

# LEGAL MIGRATION AND FREE TRADE IN THE NAFTA ERA: BEYOND MIGRATION RETHORIC

**MIGUEL ÁNGEL JIMÉNEZ GODÍNEZ**

## I. INTRODUCTION

This study analyzes the variation of legal migration flows between Mexico and the United States (U.S.) from the entry into force of the North American Free Trade Agreement (NAFTA). As a product of the asymmetry in the size of the U.S., Canadian and Mexican economies, migration flows, both from Canada and Mexico, have the U.S. as their primary destination. This essay focuses primarily on legal economic migration linked to highly skilled jobs, particularly on migrant workers with L-type visas, for intercompany transfers, and TN-type visas, for professionals. Both of them created since NAFTA. The research hypothesis of this study is that, since the entry into force of NAFTA, legal migration flows have increased as a result of the intensification of the economic relationship between the two countries, particularly as a result of the intensification of free trade.

In a few years, between 1986 and 1994, Mexico began a profound transformation in its economic development strategy. It went from an import substitution model based on protectionism, trade barriers and subsidies, to an open trade and investment strategy based on export promotion. Soon, after Mexico opened to international trade, domestic and international economic agents reacted to the new economic environment and Mexico became a new destination for productive foreign investment, particularly in manufacturing and services.

In the late eighties, the Mexican government began negotiations with the U.S. and Canadian governments with the aim of forming a free trade zone in North America. The goal was to join the free trade agreement that was signed between Canada and the U.S. in 1988, which also had an immigration component that granted privileges to Canadian immigrants.<sup>1</sup> Under this immigration agreement, Canada and the U.S. formed a single labor market, allowing for free labor mobility between the two countries with very few restrictions, a consular immigration privilege that Mexico does not have access to.

---

<sup>1</sup> Under this immigration agreement, Canadians are exempt from the consular process to obtain their entry visa, which is automatically granted at their admission. This includes work visas, for which there is no annual maximum.

Mexican government negotiations included the creation of a special category of visas, TN-type NAFTA visas.<sup>2</sup> While creating these visas was heralded as a political achievement for Mexican negotiators, they are actually not in any way an immigration privilege, since they are just a form of H1B-type visa<sup>3</sup> for highly skilled workers, with a restriction maximum of 5,000 visas issued per year, for a 10-year period (until 2004), as will be noted below.

Strong opposition to the Treaty emerged in all three countries from sectors that felt that such an opening would affect them directly in economic terms and for the negative effects associated to migration flows (Burtless et. al., 1998). In Canada, a strong concern over the “brain drain” emerged and the effect of centrifugal forces that would be generated by the United States to attract the most qualified individuals. In the U.S., the main opposition came from the industrial and border states, these latter being the most affected historically by illegal migration flows at a time when illegal immigration reached record highs.

The reaction was then focused on the concern that transnational corporations (TNCs) would migrate to Mexico, the least developed country, in search of cheaper production factors and low labor costs, which would affect Canada and the United States. Authors such as Cohen and Zysman (1997) and Cowling (1995) have documented how, as in traditional manufacturing centers in Europe, some U.S. cities, especially the old manufacturing centers (notably in the “Northeastern Manufacturing Belt”), entered into a deindustrialization process i.e. reduction and sometimes even disappearance of manufacturing industries.<sup>4</sup> They conclude that behind this process of deindustrialization there is a change in the traditional production model that arose from the modernization of information technology, more flexible production lines and the new geography of global production.

In fact, proponents of NAFTA in the U.S. argued that free trade would benefit Mexico and, as a result, economic growth would generate jobs. All this would result in the reduction of “unwanted” migration; i.e. it would help “keep Mexicans in Mexico”. President Salinas himself, in one of his trips to the United States in the middle of the negotiations, said that he wanted NAFTA so that Mexico could “start exporting goods and services, and stop exporting people” (Martin and Taylor, 1009:45).<sup>5</sup>

Paradoxically, on the Mexican side, the main opposition came from the business sector. They feared that the competition in quality and price against foreign products would be devastating after so many decades of living under a protectionist regime with an industrial policy based on trade barriers and subsidies. Employers indicated that, because of the negative effects on the productive sector, unemployment would grow and increase migration flows. The governments of the three countries were sensitive to these accusations and, as part of the negotiations, it was agreed that NAFTA would incorporate a different opening calendar for each sector of the economy, which resulted in a gradual opening over 10 years for the three countries (Aspe, 1991).

---

<sup>2</sup>In fact, these visas are only for Mexicans, since Canadians do not need the consular procedure.

<sup>3</sup> Specialty occupation or distinguished merit visa. These, like all other work visas, are granted on behalf of the employer’s request.

<sup>4</sup>Rust Belt is an American region characterized as a post-industrial region and known for the steep population decline, negative population growth rates, and the decline in its once-mighty industry. This region is formed by Michigan, New York, Pennsylvania, Ohio, Indiana, West Virginia, Illinois and Wisconsin.

<sup>5</sup> Both authors quote former president Carlos Salinas in a speech at the White House, during an official visit in 1991: “More jobs will mean higher wages in Mexico, and this in turn will mean fewer migrants to the U.S. and Canada. We want to export goods, not people”. According to the authors, the exemplification of the sentence is that Mexico would stop harvesting tomatoes and would instead export tomatoes.

In this context, this research seeks to understand with real data the effects of free trade on legal migration related to employment. To this end, the author conducted extensive research on migration in the databases of the government of the United States and Mexico. The databases consulted were those from the Department of State (DOS), Department of Homeland Security (DOH), Department of Labor (DOL), Department of Trade and Commerce (DOTC), INEGI, Mexico's *Secretaría de Economía*, the Organization for Economic Cooperation and Development (OECD), and the United Nations (UN).

## **II. THEORETICAL FRAMEWORK: MIGRATION, FREE TRADE AND TRANSNATIONAL CORPORATIONS**

According to the classical economic theory on international trade, in a country where labor is abundant and wages are low compared to its trading partners, the country would have the option of exporting products whose production is labor intensive (in contrast to capital intensive goods), instead of “exporting” workers. In this scenario, the migration effect is equal to the substitution effect. That is, as you increase the export of labor-intensive goods, the hypothesis is that labor migration is reduced (Feenstra, 2004; Venables and Limao, 1999). Recent studies in the discipline of regional economy that incorporate TNCs as economic agents consider that they add a new value to migration flows. This is so because they value relocating managers and technical experts in countries where their subsidiaries are located to contribute to the production process and international trade. Under this argument, migration and trade are not seen as substitutes but rather as complements. This branch of economic theory suggests that, as a result of the new TNC-led global economic integration, an increase in personal transfers can be expected, which would in turn increase qualified migration flows (Feenstra and Hanson, 1995; Markusen and Venables, 1998).

### **Migration**

Currently, there are more countries involved in international migration and that are affected by it like in no other time in history. It is increasingly difficult to establish a division between countries of origin and countries of destination, since today more and more countries in both the North and South are sending and receiving people. Historical patterns of migration from less developed to more developed countries has given way to a new migration between developed countries, known as the “North-North” migration flow, and between less developed, known as the “South-South” migration flow. This arises from the new conditions operating in the global economy and from physical changes due to climate change and its environmental impact.

According to recent UN global data, the number of international migrants in 2010 is estimated at 214 million people (UN, 2012). Six out of ten international migrants (128 million) live in developed countries, the majority of which (74 million) are from developing countries. Although the global economic crisis of 2008-2010 reduced the pace in the increased number of international migrants to countries with industrialized economies, their total number increased by 10.5 million between 2005 and 2010.<sup>6</sup>

Of course that migration is cause for passionate debates, often exacerbated by the rhetoric of fear and intolerance to differences, which feed xenophobic sentiments and preconceptions rooted historically in societies subject to tension and conflict in the dispute for public services. Migration is an issue that arouses emotion over concerns about the impact of migrants in regard to employment, wages and the ability of local governments to

---

<sup>6</sup> UN (2010). Department of Economic and Social Affairs, United Nations Population Division, Geneva.

provide services, and also due to the difficulty of containing the flow of undocumented workers across borders. Additionally, migration deprives countries of their best and brightest people, divides families and has historically been synonymous with human rights violations.

It is true that migration flows impose an additional burden on national security and public safety. Sometimes, organized crime bands, interacting with transnational mafias of all kinds, are instrumental and make migration their business. Despite this, it is imperative to recognize that migration is a courageous expression of the will and determination of a person to overcome adversity and live a better life for himself and his family.

On the other hand, there is increasing evidence of the benefits that migration can have. The total amount of money that migrants from the developing world send to their families reached an estimated 1,670 billion in 2012. This amount is higher than the international aid from the OECD countries together (OECD, 2012). In addition, migrants use their experience and training to transfer technology, capital and institutional knowledge. It inspires new ways of thinking about social and political problems, and provides a dynamic human link between cultures, economies and societies (UN, 2012: 2).

Demographic dynamics and labor market restructuring derived from changes in the economy, as well as the components of GDP from the growth in the service sector of developed economies have helped increase the awareness of policy makers about the crucial role played by international migrants –legal and illegal –in meeting the demand for labor in specific sectors and keeping global production networks going on, particularly those associated with TNCs, which are necessary for the correct functioning of the global economy (Bennet and Sharpe, 1985). As a result, an increasing number of governments have come to understand that international migration is an integral part of the process of economic growth and operation of the most developed countries.

## **Globalization, Transnational Corporations, and Migration**

Globalization has been defined by a multitude of terms, such as Dicken's "global change" (1992), Ohmae's "accelerated interdependence" (1995), Giddens' "action at a distance" (1990), and Harvey's "time-space compression" (1990). Most observers agree that globalization is not a new phenomenon of late twentieth century, but the continuation of economic events that have been happening and evolving for a long time and that can therefore be regarded as a continuous historical process.

For Harvey (1990), the global economy now has the ability to function as a unit in real time, he argues that the globalization's momentum was a consequence of the Second World War, of the economic restructuring that implied the search for new forms of production and market niches, and of international cooperation. He also states that the flexible production system (or post-Fordism) was the market response to the systematic rigidities of the Fordist production line, which was adopted as the industry's standard manufacturing system during the first part of the twentieth century. Post-Fordism is based on a combination of outsourcing production and the physical fragmentation of the productive process in order to adapt it mass consumer patterns from free trade. In these new processes, TNCs play a key role in conducting the transformation of a new geography of production (Liepietz and Macey, 1987; Sasse, 1991).

An important pillar of the new world economic order is the notion of free trade that emerged after the Second World War. According to authors such as Bird and Killik (1995), Burtless (1998), and Ohmae (1995), this led to the creation in 1947 of the General Agreement on Tariffs and Trade (GATT), which is an international agreement in charge of monitoring the reduction of tariff barriers and the ban on trade discrimination. GATT foundations call for member countries to promote multilateral trade expansion (multilateralism) by dismantling all barriers to trade and the reduction of tariffs and import quotas. Subsequent negotiations between the signatory countries, known as rounds, were carried out with the aim of reducing tariff levels. The first of these rounds was held in Ginebra in 1947 and the eighth, known as the Uruguay Round, began in 1986 and ended in 1993. These rounds culminated with the creation of the World Trade Organization (WTO) in 1995 and its expansion to include countries such as China (WTO, 2002: 17).

A key feature of global economic integration is the growing trade and financial liberalization throughout the world. In recent decades, we have seen the increasing importance of international capital flows through foreign direct investment (FDI) led by large TNCs. The Organization for Economic Cooperation and Development (OECD) highlights an important difference when it comes to understanding the geographic dispersion of industrial and service activities, and the creation of cross-border business networks, such as transnational corporations (OECD, 1992). According to the OECD, globalization reflects the emergence of interregional networks between communities, states, international institutions, NGOs and TNCs, which has triggered a real international division of labor and increased migration flows of highly qualified personnel.

In this regard, a number of theorists of globalization argue that the global economy consolidates as long as the industrial production system's elements are able to function as a unit in real time within a unified production process, but geographically dispersed throughout the world thanks to the post-Fordist flexible specialization system (Held, 1999:

74).<sup>7</sup> According to them, the new information technologies allow for dispersion from “outsourcing”, not only by a fragmentation technique but from a spatial fragmentation throughout the world that resulted in the disintegration of large companies, the decline of traditional manufacturing centers, and the increasing process of “internationalization” undertaken by the TNCs from the most dynamic and modern sectors of the economy. This was possible thanks to the creation of a sophisticated local network of highly specialized smaller companies in certain processes of very high added value.

The fragmentation of post-Fordist production rests on new ways of delivering services to producers (trade services, financial services, insurance, marketing, and consulting) and specialized services that give efficiency to the productive chains and circuits scattered in the world and are precisely those that have redefined the profile of the new legal migration throughout the world (Shaw, 2002: 123).

Technological change has played a key role through its impact on the economy of production and information circulation (Dicken, 1992: 34). Technology reduces transportation and information costs, and strengthens the formation of a free market system designed as a unit, where the main economic actors are transnational corporations. We argue that technology trends are reshaping the location, ownership and management of productive activities of countries and regions. The increasing ease with which capital, tangible assets, skills, market knowledge and management control can be spread throughout the world has made the integration of economic activity between the most remote places possible (Guile and Brools, 1987: 27).

Evidence suggests that flexibility became not only the most important competitive advantage in global markets at the end of the twentieth century, but also a condition to the adaptation and survival of TNCs (de Groote, 1994: 940). For Massey (1995), the new possibilities to fragment the production process and the reallocation of each part according to comparative advantage is largely determined by the relative costs of labor and the ease with which talent is able to migrate. Fröber (1990) argues that the traditional division of labor, in which less developed countries were relegated to being raw materials producers, has changed, and that TNCs have established a new global production system based on the installation of export platforms in countries with low production costs, particularly labor costs. While labor costs are an important component of total production costs, the recent trend toward more capital-intensive production suggests that other factors, such as macroeconomic stability, infrastructure, legal framework (international trade agreements and immigration laws), relative productivity, worker attitudes, crime, and security play an important role in transnational corporations’ location decisions (Porter, 2000: 14).

In spite of recent advances in growth theory, the impact of trade and economic integration in national and regional economic growth is still a matter of great debate (Venables and Limao, 1993: 3). Authors such as Krugman (1991), and Hanson (1996, 2005) state that there is a positive association between trade liberalization and reduction of regional economic disparities, in which labor market integration through legal migration plays a

---

<sup>7</sup> The literature has many terms to refer to flexible specialization (Browne and Buboio, 1984; Gupta and Goya, 1989). The two most popular are “lean production” and “toyotism”, in which the dispersion of the production circuit reaches unseen efficiency levels when you manage to implement a “just in time” inventory, which in turn reduces storage costs and every part is incorporated into the productive chain from the location where it is and at the exact moment that it is required. Monden (1995) uses “Toyotism” to refer to a system whose aim is to maintain a continuous flow of products with the aim to better adapt to demand fluctuations.

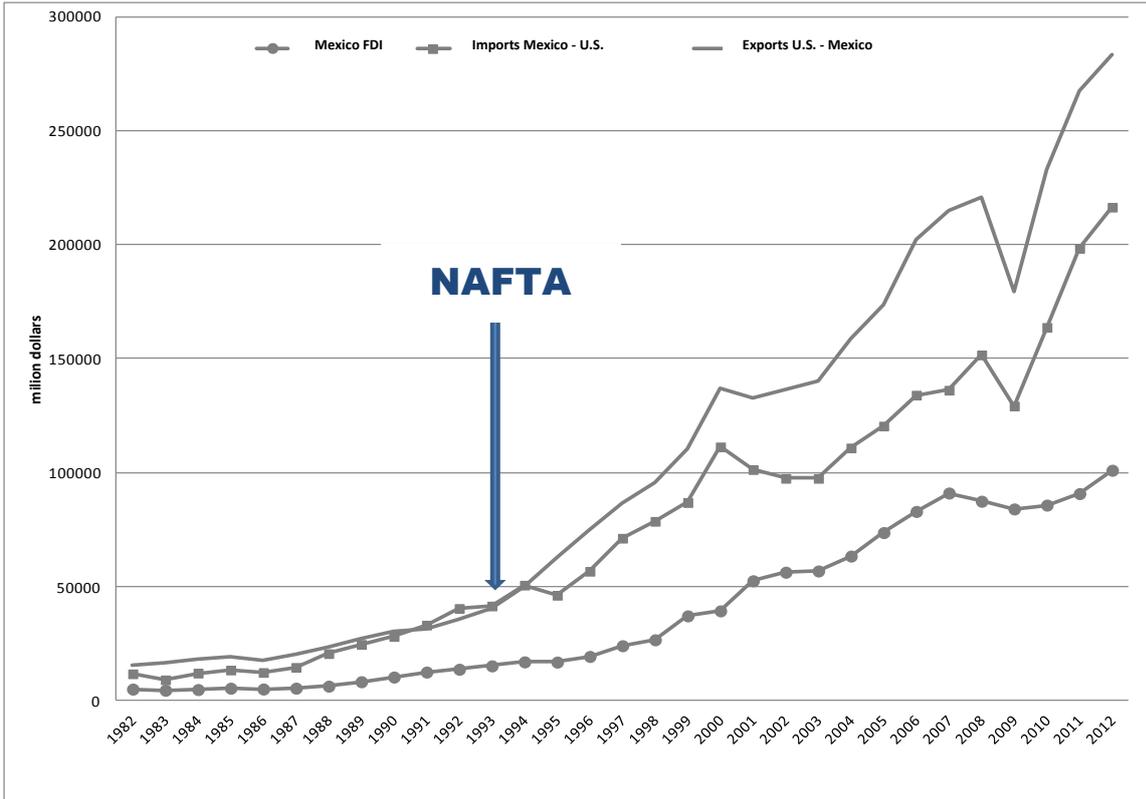
central role. According to these authors, free trade increases the commercial and industrial interaction and this, in the long run, increases labor specialization. The balance between labor supply and demand, decreasing unwanted (illegal) migration and increasing legal immigration of highly skilled personnel, leads to a reduction of the labor cost differential.

**III. NAFTA: TENDENCIES**

The growth of international trade and foreign direct investment (FDI) from the U.S. to Mexico since NAFTA came into force is clear: Mexico grew by more than 10 times the size of its imports and exports, making it the fourth largest trading partner for the U.S., the 16<sup>th</sup> world economy in trade, and the 15<sup>th</sup> flow recipient economy in 2010 (see Figure 1).<sup>8</sup> This combination of foreign investment and trade is associated with the arrival of TNCs which, within their new business model, have taken advantage of the conditions offered by Mexico as a signatory of several international trade agreements, amongst which NAFTA is the most notable, for its importance and volume account for almost 90 per cent of Mexican international trade. According to the author’s estimates based on data from UNCTAD (2008), in 2005 TNCs were responsible for around 70 per cent of Mexican exports.

**Figure 1: International Trade and Foreign Direct Investment**

**Mexico –USA, 1990-2010**



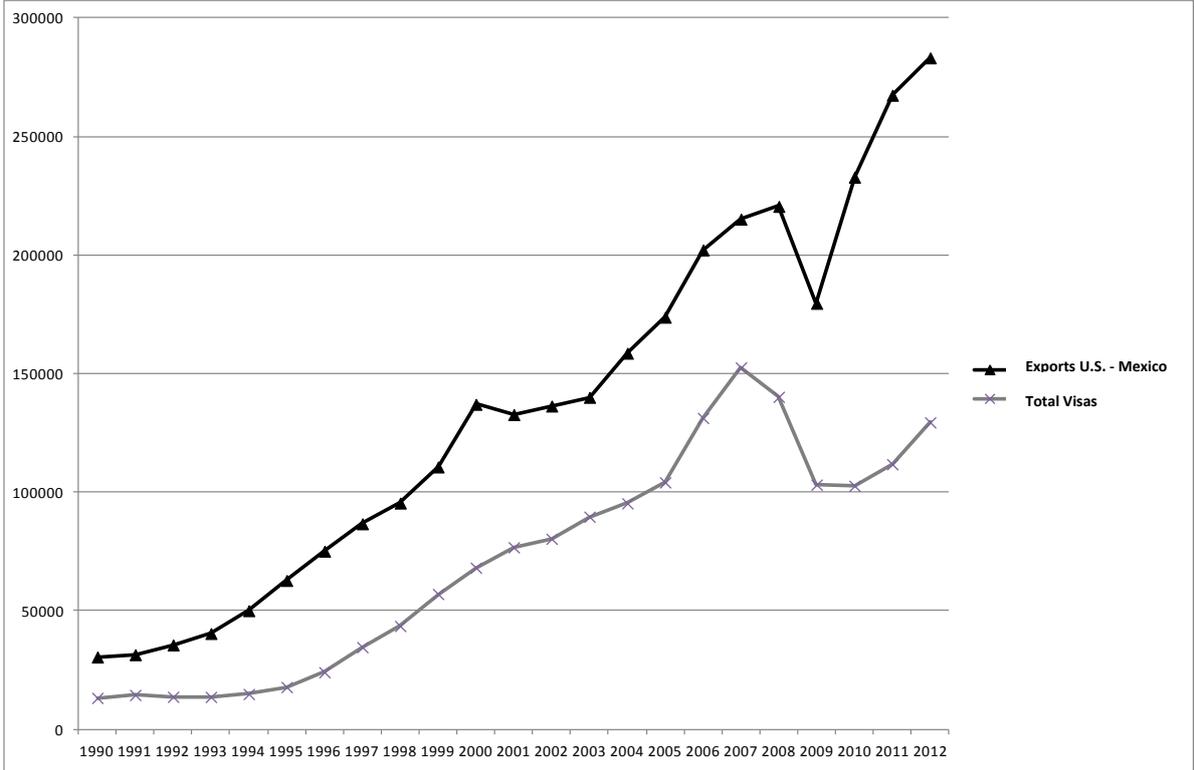
Source: U.S. Department of Commerce and Trade, International Trade Statistics Bureau, 1980-2000.

**Free Trade and Migration under NAFTA**

<sup>8</sup> 328 billion dollars of FDI stock in 2010, according to data from the CIA World Factbook. CIA (2012) World Factbook: Washington.

A starting point for this analysis was whether there was a statistical association between legal migration and free trade. Using the DOCT database of foreign U.S. trade and taking data from 50 countries over 20 years and visas issued each fiscal year by the Bureau of Consular Affairs, various tests were carried out to find the statistical association between annual international trade and visas issued per fiscal year. Using the Pearson correlation coefficient, results suggest a positive statistical association between trade and migration.<sup>9</sup> This was also positive when tested for association between work visas (H, L, TN) and total national open unemployment rate in the U.S. (see Figure 2)<sup>10</sup>, and turned out even higher for the association between U.S. imports and migration.

**Figure 2. Mexican Products Exports to the U.S. and Number of U.S. Issued Visas for Mexicans, 1990-2010.**



Source: U.S. Department of Commerce and Trade. Bureau of International Trade Statistics, 1980-2000 and U.S. Department of State, Bureau of Consular Affairs.

From these results, which confirm the working hypothesis, the next step was to analyze the legal migration from 1994 to 2012 to identify the increase in migration according to visa type associated with free trade between Mexico and the U.S. To perform the analysis and comparisons over time, we used the following methodology as a research strategy:

- Define what “legal migration” means in the U.S.;
- How many and which types of legal migration exist;
- Which are the associated migratory employment visas;
- Measure absolute and relative legal migration flows associated with employment between 1990 and 2012; and

<sup>9</sup> The Pearson correlation coefficient showed a positive association of 0.89.

<sup>10</sup> The Pearson correlation coefficient for legal migration and unemployment rate showed a negative association of -0.78213.

- Finally, to put the data in perspective, additional comparisons in relative terms to i) total population; ii) total workforce; and iii) total migration; all of these for the same period: 1990-2012.

#### **IV. LEGAL MIGRATION TO THE UNITED STATES**

Citizens from most countries need a visa to enter the U.S., according to the 1965 Immigration and Nationality Act. Visas are issued at consulates and allow the person to travel to a U.S. gateway and request permission to enter the country. People who enter without a visa, or counting on it but without going through a gateway or without notice to an immigration authority, are indistinctly considered “entry without inspection”, “undocumented” or “illegal aliens”. There are two main categories of visas: immigrant and nonimmigrant visas.

##### **Immigrant visas**

Immigrant visas or Legal Permanent Residents (LPR)<sup>11</sup> are for people who intend to live in the U.S. and are generally the first step to apply for U.S. citizenship. In general, to be eligible to apply for an immigrant visa a foreigner must be sponsored by a U.S. citizen relative or a legal permanent resident in the U.S. He can also be sponsored by a prospective employer or be the beneficiary of an approved asylum or refugee petition, according to the Vienna Convention. The INA gives the LPR certain rights and obligations, such as living and working permanently anywhere in the U.S., acquire property rights and attend public schools, colleges and universities. You can also join certain branches of the Armed Forces and apply to become a citizen if you meet certain requirements.

##### **Nonimmigrant Visas and Temporary Admission**

Foreign nationals seeking to enter the United States on a temporary basis, as opposed to seeking permanent residence, are known as nonimmigrants, according to the INA. Nonimmigrant visas are for people with permanent residency outside the U.S., but who wish to temporarily reside in the U.S., it is usually a prerequisite to apply for a LPR.

The purpose of travel and other associated events, as well as personal and professional attributes of the migrant determine what type of visa is required under U.S. immigration law.<sup>12</sup> These citizens are admitted in the U.S. for a period of time and an expressed reason. Currently, there are 24 major categories of nonimmigrant visas and 72 specific types of possible visas (see Annex 1). These visa categories are commonly referred to by the letter and numeral that denotes their subsection in the INA. The categories of visas that have been designated for temporary employment are discussed below.

##### *Type H Visas for Temporary Workers*

The main nonimmigrant category for temporary workers is the H visa. The H-1 visa classification corresponds to the category that includes highly qualified workers, distinguished professionals or professional merit (H-1B). Also considered in this category are nurses (H-1C) and two additional layers of “seasonal” visas (“season by season” double standard). These are the unskilled agricultural workers (H-2A) and “other”

---

<sup>11</sup>Also known as “green card holders”.

<sup>12</sup> Department of State, Bureau of Consular Affairs, Yearbook of Immigration Statistics, 2012.

unskilled workers (H-2B).<sup>13</sup> The law establishes restrictions on a maximum annual income for H-1 (65,000) and H-2B (66,000).<sup>14</sup>

*L-Type Visa for Intracompany Transferees (Transferencia de personal Intra-compañía)*

Multinational executives transferred by a company or TNCs are admitted to the U.S. under the L-class visa. To get an L visa, the alien must be employed in an executive capacity, a leadership role or have special knowledge over the firm products. To qualify, the executive must be able to carry out the management of the organization or a component of it, or play a role in the organization and exercise general supervision or direction of higher level executives and report to the Board of Directors. Those perceived as managers must have an advanced level of knowledge or expertise in the organization of processes and must have the ability to supervise the work of other employees in the provision of professional services, research, equipment handling and management techniques and their application in various international markets.

*NAFTA visas, TN-type visas*

As part of the new migration regulation after NAFTA, visas for skilled labor between the U.S., Canada and Mexico were created. However, these provisions are different from those contained in the Free Trade Agreement between the United States and Canada in 1988, under which consular requirements for temporary visa application for Canadian workers are cancelled.

To qualify for a TN visa, Mexican or Canadian citizens must possess certain credentials and be included in a list of about 60 professions. The employer must certify that the alien has the required qualifications for their position. Unlike most nonimmigrant visas, TN visas can be renewed indefinitely and do not have a cap on maximum requests per year. NAFTA may not impose numerical limits or labor market tests as a condition. NAFTA, however, included a limit of 5,500 TN visas for Mexicans in a 10 year period, starting from 1994. Nonetheless, that limit has never been reached. 2000 was the year with the most amount of visas at 1,422..

TN NAFTA visas provide certain categories of professionals who meet the minimum requirements of education and/ or experience and seek to engage in temporary work in the U.S. Canadians and Mexicans may be eligible to work in the U.S. as a NAFTA professional under the following conditions:

- The applicant is a Canadian or Mexican citizen;
- The profession is on the NAFTA list;
- The position in the U.S. requires a NAFTA professional;
- The applicant will be working a full-time employment or part-time preset for an employee. Just as the rest of employment visas, self-employment is not allowed;
- The applicant has the qualifications, has complied with specific requirements, and has the education and/or professional experience needed for the job.<sup>15</sup>

---

<sup>13</sup> Specially for hospitality and construction industries.

<sup>14</sup> These ceilings can be modified according to economic needs, but the Department of State needs to ask Congress to do so.

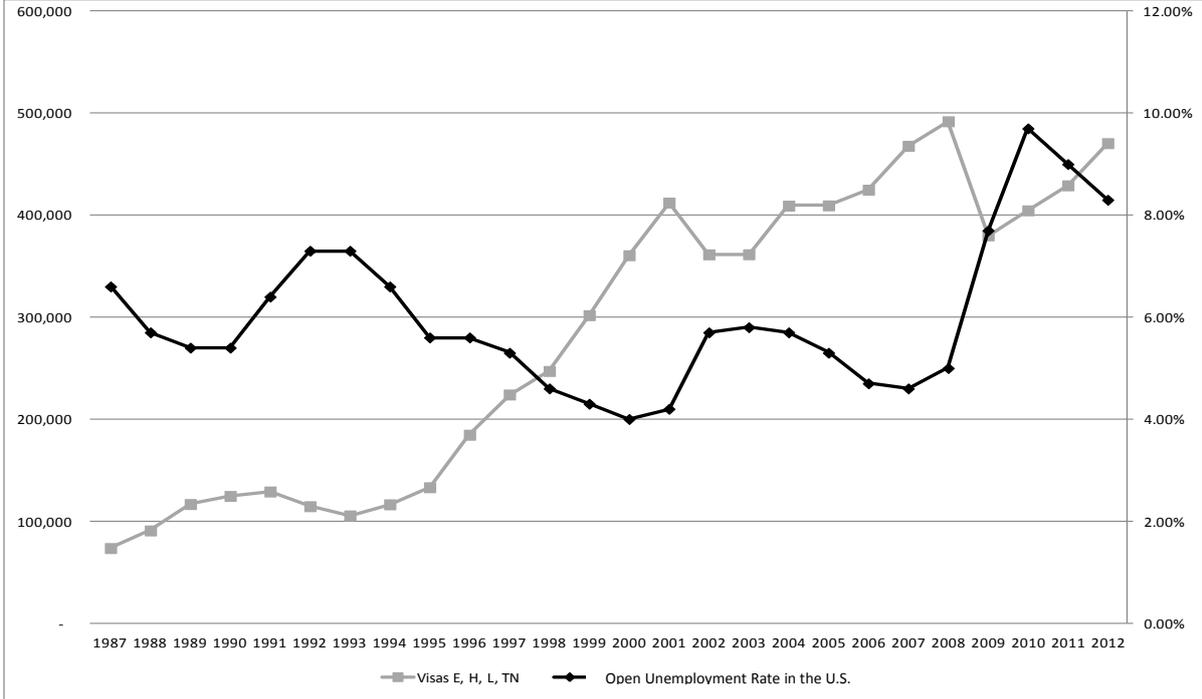
<sup>15</sup> See Annex 1 for a full list of professions and their specific requirements.

“Labor certification”, issued by the DOL, is required from employers of foreign workers on temporary visas. The INA requires them to look first for U.S. workers and that the DOL determine that admitting foreign workers will not adversely affect wages and working conditions of U.S. workers in similar activities. Employers must demonstrate that U.S. workers are not being displaced or that they are not shrinking working conditions for international legal migrants. Companies wishing intra-company L-type transfer visas and companies that hire people with TN visas are exempt from this requirement.

**V. LEGAL MIGRATION TRENDS ASSOCIATED WITH EMPLOYMENT: RESULTS**

The analysis of growth trends in work visas issued and U.S. workers’ legal income suggests that U.S. immigration policy is determined by a function that includes variables such as the size of the total population, the size of the labor force, and the unemployment rate. That is, the total number of visas granted annually is a result of these variables. Thus, immigration policy is closely related to economic cycles and demography. The results of the statistical tests confirm the association between the total number of visas per year and the unemployment rate prevailing a year in the economy (see Figure 3).<sup>16</sup>

**Figure 3. Open Unemployment Rate in the U.S. and Total Number of Temporary Visas Issued by the U.S., 1987-2012**



Source: Author’s calculations based on the Current Population Survey, Total Labor Force from the Bureau of Labor Statistics of the U.S. Department of Labor, the Bureau of Consular Affairs, U.S. Department of State, and the Immigration Statistics Yearbook, 1987-2012.

Since the number of issued visas is a function of the unemployment rate and population, their number is pro-cyclical and, therefore, has waxed and waned according to economic cycles over the past 20 years. Although the total number of temporary visas, together with the permanent ones rose from 7,495,708 in 1990 to 9,958,721 in 2012, the proportion of visas with respect to the total population remained without major changes starting from a level of 3 per cent in 1990 to 3.2 percent in 2012. In 2012, a total of 1,031,631 people acquired LPR status. Nearly 66 percent of which acquired their residence by a “family reference”; i.e., a direct family relation with a U.S. citizen or a U.S. legal permanent resident.

<sup>16</sup> The total number of visas, temporary and permanent, is the total number of possible migration. The number of issued visas per fiscal year is the number commonly associated with estimates on legal migration.

The number of permanent visas is only a small proportion of the total number of visas, about 10 percent of the annual total. LPR visas in absolute numbers increased from 720,461 in 1994, corresponding to 0.62 percent of the total population, to 1,042,625 in 2010, which accounted for 0.34 percent. That is, there was a reduction to almost a half in percentage terms. In 1999, it reached the lowest level to be only 0.23 percent of the total population.

In recent years, countries with the top numbers for nationals with permanent resident visas issued by the U.S. Immigration Service were Mexico (14 percent), China (7.9) and India (6.4), according to 2012 data. That same year, the number of employment-related LPR visas was less than 16 percent, the largest number of which was given to Indian nationals (21.9 percent), followed by China (12.6), South Korea (8.1), Canada (6.5), the Philippines (6), and Mexico in the sixth place with 5.5 percent. While Mexico remains in the first place in total LPR since 1994, in the ranking of permanent employment visas it went two places up from the 8th place, with 3 percent of the total in 1994 (see Table 1).<sup>17</sup>

---

<sup>17</sup> It is noteworthy that currently, the top of issued visas is applied for Mexican solicitors, which is why the waiting list can take between 5 and 25 years, according to information from the Department of State.

**Table 1. National Legal Permanent Residents Top Ten, 1994-2012**

Total Permanent Resident Visas		1994	Employment Related LPR		1994
1	Mexico	17.9%	1	China	12.9%
2	Soviet Union	6.8%	2	Canada	9.1%
3	Philippines	6.0%	3	India	8.0%
4	India	4.7%	4	Philippines	7.4%
5	Vietnam	4.4%	5	United Kingdom	4.9%
6	Dominican Republic	4.0%	6	South Korea	4.7%
7	China	3.9%	7	Taiwan	3.3%
8	Cuba	2.9%	8	Mexico	3.0%
9	Canada	2.4%	9	Soviet Union	3.0%
10	Jamaica	2.0%	10	El Salvador	2.3%
All other countries		45.2%	All other countries		41.5%

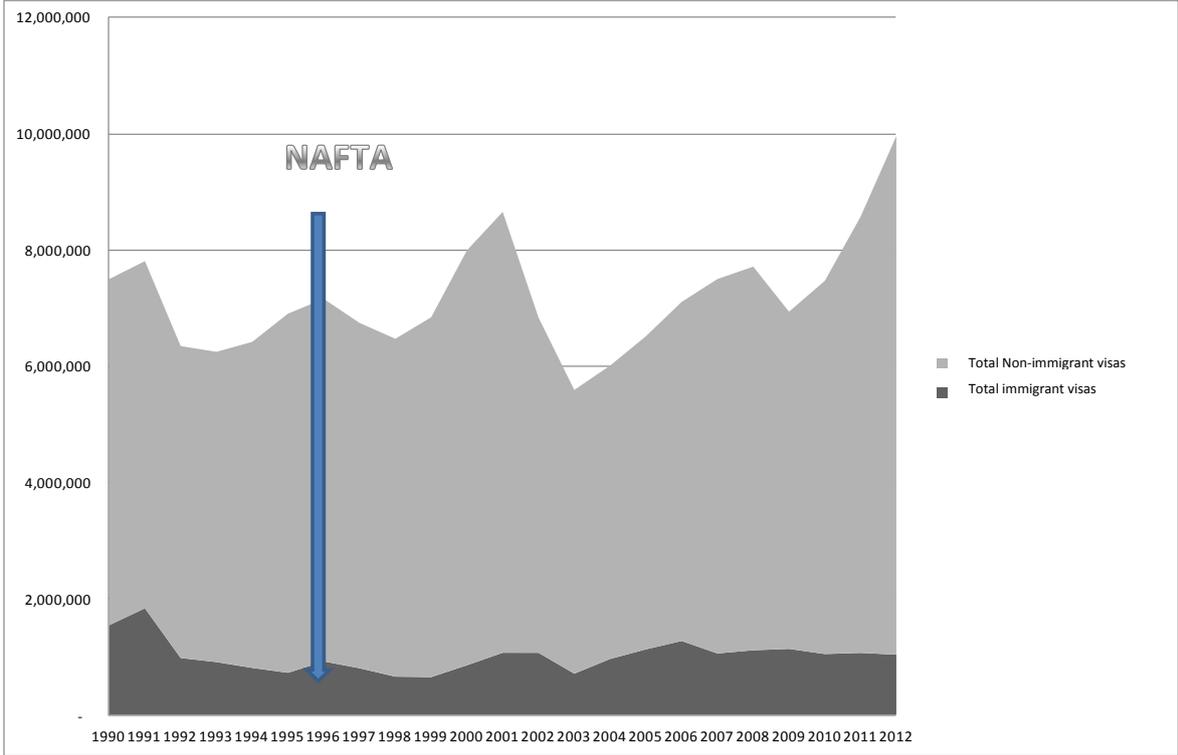
  

Total Permanent Resident Visas		2012	Employment Related LPR		2012
1	Mexico	14.2%	1	India	21.9%
2	China	7.9%	2	China	12.6%
3	India	6.4%	3	South Korea	8.1%
4	Philippines	5.6%	4	Canada	6.5%
5	Dominican Republic	4.0%	5	Philippines	6.0%
6	Cuba	3.2%	6	Mexico	5.5%
7	Vietnam	2.7%	7	United Kingdom	4.2%
8	Haiti	2.2%	8	Venezuela	1.8%
9	Colombia	2.0%	9	Brazil	1.7%
10	South Korea	2.0%	10	Japan	1.6%
All other countries		49.7%	All other countries		30.1%

*Source: Department of Homeland Security, Handbook of Immigration Statistics, 1994-2010.*

Around 80 percent of total visas issued by the U.S. consular authority over the last 20 years are nonimmigrant visas. Moreover, the number of visas granted to citizens of all over the world has increased both in absolute and relative terms, going from 5,959,225 in 1990 to 6,422,751 in 2010. This represented an increase from 2.4 to 2.8 percent of the total population, being leisure and business visas 82 percent of them (see Figure 4).

**Figure 4. Total Legal Migration, Immigrants and Nonimmigrants**



Source: Bureau of Consular Affairs, U.S. Department of State, Visa Statistics, 1987-2012.

H, L and TN-type temporary employment visas, as has been said, are associated with the U.S. unemployment rate (see Figure 3), and are a very small proportion of total temporary visas granted annually. However, in recent years, work visas have increased as a percentage of total nonimmigrant temporary visas, reaching their peak in 2004, with 8.11 percent of the total issued visas. Regarding the total workforce, they grew between 1990 and 2010 because, according to the DOL, the total U.S. labor force increased from 90.9 million to 106.8 million workers and employment visas increased from 124,561 to 404,625. In relative terms, as a proportion of the labor force, these visas went from 0.13% to 0.37% of the total force; i.e., an increase in almost three times more in relative terms compared to 1990.

Regarding work visas, the largest share belongs to highly skilled employment visas *vis à vis* unskilled employment visas. From total NAFTA visas, H-1B highly qualified workers visas and L-type visas for intra-company transfers reached 74.46 percent in 2010.<sup>18</sup> All this implies that migration policy for temporary employees who come to the U.S. focuses primarily on issuing visas to highly skilled employees, and has been for the past 20 years, contrary to the widespread belief, that most visas area aimed at low-skilled employees to meet the existing high demand, which is a strong incentive for illegal migration of unskilled workers.

<sup>18</sup> TN visas are comparable to E1 and E2 visas for investors and traders from countries with which the U.S. has trade or navigation agreements. The lowest level of total issued visas to highly skilled workers (H1B+L) was in 1991, with 52.72 percent, while the highest was in 1997, with 71.69 percent of total work visas issued.

Moreover, visas for unskilled workers corresponding to the H-2A temporary agricultural workers and H-2B workers in non-farm services increased from 13.78 percent in 1990 to 25.54% in 2010, an almost two-fold increase for unskilled employees.

In 1990, from the total employment visas for unskilled workers, the percentage for nonagricultural workers was higher (9.51 percent) compared to agricultural workers (4.27 percent). These percentages were reversed in 2010, when total non-agricultural visas reached 11.72 percent, and the agricultural workers 13.82 percent, which means a significant increase in agricultural workers. This percentage increase accompanies an increase in absolute terms, since the visas for these workers were almost nonexistent before 1990.

The top ten countries with more temporary work visas have changed over the past 20 years. According to 2010 data, there is a noticeable increase in visas granted to Indian citizens who occupy the first place in employment visas, followed by Canada, Japan, China, the United Kingdom, Mexico and South Korea<sup>19</sup>. There was a high number of visas for Indian citizens, with its noticeable domain in H-1B visas granted each year. These highly skilled visas, in the case of citizens of India, is correlated with the fact that India is the country with the greatest number of citizens studying a postgraduate program in the U.S., particularly in Science, Mathematics, Engineering and Technology.<sup>20</sup>

### **Admissions with Temporary Employment Visas**

The total number of visas granted annually is the reference for legal migration, but this does not reflect the actual number of people who are at a particular time in the U.S. The first reason is that for a person receiving a temporary visa, since this is a process that takes place before the U.S. Consulate in the country of origin, there is the possibility that the individual does not make the trip or that he is not admitted in his attempt to enter; second, because of the validity of visas, which are mostly multi-year, the total number of people in a position to enter the U.S. legally might be overlapping; i.e., the new visas accumulate with those granted in previous years which are still valid, which is swelling the total number of possible legal migrants; and third, because of the possibility of multiple entries a person can do in the same year with the same visa.

When comparing issued visas against the total number of legal entries per fiscal year, an increase in entries per issued visa can be observed between 1990 and 2010. This factor grew from 1.6 entries per visa in 1990 to 6.79 entries per granted visa in 2010, which means that, with the same visa, foreigners enter the U.S. more times in one year and stay longer than they did before. In addition, during the past 20 years, the total of admitted persons, including all nationalities and all kinds of visas, as a proportion of the total population increased from 7.1 percent in 1990 to 11.7 percent in 2010: in other words, the total legal migration, measured as foreign citizens admitted, grew between 1990 and 2010 as a percentage of the total population.

A quick look at the list of the first places by nationality associated with the different kinds of employment visas in the U.S. allows us to see the relative weight of the various nationalities in legal migration. We can see significant changes from 1990 to 2010 at the

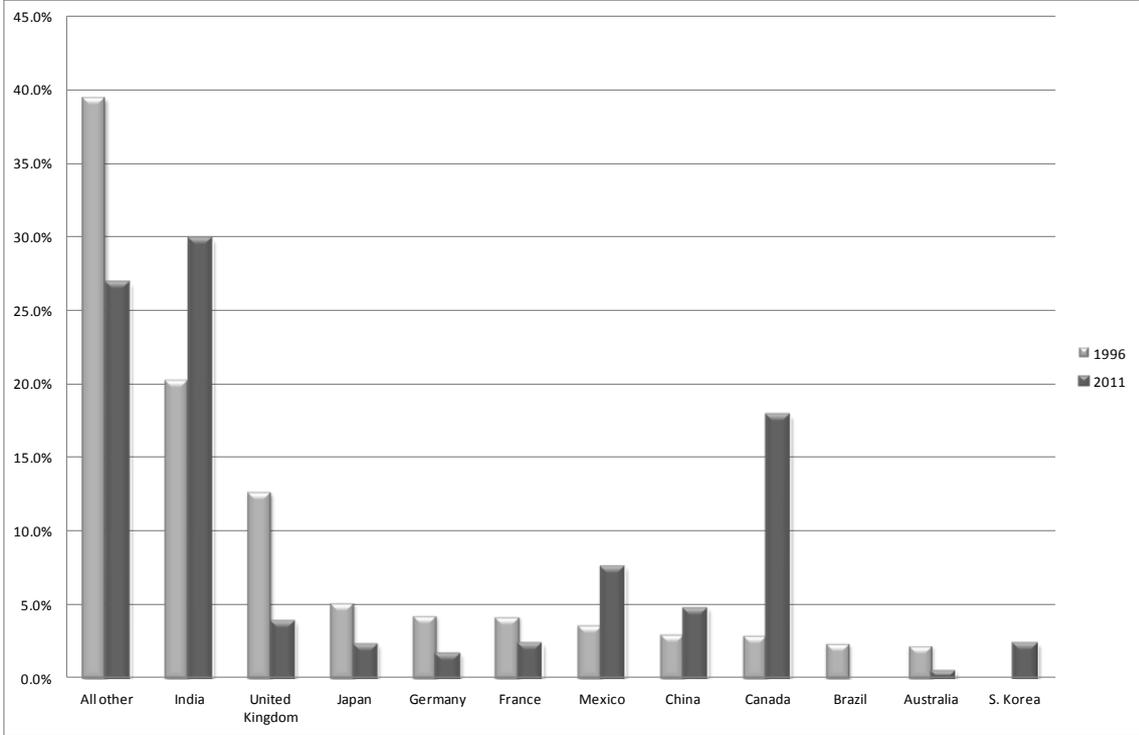
---

<sup>19</sup> As it has been noted, Canadian citizens do not require a consular process to obtain a temporary visa, including employment visas. However, as they enter the United States, they are counted as visas that were granted on a temporal basis.

<sup>20</sup> Wasem,R (2012).

top, starting with H-1B and L-type visas for highly qualified employees. In 1990, the countries with the largest number of H-1B visas were India, England, Japan, Germany and France. Mexico then occupied the sixth place, just above Canada, in the seventh (see Figure 5).

**Figure 5. Top 10 countries by H-1B granted visas between 1996 and 2012.**

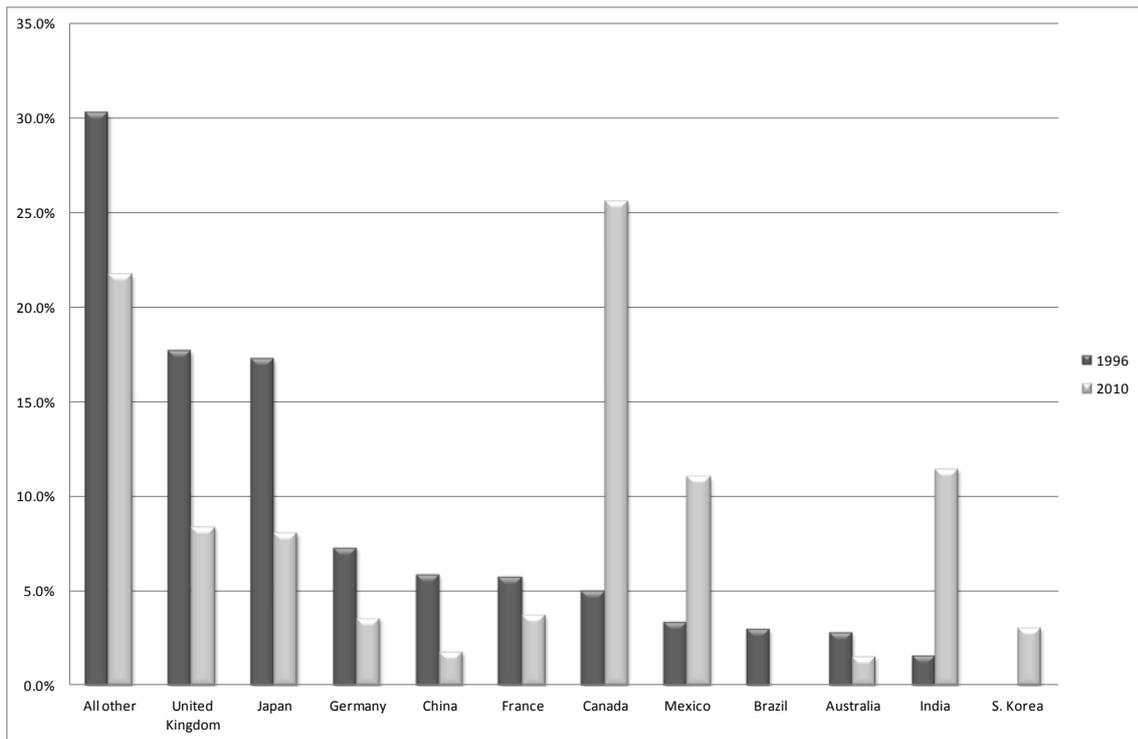


Source: *Yearly Reports from the Visa Office, Bureau of Consular Affairs, U.S. Department of State, 1996-2012*

In 2010, India remained in the first place and increased its share from 25 to 30 percent of all H-1B visas. For the same year, the second place went to Canada, followed by Mexico, China and South Korea. There was a notable decrease in H-1B visas granted to the European countries that occupied the first places in 1990 (the U.K., France and Germany).

Regarding L-type visas, for intra-company transferees, the top 10 list also changed remarkably. Canada moved from the sixth to the first place with 25.6 percent of these visas in 2010, followed by India with 11.5, and Mexico with 11 percent (see Figure 6).

**Figure 6. Top 10 countries by the number of L-type visas issued between 1996 and 2012**



Source: *Yearly Reports from the Visa Office, Bureau of Consular Affairs, U.S. Department of State, 1996-2012*

As for unskilled, seasonal agricultural employment visas, the first place is occupied by Mexico during the period of analysis. In 1990, it held 91.7 percent of the total agricultural employment visas (although it was a very small base of only 5,318) and slightly increased to 92.8 percent in 2010 (from a base of 55,900). Similarly, in the unskilled, nonagricultural workers, Mexico remained in the first place, but with a notable increase from 38.6 (from a base of 11,843) to 77 percent of H-2B visas (from a base of 47,403).

## **Mexico and Migration to the U.S.**

In recent years, several studies have shown a reduction in migration flows from Mexico to the U.S. Besides the decrease in the total remittances, which is an objective fact measured by the Bank of Mexico, various studies from U.S. and Mexican census confirm this trend. Other data associated with migration, such as the number of deportations of Mexicans per year have also fallen.<sup>21</sup>

After four decades, the flow of net migration (Mexicans who come to the U.S. minus those returning to Mexico) has reached an equilibrium point, according to an analysis of U.S. and Mexican census data by the Pew Hispanic Center (Pew Hispanic Center, 2011). According to these estimates, the return flow of Mexicans to Mexico probably exceeded the entry of Mexican immigrants to the U.S. in recent years. This phenomenon, known as “zero net migration point” seems to be the result of many factors, including the increase in the U.S. unemployment rate product of the 2008-2009 recession, increased border security enforcement, increased perception of dangers associated with illegal crossings linked to the wave of violence in Mexico, a demographic factor associated with long-term birth rate decline in Mexico and an increase in the average age of the Mexican population, and a broad improvement in Mexican economic conditions.

This downward trend began to appear in 2005 and led to the first significant decrease in at least two decades in the population of Mexican origin in the U.S. According to the Pew Hispanic Center, estimates based on data from the U.S. Census Bureau and Mexico in 2011, about 6.1 million undocumented Mexican immigrants were living in the U.S., a decrease from the immigration peak of nearly 7 million in 2007. During the same period, the population of Mexican immigrants legally entering the U.S., with immigration documents obtained at a U.S. Consulate in Mexico, increased, albeit modestly, from 5.6 million in 2007 to 5.8 million in 2010, although this figure is much higher than the 1.3 million legally admitted Mexicans in 1990, according to data from the U.S. immigration authorities.<sup>22</sup>

### *NAFTA and Migration: Work-related Legal Migration Perspective*

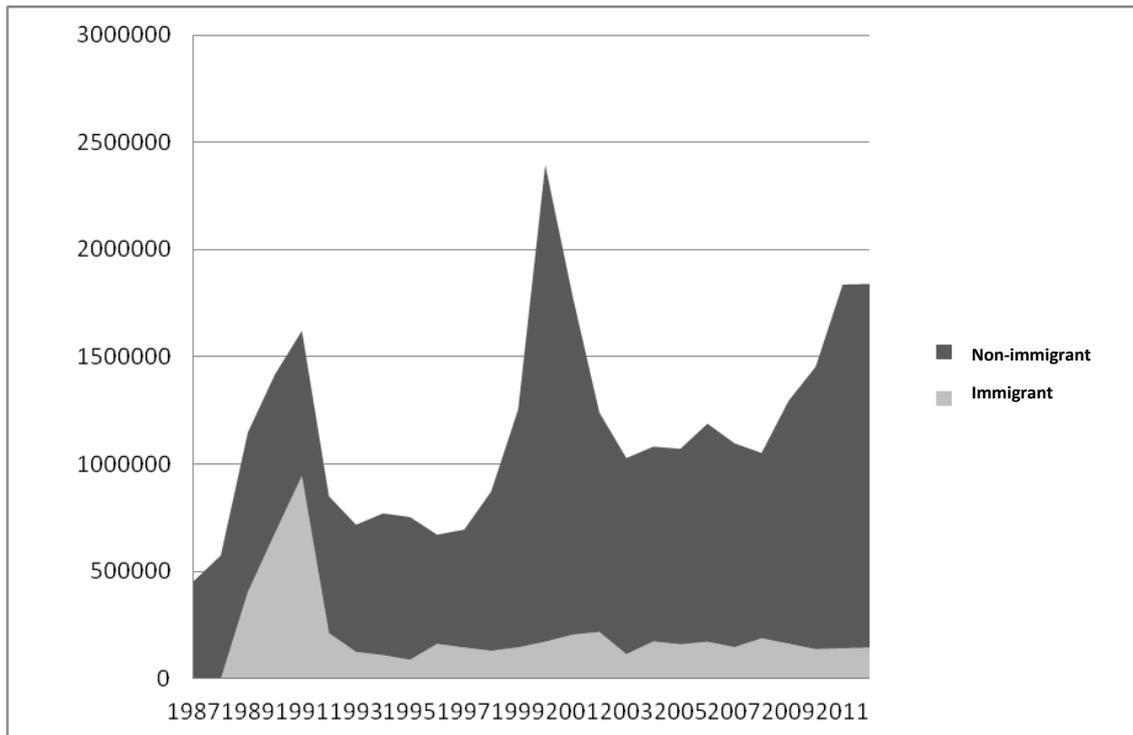
With regards to legally admitted persons to the U.S., Mexico increased from 7.3 to 20.7 percent, or one in five legal U.S. visitors was Mexican in 2010. Although rarely spoken of, this increase is significant, particularly in light of the new integration between Mexico and the U.S., a product of NAFTA that will be discussed below (see Figure 7).

### **Figure 7. Total Mexican Legal Migration to the U.S., Number of Visas Issued by Fiscal Year, 1987-2011.**

---

<sup>21</sup> Despite the increase in the number of U.S. Border Patrol agents, the apprehensions of Mexicans trying to illegally cross the border have plummeted in recent years. This might be an indicator that fewer unauthorized immigrants are trying to cross. The Border Patrol apprehensions of unauthorized immigrants are now at their lowest level since 1971.

<sup>22</sup> Yearbook of Immigration Statistics, U.S. Department of Homeland Security, 1990-2012.



Source: *Yearly Reports from the Visa Office, Bureau of Consular Affairs, U.S. Department of State, 1996-2012*

In the period 1995-2010, Mexico grew significantly in the total number of legal migrants, but specially did so in the number of Mexican citizens who entered legally with a work visa. According to data from the U.S. immigration authorities, Mexico went from the fifth place (24,598) with 7.3 percent of total U.S. legal admissions associated with temporary employment visas in 1995, to the second place with 665,106, which represented 20.7 percent of the total in 2010. In 1995, the U.K. ranked first with 12.9 percent, followed by Canada, Japan, India and Mexico. In 2010, the first place was Canada, concentrating 37 percent of total employment visa admissions, followed by Mexico, India, Japan, the U.K., and Canada and Mexico combined at 58 percent of total work visas (see Table 2).

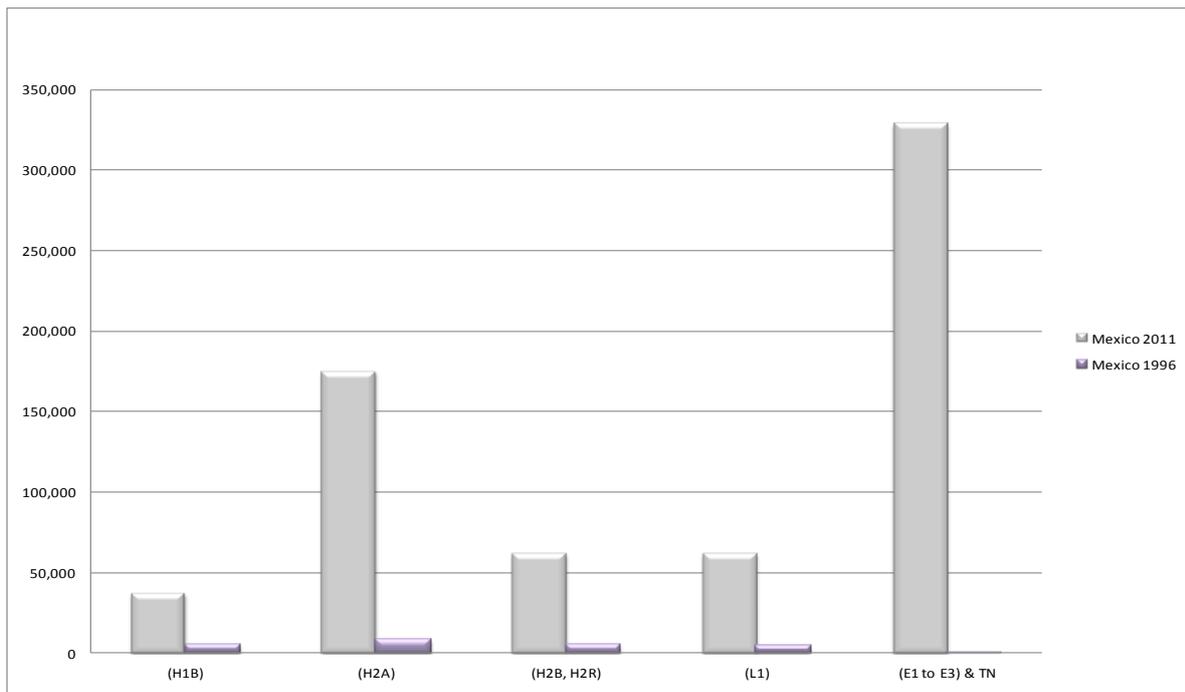
**Table 2. Top 10 Countries by Number of Entries per Citizen with Work-related Temporary Visas, 1990-2010**[Error! Not a valid link.](#)

Source: *Yearly Reports from the Visa Office, Bureau of Consular Affairs, U.S. Department of State, 1996-2012*

Mexico grew in all types of work-related visas, notably in work visas associated with the economic integration of NAFTA: H-1B for skilled workers, L for intra-company transfers, and TN, NAFTA visas. The fact that best reflects this increase is that Mexico went from receiving 3.5 percent of total employment visas in 1995 to receiving 20 percent in 2010.

The most notable increases were in NAFTA visas entries, of only 193 to 328,458, which meant going from less than 1 percent to 17 percent of total admissions for this visa. The second highest increase in admissions was in temporary worker visas for agricultural workers, which increased from 8,833 in 1995 to 174,989. In both cases, it accounted for 92 percent of total visas issued for this class (H-2A). The third increase in magnitude occurred in admissions associated with admissions for unskilled nonagricultural worker visas (H-2B), which increased from 5,539 in 1995 to 62,020 in 2010, representing an increase relative to the total of that visa from 38.6 to 77.7 percent (see Figure 8).

**Figure 8. Work-related Mexican citizens' admissions, 1996-2011**



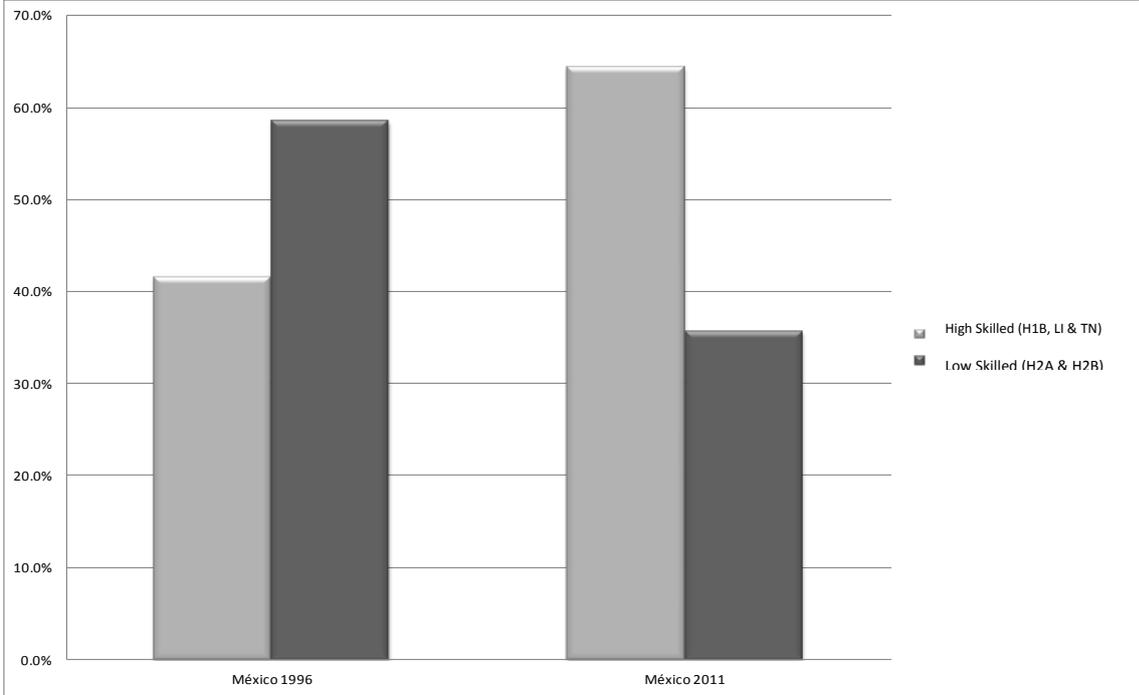
Source: *Yearly Reports from the Visa Office, Bureau of Consular Affairs, U.S. Department of State, 1996-2012*

Similar increases occurred for Mexican citizens admitted under H-1B visas, which went from 5,273 to 37,575, that is only 3.7 percent in 1996 and 7.6 in 2010. Finally, the increase in admissions associated with intra-company transfers (L-type visas) went from 4,759 to 62,155, an increase from 3.4 to 11 percent of all L-type visas in the same period.

Beyond the magnitudes of this changes, it is also notable not only the quantitative change of legal Mexican migration, but also the qualitative one. When we group visas for unskilled workers (H-2A and H-2B) and compare them with the ones for highly skilled

workers (H-1B, L, and TN), we can see that highly specialized workers outnumber unskilled temporary workers in a ratio of 65 to 35 percent. This ratio was 42-58 in favor of the unskilled, back in 1995 (see Figure 9).

**Figure 9. Employment visas for high-skilled employees (H-1B, L, and TN) vs non-qualified worker visas (H-2A and H-2B).**



Source: *Yearly Reports from the Visa Office, Bureau of Consular Affairs, U.S. Department of State, 1996-2012*

*Economic sectors, jobs and target states in the U.S.*

It has been a common place to associate Mexicans to those who perform unskilled work, and to associate the U.S. as the historical destination for Mexican migrants. However, the analysis of the data discussed in the previous section suggests a migration profile different for that portrayed by migration studies and the official discourse on both sides of the border.

The information obtained from the DOL database for professional certifications allows us to make representative estimates and inferences about the various economic sectors, employment types and destinations for Mexican qualified legal immigrants. Mexican skilled workers must undergo these certifications to obtain their H1 and L-type visas, and workers with temporary visas must undergo them as part of the process to obtain legal permanent residence (LPR).

The spectrum of economic sectors represents the U.S. economic structure, the principal of which are employment activities associated with the tertiary sector of professional services, just above manufacturing. Professional services sector represents the first place, with 19.4 percent of the total number of approved Mexican citizens’ certifications; in the second place we find the hospitality sector (16.3), followed by the construction sector (15.8), and advanced manufacturing with 15.4 percent (see Table 3).

**Table 3. Main destination sectors in labor certifications as part of the immigration process. Cumulative, 2005-2010**

*Source: U.S. Department of Labor. Historical cases data from the PERM database, 2005-2010*

The professions with more temporary work visas are those associated with information technologies, which occupy the top five places and concentrate 32.3 percent of all professions. They are software developers, computer engineers and systems developers, as well as systems analysts and non-electronic engineers. Other top professions include financial analysts, basic, middle and higher-education teachers and professionals associated with health services (see Table 4).

**Table 4. Top occupations for labor certification as part of the immigration process. Cumulative, 2005-2010**  
*Source: U.S. Department of Labor. Historical cases data from the PERM database, 2005-2010*

Traditionally, the states where the largest number of Mexican-Americans live are considered to be legal workers' destinations; i.e., California, Texas, Illinois and New York. However, the results indicate a distinct pattern for legal workers. In this case, according to the labor certification database, the destinations are associated with regional patterns of industrial concentration in the U.S. economy. For example, those with visas associated with information technologies usually go to Washington and California; in the case of the financial sector, New York, Miami and Texas; and for the agribusiness, destination states are Oklahoma, Colorado and Arkansas.

## VI. CONCLUSIONS

The conclusion of this essay is that in the period since NAFTA took place, there has been an increase in visas and qualified Mexican workers admissions. The highly skilled migration pattern is highly associated with economic integration between the economies of Mexico and the U.S. as a product of the Agreement, particularly regarding TN and intra-company transfer visas.

The results confirm the classical trade theory, which states that increasing trade reduces unwanted migration. Similarly, it is confirmed that trade and migration are complementary when the “transnational corporations” variable comes into the equation, the increase in this type of visas went from 4,000 to 60,000 in 20 years, which is notable.

Regarding this last point, it is important to notice that immigration legislation requires that all visa applications be made from the invitation letter of a prospective employer in the U.S.; i.e., it is not possible to get a work visa and work “on your own”. By increasing the number of U.S. TNCs in Mexico, inter-company knowledge and innovation networks are being created on both sides of the border, which facilitates the recruitment of potential legal Mexican employees, hence the direct association between TNCs and migration.

It is important to recognize that the U.S. immigration system is very open and that there are no specific reasons to suggest differential treatment or “amnesty” for Mexicans. Particularly for the children of Mexican immigrants, known as “dreamers”, who have not legalized their immigration statuses and are the heart of the immigration reform currently under discussion in the U.S. Congress.

A viable and politically possible option for congressmen and women is extending the ceiling rate of permanent resident visas for the “family preference” type for Mexicans, which currently stands at 150,000 per year and generates a waiting list of 5 to 25 years. In this case, with the expansion of the limits imposed by Congress, and with a consular effort from the Mexican government, providing financial and professional legal support, a structural change in migration issues and more so, in the bilateral relationship, could be achieved. Additionally, the Mexican government could try to urge “dreamers” to regularize their situation through an efficient and comprehensive use of all the 72 available options offered for temporary visas and the 5 types of permanent immigrant visas available, and where caps or ceilings exist, ask Congress to expand them.

The goal would be to explore with a coordinated institutional effort by both governments and in coordination with U.S. companies with operations in Mexico and vice versa, a scheme in which the “dreamers” could legally reenter the country and start the road to normalizing their immigration status through permanent work visas, temporary employment or H, L, J or TN and culminate, if desired, in legal permanent residency or citizenship. The same goes for those who are studying and could get M or J1 visas, or for cult ministers requesting R1 visas, or athletes and coaches asking for a P1 visa. Are there not any artists amongst the 5 million dreamers who could reenter the country with P2 visas? Or are there not any media workers capable of acquiring a visa? More so, are there not any dreamers with “extraordinary and exceptional ability in the sciences, arts, education, sports or business”, able to reenter with O1 visas?

It is therefore important to recognize that Mexico does not have any migratory privileges and treatments for Mexicans and their treatment does not correspond to its trading partner status, as do have Canada and Bermuda, countries which are free from consular processes,

along with another dozen countries enrolled in the “Waiver” program (mainly European countries), that with only a Passport, they can obtain B1/B2 visas and enter the U.S. for up to 90 days. In the latter case, it is surprising that countries such as South Korea, Malaysia, Hungary and even Argentina have enjoyed this privilege.

A measure of openness and flexibility to help Mexican citizens would help the legal way prevail over the illegal one. Nonetheless, it would be essential to accompany this measure with tighter measures for employers of workers with no visa and, of course, with those entering the U.S. illegally. Similarly, the cooperation of both governments is essential to end illegal border crossings and for a shared Central American policy.

Finally, it is important to emphasize that migration policy is defined by the U.S. Congress, and not the Executive, a situation that has not been fully understood on the Mexican side. With this in mind, the chief negotiators should be Mexican congressmen and women in the framework of their interparliamentary meetings and not the Executive, as has been historically done. A change in the bilateral relationship will be possible if, and only if it moves from a relationship based on the rhetoric of distrust to one based on trust, cooperation and legality.

## Bibliography and References

- Amin, A. and N. Thrift (1992). Neo-Marshallian nodes in global networks. *International Journal of Urban and Regional Research*, 16, 4, pp.571-587.
- Aspe, P. (1991). Reflexiones sobre la transformación estructural en México. Ciudad de México: Secretaría de Hacienda y Crédito Público.
- Banco Mundial. Indicadores Económicos 2012. <http://datos.bancomundial.org/indicadores->
- BANCOMEXT (2010). Banco Nacional de Comercio Exterior. *Atlas de Comercio Exterior*. Ciudad de México: BANCOMEXT.
- BANXICO (2012). Banco Nacional de Comercio Exterior. *Evolución de la economía: Panorama general en el Informe Anual*. Ciudad de México: Banco Nacional de México.
- Bennett, D and K. Sharpe (1985). *Transnational corporations versus the state: The political economy of the Mexican auto industry*. Princeton, NJ: Princeton University Press.
- BIE (2013). Banco de Información Económica, INEGI. Electronic resource: <http://www.inegi.org.mx/inegi/contenidos/servicios web/>.
- Bird, G. R. and T. Killick (1995). *The Bretton Woods institutions: a Commonwealth perspective*. London: Commonwealth Secretariat.
- Browne, J., D. Dubois, K. Rathmill, S.P. Sethi and E. Stecke (1984). Classification of Flexible Manufacturing Systems. *FMS Magazine*, 52, (April), pp. 114-117.
- Burtless, G., Lawrence, R.E. Litan and R.J. Shapiro (1998). *Globophobia: confronting fears about open trade*. Washington D.C., Brookings Institution; Progressive Policy Institute; Twentieth Century Fund.
- Castells, M. (2006). *The Network Society*. London: Blackwell.
- Chant, S. (1999). Population, Migration, Employment and Gender. In R. Gwynne and C. Kay (eds.) *Latin America Transformed: Globalization and Modernity*. London: Edward Arnold.
- Cohen, S. S. and J. Zysman (1997). *Manufacturing matters: the myth of the post-industrial economy*. New York: Basic Books.
- Cowling, K. (1995). The internationalisation of production and de-industrialisation. *Warwick Economic Research Papers 25*. Warwick: Economics Department, Warwick University.
- Darin, D. (1996). *The Network Society*. Cambridge: Polity Press.
- De Groote, X. (1994). The Flexibility of Production Process: A General Framework. *Management Science*, 40, 7, pp. 933-945.
- Dicken, P. (1992). *The Global Shift*. London: Paul Chapman Publishing Ltd.
- Enderwick, P. (1989). *Multinational Service Firms*. London: Routledge.

- Feenstra, Robert C; Hanson Gordon H (1995): “Foreign Investment, Outsourcing, and Relative Wages”, in Feenstra Roger C. et al. (eds): *Political Economy of Trade Theory: Essays in Honor of Jagdish Bhagwati*, Cambridge, MA: MIT Press, pp. 889-127
- Feenstra, R. (1998). Integration of Trade and Disintegration of Production in the Global Economy. *Journal of Economic Perspectives*, 12, 4, pp. 31–50.
- Feenstra, R (2004) *Advanced International Trade: Theory and Evidence*, Princeton NJ: Princeton University Press.
- Fröber, F., J. Heinrichs, and O. Kreye (eds.) (1980). *The new international division of labour: structural unemployment in industrialised countries and industrialisation in developing countries*. Cambridge: Cambridge University Press.
- Fujita M.; Krugman, P. and A. J. Venables. (2001). *The spatial economy: cities, regions and international trade*. Cambridge, MA:MIT Press.
- Giddens, A. (1990). *The Consequences of Modernity*. Cambridge: Polity Press in association with Blackwell.
- Glaessner, T. and D. Oks (1998). *NAFTA, capital mobility, and Mexico’s financial system*. Washington DC: World Bank.
- Gruben, W. (1992). North American Free Trade: opportunities and pitfalls. *Contemporary Policy Issues*, 10, 4, pp. 1-10.
- Gupta, Y. and S. Goyal (1989). Flexibility of manufacturing systems: Concepts and measurement. *European Journal of Operational Research*, 43, pp. 119-135.
- Guile, B. and H. Brools, (eds.) (1987). *Technology and global industry: companies and donations in the world economy*. Washington DC: National Academy Press.
- Hanson, G. (1996). Economic Integration, intra-industry Trade, and Frontier Regions. *European Economic Review*, 40, pp. 941-949.
- Hanson, G. (2005) Market Potential, Increasing Returns And Geographic Concentration. *Journal of International Economics*, 67, pp. 1-24.
- Harvey, D. (1990). *The Condition of Post-modernity*. Oxford: Blackwell.
- Held, D. (1999). *Global Transformations: politics, economics and culture*. Cambridge: Polity Press.
- ILO (2000). *World Labour Report*. Geneva: International Labour Organisation.
- IMF (2010). *The balance of payments statistics yearbook*. Washington DC: The International Monetary Fund.
- INEGI (2000). Instituto Nacional de Estadística Geografía e Informática. *Resultados Definitivos del XII Censo general de población y vivienda*. Ciudad de México: Instituto Nacional de Estadística Geografía e Informática.

INEGI (2008). Instituto Nacional de Estadística Geografía e Informática. *Censos Económicos*. Ciudad de México: Censos Económico. Ciudad de México: Instituto Nacional de Estadística Geografía e Informática.

Krugman, P. (1991). *Geography and Trade*. Cambridge, MA: MIT Press.

Lipietz, A. and D. Massey (1987) *Mirages and Miracles: The Crises of Global Fordism*. London: Verso.

Markusen, James R; Venables Anthony J, (1998) “Multinational Firms and the new trade Theory”. *Journal of International Economics*, Vol 46, No. 2, pp 183-203

Martin, 1993. “The uncertain connection: Free Trade and Rural Mexican Migration the United States”. *International Migration Review*, Vol. 27, No. 3, pp. 484-512.

Massey, D. (1995). *Spatial Division of Labour*. London: Macmillan.

Monden, Y. (1995). *Toyota Production System: An Integrated Approach to Just-In-Time*. Andover: Taylor & Francis.

Moody, K. (1995). NAFTA and the Corporate Redesign of North America. *Latin American Perspectives*, 22, 1, pp. 123-148.

OECD (1994b). Organisation for Economic Co-operation and Development. *The performance of Foreign Affiliates in OECD Countries*. Paris: OECD.

OECD (2005). Organisation for Economic Co-operation and Development. *Globalisation of Industry: Overview and Sector Reports*. Paris: OECD.

OECD (2012). Organisation for Economic Co-operation and Development. STAN Industry SStructural ANalysis Database Directorate for Science, Technology and Industry. Paris: OECD.

Ohmae, K. (1995). *The Evolving Global Economy: making sense of the new world order*. Cambridge, MA: Harvard Business Review Book.

OMC (2002). *Fundamentos del Comercio Internacional*. Organización Mundial de Comercio: Ginebra.

ONU (2012). Discurso del Secretario General, Ban Ki-moon, ante la Asamblea General, Marzo, Mayo 2012: Nueva York.

Pew Hispanic Center (2013). *Net Migration from Mexico Falls to Zero—and Perhaps Less*. Authors Jeffrey Passel, D’Vera Cohn and Ana Gonzalez-Barrera. Fuente electrónica: <http://www.pewresearch.org>.

Porter, M. E. (1990). *The competitive advantage of nations*. Basingstoke, Macmillan.

Reich, R. B. (1991). *The Work of Nations: preparing ourselves for 21st-century capitalism*. London: Simon & Schuster.

Sassen, S. (1998). *The Migration of Capital and Labour*. Cambridge: Cambridge University Press.

SECOFI (2000). *Reglas de contenidos de origen en el Tratado de Libre Comercio con Estados Unidos y Canadá*. Ciudad de México, Subsecretaría de Negociaciones Comerciales Internacionales. SECOFI.

Shaw, M. (2002). *Theory of the global: the unfinished revolution*. New York: Martin Press.

UNCTAD (2007). United Nations Conference on Trade and Development. *World Investment Report. Trans National Corporations, and Markets*. Geneva: UNCTAD.

UNCTAD (2008). United Nations Conference on Trade and Development. *Industrial Database*. Geneva: UNCTAD.

United Nations (1991). *World Population Prospects, 1990*. New York: United Nations. Department of International Economic and Social Affairs.

Venables, A. J. (1998). *The Assessment: Trade and Location*. *Oxford Review of Economic Policy*, 14, 2, pp.1-6.

Venables, A. J. and N. Limao (1999). *Geographical disadvantage: A Heckscher-Ohlin-von Thünen model of international specialisation*. Washington DC: World Bank.

Wasem, R (2012). Immigration of Foreign Nationals with Science, Technology, Engineering, and Mathematics (STEM) Degrees. Washington DC: Congressional Research Service

WTO. (1995a). World Trade Organization. *Regionalism and the world trading system*. Geneva: WTO.

WTO (2001). World Trade Organization. *World Trade Report*. Geneva: WTO.

**Anex 1. Types and visa classifications issued in 2012 by the Immigration Authority.  
Source: Bureau of Consular Affairs, U.S. Department of State**

Visa Symbol/Class	Non Immigrant Visa Issued by Classification	2012
A1	Ambassador, public minister, career diplomat, consul, and immediate family	10,857
A2	Other foreign government official or employee, and immediate family	99,573
A3	Attendant, servant, or personal employee of A1 and A2, and immediate family	1,141
B1	Temporary visitor for business	35,341
B1/B2	Temporary visitor for business and pleasure	5,342,439
B1/B2/BCC	Combination B1/B2 and Border Crossing Card	1,043,125
B2	Temporary visitor for pleasure	84,713
B1/B2/BCV	Combination B1/B2 and Mexican Lincoln	450,142
C1	Person in transit	12,028
C1D	Combination transit/crew member (indiv. iss.)	262,168
C2	Person in transit to United Nations Headquarters	13
C3	Foreign government official, immediate family, attendant, servant, or personal employee in transit	13,022
CW1	Commonwealth of Northern Mariana Islands transitional worker	431
CW2	Spouse or child of CW1	111
D	Crew member (sea or air) (individual issuance)	7,649
DCREW	Crewlist Visas	0
E1	Treaty trader, spouse and children	6,907
E2	Treaty investor, spouse and children	31,942
E2C	Commonwealth of the Northern Mariana Islands investor, spouse and children	63
E3	Australian specialty occupation professional	3,211
E3D	Spouse or child of Australian specialty occupation professional	2,150
E3R	Returning Australian specialty occupation professional	837
F1	Student (academic or language training program)	486,900
F2	Spouse or child of student	27,561
F3	Border commuter academic or language student	792
G1	Principal resident representative of recognized foreign member government to international organization, staff, and immediate family	5,355
G2	Other representative of recognized foreign member government to international organization, and immediate family	12,622
G3	Representative of nonrecognized or nonmember foreign government to international organization, and immediate family	286
G4	International organization officer or employee, and immediate family	26,520
G5	Attendant, servant, or personal employee of G1 through G4, and immediate family	730
H1A	Temporary worker performing services as a registered nurse	0
H1B	Temporary worker of distinguished merit and ability performing services other than as a registered nurse	135,530
H1B1	Free Trade Agreement Professional	461
H1C	Shortage area nurse	3
H2A	Temporary worker performing agricultural services	65,345
H2B	Temporary worker performing other services	50,009
H3	Trainee	2,927
H4	Spouse or child of H1A/B/B1/C, H2A/B/R, or H3	80,015
I	Representative of foreign information media, spouse and children	14,447
J1	Exchange visitor	313,431
J2	Spouse or child of exchange visitor	36,722
K1	Fiance(e) of U.S. citizen	27,684
K2	Child of K1	4,108
K3	Certain spouse of U.S. citizen	290
K4	Child of K3	72
L1	Intracompany transferee (executive, managerial, and specialized personnel continuing employment with international firm or corporation)	62,430
L2	Spouse or child of intracompany transferee	71,782
M1	Vocational and other nonacademic student	10,331
M2	Spouse or child of vocational student	524
M3	Border commuter vocational or nonacademic student	0
N8	Parent of SK3 special immigrant	10

N9	Child of N8 or of SK1, SK2 or SK4 special immigrant	2
NATO1	Principal permanent representative of member state to NATO resident in the U.S., and resident members of official staff; principal NATO officers;	6
NATO2	Other representatives of member states to NATO	6,252
NATO3	Official clerical staff accompanying a representative of member state to NATO, and immediate family	9
NATO4	Officials of NATO (other than those classifiable as NATO1), and immediate family	300
NATO5	Experts, other than NATO4 officials, employed in missions on behalf of NATO, and their dependents	92
NATO6	Members of a civilian component accompanying a force entering in accordance with the provisions of NATO agreements	504
NATO7	Attendant, servant, or personal employee of NATO1 through	2
O1	Person with extraordinary ability in the sciences, art, education, business, or athletics	10,590
O2	Person accompanying and assisting in the artistic or athletic performance by O1	5,357
O3	Spouse or child of O1 or O2	2,396
P1	Internationally recognized athlete or member of an internationally recognized entertainment group	24,825
P2	Artist or entertainer in a reciprocal exchange program	117
P3	Artist or entertainer in a culturally unique program	8,078
P4	Spouse or child of P1, P2, or P3	1,113
Q1	Participant in an International Cultural Exchange Program	1,162
Q2	Irish Peace Process trainee	0
Q3	Spouse or child of Q	0
R1	Person in a religious occupation	4,340
R2	Spouse or child of R1	1,375
S5	S5 Informant processing critical reliable information concerning	1
S6	Informant processing critical reliable information concerning criminal organization or enterprise	1
S7	Spouse, married or unmarried son or daughter, or parent of S5 terrorist organization, enterprise, or operation	0
T1	Victim of a severe form of trafficking in persons	1
T2	Spouse of T1	151
T3	Child of T1	342
T4	T4 Parent of T1	7
T5	Unmarried sibling under 18 years of age on date T1 applied	17
TD	Spouse or child of TN	5,578
TN	NAFTA professional	7,638
U1	Victim of criminal activity	170
U2	Spouse of U1	103
U3	Child of U1	194
U4	Parent of U1	45
U5	Unmarried sibling under 18 years of age on date U1 applied	83
V1	Certain Spouse of Legal Permanent Resident	0
V2	Certain Child of Legal Permanent Resident	0
V3	Child of V1 or V2	0
	Grand Total	8,925,601

## Annex 2. NAFTA Professional workers

### PROFESSION – Minimum education and qualification requirements

\* **ACCOUNTANT**-- Baccalaureate Degree, C.P.A., C.A., C.G.A., or C.M.A.

\* **COMPUTER SYSTEM ANALYST**-- Baccalaureate Degree, Post-secondary studies certificates, or a Post-secondary studies certificate with 3 year work experience

\* **DISASTER RELIEF INSURANCE CLAIMS OFFICER**-- Baccalaureate Degree, plus having successfully completed the training in the appropriate areas of insurance claims that have to do with insurance claims for disaster relief, or three years of experience in insurance claims

- \* **ECONOMIST** -- Baccalaureate Degree
- \* **ENGINEER**-- Baccalaureate Degree; or state/ provincial license
- \***FORESTER**-- Baccalaureate Degree; or state/provincial license
- \* **GRAPHIC DESIGNER**-- Baccalaureate Degree or a post-secondary studies certificate with 3 year work experience
- \* **HOTEL MANAGER** -- Baccalaureate Degree in hotel or restaurant management; or a post-secondary studies certificate with 3 year work experience
- \* **INDUSTRIAL DESIGNER**-- Baccalaureate Degree; or a post-secondary studies certificate with 3 year work experience
- \* **INTERIOR DESIGNER**-- Baccalaureate Degree; or a post-secondary studies certificate with 3 year work experience
- \* **LAND SURVEYOR** -- Baccalaureate Degree; or a post-secondary studies certificate with 3 year work experience
- \* **LANDSCAPE ARCHITECT**-- Baccalaureate Degree
- \* **LAWYER** (including “notary” in the province of Quebec) – 5-year license or L.L.B., J.D., L.L.L., B.C.L.; or membership in a state or provincial law bar
- \* **LIBRARIAN**—Master’s degree in library studies or license in library studies
- \* **MANAGEMENT CONSULTANT**-- Baccalaureate Degree; or equivalent professional
- \* **MATHEMATICIAN OR STATISTICIAN**-- Baccalaureate Degree
- \* **RANGE MANAGER / RANGE CONSERVATIONIST** -- Baccalaureate Degree
- \* **RESEARCH ASSISTANT**-- Baccalaureate Degree
- \* **SOCIAL WORKER**-- Baccalaureate Degree
- \* **FORESTER**-- Baccalaureate Degree
- \* **TECHNICAL PUBLICATIONS WRITER**-- Baccalaureate Degree); or a post-secondary studies certificate with 3 year work experience
- \* **URBAN PLANNER**-- Baccalaureate Degree
- \* **CAREER COUNSELOR** -- Baccalaureate Degree

### MEDICAL PROFESSIONS

- \* **DENTIST** -- D.D.S., D.M.D., Orthodontist or Dental Surgeon with state or provincial license
- \* **DIETITIAN** --Baccalaureate Degree; or state or provincial license
- \* **MEDICAL LABORATORY TECHNICIAN**-- Baccalaureate Degree; or a post-secondary diploma with a 3 year work experience
- \* **NUTRITIONIST**-- Baccalaureate Degree
- \* **OCCUPATIONAL THERAPIST**-- Baccalaureate Degree; or state or provincial license
- \* **PHARMACIST** -- Baccalaureate Degree; or state or provincial license
- \* **PHYSICIAN (TEACHER OR RESEARCH ONLY)** -- M.D., with state or provincial license
- \* **PHYSIOTHERAPIST**-- Baccalaureate Degree with state or provincial license
- \* **PSYCHOLOGIST**-- Baccalaureate Degree with state or provincial license
- \* **RECREATIONAL THERAPIST**-- Baccalaureate Degree
- \* **REGISTERED NURSE** -- Baccalaureate Degree with state or provincial license
- \* **VETERINARIAN**-- D.V.M., D.M.V., with state or provincial license

### SCIENTIST

- \* **SCIENTIFIC FARMER**-- Baccalaureate Degree
- \* **ANIMAL BREEDER**-- Baccalaureate Degree
- \* **ANIMAL SCIENTIST**-- Baccalaureate Degree
- \* **SCIENTIFIC BEEKEEPER**-- Baccalaureate Degree
- \* **ASTRONOMER**-- Baccalaureate Degree
- \* **BIOCHEMIST**-- Baccalaureate Degree
- \* **CHEMIST**-- Baccalaureate Degree
- \* **DAIRY SCIENTIST** -- Baccalaureate Degree
- \* **ENTOMOLOGIST**-- Baccalaureate Degree
- \* **EPIDEMIOLOGIST**-- Baccalaureate Degree

- \* **GENETICIST** -- Baccalaureate Degree
- \* **GEOCHEMIST**-- Baccalaureate Degree
- \* **GEOPHYSICIST** -- Baccalaureate Degree
- \* **HORTICULTURIST** -- Baccalaureate Degree
- \* **METEOROLOGIST**-- Baccalaureate Degree
- \* **PHARMACOLOGIST**-- Baccalaureate Degree
- \* **PHYSICIST**-- Baccalaureate Degree
- \* **PLANT BREEDER**-- Baccalaureate Degree
- \* **POULTRY SCIENTIST** -- Baccalaureate Degree
- \* **SOIL SCIENTIST** -- Baccalaureate Degree
- \* **ZOOLOGIST** -- Baccalaureate Degree

**TEACHER / PROFESSOR**

- \* **UNIVERSITY OR TECHNICAL UNIVERSITY**-- Baccalaureate Degree
- \* **SEMINAR**-- Baccalaureate Degree