I. Introduction

Even though the percentage of international migrants has remained relatively stable over the past few decades, their number has increased rapidly. The global economic crisis has slowed emigration in many regions of the world, although it does not appear to have stimulated substantial return. With economic recovery and job growth, most experts expect this slowdown to be temporary. As the underlying dynamics of migration have not disappeared, according to some experts, the scale of migration may well soon exceed prior levels.

The purpose of this paper is to analyze the basic characteristics of the Mexican labor market and the changes in the Mexico-US migration patterns that can be attributed to the recent world economic crisis. I also analyze the characteristics of Mexican migrants regarding educational levels.

II. Background

Mexico and the U.S. share the longest border between a developing and developed country in the world. Many years after these two countries had established themselves as independent nations; the number of Mexican people living in U.S. was insignificant.
Between 1942 and 1964, the Bracero Program allowed temporary migration of nearly five million agricultural workers, promoting a migration culture in some communities of Western Mexico. The number of Mexicans living in the U.S., below half a million in 1950, reached 2.2 million in 1980 (Passel, 2009). However, it was after 1980 when the dizzying growth of Mexican migration took place. Between 1980 and 1990 the number doubled and between 1990 and 2000 it grew even. By 2004 the number of Mexicans in the U.S reached 11.2 million (Lowell, Passel y Pederzini, 2006). More recent calculations state that the number of Mexican born citizens in the US reached 11.5 million in 2009 (Passel and Cohn, 2009); a number similar to the 11.6 million Mexican immigrants in 2008, or the 11.2 million in 2007 and 2006. No country in the world hosts as many immigrants from one single country as the United States from Mexico. From the Mexican side, the number of citizens in the U.S. represents 11% of the total population.

The recent world economic crisis, initiated in the U.S. on December 2007 generated speculations about its effects on the dynamics of Mexican migration. Several experts state that the predicted massive migrant return did not take place, but recent data from the 2010 Mexican Population Census suggest an increase in the number of returned migrants from the US to Mexico. On the other hand, there is evidence that since 2006, the growth rate of the immigrant population flow from Mexico has declined, meaning that more Mexicans are expecting to get a job in Mexico, in a period of severe economic depression.

III. The Mexican Labor Market

During the last three decades, the Mexican economy has not been able to generate the number of job opportunities the growing numbers of youngsters, women entering the labor market, and displaced workers require. On average from 1994 to 2009 the Mexican economy grew only 2.3 percent, while the number of people economically active has risen
constantly since the early eighties. From 1994 to 2010, the population between 15 and 64 years of age grew from 53.1 to 71.5 million, an increase of 34.7% (National Population Council). In 1980 the population between 15 and 64 years of age accounted for 32% of the total population. This percentage rose to 61% in 2000 and to 63.6% in 2010. These changes in the age composition of the Mexican population clearly represent a demographic transition, explained by a huge drop in the high fertility rates that prevailed in the sixties and seventies, (total fertility rate dropped from 7.3 in 1960 to 2.05 in 2010). If labor productivity had increased along with the capacity of the economy to absorb these workers the demographic would have transformed into a demographic bonus.

However, Mexico showed very slow economic growth during the 80’s and 90’s, which, combined with a large increase in labor supply, promoted, first, an impressive growth of the informal labor market and, second, a major raise in the emigration flows, oiled by the economic boom in the US (Hanson and McIntosh, 2009).

Graph 1 shows the rate of growth of the Mexican economy between 1994 and 2010.
Studies documenting trends in the overall labor force have shown increased labor participation driven by a rapidly rising female workforce. In contrast, the male labor force participation has remained relatively stable over the years. In addition, it has been shown that the participation over the life cycle follows the traditional inverted-U shape, although for men this curve reaches its peak at earlier ages than for women (see for instance Inter-American Development Bank, 2003) (see Graph 2)

<table>
<thead>
<tr>
<th>Graph 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Labor participation Rate by Sex</td>
</tr>
<tr>
<td><img src="image" alt="Graph showing labor participation rate by sex" /></td>
</tr>
</tbody>
</table>

Source: ENOE (National Household Employment Survey)

Mexico’s labor legislation, which promotes constant increases in labor costs in the private and public sector, has not experienced change since the 1970’s. Medium and small businesses have opted to keep a regime of informality, which allows them high flexibility but leaves workers with low levels of job security. A dual labor market has emerged from this situation generating negative outcomes in terms of productivity, competitiveness and social security in the labor market. Currently a labor reform promoting flexibility in formal employment is being discussed in Congress.
While unemployment rate in Mexico seems pretty low, the informal sector employs almost one third of the Mexican labor force. Graph 3 shows increases in unemployment rate during 2008 and 2009, with the highest peak on the third semester of 2009. The rate of informality shows slight increases in the period, which may indicate the substitution of formal employment for informal supporting the argument that participation in the informal sector in Mexico is countercyclical, mostly because the job finding rates in the formal sector are procyclical and less because the formal sector is expelling workers during recessions (Bosch and Maloney, 2007).

The number of workers affiliated to IMSS (Instituto Mexicano del Seguro Social) is a good proxy of the size of the formal labor market in Mexico. Graph 4 shows a decrease in the total number of workers affiliated during 2008 and 2009 and an increase in the total number of workers by the end of 2010 and beginning of 2011. However, the lack of flexibility (mainly high severance payments) in the formal sector may have provoked a smaller effect on employment than the one shown in other economic indicators.
Migration flows from Mexico to the US have been relevant and erratic in the last few years. According to Passel and Cohn (2009), Mexican immigration to the northern neighbor, especially unauthorized, began to drop in the mid-2006, and that pattern has continued into 2009. By the period spanning March 2008 to March 2009, the estimated annual inflow of immigrants from Mexico was around 175,000 persons. This number is the lowest of the decade, and only about half of the average of the previous two years. Graph 5 shows the dynamics of the new arrivals in the 2002-2009 period.
The decline in the flow of Mexicans into the US has not dramatically affected the number of Mexican citizens living in the US, as graph 6 suggests. The increasing trend of the 2000-2008 period is somehow reversed in 2009, but the change is too small to talk about an important drop in total numbers. This graph, at some degree, supports the hypothesis that there has not been a massive return of Mexican migrants to the country during the economic crisis 2008-2009.

Using the Mexican National Censuses of 2000 and 2010, Rene Zenteno (2011) establishes a trend in the behavior of Mexican migration to the US: sharp decrease of Mexican emigration and an increase on the rate of return migration. In 2000 census: 1.633 million emigrants and 285 thousand returning migrants. For the 2010 census 1.111 million emigrants and 351 thousand return migrants. According to these estimates the annual net
Mexican emigration is 269 thousand for 1995-2000 and 152 thousand for 2005-2010. The author states that according to both sources close to 9 out of 10 migrants headed to and returned from US. In the years 1995-2000, only 17 percent of all migrants who migrated abroad had returned to Mexico in 2000. Ten years later, the percentage of return migrants almost doubled to 32 percent. According to the 2010 census data, less Mexicans are moving abroad and the chances of heading back to Mexico increased.

V Selection of Mexican Migrants

In this section of the paper I present recent estimates which put together Mexican and US data in order to investigate the percentage Mexican population according to age and education.

Graph 7 shows that Mexican population in the U.S. concentrates mainly in the most productive age groups. One of every five Mexican men in the age group 25-34 and 35-44 resides in the US. For women the proportion is slightly lower in the productive ages but equal to men in the age group 65-74 and slightly higher for the oldest age group.
This type of pattern confirms that women participate in the migration process in a different way. Women tend to migrate once the household has established in the US and they tend to stay in the US for longer periods and this is why their representation in younger groups is smaller while their participation in older groups is higher.

Mexican advantage in terms of the age composition of its population, can only be beneficial if the working age population finds a job and 20% of men in the productive ages is finding this job in the US. Whether Mexico is benefitting from this emigration can only be assessed in further research.

One of the topics in the migration literature is whether Mexicans in the US come from the least or most educated groups, i.e., whether Mexicans are positively selected or not in terms of education. Graph 8 shows that the percentage of Mexicans in the US grows as we move from the below primary group to the high school group. The percentage of Mexicans with a post-high school degree drops again and, as we have found before, the percentage of Mexicans in the US with a B.A. again is lower than in previous groups. However, in the most educated groups, those with graduate studies, the percentage population in the US rises again. 11.5% of the Mexican men and 14.3% of Mexican women holding a Master’s degree live in the U.S. In the case of the population with a Ph.D. the percentage is even higher: 34.9% of men and 52.1% of women with a Ph.D. degree live in the U.S.
Now I show (Graph 9) the results we obtained when we did this same analysis in three different age groups: 25-34, 35-44 and 45-54. These three age groups are the most representative of the working age population in which, as we saw previously, the Mexican population concentrates. As we would have expected, the most educated population concentrates on the youngest group. Almost 60% of the Mexican population with a Ph.D. in the 25-34 age group live in the U.S.

We can also see from the previous graph that the proportion of women with a Ph.D. is greater to that of men in the three age groups analyzed. However, the difference is the youngest group (25-34) is very small while in the two other groups, the proportion of women is significantly higher. We can hypothesize from these results that Mexican women with a Ph.D. show a greater tendency to remain in the U.S. once they finish their graduate degree than men. It may be that they are more likely to marry in the US. In three age groups analyzed we can see that the proportion of Mexican migrants in the most educated groups is higher indicating that Mexican migrants not only come from the most productive ages but also from the most educated groups. In general positive selection seems to be higher for women.
Graph 9
Percentage of Mexico-Born Adults Residing in the United States by Level of Completed Education, 2009-2010
Age Group 25-34

Age Group 35-44

Age Group 45-54

Source: Lowell and Pederzini, 2011
V.- Concluding remarks

The Mexican economy is highly dependent on how the US economy behaves. There is a saying that reflects this sentiment “when the US sneezes, Mexico gets pneumonia”. The 2008-2009 economic downturn is a clear example of this. In 2009 Mexican GDP decreased 6.5%, and unemployment increased from 4.2% in 2008 to 5.6% in 2009. The reason behind this is that 79.9% of Mexican exports go to the US, while 48.8% of the imports come from that country. There is another problem: the domestic market is highly disjointed from the external sector. While exports increased 208.5% between 1991 and 2008, private consumption of the country grew only 71.7%.

Several studies show the complementarities of the Mexican and the US labor markets in terms of education, experience and age (see Hanson and McIntosh (2009), and Robertson (2009), among others). Not taking advantage of these complementarities may reduce the capability of North America to compete in the world economy in the future and, more importantly, may reduce the wellbeing of the citizens on both sides of the border.

This document shows the changes in the Mexico-US migration patterns that can be attributed to the recent world economic crisis, which severely affected the US economy and, as a consequence, the Mexican too. Even though the recently released Mexican Census seems to indicate a greater rate of return for Mexican emigrants, there is no evidence of a massive return of Mexicans living in the US, but the flow of workers to the northern country has decreased considerably. This represents a major challenge for the Mexican economy, because it has not been able to absorb much of the work force that is trying to get inserted into the national labor market. The most important effects of this inability have been the vast increase in the informal sector of the economy and, until 2006, the migration flow of people in their most productive stage of life.
The difficulties Mexicans face to enter the US labor market without the proper documents to work have increased with the new approach to deter illegal immigration, which is now based on punishment to employers instead of the employees. The fact that in a raid taking place in a firm, not only the undocumented workers present in that moment are fired, but also those in the payroll that do not comply with the legal requirements, seem to have had a significant discouragement effect for unauthorized migration flows. Additionally, the changes in state legislations against migrants --promoted by a lack of a federal new approach to migration--, have created fears that have further disincentive undocumented work in the US. All this, combined with the decrease in the number of jobs and the expectation of lower salaries have decrease the migration flow in more than half.

The problems associated to the Mexico-US undocumented migration can be diminished now that the flows are not that elevated. The solution to these problems depends on the cooperation of both countries in several issues, but the collaboration needs to be inserted in a wider framework. Therefore, it seems necessary for Mexico to lobby in the US Congress the need of a new migration approach towards Mexicans. This approach has to include labor issues, but also security measures and cooperation to promote a stronger and larger Mexican Economy.
VI.- Literature review


