

# Economic Integration, Regional Convergence and Growth in North America

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## **Abstract**

The study looks at regional convergence and economic integration in the North American region from a theoretical as well as an empirical perspective. The study provides the empirical evidence of North American regional growth and economic convergence. The existence of a catching-up convergence and economic integration process is observed, with differentiated behaviors for quite a number of regions, that suggest the possibility of different equilibrium tendencies in the long-run for the Mexican States versus the regions of Canada and the United States.

**Key words:** Economic Convergence, North America, Regional Economic Growth, Economic Integration.

**JEL Classification:** F02, F15, R10, R11.

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## Introduction

North American Economic Integration started with the negotiations for a Canada-United States Free Trade Agreement in 1985. During that same year, trade between these two countries was close to US\$ 116 billion. By the year 2000, the exchange between Canada and the USA reached US\$ 408 billion, an increase of 250%.

During the 1990's, economic linkages between the three North American economies increased dramatically, creating new opportunities and challenges. Trade between Canada and the USA has grown much more rapidly than had been predicted at the time the agreements were concluded. Mexico also became an important economic player in the North American market.

By creating a new legislation, combined with a nondiscriminatory treatment and access to the North American market, the North American Free Trade Agreement (NAFTA) promoted the installation of transnational corporations in the region that centered their production and investment opportunities within the countries of North America. NAFTA was controversial in the USA due to the new dimension of economic integration with Mexico. The signing of an agreement with a developing country with low wages magnified the related questions of labor loss and reduction of wages in the industrialized country. The NAFTA agreement is the first example of a comprehensive economic integration between an industrialized country and a developing country. The breach of economic development between the USA on the one hand, and Mexico on the other, is much greater than the breach of the original members of the European Community with the recent members of the periphery like Spain, Portugal and Greece. After a unilateral reduction of tariffs and the elimination of the import permits, Mexico became a member of the General Agreement on Trade and Tariffs (GATT) in 1986 –now World Trade Organization (WTO), and a member of the Organization for Economic Cooperation and Development (OECD) in 1994. Since the eighties Mexico had a very ambitious commercial and trade agenda in the regional and bilateral scope.

By the year 2000, companies producing manufactured goods made 87 % of the export sales in Mexico. In one decade, the liberalization of trade and the macroeconomic policies in Mexico have increased exports from 41 trillion USD in 1990 to 166 trillion USD in the 2000. Similarly, Mexico increased its imports by 310% from 1990 to 2000. From the creation of NAFTA in 1994 to 2004, the North American regions are seen as one of the most integrated commercial regions in the world. The regional proximity of the NAFTA partners is a factor that increases the dynamic performance of North America in terms of economic growth. By the year 2000, the members of NAFTA carry out one third of the total trade of the region.

Similarly, NAFTA has increased the trade flows between Mexico, Canada and the USA. During the last few years, Mexico's trade with its NAFTA partners tripled, getting to be near \$275 trillion USD in 2000.

**Table 1**  
**Trilateral Trade in the NAFTA Region (Trillion USD)**

	1993	1994	1995	1996	1997	1998	1999	2000
Trilateral Trade	301.1	352.1	391.6	435.2	495.2	527.9	588.8	659.2
México-USA	85.2	104.3	115.5	140.5	167.9	187.8	215	263.5
México-Canada	4.1	4.9	5.3	6.2	7.0	7.4	9.3	12.1

Sources: Banco de México e INEGI.

Trilateral trade in NAFTA reached 659 trillion USD in 2000, or 128.2 % more than in the year of 1993. From 1994, commercial trade between the member countries of NAFTA increased at an annual average rate of 11.8%, whereas the worldwide annual average rate of growth in trade was around 7%. The opportunities of trade for Mexico and Canada within NAFTA have increased in the last few years. Mexico became the fourth more important commercial partner for Canada, whereas the bilateral commerce between Mexico and Canada tripled, reaching 12 trillions USD in 2000. Mexico is the third most important buyer of Canadian products. Cornett (2001) has shown that the integration of the intra industry trade is extremely high within NAFTA and shows how the region integrated not only in commercial terms but also in terms of the productive systems of the region. The NAFTA region has created new opportunities of investment and trade for the companies of all 3 countries. In the NAFTA region, 50 % of the direct foreign investment is between trade partners. For Mexico, the USA is the main source of direct foreign investment. From 1994 to 2000, USA companies invested 40.3 trillion dollars, whereas Canada invested near 2.8 trillion dollars in Mexico.

Trade and investment are thought to be mechanisms for transmission of information and technology, and income convergence. An advanced degree of economic integration is evident in some sectors of North America. The North American automotive industry, operates as a sector with no national boundaries. But in order to foster economic integration with policy (in addition to the market forces), Mexico and Canada will have to take the initiative by increasing the

negotiations (and cooperation) between Departments and ministries at the federal and provincial/state/regional level in North America.

Many researchers feel that further economic integration in the NAFTA region would create the possibility of a common currency or some form of North American monetary integration. Optimal currency areas present some benefits due to the independence of monetary policy, and some costs in the form of exchange rate instability and multiple currencies. The extensive economic and increasing trade integration of the NAFTA countries is increasing the potential benefits of a common currency. In the case of Mexico, a common North American currency would have benefits in terms of controlling inflation and having substantial financial stability, including a reduced risk of events like the peso crisis of the 1990's. Recent simulations suggest that with complete integration and dollarization, the ratio of Mexican trade (imports plus exports) to GDP could grow from 60 % to 150%. The level of integration can also be explained by the movement of people between North American Borders. By 2003 there were approximately 500 million crossings at USA borders annually. September 11 had an effect in economic integration. The most important USA policy responses to the September 11 attacks were the signing of the United States-Canada Smart Border Declaration and the United States-Mexico Border Partnership Agreement in December 2001 and March 2002. On January 2008 the last provisions of NAFTA were fully implemented. These final provisions account for less than 1% of USA trade with Mexico. It also marks the end of a 14 year transition period. The close of the NAFTA transition period is not the end of continuing changes in the NAFTA economic integration relationships.

## **1. North American Economic Convergence and Growth**

The accelerating processes of economic integration between NAFTA countries reflect the forces of geography, communications and markets that have been underway for years, slowly but surely increasing the economic growth as a whole of all three countries and to a certain extent the economic convergence between most regions in North America. The effects of NAFTA had its downside on the poorest regions of North America, contrary to prevailing theories of economic integration. The common view is that North America is experiencing a process of divergence among the NAFTA periphery as the income share of the less-advantage states, provinces and regions have actually deteriorated in all three nations.

The income gap that separates the world's rich and poor nations is the main economic fact at the beginning of the 21st century. Nearly two-thirds of the world's population lives in countries where average income is only one-tenth the

USA level. Mexico's average GDP per capita is about one fourth of the USA income per capita. But that doesn't mean that the income gap is not large enough between both countries. Since the starting points for all countries were not so far apart prior to the industrial revolution in Europe and the beginning of the nineteenth century in North America, these disparities must be attributed almost entirely to differences in growth rates of per capita income. Over the past century, the growth economist observes a basic fact, which is that the world has two kinds of countries, the rich club of countries that have managed to sustain economic growth over long periods of time and those countries defined as medium and low income countries.

Most growth analysts would date the birth of the modern theory of economic growth to the 1950's, but the growth economists in Mexico would say that the classical economists, such as Adam Smith, David Ricardo, and Thomas Malthus were the first to discuss many of the basic ingredients of modern growth theory. In particular, their emphasis on competitive behavior, equilibrium dynamics, and the impact of diminishing returns on the accumulation of labor and capital are integral elements of what is called the neoclassical approach to growth theory. For the case of Mexico, the neoclassical tradition has had a big impact in the way the theory of growth has been developed. During the 1950s, the neoclassical approach to understanding growth was formalized by Solow and Swan, and was later extended by Cass and Koopmans. The basic assumptions underlying the neoclassical growth model, with a productive capacity that can be adequately characterized by a constant-returns-to-scale production function with diminishing returns to capital and labor has been the basis of the empirical work been done in Mexico at research centers and Universities in the last twenty years. The other assumptions, in which firms are price-takers in a competitive market place, which means that no individual firm has any influence over market prices and individual firms, are assumed to possess no market power, are also accepted by growth economists in Mexico. The assumption that technological change or productivity growth is entirely exogenous and independent of the actions of the consumers and producers and is available to all countries at no cost has always been taken with some reservation.

The implications of the neoclassical model of growth are straightforward for a middle-income country. The first major implication is that sustained increases in per-capita income can be supported only by sustained increases in total factor productivity. In such a model, the output per worker can only rise if the ratio of capital per worker increases or total factor productivity increases. The assumption of diminishing returns to capital showed us that there is a limit to how much capital accumulation can add to output per capita. Hence, the only way to increase output per worker in the long run is to have sustained productivity growth. This major

weakness of the neoclassical growth model has been detected by economists around the world and has not been overlooked in Mexico. Long-run growth in the model is exogenous and determined by an element that is entirely outside of the model.

The second major implication of the neoclassical model is conditional convergence, which states that national or regional economies with lower initial levels of real output per worker relative to the long run level should experience faster economic growth. This property follows from the assumption of diminishing returns to capital: the lower the ratio of capital per worker, the higher the return to investing in capital. Hence, the lower the ratio of capital per worker, the faster the rate of capital accumulation and the faster the growth rate of output per worker. This implies long run convergence in output per capita. Economic convergence is said to be conditional here since the long run level of capital per worker and output per worker depend on the savings rate, the growth rate of the population, and the existing technology, factors that are unlikely to be identical across regions and countries. For Mexico, we would now that most factors vary even at the state level. When comparing the data on the savings rate and the growth rate of the population between Mexico and the USA, we observe huge differences. The convergence thesis requires also the assumption that all regions can acquire technological progress at no cost, which is a very strong assumption even in a surrealist world like Mexico.

For several decades, the neoclassical growth model remained the benchmark model of economic growth and still remains strong in many parts of Mexico. During the 1980's, more sophisticated growth models were developed in the industrialized countries research centers. A key feature of these new models is that, unlike the neoclassical model, technological change is not assumed to be exogenous. Hence, the new endogenous growth models explain where technologically driven productivity growth comes from. In the new growth models, the accumulation of knowledge plays a key role in driving productivity growth in these models.

For the Mexican growth theorist, there are essentially two seminal lines of work in the endogenous growth literature. The first line includes the work done by Romer (1986) and Lucas (1988). In this line of work, the assumption of constant returns to scale is dropped. In particular, knowledge is assumed to be an input of production with increasing returns to scale, so that it may be possible for per capita output to grow without bound. In addition, convergence of per capita incomes need not occur in the long run for different regional or national economies. The second line of endogenous growth models is based on the articles by Romer (1990), Grossman and Helpman (1991), Aghion and Howitt (1998), and others. In these models, an effort is made to model the microeconomic environment in which firms

may accumulate knowledge. In particular, the assumption of perfect competition has to be dropped. This is because the acquisition of knowledge through research and development activity is costly and can only be rewarded if firms have some ex post market power. Hence, firms are assumed to compete in a monopolistically competitive environment, which is a model more closely related to the Mexican economic environment. As in the first class of endogenous growth models, per-capita output growth can occur without bound since there need be no tendency for the economy to run out of ideas. Furthermore, convergence may not occur in the long run for different regions and countries.

The economics of growth in Mexico has come a long way since it regained center stage for economists in the last few years. The early focus of economic growth in Mexico was on theoretical models that generated self-sustaining growth, but newer models of economic growth have been applied for Mexico, which have increasingly replaced older models with an attempt to shed light on the factors affecting economic growth in Mexico. On the empirical front, the search for determinants of growth has gone from basic economic growth variables (such as physical and human capital) to newer determinants of economic performance such as trade and institutions. Our understanding of the economic growth process in Mexico has increased considerably as a result. However, there remain serious questions in the existing growth research in Mexico. Neither the cross-national growth literature nor existing country studies have made adequate progress in answering these and many other fundamental questions. Of course, there is no shortage of country studies in the literature due to the shortage of researchers in Mexico. At the international level, recent growth studies begin to answer some of the economic growth questions. The studies explore the respective roles of human capital, trade, institutions, political economy, and initial conditions in driving patterns of technological convergence and accumulation in selected countries. Mexican economists look at growth as determined by initial and secondary determinants. The standard initial way in which Mexican economists look at growth is that of total output of an economy as a function of its resource endowments (labor, physical capital, human capital) and productivity with which these endowments are deployed to produce a flow of goods and services, increasing the gross national product. The relationship is expressed in the form of an economy production function, with the letter representing total factor productivity. Total factor productivity captures not only the technical efficiency level of the economy, but also the allocative efficiency with which resource endowments are distributed across economic activities. The growth of per capita output can in turn be expressed in terms of three determinants: physical capital deepening, human capital accumulation and productivity growth.

This is the usual and standard neoclassical growth accounting decomposition, and it has given rise to a large literature on sources of growth accounting. But one has to be careful in interpreting such decompositions because accumulation and productivity growth are themselves endogenous. The secondary determinants of growth are the determinants mentioned by Rodrik (2001) including integration and openness (trade), culture and institutions. Trade or integration relates to market size and regional openness, and the benefits and costs of participation in international trade in goods, services, capital, and labor. Institutions refer to the quality of formal and informal, sociopolitical arrangements, that range from the legal system, the level of corruption and to political institutions. An observer in Mexico knows that institutions play an important role in promoting or hindering economic performance. Trade and institutions are obviously endogenous in Mexico and evolve with economic performance.

Mexico has gone through remarkable transformations during the last two decades in their economic performance, while others countries have experienced sharp deteriorations. This suggests that moderate changes in country specific circumstances (government policies, democratic elections and institutional arrangements), often interacting with the external environment, can produce discontinuous changes in economic performances, which in turn set off virtuous or vicious cycles. An in depth country study of the determinants of economic growth in Mexico can highlight the important determinants of growth in ways that cross-country empirics cannot show.

The government policy toward trade in Mexico plays a key role as well as the institutional setting in the economic growth of the country. Specific public policies such as a free trade agreement that is directed at international economic integration of Mexico do not correlate very well with economic performance, once one looks at the regional evidence. The evidence also shows that regional institutions with less corruption can overcome geographical constraints and lousy initial conditions. In order to promote and sustain growth in Mexico, we must have elements that are highly specific to a country's circumstances. An approach to institutional reform that ignores the role of local variation and institutional innovation is at best inadequate, and at worse harmful. The case of Mexico complements the literature on growth by providing more specific detail on how institutional arrangements matter to economic performance. A good example is monetary policy in Mexico. Good institutions are those autonomous institutions that provide public officials with the incentives to work and provide a public good at least cost in terms of corruption and rent seeking. Thinking in such terms helps endogenize the concept of good governance in Mexico. Economic growth in Mexico requires extensive



institutional reforms within the existing institutions, rather than the conventional wisdom on institutional reform, which holds that the complementary nature of institutional reforms requires a long list of reforms to be pursued simultaneously. Sustaining economic growth in Mexico in the face of adverse circumstances such as world economic recessions requires even stronger institutions. The policies required to initiate a transition from a middle income country equilibrium to a state of rapid growth are qualitatively different from those required to ignite growth in a very low-income country. The institutional requirements of re-igniting growth in a middle-income country can be significantly more demanding than those of an industrialized country due to the uncertainty about the rules of the game. Economic growth in Mexico has to be accompanied with good fundamentals that would provide the economy with the resilience to handle adverse shocks.

The country as a whole estimates of growth due to integration and trade liberalization are positive in the NAFTA region. Partial equilibrium and computable general equilibrium models indicate that per capita income gains range from 20 to 50 % of the increased trade volumes. In other words, an increase of imports (or exports) by \$100 million, increases the country's income from \$20 to \$50 million. For example, between 1990 and 1999, Canadian exports grew from \$126 billion to \$237 billion. If Canadian exports had grown only as fast as real Canadian GDP including USA inflation, the Canadian 1999 figure would have been \$184 billion. The extra \$53 billion of exports is attributed to NAFTA and trade liberalization. The boost to Canadian GDP potential was \$11 to \$26 billion (2 to 4 %). Between 1993 and 1999, Mexican exports grew from \$48 billion to \$120 billion. If Mexican exports had grown only as fast as real Mexican GDP plus USA inflation, the 1999 figure would have been \$63 billion. The extra \$57 billion of exports boosted Mexican GDP potential by \$12 to \$28 billion (3 to 6 %). Between 1990 and 1999, USA exports grew from \$251 billion to \$700 billion. If USA exports had grown only as fast as USA GDP, the 1999 figure would have been \$400 billion. The extra \$300 billion of exports boosted USA GDP potential by \$60 to \$150 billion (1 to 2 %).

The law of comparative advantage explains why trade increases per capita income levels, as producers become more efficient in response to import pressures, while the firms spread the fixed costs over longer production runs. Another benefit of trade integration is narrowing the range of price dispersion. Border frictions have increased price divergence between border cities. If Canadian and Mexican price divergence could be narrowed to plus or minus two standard deviations around the USA average, Canadian GDP would increase by nearly 3 % and Mexican GDP would increase by nearly 11%.

Some studies suggest that economic integration and financial liberalization with world markets increases income levels and fosters higher growth rates. Frankel and Rose suggest that trade integration alone, in the context of currency union, might increase growth by 0.8% per year over 30 years. In terms of long term growth, Canada could grow 1.0 % per year faster than the USA for at least five years, and Mexico could grow 2.5 % per year faster for decades.

The absence of free movement of people is not an obstacle to regional economic integration in North America. Nevertheless, in the long run, free movement should remain an objective in order to achieve a complete economic convergence. During the present decade, the NAFTA agreement should be complemented by a positive security and migration policy, whose primary objective would be to discourage unauthorized immigration, and regulate safe flows within the free trade area.

On its 14 anniversary, NAFTA stands as a commercial trade success. Dramatic increases in trade and investment have increased the efficiency of North American companies. In addition, the tragedy of September 11, 2001, created new security challenges for North America. To achieve greater economic integration, new ideas have to be turned into achievable goals for a fresh initiative that will give North American integration renewed momentum.

## **2. Empirical Results**

The empirical model follows the study by Díaz-Bautista (2002) that analyzed the effects on institutions on regional economic growth at the state level. The model also follows the standard approach in Barro and Sala-i-Martin (1991), derived from a constant returns to scale production function with two inputs (capital and labor) that are paid at their marginal products. The empirical variables used in the study are the annual growth rate of GNP per capita between 1999 and 2002 for the states, provinces and territories of Canada, Mexico and the United States. The regions of Canada include 10 provinces and 3 territories. The provinces included are Alberta, British Columbia, Manitoba, New Brunswick, Newfoundland and Labrador, Nova Scotia, Ontario, Prince Edward Island, Quebec and Saskatchewan. The territories are Nunavut, Northwest Territories and the Yukon Territory. For the United States the 50 states are included. The states include Alabama, Alaska, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, Florida, Georgia, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina,

North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin and Wyoming. For Mexico the 31 states and the federal district are included: Aguascalientes, Baja California, Baja California Sur, Campeche, Chiapas, Chihuahua, Coahuila de Zaragoza, Colima, Distrito Federal, Durango, Guanajuato, Guerrero, Hidalgo, Jalisco, Mexico, Michoacan de Ocampo, Morelos, Nayarit, Nuevo Leon, Oaxaca, Puebla, Queretaro de Arteaga, Quintana Roo, San Luis Potosi, Sinaloa, Sonora, Tabasco, Tamaulipas, Tlaxcala, Veracruz-Llave, Yucatan and Zacatecas. The data for GNP per capita, production and population comes from the Mexican National Institute of Statistics, Geography and Computing (INEGI, by its Spanish abbreviation), Statistics Canada (CANSIM), table 384-0002 and U.S. BEA data (SA05) obtained in February 2005 in U.S. dollars. A border dummy variable was also included to indicate the northern states that border the USA. The regional convergence equation had the change in income per capita as the dependent variable and the income per capita and the border variable as independent variables. The method of estimation was generalized least squares with instrumental variables for the period 1999 to 2002. The following table shows the empirical results.

**Table 2**  
**North American Convergence by State, Provinces and Territories in Canada, Mexico and the United States**

*Dependent Variable: Growth of Income per capita 1999-2002*

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Method: Generalized Least Squares

Included observations: 96 after adjusting endpoints

Instrument list: CHANGELN9902 LNINCPERCAP1999 BORDER

<i>Variable</i>	<i>Coefficient</i>	<i>Std. Error</i>	<i>t-Statistic</i>	<i>Prob.</i>
C	0.1102	0.026743	4.12	0.0001
LNINCPERCAP1999	-0.0176	0.006320	2.80*	0.0062
BORDER	0.0082	0.007729	1.06	0.2909
R-squared	0.09	Mean dependent var		0.0367
S.E. of regression	0.02	Sum squared resid		0.0492
F-statistic	5.82	Durbin-Watson stat		1.1162
Prob(F-statistic)	0.01			

In the case of North America, the regional model of growth was empirically tested with border variables, with results of a relatively small regional convergence at the state and provincial level for the period 1999 to 2002. The coefficient on the level of income is negative and significant for the regression, implying that there is evidence for convergence towards the respective steady states in the regions of North America. The Border States of Mexico and the USA may be growing at a different rate than the rest of the regions in North America. The  $F$  statistic in the regressions is significant. With a low  $p$ -value of 0.01, we obtain a result in favor of the alternative hypothesis that at least one on the coefficients in the model is not equal to zero and the model is significant.

Income per capita levels across countries are compared by converting national data into a common currency using Purchase Power Parity (PPP), which are currency conversion rates that enable international volume comparisons of GDP by taking into account the differences in price levels between countries. To do so, prices of a basket of comparable and representative goods and services are compared across countries. Generally, the gap between high-income countries and middle or low-income countries narrows when PPP's are used instead of exchange rates. For example, the per capita indices based on PPP's for Mexico are closer to those of USA than are their per capita indices based on exchange rates. This is due to the price levels in Mexico are low compared to the USA and Canada.

The Mexican economy has been transformed to a trading and global nation following the new world dynamics thanks to the NAFTA agreement and the free trade agreements that Mexico signed with the European Union and Central American nations. Mexico's main trade partner is the USA, with around an 80% share of total trade in 2000 and a growth of 5 percentage points since the pre-NAFTA situation. Mexico's largely U.S. exports-led growth is clearly dependent on the United States economic situation. The USA comes second in terms of economic ties with 6% of total trade in 2000. At the end of 2000, Mexico ranked 24th among USA trade partners. After the 1995 recession, USA-Mexico trade in both directions has constantly increased. USA exports have more than tripled since 1995, while imports have more than doubled. Growth has accelerated during 2000, in particular during the months following the entry into force of the Free Trade Agreement, with an increase of exports of 32.9% and of imports of 48.5%. USA has a substantial trade surplus with Mexico: exports are almost double the imports. Other important commercial partners are Japan and Canada (both with about 2.2% of total trade). Canadian access to the Mexican market continues to improve under the terms of NAFTA.

But the opening up of the economy has also brought a worsening of the conditions of inequality and disparity in some regions of Mexico. While it is argued that thanks to these agreements there exists an indisputable economic, increasing trade and social development, at the same time, there is also recognition that there are great disparities between some regions in Mexico. Mexico has suffered a rise during the last decade of the number of people who live in extreme poverty. Mexico had 20 million living in poverty in 1994, increasing to 50 million by the year 2000. After the Mexican Crisis of 1994, and the decline of 6.2% in the GNP in 1995, the Mexican economy grew at rates of 5.1% during the years 1996 to 1999. Even with the decline in gross domestic product, employment actually rose slightly.

In terms of regional growth, we observe a relative process of catching-up among the North American regions in terms of income per capita during the last twenty years. Nevertheless, the conditional convergence analysis qualifies the previous result given that, although the existence of a catching-up process is present in the differences between regions at the North American level, we observe sufficiently differentiated behaviors for quite a number of regions, that suggest the possibility of different equilibrium tendencies in the long-run for the Mexican States versus the regions of Canada and the United States. The same is true for North America as a whole. The tendencies in regional growth in Mexico show advance regions with growth in terms of income and productivity, which are above the mean of the Mexican states, such as the Northern States of Chihuahua, Baja California and Mexico City. The economic growth of the Northern region has been driven in part by the *maquiladoras*.

Some states in Mexico can be classified as dynamic intermediate regions, which show an important dynamism in terms of productivity and employment such as the states of Guanajuato and Puebla. The dynamic intermediate regions reflect an adequate process of adaptation and a strategy of growth based on dynamic activities with some of the branches of manufacturing and the third sector in general. We observe also declining regions which correspond to the southern periphery with a low level of industrialization, low human capital indicators and problems due to the lack of economic activity. The states of Guerrero and Chiapas are representative of that group. New regional economic growth proposals for the southern periphery of Mexico have been proposed by Dávila, Kessel and Levy (1999) with the Puebla-Panama Plan. This Plan is a regional economic growth plan that has the intention of generating new public policies for the human development of Mexico in the struggles against poverty, promotion of investments and productive developments. The Plan also envisions the fulfillment of strategic investments in the infrastructure that will permit the region to communicate more effectively and

take advantage of the possibilities inscribed in the Mexican free trade agreements. There are eight components of the regional economic growth plan which include sustainable development; human development; the prevention and mitigation of natural disasters; tourism promotion; enhancement of trade; highway integration; energy interconnection and integration of telecommunication services.

Demographics will be an important factor that influences the economic growth of Mexico. The Mexican population increased from approximately 75 million people in 1984 to 97 million in 1999. When we make comparisons for North America, Canada's population was 31 million in 2000; Mexico's was 97.5 million; and the United States' population was about 281 million. While population annual growth rates between 2000 and 2010 for North America are expected to be (1%) for Canada, (1.1–1.2%) for Mexico, and (0.6%) for the USA.

Mexico's population doubled between 1970 and 2000, from 53 million to 97.5 million; while the number of Mexican-born USA residents increased more than ten times, from less than 800,000 to about 8.5 million in the same period. During the 1980's and 1990's, changes in Mexican farm policies helped to speed up migration, at the same time that the USA economy created millions of jobs that could be filled by Mexican migrants. More than half of those who immigrate to the USA from Mexico return and settle in Mexico within the next ten years. By the year 2020, the Hispanic population of the USA will be around 52 million and by the year 2050, 96 million. Hispanics are projected to be a majority in California and Texas by the year 2015. The population of Mexican origin living in the United States in 2000 is 20% of Mexico's total population.

The Consejo Nacional de Población (CONAPO) in Mexico estimates that the total population of Mexico will reach 131.6 million in 2050. The United States Census Bureau's projection of the Hispanic population in the United States is close to 96 million, with 65% of Hispanics having a Mexican origin. The population of Mexican origin in the USA in 2050 will be almost half of Mexico's total population. The USA and Mexican policies toward migration, will help to determine how fast the Mexican-born USA population rises.

Mexico's economy will become more dependent on the United States economic cycle in coming years. An example is the recent economic cycle in the Mexican economy, which experienced a deeper than expected deceleration in the first half of 2001, because of slower growth in the international economy, especially in the United States. The tight fiscal and monetary policies has maintained Mexico's growth rate in positive terms. The recent fiscal budgets in Mexico can be described as modest, with President Fox's administration determined to reduce the fiscal deficit

to less than 0.65% of GDP. The trade dependency on the USA will drive Mexico's GDP growth in coming years. In the next decade, almost 90% of Mexico's exports will move into the USA.

It seems that gross national product per capita has somewhat increased in Mexico during the 1990's. The value of Mexican GNP for the year 2000 was estimated around \$580 billions of USD. Income per capita has increased during the past few years, from a level of GNP per capita of \$3,923 USD in 1995 to around \$4,400 USD in 1999, and an expected income per capita in 2001 of around \$6,295 USD. However, income distribution has worsened. More than half of the population lives in poverty.

For the period 2020-2025, Mexico's GDP is expected to grow at an average annual growth rate of 2-3%, while the annual rate of population growth will be from 1.2-1.4%. With those assumptions, Mexico will double the current level of income per capita in the year 2025. However, the level of income per capita will not reach the current level of income per capita of the United States or Canada. In 2000, Canada's GDP (constant \$1990 USD) was \$749 billion, compared to \$371 billion for Mexico and \$8 trillion for the United States. GDP annual growth rate projections between 2000 and 2010 for North America are: Canada (2.5%), Mexico (2.9), and the USA (2.9). Between 2000 and 2010, per capita GDP is forecast to increase by 12% in Mexico, 16 in Canada, and 25 in the USA. By 2010, North American per capita GDP will reach about \$27,300 per person (constant U.S. \$1990), up 80% from 1980 levels. The North American level of per capita GDP in 2010 will not be reached by Mexico even by the year 2025. By the year 2025, Mexico will remain in the ranking of middle-income countries.

The projected average growth in per capita income in Mexico will be just over 2% per year between 2003 and 2025. Economic growth of income per capita in Mexico will be conditioned by the implementation of deep structural economic reforms. Mexico's growth will be determined by demographics, accelerating openness and global trade, human capital and knowledge-based technologies, and the integration of capital markets. While economic growth will bring increasing wealth to some states in Mexico, income distribution will remain at critical levels. Growth will be uneven in Mexico; not every state will benefit equally from national growth. Some states may lose out in the growth process. New economic centers of power will rise, which will rival the resources available to poor states in Mexico. Economic growth will carry new demands on infrastructure in Mexico, such as water, energy, communications, waste disposal, urban transportation, public health, housing, and education. Failure to accommodate the demands of infrastructure, human capital and job creation will trigger a process of divergence.

Mexico's demand of energy sources will also increase in the coming decades. A growing population and per capita income will drive the demand for more energy, particularly as the Mexican economy expands.

Structural reforms will have to be implemented to enhance economic growth in Mexico. These reforms include making the labor market more flexible, a better fiscal reform, simplifying investment in electricity generation, opening natural gas exploration to private investors, increasing private investment in the oil sector, reforming the telecommunications structure, and altering the judicial system, especially as it applies to mercantile law. Other important structural elements that prevent economic growth are the low savings rate, the large reliance on capital inflows, and the growing lawlessness and corruption in many Mexican cities.

Economic growth, consolidation of democracy, regional cooperation, and greater emphasis on multilateral organizations will be part of Mexico's efforts in the next 20 years. The political environment will continue to influence the economy in Mexico. Mexico will reflect a process of economic divergence in the coming years. The northern states will become increasingly integrated with the USA economy, reflecting new foreign direct investment, substantial infrastructure improvements, energy projects and slowly expanding free trade arrangements with the rest of the world. States in the south will continue to lag in job, education and income growth.

## **Conclusions**

NAFTA, in its 14<sup>th</sup> anniversary has become the second largest trade bloc in the World, behind the European Union. In terms of economic output, the United States accounts now less in terms of GDP than the European Union. In 2007, the European Union has a combined GDP of USD\$ 16,830,100 millions, while NAFTA has a combined GDP of 15,857,000 millions and the USA of USD\$ 13,843,825 millions. Canada is the 9th economic power in the world with a GDP of USD\$ 1,432,140 millions, while Mexico is the 15th economic power in the world with a GDP of USD\$ 893,365 millions.

Formidable development and economic growth challenges lie ahead for Mexico in the next quarter century, as we observe the deep contrasts between Mexico's rich and poor states, growing urban centers and destitute rural areas, and between Mexicans rich enough to be considered between the richest men in the world and owning companies that are able to compete with industrialized countries, and those Mexicans for whom the benefits of globalization have not yet materialized. In the coming years, Mexico faces many challenges in order to support economic



growth. The pending reforms, including the overall energy reform, financial reform, labor and education, promises to give the country a greater legitimacy, stronger sustainability and a higher rate of economic growth.

Economic Integration in North American is evident. The USA has over \$400 billion in two-way trade with Canada each year, and nearly \$300 billion with Mexico. The countries also share strong social and cultural ties, and each has its own interests in a secure border. Canada and Mexico have benefited from economic integration but they are both lagging, compared to the United States. In terms of purchasing power, Canadian per capita GDP reached 90% of the USA level in 1990, but only 78% in 2000, while Mexican per capita GDP was 23% of the USA level in 1990, but only 21% in 2000. Nevertheless, national GDP per capita figures conceal wide variations between regions. In Mexico, the northern states have high rates of economic growth, compared to the national average. While in Canada, British Columbia, Alberta and Quebec are doing well in terms of growth. In the case of North America, the regional model of growth was empirically tested with border variables, with results of a relatively small regional convergence at the state and provincial level for the period 1999 to 2002.

Finally, increased economic integration has multiple implications for regional economic growth and convergence opportunities in North America. Economic policies that are unilaterally implemented by NAFTA countries in terms of security, currency, tax, tariff and transportation will foster a rise of Canadian and Mexican per capita income to USA levels. Canada could close its per capita income gap in the next decade, while Mexico could close its income gap with the USA in half a century. Mexico's tremendous advances in recent years, economically, socially and politically, occurred after NAFTA was enacted. NAFTA's successes are bipartisan successes. Quitting NAFTA would send economic signals throughout the world. The North American model is increasingly economic integrated. Withdrawing from NAFTA would affect the economies in the UAS border communities, and rip apart North American supply chains and information systems, and devastate North American exporters. In short, it would cause incredible damage to the economies of North America.

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