Mexico’s export processing industries, which have become the main form of industry in Mexico. Salinas’s words reflect his government’s policy for curbing legal migration and stopping illegal migration to the United States by providing jobs at home through maquiladora industrialization. A decade later, Don Nibbe, the well known editor of a journal promoting maquilization, made a similar, albeit more modest, claim, saying “The maquila industry has ... helped keep undocumented immigration less than it would be without it.”\(^6\) The suggestion is that maquiladoras would act as a sponge to absorb labor or an ‘economic fence’ to prevent it from crossing border.

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Mexican researchers who have addressed the relationship between maquiladora employment and migration to the United States tend to argue that Mexicans who work in maquilas are not international migrants. Cruz, for example, analyzing some of the same data I am using in this paper, concluded that “results from the EMIF showed that the Mexican migrants who have crossed the border to the U.S. have not primarily been attracted by the maquila before crossing.” He presents no empirical evidence to support this conclusion in this publication. In fact, the data sets we are both using are not well suited to come to this conclusion, since they exclude border city residents, as elaborated in the next section.

A middle position has been suggested by economic theorists who argue that international trade (e.g. maquila imports and exports), capital flows (e.g. foreign investment in maquiladoras), and international migration (almost all Mexican international migration is to the United States) are not necessarily alternative outcomes of the restructuring of economies such as Mexico’s. They may, in fact, be complementary outcomes, occurring simultaneously. While maquiladora industries became a major contributor of jobs in Mexico in the eighties and nineties when the Mexican government abandoned its policies of import substitution and instead adopted those promoting export led development, the downsizing and closure of domestic industries contributed to high unemployment in the center of Mexico which had been historically the most industrialized part of the country. The promotion of agricultural exports via land reform also created high unemployment among subsistence farmers. In fact, more jobs were lost in traditional sectors of the economy than created via maquiladoras, reinforcing the need of Mexicans to leave their country to earn a living.

Another conceptualization of the complementarity of maquiladora employment and international migration is Tello’s (1996) suggestion that maquiladoras are not really exporting manufactured goods. Instead, they are selling Mexican labor indirectly in the United States. This is because the goods maquiladoras produce are largely made up of imported parts, since less than 2% of all inputs comes from within Mexico. Almost all the value added in Mexico comes from wages paid to maquila employees, so that maquila products represent the export of Mexican labor without it ever having to leave the country. Living labor is understood by some theorists to be congealed in the commodities produced in maquilas. These commodities, containing ‘dead’ labor, are exported for sale to the United States. Most tax is paid on them where they are sold, and not in Mexico. In this sense, maquiladora owners have constructed a reserve labor force in Mexico for the U.S. economy which transfers value out of Mexico. On the basis of this conceptualization, it could be hypothesized that during maquiladora recessions, such as the worst one from 2000-2004, the indirect export of labor via maquila products becomes a direct labor export via the migration of former maquiladora workers who had lost their jobs to the US to work.

Data and Methodology:

Every year since 1993, El Colegio de la Frontera Norte, in conjunction with the Mexican Secretary of Labor, and the National Council on Population, has conducted a survey of people migrating within Mexico and to the United States, called the Encuesta sobre Migración en la Frontera Norte de México (EMIF). In the first phase, administered during 1993 and 1994, interviews were conducted in 18

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Mexican cities spanning the width of the border. Thereafter, the number was reduced to eight: Tijuana, Mexicali, Nogales, Ciudad Juárez, Piedras Negras, Nuevo Laredo, Reynosa and Matamoros. In each of these locations, people were interviewed in bus stations, airports, railway stations, international bridges, and Mexican customs inspections points and gates. A random sample was also taken of those returned by the US border patrol.\textsuperscript{10}

The EMIF data bases can be analyzed to learn something about whether those with maquiladora work experience in Mexico are likely to migrate to the US, but they are very limited. The surveys are categorized by those who collect the data into four migratory streams or currents, and in three of them, people who live in the border city where the interview takes place are not interviewed. Since the border cities where the interviews are done almost all have large maquiladora labor forces, it can be assumed that if Mexicans with work experience in this sector do migrate internationally, many would live in these cities. In none of the four currents are informants asked about their past work experience in Mexico if they said they lived in the United States. Thus, we cannot find out from these data if migrants who succeeded in migrating north of the border had previously worked in Mexico or the sector in which they were employed.

Only one of the four migratory currents, those returned by the border patrol, were interviewed if they lived in the border city where the interview took place\textsuperscript{11}. The data on this current are also limited due to questionnaire construction, since those who live in the city where interviewed are not asked about work activity in the city where they crossed the border. Neither are those who said lived in the United States asked about work history. For these reasons, people returned by the border patrol who previously worked in a maquiladora in Mexico are underestimated. Keeping this drawback in mind, these data bases do allow for some investigation of the relationship between maquiladora employment and migration to the US, since all informants attempted, albeit unsuccessfully, to cross the border, and thus are potential international migrants. The vast majority of the informants in the other three migratory currents said they had never crossed the border to work and did not intend to on their current trip within Mexico. This finding, however, is probably artifactual, since as noted above, residents of cities where the questionnaires were administered were excluded.

\textsuperscript{10} According to Liza Davis, the Public Affairs Officer at the U.S. Consulate General in Tijuana, Mexico, the United States does not have the capacity to prosecute all those found within the country without proper documents and legally deport them. The practice is to return those found without documents without processing them, arresting people only if they are recognized as having tried to cross a large number of times in a short period. There is no hard and fast rule about how long undocumented people have to be in the United States before they are prosecuted and legally deported. (Personal communication, May 24, 2005)

\textsuperscript{11} Secretaría del Trabajo y Previsión Social, Consejo Nacional de Población, El Colegio de la Frontera Norte, México, 1997. Encuesta sobre Migración en la Frontera Norte de México 1993-1994. México: Secretaría del Trabajo y Previsión Social. All of the EMIF reports’ introductory notes (p. 16 in phase I &II), say the following about who was interviewed in this current (author’s translation): Persons delivered by the US border patrol to Mexican migration authorities, in one of the points established along the border line. It is important to make some comments about this population:

- It includes migrants of other nationalities, such as El Salvadorans, Guatemalans and others, who are captured the same way in their attempt to get into the US
- It underestimates those under 18 years old, since these are frequently delivered to Mexican consulates in the US, which are in charge of their repatriation.
- It includes residents of [Mexican] border cities, measuring partially (since it only considers those apprehended) the phenomenon of local migration or transmigration [commuting: living in Mexico and working in the US daily].
- It includes persons whose displacement to the other side [US] of the border is not due to work reasons (shoppers, people visiting family or friends, etc.) Although not numerically important, the questionnaire contains ways of permitting them to be differentiated, and for some analyses, eliminated.
Phases one (1993-1994), two (1994-95), and three (1996-97) of the questionnaires administered to those returned by the border patrol contain items which specifically ask informants about work history and include maquiladora employment in the closed ended answers. Later phases only ask whether informants worked in industries, and it cannot be assumed that all industries in Mexico are maquiladora industries. Tijuana, for example, has a substantial proportion of non-maquiladora industries. For this reason, only the first three phases of the EMIF are analyzed in this paper.

While the researchers carrying out the EMIF explain how sampling is random for those returned by the border patrol, it cannot be assumed that the data bases are random samples of all those attempting to cross the border without proper documents, since the universe is unknown. Even as a random sample of those returned by the border patrol, it is limited since the unit of analysis used in the EMIF is movement of people, not individuals. As Anguiano points out in her article analyzing phase one of those deported, migrants returned by the border patrol may try to cross unsuccessfully several times in a short time period, and if returned frequently, could have been interviewed more than once. The notes introducing all of the EMIF reports (p. 16 in phases 1 and 2) indicate that the questionnaire contains ways of estimating how many informants may be the same person interviewed more than once.

There are precedents in previous research on undocumented migrants which show that something can be learned from data sets which may duplicate individual cases. Bean et al. for example, disagree with arguments that data on apprehended undocumented immigrants lack utility because some persons are apprehended more than once. Instead, they make the case that such data provide a reflection, albeit a partial one, of illegal crossings, their volume, and changes in them over time.

In order to get a more recent picture of if and how those with maquiladora work experience are labor migrants to the United States, and to include those who had settled north of the border, I carried out in-depth interviews in the San Diego-Tijuana region, twenty of which are reported in this paper. This permitted the construction of survey items more directly focused on this investigation’s themes, and allows the addressing of questions which arise from analysis of the EMIF data. In order to construct a sample of those with work experience in both maquiladoras in Mexico and in the United States, the author asked for referrals from community organizations which might be in contact with them, such as US educational institutions serving immigrant populations and groups supporting maquila workers in Mexico. Other researchers and research institutions were also asked for and gave referrals. After this

13 In phase 1, almost a quarter (24.1%) of all informants said they had crossed on their first attempt, and another 51% said they had only made one previous attempt. The average number of attempts to cross before getting into the US does not vary much by work experience, although those with maquiladora experience report among the lowest average number of previous attempts. The results are similar for phase two, with 21% of all the deported saying they had crossed on their first attempt and 52% saying they had tried once before. In phase two, maquila workers have a lower average number of attempts to cross (1.1) in comparison with the entire sample (2.5). In phase three, the average number of attempts to cross by all the deported rose to 3. In order to guard against having the findings skewed by the possibility of an individual being interviewed more than once, all analyses were completed for the sample as a whole and for those who crossed on their first attempt. Only those findings which show the same relationships among variables for both groups are reported.
beginning, a snowball method brought more respondents. The size of a snowball sample is determined by reaching a saturation point where information is being repeated by respondents. Since this point has not yet been reached, interviews will continue. However, preliminary findings from twenty of the interviews already completed round out the picture sketched with the secondary analysis of data, and are therefore included in this working paper.

The San Diego-Tijuana region is a good one for finding research participants for a study such as this one for several reasons. Tijuana has historically had the largest number of maquiladora plants compared with other Mexican cities. The border area between Tijuana and San Diego has historically been one of the most important crossing areas for Mexican migrants, since it is the most urbanized on both sides of the border, and provides many employment opportunities. There is also a large stock of people north of the border with Mexican roots, facilitating the blending of new Mexican immigrants. Of course, findings from interviews here cannot necessarily be generalized to other places. However, we know so very little about the phenomenon under study that in depth interviews using a non-random sample are appropriate since they permits us to develop conceptual models grounded in empirical findings.

An equal number of men and women were interviewed, with four of the men and two of the women having had highly skilled or professional jobs in the maquiladora sector in Mexico—mostly in engineering and management. These people also worked in professional jobs north of the border, with the exception of one working at home child rearing, who intended to return to paid professional work. Almost all of the other respondents had held several maquiladora jobs, usually starting with assembly, and working their way up over time, as described in more detail below. Five of the women worked in private homes north of the border, doing house work and/or taking care of dependent household members. Two other women worked semi-professionally in services. One man still worked in a Tijuana maquiladora, but crossed whenever a carpentry shop in which a relative worked could employ him. Other men worked in construction, grocery stores, and restaurants.

Interviews were carried out in places convenient for the respondent throughout the region, often close to their workplace or home. Six of the participants lived in Tijuana, and four were interviewed there. Of the six who lived in Tijuana, two were commuters, three had returned from previous US employment, and one maquila manager had just bought a house in an upscale Mexican-American neighborhood in Chula Vista to which his family would soon be moving. Other interviews were conducted in San Ysidro just north of the border, National City, Barrio Logan which is home to a large Chicano population, as well as mid-town and uptown San Diego. Except for the manager interviewed in Tijuana, most professionals were interviewed in the Rancho Bernardo and Golden Triangle areas of San Diego, home to many large multinational corporations. All of the professionals except two had worked for the same large multinational corporation on both sides of the border whose origin of capital is Asia. The interviews were conducted from March to July of 2005, and took an hour to an hour and a half, on average.

Preliminary Findings:

(A) The secondary analysis demonstrates that Mexicans with maquiladora work experience do attempt to migrate internationally. The in depth interviews show that information about getting and using documents to cross to work is circulated in the maquiladora work place, and that the administrators of maquiladoras provide proof of employment necessary to get laser visas.

Table 1 below shows that, as might be expected, those who did not work in the thirty days before starting their trip comprise a larger group than any occupational group employed during that time. Among those who worked where they lived, and who worked in the city where they crossed the
border, maquila workers are the fifth largest occupational group returned by the border patrol in phase one and the sixth largest in phases two and three. When we add the data for all three phases together, they are the fifth largest during this four year period. Maquiladora workers may be underrepresented in this table because they are not caught as often due to their possession of documents, such as the visa fronteriza, which is relatively easy for border residents to get, or the laser visa, which their maquiladora employers assisted them in acquiring. Mexicans can enter the United States legally with such documents to shop, visit, and travel certain distances, but some then work in the US even though not permitted to do so by such documents.

Table 1: Last job before leaving home or at the border before crossing:

<table>
<thead>
<tr>
<th>Labor Sector</th>
<th>Force 1993-97</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>4391</td>
</tr>
<tr>
<td>Construction</td>
<td>3205</td>
</tr>
<tr>
<td>Business</td>
<td>1723</td>
</tr>
<tr>
<td>Domestic Industry</td>
<td>1415</td>
</tr>
<tr>
<td>Maquila Industry</td>
<td>868</td>
</tr>
<tr>
<td>Technical/Prof</td>
<td>862</td>
</tr>
<tr>
<td>Other</td>
<td>2397</td>
</tr>
<tr>
<td>Did Not Work</td>
<td>5320</td>
</tr>
</tbody>
</table>

Many people interviewed in depth said that a common strategy for crossing the border to work was to get a job in a maquiladora, and wait six to eight months until one received one’s pink social security card, which they then used to apply for a passport. Even those who never intended to cross the border to work often end up following this pattern. One of the women interviewed in Tijuana who had crossed three different times to work, came from Veracruz originally with no plans to cross. In the quotation below she describes how she was convinced to get a passport and use it to work in the US by her fellow maquiladora workers.

Well, in the maquila, I heard compañeras saying excitedly, “yes, yes I’m going to get my passport.” And they got it and they gave it to them. Since we would have chats together over lunch, they encouraged me and would tell me: “go ahead, do it.” Then, I decided. I went and I did it, but did not even know for a while if they had given it to me. One does not find out, nor get it right away. What happens is that one goes, does the request and fills out the paperwork…. Afterwards, they sent me to certain office to get an appointment, so I went and that’s when they finally told me that they were going to grant me the passport. I honestly did not know whether they were going to give it to me or not, nor had I any illusions. Back then [1996] it was not as bad as today; they are very expensive at this point; thus, when people get denied nowadays, they feel a lot of despair since they had such useless expense. … At first I only used it to cross to shop, and not to work. But time after time, people told me, you should use it to work. Then I had lost my job. Being unemployed was what really pushed me to cross to look for work.

As this quotation implies, getting a passport can be difficult for Mexicans, and many are rejected when they apply. This is especially true for recent migrants, since proof of residency for a specified length of time is required.

A man who migrated from Veracruz to Tecate with the explicit intention of crossing to work after spending some time in a maquila applied for a passport, and his application was turned down. Then, he applied for a laser visa from the US consulate. A letter of recommendation from one’s employer is required, and when he asked the administrators of the maquila in which he worked in Tecate, they gave him one. Many of those interviewed had asked for and received such letters from their maquiladora employers. He quit his maquila job a week after receiving his laser visa and crossed to the US with his wife, never to return. Once in possession of a passport or a laser visa, many of those interviewed crossed the border saying they were going to shop or visit. It is easy to buy false social security and green cards north of the border, and most employers accept them as valid even if they are obviously fake. Ruiz argues that those who are able to get visas from the US are usually middle class border residents, since you have to show you have a stable job, a middle income, and have resided in your home for some time.\(^{16}\)

\(\text{(B)}\) The secondary analysis of quantitative data shows that maquiladora workers, like workers from other sectors of the labor force, are potential labor migrants. The more qualitative approach north of the border shows that it is quite possible for them to continue working north of the border and not return to Mexico.

The null hypothesis referred to above is that maquiladoras provide jobs in Mexico so that people do not have to migrate to the United States to work. To clarify if respondents working in each labor force sector crossed the border to work, or for some other reason, that is, to assess the sending strength of each sector, we look next at the most important reason for crossing the border. Table 2 below shows that among those returned by the border patrol during the four years for which data are available, a large majority of those working in all labor force sectors said the main reason they crossed was to work or look for work. Other reasons for crossing included visiting friends and relatives, shopping, and traveling. For those who had experience working in maquiladora industries, almost three quarters (72\%) said they crossed to work or look for work, indicating that the maquiladora sector is a strong sender of labor migrants to the United States.

**Table 2: Mexicans crossing the border to work or look for work by labor force sector.**

<table>
<thead>
<tr>
<th>Labor Force Sector</th>
<th>1993-1997</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>96%</td>
</tr>
<tr>
<td>Construction</td>
<td>92%</td>
</tr>
<tr>
<td>Business</td>
<td>83%</td>
</tr>
<tr>
<td>Domestic Industry</td>
<td>84%</td>
</tr>
<tr>
<td>Maquila Industry</td>
<td>72%</td>
</tr>
<tr>
<td>Technical/Professional</td>
<td>83%</td>
</tr>
<tr>
<td>Other</td>
<td>83%</td>
</tr>
</tbody>
</table>

Of the twenty people interviewed in depth, eighteen said they had come to the United States for work reasons, and only two immigrated for non-work reasons. However, both intended to work in the United States at some future date after they secured the proper documents. Both were professionals

married to US nationals who immigrated right after their weddings, quitting their maquila jobs in Mexico. One of the two had tried very hard to get an internal transfer within his company, since it had operations on both sides of the border. His company had a policy which in general discouraged transfers across the border, but would consider requests on a case by case basis. He knew of people who had been internally transferred. He made several requests, but his manager in the maquila did not want to let him go, and his requests were denied. For this man, commuting from the United States back to his maquila job in Mexico was out of the question when he first married and started the immigration process, because when a person is becoming a permanent US resident, it is prohibited to leave the country. Both of those who crossed after marrying, however, worked a few years after crossing for the US branch of the company to which the maquila plant belonged. Both said their experience in the Mexican maquila helped them get their US jobs, since they were working in branches of the same multinational corporation and had learned a great deal in their maquila jobs which was transferable. They even worked in communication with some of the same people they had previously in Mexico.

Of those who lived in the US, only one said he might go back to Mexico to work in the future, if he could get the top kind of job he wanted in a Mexican branch of his multinational firm. All of the others said they would not go back, often because their family was now settled here. Among those who had not had managerial positions in maquilas in Mexico, but more ordinary jobs, the reason was the low wages and lack of opportunities to get ahead in maquiladora industries. Even if they did return to Mexico, they said they would not work in a maquiladora again.

Turning back to the EMIF data, the 72% of those in Table 2 with maquila experience crossing to work or look for work is notably lower than those in other sectors. This may be due to the fact that the current of those returned by the border patrol includes commuters. Commuters may still work in maquiladoras, but cross on days off or holidays to shop or visit relatives. Migrants from the interior may be more likely to cross for work reasons, rather than to shop or visit, since they come from farther away with the intention of crossing to work. This was tested by seeing how many informants in each occupational group said they lived in the city where the interview took place.

**Table 3: Residents of city where interviewed by labor force sector (1993-1997)**

<table>
<thead>
<tr>
<th>Labor Force Sector</th>
<th>Lived Where Interviewed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>4%</td>
</tr>
<tr>
<td>Construction</td>
<td>27%</td>
</tr>
<tr>
<td>Business</td>
<td>27%</td>
</tr>
<tr>
<td>Domestic Industry</td>
<td>18%</td>
</tr>
<tr>
<td>Maquila Industry</td>
<td>63%</td>
</tr>
<tr>
<td>Technical/Professional</td>
<td>30%</td>
</tr>
<tr>
<td>Other</td>
<td>33%</td>
</tr>
<tr>
<td>Did not work</td>
<td>26%</td>
</tr>
</tbody>
</table>

(C). *Table 3 above shows that those who worked in a maquila in the thirty days before their trip were much more likely to live in the city where interviewed, than those who worked in other sectors. They are either commuters who still are employed in maquilas and have crossed on their days off or holidays, or they were fired from or quit working in maquilas during the thirty days before starting their trip. The most striking difference in this table is between those with maquila experience, 63% of whom lived in the interview city, and those with agricultural experience, only 4% of whom lived in the interview city. This is evidence of the new kind of urban labor force of potential migrants created by*
export processing industries which Sassen predicted. The occupational sector sending the smallest number who live in the city where they were interviewed, agriculture, is the traditional sending sector of migrants from Mexico to the United States, and the one about which most research has been done, according to Cornelius, and Cornelius and Martin.\textsuperscript{17}

Five of the twenty people interviewed in depth had experience commuting across the border to work, and their accounts help to understand how commuting may or may not lead to a more permanent move across the border. The qualitative data show that if a commuter can get documents to legally work north of the border, and has a job which pays enough to live in San Diego county (and/or family to share living expenses), there is a tendency for the commuting process to become a permanent move. Only two of the five with commuting experience had documents permitting them to work in the United States. One of them, the man described above who immigrated after marriage, had commuted from his home in northeast San Diego daily as the top manager of an Asian origin maquila that had moved from the area near his home to Tijuana. When his wife was about to give birth to their first child, he quit that job and got another north of the border, wanting to be closer to home. The other commuter with documents permitting US employment had been crossing the border daily to work for four years, but couldn’t afford to bring his family. He had been employed in construction for the last three years at the apprentice level, and looked forward to wage increases in the next two years when he became a journeyman. At that point he thought he would be able to afford to move his family of three to the US side of the border, which he wanted to do so his ten year old could attend US schools, and so he could spend less time waiting in line to cross every day.\textsuperscript{18} One woman had commuted on a tourist visa daily for the last fifteen years to clean houses, but was in the process of getting her permanent residency, when she intended to move to the US side with her daughter who already lived there. She wanted to avoid long waits at the border as well. Of the three people described in this paragraph, the first was now a US citizen, the second wanted to be in the future, and the third hadn’t thought about it.

The two remaining respondents with commuting experience had documents which allowed them to cross the border legally, but not to work. One had a tourist visa and the other a laser visa, both of which they had attained with support from maquiladora employers. They were motivated to find work in the US, as a housekeeper and a carpenter, when they lost their maquila jobs due to plant shutdowns and relocation within Mexico. They had started at the bottom and worked their way up over many years in their last major maquila job, with the carpenter having become a mechanic and the housekeeper the head of an assembly line. Their experience of upward mobility within their respective plants was not transferable, however, and they were unwilling or unable to go back to entry level jobs in other maquilas, since it would have cut their wages approximately in half. Moreover, they were somewhat dissatisfied with the idea of working only in the maquila sector because of perceived unfairness in the plant closings. They were due a large amount of money in compensation according to Mexican labor law, but their previous maquiladora employers were unwilling to pay what they believed they deserved. They had taken their cases to the Tijuana Labor Board, were not satisfied with the outcome, and were still petitioning for more money with former fellow workers.


\textsuperscript{18} At the time of the interview, waiting in the line in Mexico to cross into the US by car could take on average over an hour on good days. If immigration authorities had intelligence on impending smuggling, they often looked more thoroughly at those crossing and their vehicles, which could lengthen the wait to two or three hours.
They crossed the border on Monday and slept at their workplaces at no monetary cost to them, returning to Tijuana at the end of the week. They feared that if they crossed daily, immigration inspectors would find out they were working. Neither of them could afford to move their families to the United States, and both said they preferred not to, since they anticipated being discriminated against and hunted by the border patrol. Both said they would probably legalize their status in order to work in the US if they could, but said they didn't have friends or relatives who could help them do it, so it seemed unlikely. To avoid apprehension and incurring expenses, neither of them left their workplaces in the evening. Both missed their families, but believed the money they earned was well worth it. The carpenter earned about as much in one hour as he did in one day at the entry level maquiladora job he held simultaneously, and the housekeeper earned almost triple what she would going back to an entry level maquila job. For these two people, their lack of documents permitting employment and their relatively low wages prevent them from moving to the US, but they both said they intended to continue commuting.

D. Past international migratory experience and future plans.

Among those deported by the border patrol, maquiladora workers, like those from other sectors of the labor force, say they intend to cross again in the next 7 days. There is little difference among occupational groups in their responses to weather they intend to cross into the US again in the next seven days. In the first phase, 1993-1994, a little over half said that they intended to re-enter in the next week. In the second and third phases, it rose to about two thirds. Maquiladora workers are not very different from those with other work experience in this intention.

There is little difference between the number of times (excluding the last) that maquiladora workers have crossed into the US to work in comparison to all those returned. Over half have never gone to work in the US. This was their first attempt. The average number of attempts, not counting the most recent failed one, was between 2.5 and 3.5 for all occupational groups.

The picture sketched when we look at the qualitative data from those who have successfully crossed the border to work shows that it is quite possible for those with maquiladora work experience to decide to permanently move to the US to work, or to make different trips when they need to and there is the opportunity. Having documents permitting US employment makes a long term move easier, but not having such documents does not prevent it. Ten of the twenty interviewed had crossed the border only once, and in most cases many years ago, having settled in the United States. Five of them had documents permitting them to work when they crossed. One of the other people crossing only once when she married a US national worked in the US after waiting six months to get her documents. Three others who had crossed only once some time ago had a document permitting them to enter the country, but not to work. Only two men had crossed once with no documents. Among the other nine who had crossed more than once were two commuters, and the rest had made more than one trip to work in the US, each lasting many months or years.

Only two men out of the twenty in depth interviews had ever been apprehended by the border patrol and returned to Mexico. One crossed successfully six months ago, when an uncle in the US found a coyote who helped him via a very difficult thirteen hour hike over hills. Another man had come to Tijuana eighteen years ago with male friends from Morelos, planning to cross undocumented into the US to work. They hired a coyote at the bus station, who did not deliver them to the promised destination, but dropped them off very near the border where they were apprehended and returned. Later, when he was working in a Tijuana maquila, a fellow worker convinced him to try walking across with him, but they were also apprehended. He is the commuter described above who works in San Diego in carpentry when he can while also having a full time maquila job.
E. Origin. Most of those returned by the border patrol during this period are probably not migrants traveling only within Mexico, i.e. internal migrants, since the correlation between the city where they were born and the city where they lived was quite high (r=.8). Those who were not born where they lived were almost all born within the same state where they lived. The exception was those living in Baja California, the majority of whom had not been born there, but throughout Mexico. This reflects Baja California's reputation as the most frequent crossing point along the border, even during these years which marked the beginning of Operation Guardian and increased enforcement by the border patrol.

There was not much difference among occupational groups, with those most likely to live in their birth city having agricultural work experience (r=.9) and those least likely having maquiladora factory experience (r=.7). Although the difference between agricultural workers and maquila workers on this indicator is small, it is interesting that the greatest difference in occupational groups parallels the finding reported above that they are the most different on whether they live in the interview city. As Cornelius and other researchers have shown, agricultural migrants do not stop in border cities to work before crossing into the US.

The six northern border states were the home of 50% of all informants in phase one, 40% in phase two, and 42% in phase three. However, substantially fewer were born at the northern border. In phase one, only 35% were born in the six border states, in phase two 32% and in phase three 29%. In all three phases, the places of birth ranking third and fourth for all informants were the states of Guanajuato and Michoacan, interior states traditionally sending agricultural migrants.

If we compare the origins of those with maquiladora work experience to those with agricultural experience, maquiladora workers are found to be much more concentrated in their origins and are more likely to come from the northern border region. In all three phases, 50% of maquiladora workers were born in the six northern border states and 75% lived there, higher proportions than for the sample as a whole. For agricultural workers, the three highest ranking states of origin are Guanajuato, Michoacan, and Oaxaca, but their concentrations there are much smaller than the concentration of maquila workers at the northern border. In phase one 25% of agricultural workers were born and lived in Guanajuato and Michoacan. In phases two and three 30% of all agricultural workers were born and lived in these two states plus Oaxaca. The other states where agricultural workers were born and lived formed a corridor at the eastern end of the northern border: San Luis Potosí, Tamaulipas, Nuevo León, and Coahuila.

Of the twenty in depth interviews, four were born in Tijuana. A fifth was born in Mexicali, and a sixth in Ensenada, but the fourteen others were born outside of Baja California. Ten of the twenty had followed a two step process, moving to Tijuana (or in one case Tecate) from outside of Baja California and then crossing the border to work after having one or more jobs in maquiladoras. Several had come as children with their families, and not all of them had intended to cross the border to work. A couple had made more than one move to get to Tijuana before crossing to work. The others had made several crossings to work in the US, and had started when they were quite young, often doing so as students. Three were born in Veracruz, two in Guadalajara, two in Michoacan and one in each of Nayarit, Morelos, Sinaloa, San Luis Potosí, the D.F., and the state of Mexico.

E. Gender, Marital Status, and Position in Household:

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19 It is possible that respondents moved away from the city where they were born and then moved back, but the structure of the questionnaire does not allow this to be ascertained.
A very high proportion (87%) of those returned by the border patrol were men, with almost no change over the three phases. Almost all of those with experience in construction and agricultural work were men. The sectors sending the largest numbers of women are those not working before their trip (1531), domestic labor (270), business (226), maquiladora industries (156), tourism (107), agriculture (77) and education (15). Previous researchers have suspected that this high proportion of men among those caught without appropriate documents may be a methodological artifact. Solorzano-Torres\(^{20}\) says that:

“because a random sample of the undocumented Mexican immigrants is not possible, samples of this population have often been interviewed at Immigration and Naturalization Service detention centers. I find that these studies tend to underrepresent women.”

She notes that other studies looking at social structures where women are expected to be found (e.g. parents of children attending schools for the undocumented) show a higher proportion of undocumented women migrants, sometimes almost two thirds.

The in depth interviews provide strong evidence supporting women’s labor migration after maquiladora employment. Four women were single mothers and two of them explained that discrimination on the basis of age and gender was still widely practiced in Mexico, with young single women being preferred in many maquiladoras, and sexual harassment quite prevalent. Although this is illegal in Mexico, the laws preventing it are not enforced. They said there are many single mothers like them working in maquiladoras who cannot support their families on the wages paid, and cannot find any way of moving up to earn more. Migration across the border, in three cases permanent and in the other temporary, was their solution. A forty-four year old single mother who had migrated to work in San Jose in a factory and to Chula Vista to be a live in baby sitter, spontaneously volunteered the following after all the interview questions had been asked:

For women, it continues to be really important to work in the US because it’s the easiest way to earn money that you have to have to meet basic needs. All women want to earn a good income. But the pay for women’s work is low here. Older women such as me can’t get work here. There are more maquilas all the time, but fewer jobs for people like me. They don’t discriminate on the basis of age and gender in the US like they do here, you can keep on working even if you’re sixty—not here.

She did not want to permanently move to the United States because she didn’t earn enough money to bring her two children, who lived with her parents in Tijuana.

The five women who worked in private homes doing housework said that they knew lots of other women who had worked in a maquiladora and crossed on their days off to do housework. Or they knew women who had quit maquila jobs and commuted daily or immigrated to work cleaning houses. Many of them were, or had been, their neighbors in Tijuana. The first reason given by most of them for cleaning houses after or simultaneously with maquiladora employment was that you earn more money and work less time. They could make as much cleaning two or three houses, which took four to six hours each, as they could working in a maquiladora for a 48 hour week. A second reason why they ended up doing housework had to do with the fact that they were not documented to work in the US, but often crossed with a passport, tourist visa, or laser visa. Cleaning houses did not require one to cross the border at times when immigration inspectors would suspect one was going to work. Moreover, the senoras who employed them did not usually ask if they had documents permitting them to work, whereas factories, shops, or restaurants usually did. Although they had heard of raids by the immigration police on some workplaces, they didn’t think the migra were going to come to private

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homes to look for them, so cleaning houses was perceived as a safe job. Some of them liked the fact that there was less work pressure cleaning houses, whereas working in maquiladoras often required a fast pace, high performance with harsh discipline not uncommon. In comparison, they said, they already knew how to do housework and it was easy. Although there were no formal benefits as in maquiladoras where one got regular bonuses for groceries, etc., if you got along well with the senora, and she liked you, she would help you out more. This is clearly a situation in which the skills acquired in maquiladoras are not transferred, but one in which skills learned earlier by women in unpaid household work bring better pay and working conditions.

The description of a more open US work environment for women was not limited to those doing housework. A woman engineer, born in Mexico City, educated in Hermosillo, and hired in her first full time job in an Asian origin maquiladora in Tijuana said she was shocked and frustrated in her first months of work when her Asian supervisors did not seem to pay much attention to what she said, and she had to consult them before she said anything at meetings. She noted that her male colleagues with the same credentials were not subject to this treatment, and suggested that there were parallels between the attitudes toward women in Mexican and Asian cultures which reinforced each other in the maquiladora workplace. Only after her Asian supervisors had worked with her for a few months did she feel she could participate in her administrative department as she should and that her achievements were recognized. After immigrating, she had worked in two US companies, one of them the same Asian origin firm, and said that communication was much more open. Unlike her first months in the maquiladora in Tijuana, people greeted her at work, she felt what she said was listened to, and it was possible to communicate easily with one’s supervisors’ supervisors. In Mexico, the Asians knew that their treatment of women was close to the norm in the local culture, whereas they also knew that it was not acceptable in the United States, changing their behavior. Thus, there appears to be an interaction between patriarchal attitudes and practices which makes it more difficult for even professional women employees in Mexico.

Over half (59%) of all those returned by the border patrol from 1993-1994 were single, and there are not big differences by occupational sector. The small variation that exists shows those with work experience in business (67%) and maquiladora industries (61%) tend to be single a little more often, and those with experience in agricultural (54%) and domestic industry (54%) tend to be single less often. Of the twenty in depth interviews, only two people were single when they crossed the border to work, and they were men. Twelve people were married at the time they first crossed to work, one living common law, and the four remaining were divorced or separated. All of those divorced or separated were women with children.

A small majority of those returned by the border patrol during this period were not heads of their households. Almost half (48%) of all males reported being heads of their households and only a quarter (25%) of all women. There was an interesting interaction between gender, sector in which the respondent had worked and whether he or she was the head of their household. Among females, the occupational sector with the highest proportion of heads of households was other services (38%), the second highest was maquiladora industries (33%), and the lowest was technical and professional services (13%). Among males, the occupational sector having the highest proportion of heads of households was agriculture (61%), the second highest was construction (51%) and the lowest was maquiladora industries (43%). This is also congruent with the findings from the in-depth interviews which showed labor migration to be a solution for single mothers working in maquilas. The finding that those having worked in agriculture are married most often is more evidence of the difference between the new migratory current coming from maquiladoras and those who have traditionally migrated with agricultural work experience. Unfortunately, the EMIF questionnaires do not ask respondents if they have children.
F. Education

The average number of years of education among those returned by the border patrol is 3.5, with half of respondents having completed primaria. There were not many differences by work experience. In contrast, the in-depth interviews show that those who have succeeded in crossing to work in the United States have much more education, as one would expect of those who had achieved their goal of labor migration. Only three had ended formal study after primaria. Two more had stopped attending school part way through secondaria. One had stopped attending school part way through preparatoria and another after finishing preparatoria. Among those with lower educational achievement in Mexico, having attended English classes in the US was common. Among the more educated, six had finished preparatoria and done further studies in university or other professional schools in Mexico. The three men at this level studied engineering most often at university, and the three women did post-secondary studies in nursing, tourism, and business/secretarial schools. Among the engineers and managers who were interviewed, many had engineering degrees and/or MBAs, earned both in Mexico and in the United States.

The most highly educated person interviewed had migrated to from Veracruz to Mexico City, to Tijuana and then Ensenada with his family as a child. His father worked for Uniroyal Tires and they transferred him to growing markets for their tires. He had earned a Bachelor's degree in Computer Science in Baja California, which was when he began installing communication equipment in maquiladoras and their US offices across the border. He continued this job in Baja California after graduating, and when this business closed, did the same thing at a comparable business in northern Baja California. His boss in the first business started it up again, this time in Chula Vista, California, to serve Latin America and Africa. He offered his former employee a job and a visa. In this case, it is clear that work relationships formed in the maquiladora sector were important in his migration to the US, as was the transferability of his skills, since he was doing the same job. He moved with his wife to the US, where he earned a Master of Science degree studying part time. In this job he traveled extensively in Africa and Asia, but quit when he had small children and wanted to stay at home more. At the time of the interview, he was employed full time as a manager by a very large communications company and completing his Ph. D. in Business part time, expecting to have it done within two years. This man is obviously a very intelligent, high achiever, but attributed his being able to get ahead to his move to the United States, when he said:

People also want to come to the US to get more training and certification. The supervisors in the maquilas in Mexico think that if we give you more training or permit you to get certified, you’re going to take their job, or you’re going to leave. This way of thinking makes it very hard in Latin America, it’s like, we don’t want you to grow because we want you to be right there. Because if you learn a lot, you’re going to take my position. That’s one of the reasons I came over here. I didn’t want to get stuck over there. … I think people employed by maquiladoras in Mexico get stuck in the lower levels of the job ladder, and if they want to move up to the next level, they have to immigrate to the US. That’s what I think.

G. Age:

Those returned by the border patrol during this time tended to be in their mid-twenties, without much variation by occupational sector. Nevertheless, the small variation that exists in age once again shows the polarization between those having worked in agriculture and those having worked in maquiladoras. Those with maquiladora work experience were the youngest, at 24 years, and those with agricultural experience tended to be the oldest, at 27 and 26 years. The average age at which those interviewed in depth crossed the border to work for the first time was 28 years old, not very different form those returned by the border patrol.
The youngest to cross for work was a woman who came from Tijuana to San Diego to clean offices during school holidays when she was seventeen. She crossed the border with her passport, which her mother had gotten for her when she was very young. When holidays were over, she returned to her studies in Tijuana. The person who was the oldest when crossing the border was a forty year old man who was a top manager of a Tijuana maquiladora. He and his wife have four children under fourteen and just bought a house in East Lake, a prestigious neighborhood close to the border, so his family could take advantage of excellent schools and recreational areas there. His family had just become permanent residents with the help of US relatives. He planned to continue working in his maquiladora job in Tijuana by commuting across the border daily. The maquiladora sector made available jobs such as his, which pay enough to buy a house in one of the most expensive housing markets in the United States. However, the maquiladora sector has not led to well rounded community development which would satisfy his family’s needs.

The in depth interviews indicate that maquiladora employment was often the first paid job, sometimes done at the same time as full time studies. As the previous section implies, educational achievement was important for these people. Two of the twenty interviewed had been employed full time in maquiladoras while studying at the level of secundaria full time, in workers’ schools which meet in the afternoon. Another studied accounting while she worked full time in a maquiladora. Two others went to university full time and did full time maquiladora work simultaneously.

For eighteen of the twenty persons interviewed, maquiladora employment had come early in life, and migration to the United States to work later. For young women dependent on fathers and husbands, it was a way of gaining some independence in order to make their own decisions about staying in school, staying in the marriage, or going to the US. If a young woman can contribute to the family income, she can more easily make her own decisions, according to those interviewed. Being a first job, it influenced work they did later, either by providing them with skills or giving them a chance to learn what they didn’t want to do. Many of the men at all educational levels and the women professionals learned skills and knowledge in their maquiladora jobs that carried over and helped them get and perform well in their US jobs. Women with less education also reported learning things in maquilas, but these did not necessarily carry over to the house cleaning jobs they preferred to do north of the border. Many of them, and also some of the men, reported learning work place discipline, high quality work performance, learning to eat quickly on short lunch breaks, and punctuality (“come every day and come early; they like that”).

H. Experience Crossing the Border This Last Time:

The findings in this section reinforce the argument suggested by Solorzano-Torres, that those apprehended by the border patrol may not be representative of all those crossing the border without documents. Over the entire period for which data were collected, 90% said they used no document to try to cross. Less than 10% had hired a coyote or other professional smuggler to help them enter the United States. Four fifths (80%) said they had been in the United States only hours. Only seven to nine percent had succeeded in working in the United States, with the largest numbers in construction, agriculture, industry and domestic services. Approximately four-fifths (80%) were caught in the street, highway, or crossing the line.

The picture painted by these statistics is of the men who can be seen every day waiting at the fence which marks the border on the Tijuana side. They watch for an opportune moment to cross over, when border patrol vehicles drive off and are no longer in sight. If they can get past the fence, they try to get to San Ysidro and quickly blend in with the local population, a very high proportion of which is
of Mexican origin. However, this period is at the beginning of Operation Gatekeeper, with intensified enforcement by the border patrol and their new equipment.

The fact that so many of those deported were caught in the street, highway, or crossing the line may provide a clue as to why such a high proportion were male. A profile of Pilar Rosas, who crossed the border illegally at San Ysidro when she was twenty in 1993, says that in 2005, she has four US born children and a hard working, reliable husband of ten years. When asked “what’s been the greatest challenge of your life here [in San Diego]”, she chose this out of her dozen years of experience here. “The biggest problem for me was jumping the fence—I jumped the fence and ran.” Women who are attempting to cross the border without documents may try less physically challenging method of entering the United States, and may also try to stay out of sight more often than men. This can be expected to be even more likely as the number of fences was increased between Tijuana and San Ysidro under Operation Guardian, and more border patrol vehicles, helicopters, and electronic sighting equipment were stationed in the area.

Conclusion:

This paper uses both quantitative and qualitative data to investigate the relationship between maquiladora employment and migration to work in the United States. The first hypothesis, that maquiladora employment leads to people crossing the border to work, is supported. People who cross to work are usually quite young, in their twenties, and have worked in a maquiladora previously, often as their first paid job, carried out at the same time as attending school. People who cross to work are often assisted by maquiladora employers in getting US visas, since a person must have a letter of recommendation from one’s employer. Having documents to enter the US but not permitting employment makes it more difficult to cross to work in the US, but this does not stop people from doing so. Those who succeed in crossing the border to work, in comparison to those caught by the border patrol and returned, are often highly educated, and get better jobs than those available in Mexico.

The second hypothesis, that maquiladoras inhibit migration to work in the United States, is not supported with the findings from this research. The fact that Mexican maquiladoras have policies prohibiting transfer of personnel to US operations indicated that this has been attempted. They don’t want to lose their employees after investing in their training. However, two of the in-depth interviews show the extent to which some managers have gone to get around such policies. One solution is marrying a US national, migrating to the US, and then applying for work within the same firm. The individual described in this paper who followed that pattern did not marry in order to cross the border to work, but crossed the border after marriage despite the fact that he was denied an internal transfer. He and his family absorbed the costs of migrating, when his firm would not help him. Some years later, however, he was employed by the same firm in San Diego. The case of the Tijuana maquila manager who bought a house in East Lake, but kept his maquiladora job while his family moved to the US for better schools and a more prestigious address, is evidence of the inability of maquiladora industries to foster the type of development which will provide the services and facilities required by those who are most successful in them.

The differences found between labor migrants to the US who had previously worked in agriculture and maquiladoras allows us to conclude that former maquiladora workers are a new migratory current from Mexico to the United States. Maquiladora workers who cross to work, in comparison to agricultural workers, are more likely to live at the northern border after having migrated to a border

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city from within the same state. In contrast, agricultural workers are not so concentrated in any one region, but the largest numbers come from Guanajuato, Michoacan, and Oaxaca. While not much variation was observed in age, those crossing who worked in maquilas are the youngest, while those crossing who worked in agriculture are the oldest. Women labor migrants are more likely to have previous work experience in maquiladoras than in agriculture. Both male agricultural workers and female maquila workers tended to be heads of their households more often than men and women generally. Women labor migrants with maquiladora experience are attracted to US jobs by the higher wages, as are men, but also because working conditions are better for them in the US and the workplace more open to their participation. None of the twenty people interviewed in depth had ever worked in agriculture.

The very high proportion (63%) of maquila workers who lived in the city where interviewed, in comparison with those having work experience in other sectors, has methodological implications for the EMIF in future years. If residents of the border cities where interviews take place were included in the survey, as they are in the deported current, then more international migrants would be found to have maquiladora working experience. It is recommended that the sampling method be changed to include them, and also that those who say they live in the United States be asked about their work history. It is also recommended that the collapsing of closed ended answers, removing the distinction between maquiladora and domestic industries, but reversed.