Employment Growth in North America since NAFTA:
What Has Changed

Maria Elena Vicario

Industrial Relations Research Association
52nd Annual Meeting

Boston, Massachusetts
January 6 - 9, 2000

Ma. **Elena Vicario is** a senior economist at the Secretariat of the Commission for Labor Cooperation, 350 N. Saint Paul, Suite 2424, Dallas. Texas 75201. **E-mail:** mev@naalc.org
This paper is based on the main results of the second edition **of North America Labor Market: A Comparative Profile, which will be published by the Secretariat next year.** The **description of the economic evolution of the NAFTA** countries was based on Chapter One which was elaborated by Datil Maschino, who was a senior **economist** at the **Labor** Secretariat.

Introduction

Five years have past since the North American Free Trade Agreement (NAFTA) was signed by Canada, Mexico and the United States forming the largest free trade area in the world. In 1998, merchandise exports of this area totaled 1,101 .5 billion U.S. dollars while imports amounted 1,278.5 billion U.S. dollars. These figures represented 25.2 percent of total world exports and 30.5 percent of total world imports in that year.[1]

One of the objectives of the NAFTA between Canada, Mexico and the United States is to stimulate trade between the three countries, thereby creating better job opportunities and better standards of living for the population. During the first five years of the agreement, trade between the signatory countries has increased. In fact trade has been one of the major sources of economic growth in the three countries.

The objective of this paper is to present an overview of the major changes in employment in Canada, Mexico and in the United States after 1994. There is no attempt to establish a causal relationship between the trade agreement and changes in the labor market since multiple factors have also influenced the evolution of employment since the coming into force of NAFTA on January 1, 1994. The first part of this paper will describe the economic growth and the evolution of trade in NAFTA countries within the period between 1994-l 998. It serves as a background to the review of changes in employment during the same period that will be described in the second part of the paper.

Economic *growth* in NAFTA *countries*

[1] In 1998 world merchandise exports accounted for 4,018 billion U.S.dollars and world merchandise imports stood at 4,200 billions of U.S. dollars. World Trade Organisation, *Foc* us News *Letter,* April 1999.

The economic conditions of the three NAFTA countries after 1994 occurred **in** a macro-economic context marked by sustained growth in Canada and the United States and by cyclical behavior of the Mexican economy consisting of a period of economic crisis in 1995, which lasted until the first quarter of 1996, together with a period of economic recovery as of the **second** quarter of **1996 (See** Graph 1). During this period, the annual increases in the consumer price index slowed considerably; interest rates started to come down at various paces in the three countries stimulating the growth in investment, and smaller deficits and lower interest rates stopped the public debt from increasing as a percentage of GDP.

The United States posted the best performance among their counterparts, which resulted in major spin-off effects for **the** economies of Canada and Mexico, After **a** period of recession, which began in July 1990 and lasted eight months causing 5 million jobs to be lost, **the** economy of the United States begun its recovery in mid-1993. The GDP growth was up almost consistently, stimulated by the recovery in household consumption. In 1997 real GDP increased by 3.9 percent, the highest annual rate since 1984. In 1998, the impact of the economic crisis in a number of Asian countries had a substantial effect in exports that were felt, especially during the second and third quarters. Despite this, GDP maintained its annual growth at 3.9 percent in response to a strong rise in domestic demand. The sectors with highest growth levels during **1994-I 998** period were finances, insurance and real **estate,** services, wholesale trade and manufacturing. This period of expansion also featured control over inflation, which declined continuously reaching 1.6 percent in 1 998.[2]

In Canada, the recession that began in April 1990 accelerated toward the end of the year leading to a 1.9 percent drop in real GDP in 1991. This downturn, which was less severe than that ten years earlier recession, resulted in the loss of **249 000** jobs in 199 1 (or 1.9% of total employment at the previous crest). After the peak of the recession, which was reached in March 1991, the recovery was weak at first and employment continued to decline in 1992. Beginning in the second half of

1993, economic growth in Canada began to increase at a higher speed. Household consumption and then corporate investment joined exports in stimulating total demand. The annualized growth rate of real GDP rose by 2.5 percent in 1993. The economic growth was sustained in 1994 and 1995. Although, growth slowed in 1998, partly caused by the economic crisis in a number of Asian countries, the economic performance stood at 3 percent growth of GDP. Between 1994 and 1998, the sectors with the highest output growth were trade, manufacturing, transportation and communications and mining.

Mexico embarked on the 1990s by continuing the changes begun in the mid-1980s, such as opening the country to international trade, privatizing government business enterprises, and developing a securities market. Despite high annual rates in 199 1 and 1992, growth began to decelerate and halted in 1993. By the end of 1994, a sudden change in the expectations of security holders provoked a massive sell-off of government bonds. The flow of this capital abroad caused the peso to fall. As a result of substantial increases in the rate of interest and inflation, aggregate demand had a significant reduction, which led to a 6.2 percent decrease in real GDP in 1995.[3] Restrictive monetary and fiscal measures were instituted to control inflation and stabilize the balance of payments.

The Mexican economy began to recover in the second quarter of 1996. From that year to 1998 real GDP has grown at an annual average rate of 5.8 percent. Among the factors explaining growth was the strong export performance which increased by 21.6 percent during the 1996-l 998 period. In addition to exports another factor responsible for this sustained growth was private consumption which recovered substantially, especially demand for durable goods and services. Private investment also grew strongly, sparked by an improvement in business expectations, lower interest

[2] The annual growth in the consumer price index declined from 2.6 percent in 1994 to 1.6 percent in 1998

[3] Agregate demand, in constant terms, was reduced by 10.2 percent, in comparison to 4.9 percent growth in 1994.

rates and an inflow of foreign capital.[4] As in Canada and the United States growth in Mexico slowed in 1998, with real GDP having risen 4.8 percent. Since 1996, the economic sector posting the strongest recovery was manufacturing, whose output increased 24.4 percent during the 1996-l 998 period, compared to a rise of 10 percent in national GDP. Specifically, production of machinery and capital goods, primary metal industries, textiles and clothing as well as non-metallic minerals achieved output gains above average for the manufacturing sector.

Evolution of trade among NAFTA countries

Foreign trade in goods and services is important for the NAFTA countries overall, accounting for almost 30 percent of the region's GDP in 1998. This proportion is higher than that observed in 1994, showing a growing openness to foreign trade.5 The role of foreign trade varies in the economies of the three countries, but trade of goods and services has increased in all three cases over the last ten years. In addition, regional trade has grown faster than trade with all non-NAFTA countries. This development is not exclusive to North America, and a trend toward the regionalization of trade can be seen us well in other regions, especially where there are free trade agreements.

The openness of the NAFTA countries to foreign trade is not recent but has become more marked over the 1990s (See Graph 2). Insofar as the United States is concerned, the value of its exports of goods and services remained stable during the 1960s at 5 percent of the GDP. This proportion rose in the middle of the following decade, mounting 8.4 percent in 1975. Thereafter, this proportion stopped increasing and even declined slightly in the 1980s. Beginning in 1987, U.S. openness to foreign trade began to increase moderately, with exports reaching 11 percent of the GDP in 1998.

---

[4] Fix gross investment grew at an annual average rate of 15.8 percent between 1 996 ond 1998
[5] In 1994 foreign trade in NAFTA coutries represented 24.1 percent of total NAFTA GDP, and in 1991 represented 23.9 percent.

In Canada, total exports of goods and services increased steadily as a proportion of the GDP between 1960 and 1980 (rising from 18% to 28%), before declining between 1984 and 1990. Beginning in 1992, they increased rapidly, accounting for 41.7 percent of the GDP in 1998. In Mexico, exports remained stable us a proportion of the annual GDP during the 1960s at 7 percent. After increasing moderately during the 1970s, this proportion soared during the 1980s. It declined between 1988 and 1993, but began to rise steadily again in 1995 reaching almost 34 percent of the GDP in 1998.

The role played by imports of goods and services in the economies of the three countries evolved similarly to that of exports. In the United States, the share of imports grew steadily after 1986, accounting for almost 13 percent of GDP in 1998. In Canada, this proportion remained stable during the 1980s and then increased quickly beginning in 1992, accounting for 40 percent in 1998. In Mexico, the share of imports increased between 1986 and 1990, when it reached 24.3 percent of the GDP in the lust year, and then remained stable until 1993. Since 1994, the import share has grown again, reaching almost 38 percent of the GDP in 1998.

Intra-regional trade growth

Even though intru-regional trade is characterized by a large and growing proportion of trade from Mexico and Canada to the United States, the proportion of trade from the United States to its trading partners has also increased during the 1994- 1998 period (See Graph 3).

In 1998, Canadian exports of goods to the United States accounted for 173.3 billion U.S. dollars while imports accounted for 156.6 billion U.S. dollars, which meant proportions of 84 percent and 77 percent of the total respectively, higher than the proportions observed in 1994.[6] Mexican exports of

[6] In 1994, Canadian trade with the United States accounted for 79.3% of total merchandise exports and 74.5% of total merchandise imports,

goods to the United States totaled 103 billion U.S. dollars in 1998, while imports stood at 93.3 billion U.S. dollars. These figures represented 87.8 percent of total Mexican exports of goods and 74.4 percent of total Mexican imports[7] (See Graphs 3 and 4)

By contrast, trade between Canada and Mexico remains rather modest. In 1998, Mexico's merchandise imports from Canada accounted for 2.3 billion US dollars, which represented 1.8 percent of its total imports. While exports to Canada amounted to 1 .5 billion US dollars, which represents 1.3 percent of its total exports. Insofar as Canada is concerned, total merchandise exports to Mexico in 1998 represented 0.43 percent of total Canadian exports; while imports from Mexico represented 2.5 percent of its total imports. However, trade among these two countries has grown consistently since 199 1 (See Graphs 3 and 4).

The United States increased its merchandise trade with Canada, and especially with Mexico during the 1994-1998 period. While US merchandise exports to these countries were 22.3 percent and 9.9 percent of the total respectively in 1994; in 1 998, these proportions increased to 23 percent and 11 6 percent. In the case of imports, the Mexican share of the U.S. total increased from 6.9 percent to 10.4 percent between 1994 and 1998; while the share of imports from Canada steadily increased till 1996, and has decreased slightly thereafter. In 1998, merchandise imports from Canada and Mexico totaled 173.3 billion dollars and 94.6 billion dollars, respectively; while exports amounted 156.6 billion dollars to Canada and 78.8 billion dollars to Mexico. Allowing retaining Canada's position as the first U.S. trading partner, and Mexico to replace Japan as the second U.S. trading partner.

Main *trade sectors* in the *NAFTA* countries

[7] In 1994, Mexican trade with the United States accounted for 84.9% of total merchandise exports and 69% of total merchandise imports.

In the above-mentioned bilateral relations, North American trade is relatively specialized. Part of this specialization is bused on the traditional comparative advantages of each country. The other part, intra-industry specialization, is based on a North American division of production units and subcontracting among the three countries by multinational companies in the areas of transportation equipment, electrical and computer equipment, communications equipment and chemicals.

Canada's leading exports to the United States comes from the automobile sector and products with a high natural resource content as paper and petroleum and natural gas. The other important industries are aeronautics (aircraft and parts), electronic products (electronic computers, parts and accessories), plastic products, and electrical products (communication equipment). The relative importance of these leading exports industries remained during 1994 to 1998, accounting for 57 percent of total merchandise exports in the last year. On the import side, automobiles, engines, parts and accessories are also a large part of merchandise imports from the United States, accounting for 24.5 percent of the total in 1998, with half being components and parts. Scientific instruments, medical products, aircraft, machinery for construction and for mining, and electronic parts are also among the leading Canadian imports from the United States. In 1998, these industries accounted for 27 percent of total merchandise imports.

Canadian exports to Mexico are mainly concentrated in automobile engines and bodies, parts and accessories; telecommunications equipment, parts and electronic components, machinery and equipment and wheat and oleaginous cultivating farms (except corn). In 1998, exports in these industries accounted for 55 percent of total Canadian exports to Mexico, in comparison to 38 percent in 1994. During the 1994- 1998 period, the industries with the highest growth in exports to Mexico were those related to the automobile industry. Imports from Mexico are mainly in automobiles, automobile engines, parts and accessories; electric cables; textiles: computers; radio and television apparatuses; and industrial electrical material. In 1998, these industries represented 58 percent of total imports from Mexico. These industries also showed the highest growth in imports during the 1994- 1998 period.

United States exports to Canada are mainly concentrated in motor vehicles and car bodies, parts and accessories which in 1998, amounted to around 30.6 million dollars, or 19.5 percent of total US exports. Exports of aircraft **and** parts, telecommunications equipment and electronic equipment grew faster than average during the 1994-l 998 period. In 1998, exports of these industries represented almost 8 percent of total. United States imports from Canada continued to be dominated by the transportation (motor vehicles, parts and accessories), crude oil and natural gas, communications equipment (semiconductors and related devices, telephone and telegraph apparatuses), paper mills, metal products (primary aluminum, steel mills, primary nonferrous metals) , plastics materials and resins, and aircraft. In 1998, these industries accounted for 58 percent of total merchandise imports from Canada. Aircraft and parts and telephone equipment grew faster than merchandise as a whole from 1994 to 1998.

United States exports to Mexico became more concentrated between 1994 and 1998. This greater concentration stems mainly from the rapid increase in exports of automobile engines and bodies, semiconductors, electronic computers, plastic products and materials and petroleum refining, nonferrous wiredrawing and insulating, telephone and telegraph apparatuses and fabricated metallic products. In 1998, these industries accounted for 33 percent of total exports to Mexico, in comparison to 29 percent in 1994. Imports from Mexico also became more concentrated, with the shore of the leading industries in total merchandise imported from that country rising from 47 percent in 1994 to 50 percent in 1998, These Mexican imports included motor vehicles and car bodies, car parts, accessories and engines; audio and video equipment; crude petroleum and natural gas; communication equipment and electrical equipment; electronic computers and peripheral equipment; furniture and fixture and girls and children outwear.

Over the lust 15 years, Mexican non-petroleum products have substantially increased their share of merchandise exports. In 1998, these exports amounted to 110.3 billion U.S. dollars, 94 percent of the total. At the same time, oil's share of merchandise exports fell continually from 68 percent of the total in 1982 to 6.1 percent in 1998. Another important change in Mexican trade is the increasing participation of manufacturing products in total export of goods, representing 91 percent of the total in 1998, in comparison to 83.9 percent in 1994 and 23 percent in 1980.

The maquiladora sector has substantially increased its share of total Mexican merchandise exports from 16 percent in 1980 to 45.1 percent in 1998. It should be noted that in 1998, manufactured exports from the maquiladora sector were, for the first time since 1994, slightly greater (53.1 billion of US dollars) than manufactured exports from the non-maquiladoru sector (53 billion US dollars) .

Evolution **of** *Employment* **in** NAFTA *countries*

Generally speaking, employment conditions in Canada, Mexico and the United States improved between 1994 and 1998. On the one hand, employment grew by an annual average rate of almost two percent in Canada and the United States, and by more than three percent in Mexico. On the other hand, unemployment rates tended to fall in all three countries. The data used in this section comes mainly from the respective employment surveys of each country.[8]

The improved performance of the Canadian economy as of 1994 has had a positive effect on employment. Between 1994 and 1998, the average growth rate of employment stood at 1.9

[8] For Canada, Labour Force Survey; for Mexico, Encuesta Nacional de Empleo, for the United States, Current Population Survey.

Percent Per annum, which means an average annual **increase of 258,000** employed persons. This rate actually implies a recovery in comparison with the employment **reduction observed** during the period of economic crisis in the earlier 1990's, with regard to the 1983 to 1989 period, which was also characterized by a high economic growth, these figures point to a slight deceleration of employment growth.[9] After 1994, employment growth in Canada has been continuous, and reached a growth rate of 2.8 percent in 1998. This year, employment rose by 386,000 people, the highest employment growth rate for the last ten years (See Graph 5).

The characteristics of employment in **Canada** have undergone some changes between 1994 and 1998. While, during the first two years of this period, employment was essentially of a salaried nature; in 1997, employment growth was largely the result of increasing self-employed labor; however in 1998, wage and salaried employment had a substantial increase accounting for 85 percent of total employment growth. This situation contrasts with the period preceding the economic crisis, when employment growth was basically the result of increased salaried labor. It is also observed that during the 1994-l 998 period the jobs created were essentially of a full-time nature. Although this situation marked the entire period, it reached its apogee in 1998, when nine of every ten new jobs **were** full-time. It should be noted that that year, the average full-time worker remuneration was 3.2 times higher than that of part-time workers (See Graph 6).

The evolution **of** employment in Mexico between 1994 and 1998 went from an initial period of deterioration during the first two years, to a period of high growth as of 1996. The employment deterioration of the first two years was caused by the economic crisis, which began in 1994, and culminated with the considerable GDP contraction of 1995. This situation brought about the reduction of the employment growth rate, together with increased unemployment, which reached the highest level of the period in 1995.[10] **The number** of workers insured by the Instituto Mexicuno del

---

[9] **During this lost period, employment increased by** an average annual rate **of 285,000 people.**
[10] **In 1995, the level of unemployment in Mexico totaled 1,651,794 people.**

Seguro Social (Mexican Social Security Institute –IMSS), an indicator of the behavior of employment in the private formal sector, dropped by three percent, which meant a reduction of 611,000 formal jobs in 1993. This decline was even more acute than during the 1982 crisis. Employment in the manufacturing industry which, in 1995, accounted for 34 percent of total employment, also fell. Only the export in-bond industry maintained a high employment growth rate which, in 1995, stood at 11.2 percent. The deterioration of employment in the formal sector led to an increase in informal employment. The share of people occupied in the informal sector rose from 52.8 percent of the total in 1993, to 57.8 percent in 1995[11] (See Graph 5).

In the second semester of 1996, the Mexican economy begun to recover. That year, real GDP increased by 5.2 percent; economic growth was sustained in 1997 and 1998. Better economic performance was reflected by a recovery of the employment growth rate, which grew by 9.6 percent between 1996 and 1998; this meant an increase in the number of people employed by 3.3 million. Formal employment increased by 16 percent between 1996 and 1998, 1.6 million more employed persons. The characteristics of employment in Mexico during these years, is evidence of a significant improvement. Full-time employment growth was higher than part-time employment growth. Eight out of ten new jobs between 1996 and 1998 were full-time jobs. Wage and salary employment also grew at a higher level than self-employment.[12] It should be mentioned that eventhough an important share of the employment growth (49 percent) during 1996-l 998 occurred in small establishments of less than 15 workers, employment growth in establishments of more than 250 workers was also important, accounting for 35 percent of total employment growth in that period. In 1998, employment in small establishments accounted for $7 percent of the total employment, while the share of employment in large establishments was 29 percent (See Graphs 5 and 6).

---

[11] Data estimated by the Labor Secretariat using data of the Encuesta Nacional de Empleo. The definition includes household domestic workers, employers, wage earners, piece rate workers in establishments with five or fewer workers, self-employed workers, except professionals and unpaid workers,

In the United States, the sustained economic growth **of the 1994-1998 period had a** positive effect on employment. During **this** period, employment increased at an annual average rate of 1.7 percent, or an increase of 2.1 million occupied people. This level was higher **than** the figure reported for the previous four years, but less than the rate registered for the 1984-l 989 period, when employment grew at an average annual rate of 2.5 million people. This situation was mainly a result of a less rapid recovery of the United States economy from the recession in the earlier 90's, in comparison to the recovery from the recession in 1982.

After 1994, the growth of employment in the United States took place within the context of better labor conditions, a situation that is demonstrated by the following indicators. On the one hand, the employment increase was essentially in wage and salaried labor, which generally receives better salaries and higher benefits than non-salaried work. The growth of salaried labor occurred throughout the entire period, causing the participation of salaried labor in total employment to rise to 92.1 percent in 1998, which is a percentage point higher than the 1994 figure. Another indication of these improved employment conditions was the higher full-time employment growth rate, in comparison with the increase of part-time employment. In 1998, 98 percent of the employment increase *was* accounted for by the growth of full-time employment. Likewise, the participation of workers with temporary employment fell slightly in 1997 (4.4% of total employment) , in comparison with the 1995 figure, 4.9% of total employment (See Graphs 5 and 6) .

Industries with the highest *employment* growth

During the 1994-1998 period, the changes in the distribution of employment by branch of economic activity in Canada, Mexico and the United States, maintained the trend noted in previous years. In

---

[12] **Between 1996 and 1998 the number of wage and salary workers** in Mexico rose **by 2.4 million people, which** represented 75 **percent** of total employment growth; while self-employed workers rose by 827,000 people.

other words, the proportion of people employed in the agrarian sector tended to fall, while the number of workers occupied in the service sector [business, professional, personal, social, medical and educational services) tended to increase. However, one important change, which has reverted the overall trend observed in previous years, is the increased participation of the manufacturing sector in employment in Mexico and Canada during the 1994-l 998 period. In the case of the United States, the decline of the participation of employment in manufacturing activities tended to slow during the first three years, although in 1998 it decreased again.

Between 1994 and 1998, the most dynamic activities in the net generation of employment in Canada were the services industry and the manufacturing industry. Business services played an especially important role with 29.5 percent of total net employment growth in this period, being information technology services and administrative consulting services the ones generating the largest share of employment. Also, medical services, educational services and food and beverage services were important job creators in this period.

The manufacturing industry generated 24.1 percent of total net employment growth between 1994 and 1998, causing its participation in total employment to rise from 14.7 percent at the start of the period, in 1994, to 15.7 percent in 1998, reverting the downward trend that had been observed in earlier years. In the last year of this period, the personnel occupied in the manufacturing industry accounted for 2.3 million people, 300,700 more than in 1994. The most dynamic manufacturing industries for that period, as far as those that generated the most employment, were the manufacture of transportation equipment, especially aircraft, aircraft parts, motor vehicles parts and accessories; the metal products industry; the wooden products industry; the rubber and plastic industries, especially its plastic products division; communications and other electrical equipment: other machinery and equipment industry; and the machine shop industry. As a whole, these activities accounted for **182,900** more workers, or almost 60.8 percent of the employment growth in the manufacturing industry between 1994 and 1998 (See Graph 7).

Industries which have shown a trend of decreasing employment and which have **been** important employment sources are the paper derivatives industry, especially in its pulp and paper subdivision; and the non-ferrous metal smelt. It is important to point out that the clothing and apparel industry, which had shown a continuous reduction in its occupied personnel until 1993, had a recuperation during this period, reaching a substantial increase in 1998; nonetheless, the employment level reached that year did not reach levels observed in 1984.[13] Another industry which had shown a decreasing trend in employment and which has recuperated earlier levels is the food products industry; which, after the transportation equipment industry, is the second most important in employment absorption in the Canadian manufacturing sector.

In the United States, changes in employment by economic activity are also associated with a higher participation of employment in the services sector. Between 1994 and 1998, 50.8 percent of the employment increase took place in this **sector;** this means that its participation in total employment rose from 34.9 percent in 1994, to almost 36 percent at the end of the period. Services supplied to companies, specifically computer and data processing services; personal services: health cure services and educational services in primary and secondary schools, were the activities with the highest level of employment growth **in that** period.

As far as employment generation in the United States is concerned, commerce was the second most important activity; in this area, employment increased by 2.6 million people between 1994 and 1998, or the equivalent of 31 percent of total, This employment growth took place in both retail and wholesale trade, although the former generated **more employment** than the latter. In 1998,

[13] In 1998 employment in the clothing industries totaled 121.6 thousand workers, 12 thousand more than in 1994, but 17 thousand less than in 1984.

seven of every ten new jobs in commerce were created in the retail trade. Construction also played an important role in the creation of employment; more than a million new jobs were generated in this area over the last five years.

In the United States manufacturing industry, employment increased by 576,000 people between 1994 and 1998; contributing with 6.9 percent of total employment growth. In the lust year, the number of people working in the manufacturing industry was 20.7 million people, or 15.8 percent of total employment. It should be noted that the increase in employment of this period reversed the reduction observed during the previous four years, although, in 1998, employment in the manufacturing industry experienced a slight reduction. In general terms, the most dynamic manufacturing activities, with regard to employment absorption during 1994-l 998 period, were those related to the manufacture of durable products. Among these, the activities reporting the greatest increases were the combined manufacture of machinery and electrical equipment; the manufacture of rubber and plastic products; the manufacture of automobiles and related equipment; the manufacture of wooden products (excluding furniture); and the manufacture of metal products. Likewise, the textile, garment and food industries underwent the greatest employment reductions. Between 1994 and 1998, the number occupied in the textile and garment industries fell by 238,000. This trend had been observed before 1994 after which it accelerated. The garment industry reduced its occupied personnel by almost 30 percent between 1983 and 1998, while in the textile industry the reduction stood at 20 percent (See Graph 7).

Similarly to Canada, employment in the Mexican manutacturing sector underwent a considerable increase of 1.8 million people between 1995 and 1998, henceforth becoming the most important activity in the generation of employment in that period. This led the participation of this activity in total employment to increase from 15 to 18 percent. This favorable evolution of employment in the manufacturing industry was the result of a considerable recuperation of GDP in this industry between 1996 and 1998.[14] The most dynamic manufacturing activities, as regards the generation of employment, were the garment industry; the food and beverage industry; the manufacture of transportation equipment: the manufacture of metal products; and the leather and footwear industries. Together, these industries accounted for a growth of 1.3 million workers during this period, or 74.2 percent of total employment growth. This situation meant an employment recovery in these activities, which was directly related to their output dynamism. Meanwhile, the industries subject to employment reduction were the oil refining and derivatives industry, the chemical products industry, and the tobacco industry, losing 64,500 workers altogether during this period (See Graph 7).

The behavior of employment in the Mexican manufacturing industry has been highly influenced by the evolution of employment in the in-bond export industry. Between 1994 and 1998, the number of in-bond companies, or *maquiladoras,* rose from 2,085 to 2,983. This mean) that, by 1998, this industry occupied just over a million people, 424,987 more people than in 1994. The growth of employment in this industry over the last three years of this period has been the highest since 1980 (See Graph 7).

The most important maquiladora economic activities by their employment growth absorption during the 1994-1998 period are the garment and textile industry, showing an increase of 128,278 workers. The production of electrical and electronic materials and accessories grew by 106,853 employees,• Is the third largest job-creating activity is production, reconstruction, and assembly of transportation equipment and its accessories, having grown by 64,156 employees during the same period. In 1998, the above industries represented almost 65 percent of total employment in the maquiladora industry.

[14] The GDP of the manufacturing industry, which in 1995 decreased by 4.9 percent, increased by 8.7 percent between 1996 and 1998.
[15] The sector producing electrical and electronic materials and accessories has experienced a steady decrease in its shore of the total maquiladora empfoyment, which stood at 33.1% in 1980 and at 25.2% in 1998.

The employment growth in some in-bond industries accounted for more than fifty percent of their total industry employment growth.[16] Such was the case of the fabrication, reconstruction and assembly of transportation equipment and its accessories, where in-bond industries accounted for 83.8 percent of total employment growth in that industry during 1994-1998 period. This was also the situation for the fabrication and assembly of electrical and electronic machinery, equipment, appliances, and articles, and its parts, where the muquiladora industry represented 57.2 percent of total industry employment growth. Other muquiladora industries with higher participation in employment growth were the garment industry including other articles produced from textiles (with 45.6 percent) and the chemical industry (with 33 percent).

Even though the employment increase in the in-bond industry in Mexico has played a significant role in the overall growth of employment in the manufacturing industry, in the last three years of this period non-muquildoru industries have been the main source of manufacturing employment growth. Between 1996 and 1998, only two out of every ten new jobs in the manufacturing industry, were created in the in-bond export industry; this ratio increases to 4.4 when the comparison is made with the formal manufacturing employment growth. In 1998, the participation of this industry in manufacturing employment accounted for almost 15 percent. If this is compared with employment in the formal manufacturing sector, the participation of the maquiladora industry rises to 27 percent (See Graph 8).

In Mexico, communal, personal and social services have also played an important role in employment growth. Between 1995 and 1998, employment in this sector increased by 1 .6 million people, and accounted for 33.6 percent of the total employment increase. In 1998, the number of people occupied in these activities represented almost 25 percent of total employment.

[16] It onty refers to the formal industry that constitutes all enterprises whose employees are active in the Mexican Social Security Institute (Instituto Mexicano del Seguro Social-IMSS).

The services with the highest employment growth rates were health and educational services, domestic services, and repair and maintenance services.

Unemployment and *Labor Stability*

Between 1994 and 1998, the rhythm of employment growth in the three countries was higher than the labor force growth rate. This situation led to a reduction of open unemployment rates in the three countries. Aside from the reduction of open unemployment rates, other factors such as the reduction of the duration of the period of unemployment and the lower proportion of workers losing their jobs for economic reasons, demonstrated the improved conditions of the labor markets of Canada, Mexico and the United States during that period of time.

After having reached high levels during the period of economic recession in the early 90's, unemployment began to decline in Canada after 1994, reaching its lowest level in 1998. In that year, the number of unemployed people amounted to 1.3 million, almost 200,000 less than in 1994. In **1998,** Canada registered its lowest unemployment rate for eight years, Nonetheless, unemployment levels for the entire period were higher than those reported for the 1986-1989 period. when unemployment also fell substantially (See Graph 9).

A similar situation occurred in the United States, with a continued reduction of unemployment starting in 1994; this meant a reduction of 1.8 million unemployed people between 1994 and 1998. During the final year of this period, the unemployment level stood at 6.2 million people, which is the lowest level for the last eighteen years. This unemployment decline was reflected by a continuous reduction of the unemployment rate, which, in 1998, reached its lowest level since 1980 (See Graph 9). It should be noted that, despite the fact that the rhythm of employment growth tailed off in the United States in 1998, the higher deceleration of the growth of the labor force led the unemployment rate to maintain its decline trend. The reduction of the unemployment rate in the United States, since 1994, ***has*** been greater than the corresponding reduction in Canada. Thus, the differences between the unemployment rates registered in both countries since 1982 have augmented.

In contrast to Canada and the United States, in Mexico, the unemployment rate increased considerably during the first two years of the 1994-1998 period, a situation that was largely influenced by the economic crisis spanning these years. in 1995, the unemployment level stood at almost 1.7 million people, which meant an open unemployment rate of 4.8 percent. In urban areas, the unemployment rate in that year reached 6.2 percent, slightly higher than the rate registered during the 1983 recession.[17] As of 1996, unemployment tended to fall. In 1998, the unemployment rate fell to 2 percent, which, in relation to the labor force, meant an unemployment level of 869,000 people. This unemployment level was lower by 464,352 people than that of 1996 and by 782,696 than that of 1995. Data for urban areas shows that, in 1998, the unemployment rate was 3.2 percent, 3 percentage points less than that observed in 1995 (See Graph 9).

In Mexico, the unemployment rate has been considerably lower than in Canada and the United States. In fact, even in periods of economic recession, Mexico's unemployment rate has never been higher than seven percent. The factors affecting this situation include the non-availability of unemployment insurance in Mexico and the deterioration of real wages, both of which make it very difficult for the population to remain in a situation of open unemployment. Aside from reflecting a low unemployment rate, this situation is also demonstrated by the duration of unemployment, which is considerably shorter in Mexico than in Canada and the United States. Aside from the foregoing factors, differences in the definition of unemployment in the three countries accentuate the differences observed in unemployment rates. By adjusting the definition of unemployment in Mexico to make it more comparable with those of Canada and the United

States, the unemployment rate rises from 2.4 percent to 5.5 percent in 1997 or, in other words, by 2.9 percentage points more than the original definition[18] (See Graph 9).

Unemployment in the countries of North America is essentially of an involuntary nature, and that is reflected by the high proportion of people who are unemployed for economic reasons in Canada, Mexico and the United States.[19] This situation was maintained during the entire 1994-1998 period, regardless of the fact that the number of people unemployed for economic reasons fell in all three countries (See Graph 10).

In Canada, the proportion of workers unemployed for economic reasons, or involuntary unemployment in total unemployment, fell from 43.5 percent in 1994, to 39 percent in 1998. In the United States, the situation was very similar, since the share of unemployment for economic reasons fell from 47.7 percent in 1994, to 45.4 percent in 1998. This situation is reflected in a decreasing trend in the average number of people who lost their jobs for economic reasons. In the United States, the level in 1998 (2.8 million people) was the lowest observed in eighteen years; for Canada, the number of people unemployed for economic reasons accounted for 598,600, the lowest level in the last nine years.

The reduction of unemployment caused by economic reasons was also reflected by a lower number of workers permanently dismissed from their jobs in all three countries. In Canada, 410,000 people lost their jobs definitively in 1998; this figure accounted for 31.4 percent of total unemployment that year. In comparison with previous years, this figure represented a substantial

---

[17] In **1983 the** unemployment rate in urban areas accounted for 6.1 percent.
[18] The adjustment **in the definition was made by including as unemployed** those people who **did** not seek employment because they **intended to start a new job within four weeks of the reference week, and** those who did not seek employment **because they were waiting to be reinstated in their old jobs. Usually these two type of workers** are considered employed in the Mexican definition.

improvement, being the lowest since 1981. In the United States, the number of workers dismissed from their jobs for reasons related to closure or relocation of companies, to insufficient work opportunities, or to the elimination of their positions also decreased.[20] In accordance with data provided by the Displaced Workers Survey, 4.6 million people lost their jobs in a definitive manner between 1995 and 1996, which, in comparison to the employment level during the same period, meant a displacement rate of 3.9 percent.[21] This level was 508,000 less than the level registered for the 1993-1994 period and 819,000 less than the 1991-1992 period.

Until 1994, the proportion of Mexican workers unemployed for economic, or involuntary, reasons was very similar than in Canada and the United States. However, in 1995, not only did the economic crisis generate a substantial rise in the unemployment rate, but also brought about a considerable increase in the number of people unemployed for economic reasons. In fact, 73 percent of the increase in unemployment in Mexico between 1993 and 1995, was the result of company closures, personnel cutbacks, or the termination of labor contracts. As of 1996, the percentage of involuntary unemployment in Mexico began to fall, in such a way that, in 1998, for every hundred unemployed workers, forty-three had involunfarity lost their jobs; this figure is fourteen workers less than in 1995. In the case of Mexico, the main reasons behind workers losing their jobs in a definitive manner, were company closures or personnel cutbacks. In 1998, 227,585 people were definitively dismissed from their jobs for these reasons. However, this figure is 2.7 times lower than the number of people dismissed in 1995, when the economic crisis substantially affected job creation (See Graph 10).

---

[19] Unemployment for economic reasons includes company closure, the conclusion of labor contracts, company relocation, a lack of raw materials, among other factors. Involuntary unemployment includes sickness, school enrollment, a lack of work satisfaction, and a change of address, among other reasons.
[20] In the United States, displaced workers are those persons aged 20 or more, who lose or leave their jobs because of company closure or relocation, due to a lack of work, or because their jobs were eliminated.
[21] The displacement rate is obtained by dividing the number of displaced workers in a specific worker group by the average emptoyment for two years; this figure is then adjusted in accordance with on estimate of employment duration.

Real Earnings in NAFTA countries

The favorable evolution of employment in Canada, Mexico and the United States since 1994 has not been reflected by a substantial improvement in wage levels. On the one hand, increases have only permitted a slight recovery of salaries in real terms while, on the other, the salary differences between the diverse sectors of the occupied population have been maintained high (See Graph 11).

In Canada, average real worker remuneration increased by 2.6 percent between 1994 and 1997, a situation that was largely the result of an increment of nominal remuneration, which surpassed the inflation rate increase for this period. This salary increase served to reverse the declining trend observed between 1990 and 1993, when real salaries fell by 4.1 percent (See Graph 12). The most recent data provided by the Labour Force Survey shows that in 1998 real remuneration for Canadian workers grew at 0.3 percent.

In Mexico, the growth of average nominal salaries has been surpassed by the more pronounced growth of inflation. Between 1994 and 1998, the average nominal salaries of workers in the formal sector, as represented by workers insured by the Instituto Mexicano del Seguro Social (Mexican Social Security Institute –IMSS), increased by 90.8 percent, while price increases totaled 154 percent.[22] This situation led to a 25 percent deterioration of real salaries between 1994 and 1998. It should be noted that, during the final year of this period, salaries underwent an improvement in real terms, rising by 1.8 percent (See Graph 12). It was also the first increment of real salaries in the formal sector in four years. If we analyze the evolution of real workers' salaries at national level, a similar behavior pattern may be observed. Data taken from the National Employment Survey shows

[22] The average weekly earnings of workers at IMSS was $662.76 pesos in 1998.

that average real worker remuneration fell **by** almost **21** percent **between** 1993 and 1997, while in 1998, real remuneration rose by 11.3 **percent.**

In the United States, the real remuneration of salaried workers rose by 4.5 percent between 1994 and 1998.[23] **This increase** was the result of a reduced inflation rate and, above all, of higher nominal remuneration. The salary recovery observed during this period took place starting **in 1997;** substantial increases were reported in 1998, when real salaries rose by **3.9** percent, the highest increase for 18 years* This situation offset the trend observed since 1986, when real remuneration was subject to a continuous reduction, thereby provoking a 4.4 percent loss of salary purchasing power **between** this year and 1996. The increase of the median weekly earnings of the last two years helped to recover real earnings levels a compared to the levels observed in the early 1980's (See Graph 12).

In Canada, salary dispersion is lower than in the United States and in Mexico and has **fended to** decline. In 1997, the average annual remuneration of workers in the last quinfile rose to $47,342 Canadian dollars, or four times more than the average remuneration received by workers in the first quintile, and twice as high as the remuneration of workers in the second quintile. The salary dispersion affecting Canadian workers has fallen since 1986, particularly between workers receiving the highest and lowest remuneration whose salary differences felt from 4.5 **times in** 1986 to 4 times in **1998.** This is a result of the higher growth in remuneration for workers situated **near** the salary limit, in comparison with the remuneration increase for workers in the highest salary bracket[24] (See Graph 13).

In Mexico, salary differences between workers are bigger that in Canada and the United States. **In 1998, the** average **monthly** earnings of workers in the highest quintile stood **at $5744.6 pesos a**

---

[23] **Data refers to the median weekly earnings of** wage and salary workers.

month, fourteen times the average remuneration of workers in the lowest quintile, and 6.4 times higher than the average remuneration of workers in the second quintile. These ratios are slightly lower than those observed in 1995, thereby implying that the salary differences separating the highest and lowest incomes have decreased during this period. This is the result of the more pronounced growth of earnings of workers in the lowest incomes in comparison with the increment of the highest incomes.[25] However, when we compare earnings differences among workers in previous years, earnings differences in 1998 are higher (See Graph 13).

In the United States, the salaried working population is subject to a considerable degree of salary dispersion.[26] In 1998, median weekly earnings of salaried workers in the ninth decile stood at $1,198 dollars a week. This level was 4.4 times higher than the average remuneration of workers situated in the first decile, and 2.1 times more than the average remuneration received by workers in the second quartile. While salary differences have been observed during the lust nineteen years, in 1997 and 1998, salary dispersion declined slightly, a situation that had not arisen since 1979. This was due to the fact that, during these two years, the remuneration of workers situated in the first decile grew more quickly than that of workers in higher deciles (See Graph 13).

Conclusions

Trade among NAFTA countries has continued increasing after 1994 and economic growth has been swstuined in Canada and the United States and in Mexico since 1996. In this context, employment in Canada, Mexico and the United States hus performed well with employment rising mainly in full-time jobs and rates of unemployment declining continuously. However, real earnings

---

[24] Between 1986 and 1997, nominal income of individuals in the lowest quintile grew by 13.1%; while the income of individuals in the fourth quintile grew by 2.5 percent.
[25] The monthly income of workers in the lowest quintile increased by 96.4% in nominal terms between 1995 and 1998; while the monthtly income of workers in the highest quintile increased by 59.7 percent,
[26] Data refers to wage and salary workers 25 years and over.

have only recovered slightly, mainly in the last two years, and salary dispersion among workers is still high.