# Integrating South American Economies to the USA Market. Effects upon Development, Productivity and Employment

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# North America and the South: development, Productivity and labour contexts

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# **I** Introduction

Two decades after the eruption of the debt crisis and the beginning of adjustment and structural reform programs, it is widely accepted that ther economic growth performance of the majority of, if not all, Latin American countries has been disappointing. Furthermore, even when growth of the gross domestic product did take place, formal employment was not created, salaries and income lagged behind, poverty and the concentration of income intensified.

An increasing number of studies have analysed past reform experiences in Latin America, and other developing countries, in an effort to explain the reasons for the lack of stable growth. Many of them blame the warm luck reform process, corruption and red tape, poverty, illiteracy and so on. As Rodríguez and Rodrik (1999) have observed, the shopping list of indispensable actions to make reforms and liberalization work, is a never-ending story.

Today, it is generally accepted that during the last two decades economic growth has been lower than during the period from 1950-1980. Despite the impressive opening up of the economies to foreign competition, Latin America registered lower growth rates of gross domestic product (GDP)both per capita and per worker. What is more troubling is the evidence that Latin American growth rates of GDP per head (GDP/C) failed to overtake above the rhythm reached by developed economies and convergence with these nations did not emerging and, what is worse, the distance is widening in both GDP/C and labour productivity.

The new economic strategy pursued by Latin American countries introduces a combination of two processes: stabilization policies and the liberalization of foreign trade. The import substitution policies pursued in Latin American (and elsewhere) during decades were dismantled. "Since the early 1980s, developing countries have flocked to free trade as if it were the Holy Grail of economic development," Rodrik (1992) has put it. In his opinion, the deep macro-economic crisis of the 1980s allowed the introduction of controversial trade reforms. The high costs of distribution were overshadowed by the crisis.

The objectives of the reforms and of the new trade regimes are manifold: to reverse the loss of competitiveness in international markets; to regain export dynamism and larger shares of world trade; to overcome the inefficient allocation of productive factors and to speed up growth and reduce unemployment or underemployment; to advance to a new industrialization process at higher levels of productivity by creating an environment conducive to domestic and foreign private investment and to increase the rate of capital formation; to sustain macroeconomic stability and to reduce inflation.

In theory, successful liberalization of trade policies would induce sustained expansion of the external coefficient to the GDP, measured as the ratio of imports plus exports to GDP. It can be assumed that lower import tariffs would reduce the domestic prices of importable goods(nationally produced goods that compete with imports). Since the degree of openness of an economy (measured by the external coefficient GDP) is inversely associated with gap between international and domestic prices, the more open an economy the lower the gap between international and domestic prices and therefore, production and export structures should move towards comparative advantage and, if the exchange rate is properly established, no excessive trade deficit should emerge.

Assuming that the export sector has higher productivity than the rest of the economy, then, in those countries that reallocate resources towards exports should grow faster. By closely linking domestic prices to international prices, gains in efficiency will emerge through changes in i) the productive structure, which would favour increased production of tradable goods whose domestic relative production costs are lower than international ones; ii) domestic firms that compete with imports will improve its productivity becoming more efficient as a result of more competition from imports; iii) the use of abundant factors of production, labour in particular pushing aggregate wages to rise.

As we will see, the opening up of the economies have practically been completed yet economic growth is lower and erratic.

The ultimate goal of economic policies is growth and improved living conditions for the population. These objectives are to be obtained through more and better employment, and higher wages. To obtain these goals, permanent increases in productivity are a necessity. Lower inflation rates, fiscal discipline, balanced external accounts, and faster exports, important as they are, are only a means, tools to produce growth and development and should not become the only indicators of the success of the economic policies.

When any given country introduces reforms in its development model, or when it engages in negotiating trade agreements - multilateral or bilateral - or regional economic integration treaties, the aim is to overcome the obstacles to its economic growth and advance towards the more developed economies. To speed up growth and shorten distances between member countries, preferential treatment needs to be granted to the less developed economies. In multilateral negotiations, as well as in regional integration, preferential treatment has been conceived as creature mechanisms of convergence and stabilization of the agreements. The objective of procuring convergence was clearly revealed when the Treaty of Rome was signed in 1958 (Ben-David, 1993; Olivera et al, 2003) in which trade was not considered as the main catalyst for the convergence between EU countries. In NAFTA Mexico did not receive preferential treatment; neither did so Central American countries or Colombia and Chile. Preferential treatment was not seriously contemplated in ALCA (Puyana & Romero, 2004).

Mexican economic performance after reforms is frequently presented as a token of the success of the new model. In effect, main results of changes in policy are remarkable. The participation of foreign trade in GDP went from 13% in 1980 to almost 60% in 2002 and the economic links with the USA economy are growing tighter than any time in history. In the year 2002, near 88.7% of Mexican exports went to the USA and México bought 70% of its imports from that country. Export of manufactured goods registered the highest rate of growth during the 1982-2002 period, an average bordering the 20% in real terms. The structure Mexican exports was so deeply transform that today manufactured goods comprise 87% of total external sales, an impressive figure with respect to 23% in 1980. In 2002 *maquiladoras* were responsible for almost 50 % of total exports and 35% of total imports.

This study shows the course of the Mexican economy and explores to what degree the objectives of the reforms, as regards growth and employment, have progressed, following the great strides made in opening up trade and the implementation of NAFTA. It compares the performance of Mexico with that of Argentina, Brazil, Chile and Colombia, countries that differ from Mexico in their form of insertion into world markets (structures of external demand and supply and the diversification in their origins and destinations), and in the trajectory of productivity, employment and income. Firstly it analyses the important progress made by these countries upon opening up to foreign competition and, secondly it explores how far this has produced a greater and more stable growth and approached the predicted convergence with more developed economies (that of the USA). It concludes with a consideration on the possible explanations for the weakened relation between economic growth, on the one hand, and the generation of employment and increased average income, on the other. The factors analysed are, in the case of Mexico, the evolution of labour productivity, the changes in the make up of production, the weight of maquila (inbond manufacturing) in exports and the production of manufactured goods, the evolution of the formation of gross capital and the participation of foreign investment.

From the group of countries compared, which concentrates 83% of the total Latin American GDP, there emerges a picture of great diversity, which makes it difficult to generalise. As will be shown in this chapter, there is wide dispersion in the structural variables commonly used to describe and evaluate the reforms. The differences go beyond the type of goods that make up the exportable supply, as suggested by Stallings, 2001, Ocampo, 2004 and others. It underscores the role of the state in market interference, and in the wave of deep liberalisation that has swept through the whole region. Countries do differ in growth rates, increases in productivity and improved welfare of the population must be sought elsewhere, not only or mainly in openness or the types of goods exported.

#### II Have Latin American Economies Opened Up?

Before analysing what elements lay behind the slow growth of the GDP/C of the region, we must observe the progress of liberalisation, and the dismantling of the mechanisms for state interference in the market. The Mexican economy has opened up to foreign competition to

a great degree. So have all the other nations of the region, with to a greater or lesser extent. (Puyana and Romero, 2005, Chapter III). The fastest change in this regard is registered for Argentina and Brazil.

Within the degree of openness it is important to highlight the differences in the weight of imports and exports in the index and in the structure of goods that make up external purchases and sales. Mexico is notable for the low participation of agricultural and livestock products and of raw materials in its exports, which are a feature of the other Latin American countries. Manufacturing represents 85% of Mexican exports, 50% if which come from assembling activity. Remaining countries do export a lager proportion of raw materials and agricultural products, this type of exports represent for them a larger share of the GDP than their imports do, Table No.1

TABLE N° 1 SELECTED LATIN AMERICAN COUNTRIES: STRUCTURE OF THE EXTERNAL SECTOR

	Argei	Argentina		Colombia		Brazil		ile	Mexico	
	1990	2004	1990	2004	1990	2004	1990	2004	1990	2004
Exports of goods (% of GDP)	10.4	22.6	18.6	17.6	7.9	16.0	33.1	34.0	19.7	27.8
Imports of goods (% of GDP)	4.7	13.9	16.0	16.2	6.1	10.4	29.5	24.4	18.6	29.1
External coefficient GDP (%)	15.1	22.5	34.6	45.0	14.0	27.0	62.6	54.4	38.3	66.8
Food export (% of the total export)	56.3	48.3	32.8	17.5	27.7	28.5	23.1	21.3	11.6	5.4
Raw material export (% of the total )	3.9	1.6	4.3	4.6	3.3	4.0	9.5	8.1	1.6	0.5
Manufactures export (% of the total )	29.3	28.9	25.1	38.4	51.8	54.1	9.8	13.4	43.3	79.9
Food Import (% of the total Import)	4.0	2.3	7.1	10.6	9.4	5.0	4.4	7.4	14.6	6.3
Raw material Import (% of the total )	4.0	1.2	3.4	2.0	2.6	1.8	2.1	1.2	3.5	1.5
Manufactures import(% of the total )	75.9	91.4	3.5	82.3	56.2	70.3	75.4	68.2	64.0	84.7

Source: World Development Indicators, 2006

Latin American countries are indeed more open and exposed to foreign competition than in previous decades. That is a fact. Then why is it that neither convergence nor stable growth has been achieved so far? We have detected a negative correlation between the rhythm of growth of the GDP external coefficient and the expansion rate of the economy, for the sample countries of which we show two. Graphs 1 and 2 present the values of simple correlation results between the two variables for Mexico and Chile, from 1960 to 2004. The

trend is negative, suggesting that the expansion in the degree of openness has not been accompanied with a faster growth rate of the economies.<sup>1</sup>





Source: Our own calculations based on WB:WDI, 2006

#### **GRAPH No. 2**



Source: Our own calculations based on WB:WDI, 2006

It is therefore necessary to delve deeper into the elements explaining the forces behind the sources of growth of Latin American economies to be able to explain why opening the

<sup>&</sup>lt;sup>1</sup> These regressions do not take into consideration other variables that could be responsible for the lack of economic growth. What a low value of  $R^2$  shows is that openness by itself is not enough to accelerate the rate of economic growth.

economy to foreign competition has failed to induce higher rates of growth and convergence, as was expected.

## II. Are Latin American Countries Getting Closer To Their Northern Neighbour?

From 1940, the year in which the state lead industrialization strategy was initiated in most Latin American countries, until 1982 when the debt crisis erupted, the GDP per capita in Mexico increased at an annual rate of 3.0%. While in the US economy, Mexico's main trading partner, the GDP per capita grew at a rate of 1.9% a year. During this period the Mexican GDP per capita was converging on the standards of living of the USA. As was that of all Latin American countries except for Argentina, Chile and Uruguay. See Table N° 2.

		Average G	rowth Rate		Relativ	e to USA Av	erage Grow	th Rate
Country	1900-1940	1940-1982	1982-2003	1900-2003	1900-1940	1940-1982	1982-2003	1900-2003
Argentina	0.7%	1.7%	0.9%	1.1%	0.85	0.89	0.47	0.56
Brazil	1.6%	3.4%	0.8%	2.4%	1.81	1.80	0.41	1.21
Chile	0.5%	1.3%	4.7%	1.3%	0.56	0.68	2.35	0.68
Colombia	1.4%	2.1%	1.1%	1.8%	1.64	1.08	0.57	0.91
Mexico	0.4%	3.0%	1.0%	1.8%	0.40	1.55	0.51	0.90
Peru	2.6%	2.3%	0.3%	1.7%	2.94	1.21	0.17	0.86
Uruguay	1.0%	1.1%	1.6%	1.1%	1.17	0.55	0.81	0.57
Venezuela	4.8%	2.2%	-0.4%	2.8%	5.45	1.12	- 0.22	1.42
Total 8 countries	1.2%	2.5%	1.0%	1.8%	1.40	1.30	0.49	0.90
United States	0.9%	1.9%	2.0%	2.0%	1.00	1.00	1.00	1.00

TABLE NO. 2INCOME PER CAPITA. AVERAGE GROWTH RATE 1900-2003

Source: Historical Statistics for the World Economy: 1-2003 AD, Angus Maddison. http://www.ggdc.net.

During the so called "lost decades", that is from 1982, the year the debt crisis erupted and economic reforms were launched, to 2003, the GDP per capita in Mexico increased at an annual rate of 1.0%, while that of the USA grew at a rate of 2.0% a year. A similar tendency was registered for the other seven main Latin American economies, except Chile, which outperformed the USA growth by more than double. See Table 2.

The difference in growth rates has produced a divergence in per capita income in most Latin American countries with respect to USA; in the year 2003, the GDP per capita in the US was 4 times greater that of Mexico, 5.3 times that of Brazil and 5.6 times that of Colombia. These figures are substantially greater than those prevailing in 1982 for all countries except Chile, see Table 3.

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	-								Total 8
									American
Year	Argentina	Brazil	Chile	Colombia	Mexico	Peru	Uruguay	Venezuela	Countries
1900	0.67	0.17	0.54	0.24	0.33	0.17	0.54	0.20	0.29
1910	0.77	0.15	0.60	0.23	0.34	0.20	0.63	0.18	0.31
1920	0.63	0.17	0.50	0.23	0.33	0.22	0.48	0.21	0.30
1930	0.66	0.17	0.46	0.24	0.26	0.27	0.69	0.55	0.31
1940	0.59	0.18	0.46	0.27	0.26	0.27	0.52	0.58	0.30
1950	0.52	0.17	0.38	0.23	0.25	0.24	0.49	0.78	0.28
1960	0.49	0.21	0.38	0.22	0.28	0.26	0.44	0.85	0.30
1970	0.49	0.20	0.35	0.21	0.29	0.26	0.34	0.71	0.29
1980	0.44	0.28	0.31	0.23	0.34	0.23	0.35	0.55	0.32
1982	0.40	0.26	0.27	0.23	0.36	0.23	0.33	0.51	0.30
1985	0.33	0.24	0.24	0.21	0.30	0.18	0.27	0.41	0.26
1990	0.28	0.21	0.28	0.21	0.26	0.13	0.28	0.36	0.24
1995	0.33	0.22	0.36	0.22	0.24	0.15	0.30	0.36	0.24
2000	0.30	0.20	0.36	0.18	0.26	0.13	0.28	0.30	0.23
2001	0.28	0.20	0.37	0.18	0.25	0.13	0.27	0.30	0.22
2002	0.25	0.20	0.37	0.18	0.25	0.14	0.23	0.27	0.22
2003	0.26	0.19	0.38	0.18	0.25	0.14	0.23	0.24	0.22

Table No. 3 Income Per Capita Of Selected Latin American Countries Relative to USA 1900-2003

Source: Historical Statistics for the World Economy: 1-2003 AD, Angus Maddison. http://www.ggdc.net.

The economic divergence in income per head between the USA and the eight biggest economies in Latin America is depicted in Graph 3 which presents the relative income of those countries in four different years, 1900, 1940, 1982 and 2003.

# GRAPH No. 3 INCOME PER CAPITA OF SELECTED LATIN AMERICAN COUNTRIES RELATIVE TO USA. 1900-2003 In %



Source: Historical Statistics for the World Economy: 1-2003 AD, Angus Maddison. http://www.ggdc.net.

#### IV. Does productivity growth differ?

Taking the evolution of the GDP/C as proxy for the growth path of the productivity of an economy, we can infer from the above discussion that, with the exception of Chile, neither the whole of Latin America, nor the selected countries, have registered important advances in productivity. Countries with a higher per capita income, and therefore with higher productivity, have greater capacity for innovation and producing diversified goods, and for mastering more sophisticated, capital intensive production processes (Helpman & Krugman, 1981).

GDP per capita (GDP/C) and GDP per worker, or labour productivity (GDP/W) are closely related.<sup>2</sup> Hence the convenience of using the GDP/C and its evolution during pre and post reform periods, to asses the course of productivity growth of the economies, the factors that explain the expansion of their economy and the convergence with their more developed commercial partners. From tables 2 and 3 and Graph 4 it emerges clearly that only Chile registered higher growth rates than the USA in the 1980-2003 period.



GRAPH No. 4 Latin America: GDP per capita and rate of annual growth

Source: WB. Word Development Indicators CDR, 2004

<sup>&</sup>lt;sup>2</sup> GDP/C (income per capita) and GDP/E (labour productivity) are closely related. GDP/C=(GDP/E)(E/L)(L/C), where GDP is gross domestic product, C is total population, E is the number of people employed, and L is the population economically active.

Growth in Latin America as a whole and most of the countries has been characterized by the weak relation between the growth of GDP, the generation of employment and the growth of wages on the one hand, and the expansion in exports, or the opening of the economy, on the other. In the case of Mexico, this absence of relationship has to do with the slow growth in productivity which itself is explained by the decrease in capital endowment per worker and the change in production structure towards activities with lower value added per worker and low technical content. Under these conditions, a sustained improvement in the education of the work force is not reflected in higher productivity or better wages.

The new strategy, the so called "neoliberal economic model", took for granted the many advantages that would result from trade liberalization. It assumed, in particular, that once protective trade barriers were lifted, a radical improvement in technical efficiency would take place. With trade liberalization set in motion, previously protected firms would have no choice but to modernize their techniques and cut their costs in order to compete with foreign producers; this in turn would lead to increased productivity and higher income levels. Experiences of most Latin American countries show that trade liberalization has not yet translate itself in improvements of efficiency, and therefore, in the rate of economic growth.

Mexican productivity, measured as GDP per worker during 1983-2001 shows a negative slope (average output per worker declined at a rate of -0.1%), in sharp contrast with the trend during the four previous decades. The decline in productivity has been compensated for an increase in the participation rate of the labour force<sup>3</sup>; this last factor offset the decline in labour productivity and produced an almost flat per capita income.<sup>4</sup> GRAPH N° 5 shows the evolution of Mexican labour productivity for the period 1980-2000. The average growth rate of total labour productivity in this period was -0.3%, showing a slightly higher increase after 1995. This result leads us to conclude once again that the Mexican economy is not becoming more competitive; it is also true that its manufacturing sector has not shown a significant improvement in labour productivity since 1980.

 $<sup>^{3}</sup>$  The participation rate is measured as the proportion of the population of working age that is willing to work, looking for a job and already working. L/C in the previous foot note represents this rate.

<sup>&</sup>lt;sup>4</sup> The decline in GDP/E was compensated by an increase in L/C. in equation GDP/C=(GDP/E)(E/L)(L/C).



GRAPH 5 México, Trends in productivity, 1960-2005

Source: Our own calculations based on INEGI, SNCN, online information.

Since 1982, Mexico and all our sample countries have reallocated their labour force toward activities with lower capital labour ratios and, in consequence, labour productivity has suffered.<sup>5</sup> We suggest that this path has been originated by the intensive expansion of the *maquila* activity, characterized by low capital intensity and low, almost stagnant, value added per worker (Puyana and Romero, 2006 p: 14). Slower productivity gains do imply stagnated unit labour costs and lower incomes.

As suggested by Graph. No.6 the evolution of productivity of the countries of our group does not differ greatly from Mexico except for the case of Chile. Here, after a considerable growth in productivity, it stalls towards 1998. What differs, and sharply, is the level of productivity, from a mere 5 to 17 thousand dollars per capita in Colombia and Argentina, respectively. As mentioned above, productivity levels indicate the capacity of an economy to adapt to the changes in world markets brought about by constant technological progress.

<sup>&</sup>lt;sup>5</sup> If we consider that sectors with high capital-labor ratios are sectors with potential economies of scale, and are also knowledge-intensive sectors, this employment shift has severely adverse repercussions in the long term for the growth rates of productivity and per capita income of the kind indicated by Young (1991). See Section VI.



**GRAPH NO. 6 PRODUCTIVITY PER WORKER. 1980-2003** 

In thousand constant 2000 per worker

Source: Own elaboration based on BM, WDI, CDR 2006

#### V. Educating The Labour Work Force?

At least since 1991, education of the workforce has improved constantly, in Mexico as in the other countries in the analysis. We give an evaluation in greater detail for Mexico, thus allowing greater clarification of certain suppositions regarding the lineal relation between investment in education and economic growth.

In 1991 56.6% of the Mexican workforce had either never been to school or had barely finished primary, and only 9.8% had one or more years of university, technical college education, or started post graduate studies. Since then the most significant changes are the reduction in workers without any education, the modest growth in those with secondary education, and the expansion, exceeding the birth rate, in the following four levels of education that we describe in Table N° 4, particularly the last two.<sup>6</sup> This progress is

<sup>&</sup>lt;sup>6</sup> In spite of this progress, in 2000, 46.8% of workers in Mexico had had 6 years or less of schooling, and only 13.9% had 13 years or more. These figures contrast with the situation in the U.S.A , where during the period 1980-1992 the proportion of the workforce with 13 or more years of schooling was 53%. See Baldwin G. & Cain G. (1997).

repeated throughout the whole region and Mexico is no pioneer since in 2000 it was lagging behind in education.

Under these conditions, the unskilled labour force, which includes illiterates and those of up to 12 years of formal education (L0 + L1 + L2 + L3), decreased from 90.2% of the total in 1991, to 86.1% in 2000. Educated labour (grades L4 + L5) reached 13.9% by the end of the period: an improvement of more than 4 percentage points in less than a decade. See Table No. 4

(Persons) Rate of 1991 1993 1995 1996 1997 1998 1999 2000 Growth LO 3,409,734 3,673,425 3,556,239 2,997,708 3,271,191 3,239,409 3,258,873 3,120,419 -1.0% 12.743.031 L1 13.538.311 13,345,303 13,400,278 13,880,913 14,133,348 14,606,533 13,854,208 0.9% 7,841,776 L2 6.984.814 8.335.788 5.538.186 5.967.236 6.686.462 8,405,272 8.656.034 5.0% L3 4,042,209 4,236,968 4,596,352 4,868,441 5,244,893 5,587,337 5,401,790 5,614,368 3.7% 2,776,659 3,745,999 3,955,683 4,225,966 6.5% L4 2,656,667 3,190,166 4,291,629 4,788,362 L5 147,888 146,431 178,794 217,337 260,723 246,397 247,141 271,087 6.7% 32,214,577 Total 28,537,715 30,339,030 31,553,316 34,455,179 35,833,908 36,145,575 36,304,478 2.7%

**TABLE No. 4 EDUCATIONAL MAKE-UP OF THE WORKFORCE** 

Geometrical annual growth rate: 1991 - 2000.

L0: No schooling. L1: From 1 to 6 years of schooling. (Primary); L2: from 7 to 9 years of schooling (end of Secondary) + Technical training I (Primary required), finished or not; L3: From 10 to 12 years of schooling (High-school or 6 form to College) + Technical II (Secondary required), finished or not; L4: One or more years of university studies + Technical III (High-school required), finished or not; L5: One or more years of post-graduate studies, Master's, Ph.D., etc.

Source: Secretariat of Labour and Social Welfare, National Employment Survey, several years.

Between 1991 and the year 2000, all sectors except construction, show an increase in absorbing qualified labour, particularly services (an increase in its share of qualified labour over total employment of 4.9 percentage points), mining (an increase of 1.4 percentage points); agriculture (gained 0.4 percentage points). Nevertheless, in the year 2000, the manufacturing sector, in spite of its spectacular increase in exports, had a share in qualified labour of 4 percentage points less than the overall economy and only modest increases between 1991 and 2000. This means that an increase in exports did not produce an increased participation by the manufacturing sector in the creation of employment, nor any considerable changes in the make-up of the labour force towards better-educated workers. In 2000, 90.1% of the labour force in manufacturing was unqualified. This would suggest that manufacturing is an activity that uses intensive unskilled labour, not fundamentally different form agriculture, a sector where unskilled labour represents 98% of the total (Romero & Puyana, 2004). The ever-increasing weight of 'maquila' in the production and exports of manufactured goods helps to explain this development.

Education has been mentioned among the variables that supposedly have a positive impact on growth. According to Romer-type models of growth (1990), efficiency in human capital investment is one of the most important variables determining growth. And investments in education in the four countries induced a substantial improvement in the qualification of the labour supply. See Table N° 5. In Chile the share of the labour force with higher education is the largest, while Brazil, Colombia and Mexico are the ones with under 9 years. Latin America is hanging behind international levels according to its development level, especially when compared with Asian Countries. According to Szekely (1997), on average, education in Latin America is two years lower than expected from the level of development and four years below East Asian countries of comparable development.

Even when it is true that there has been a remarkable improvement in the educational level of manpower, the outstanding thing about the Mexican case is the lack of a positive correlation between educational levels and productivity growth (Puyana y Romero, 2006). A credible explanation of this phenomenon is that given the current conditions of the Mexican labour market, education has turned out to be a mechanism for competing to obtain scarce jobs, in activities that not necessarily require the skills acquired by the employee in the education process. As a result of these conditions, the largest parts of human capital investments are neither translated into higher productivity nor into better income levels (Romero y Puyana, 2004 dos decade).

In fact, as can be seen in Table No. 5, all countries, except Colombia, reduced the proportion of the work force with less than 9 years' instruction and they have all increased the participation of workers with more education with insignificant increases in productivity or wages. Next, we analyse what has happened to wages.

 TABLE N° 5

 Composition of the Economically Active Population by levels of education 1990-04

 In percentages

#### TABLE N° 5 Composition of the Economically Active Population by levels of education 1990-04 In percentages

	Argentina		Colombia		Brasil		Chile		Mex	ico
	1990	2004	1990	2002	1990	2003	1990	2003	1990	2004
EAP* with 0 to 5 years of schoolarity	13.1	6.3	28.4	29.6	47.5	33.2	12.9	7.5	21.7	14.3
EAP* with 6 to 9 years de education	34.5	34.2	28.2	19.1	24.3	24.3	26.9	19.9	50.4	42.8
EAP* de 10 to 12 years of education	34.5	32.8	26.9	29.9	18.4	30.3	36.5	44.0	13.2	20.8
EAP* with 13 or more years of education	17.9	26.7	16.5	21.4	9.8	12.1	23.8	28.5	14.6	22.1
Unemployment, total (% of total labor force)	7.3	15.6	10.2	14.2	3.7	9.7	5.7	7.4	2.7	3.0

EAP\*: Total employee working force

Source: Panorama social de América Latina 2005, CEPAL y World Development Indicators, 2006

#### V Does Education Pay?

Despite the increase in the educational level of the labour force between 1980 and 2000, signalled by the decrease in the share of persons between nil and 9 years of education and the corresponding growth of those with more schooling, the average wages of the workers in Mexico have fluctuated but the over-all tendency seems constant. As shown in Graph 8 the trend in the average income of the workers from 1980 to 2004 is almost zero, which indicates that real wages have remained practically the same during twenty years.

What is disappointing about these results is that the stagnation of average wages and the consequent reduction of the labour share in added value took place in spite of the improved conditions in the educational level of the work force. The evolution of wages for each of the educational categories illustrated in Table N° 6, shows a negative trend, especially the first one.



GRAPH N° 8. Mexico: Retributions to labour and capital

\* Average wages are calculated by dividing the total pay-roll by the number of workers. **Source:** INEGI, System of National Accounts, Mexico 2004.

Nevertheless, the average wages for qualified labour (Categories L4 and L5) fell at a rate of 1.4% and 1.5% respectively. Therefore, it would appear that the supply of qualified labour expanded faster than the demand. From the above, it can be deduced that the inequality in wages, far from improving as a result of better education of the work force, has tended to decrease in a perverse way, as shown by the falling trend of the quotient obtained by dividing the average income of the qualified workers by the average incomes of the unqualified workers.<sup>5</sup>

Type of									Rate of
Labour	1991	1993	1995	1996	1997	1998	1999	2000	growth*
LO	252	188	197	190	184	190	219	206	-2.3%
L1	336	325	308	278	261	276	272	315	-0.7%
L2	990	1,148	953	793	713	784	787	899	-1.1%
L3	1,251	1,398	1,345	993	984	1,036	1,036	1,153	-0.9%
L4	2,151	2,227	1,967	1,588	1,636	1,627	1,626	1,900	-1.4%
L5	2,386	2,426	2,154	1,855	1,954	1,955	2,195	2,077	-1.5%
Total	474	498	471	409	397	420	419	490	0.4%

 Table 6

 MEXICO: REAL AVERAGE WAGE BY TYPE OF WORK

 (constant 1000 pages)

\*Geometric annual growth rate: 1991 – 2000.

L0: no schooling. L1: From 1 to 6 years of schooling (Primary); L2: from 7 to 9 years of schooling (end of Secondary) + Technical training I (Primary required) finished or not; L3: From 10 to 12 years of schooling (High-school or 6 form + Technical II (Secondary required), finished or not; L4: One or more years of university studies + Technical III (High-school required), finished or not; L5: One or more years of post-graduate studies, Master's, Ph.D., etc. **Source**: Secretariat of Labour and Social Welfare, National Employment Survey, several years.

#### GRAPH 9 MÉXICO: RATIO OF QUALIFIED WORKERS' WAGES TO WAGES OF UNQUALIFIED WORKERS

<sup>&</sup>lt;sup>5</sup> The standard deviation in the average income of the unqualified workers and qualified workers, for 72 activities, has tended to diminish over recent years, which strengthen this argument, see Graph 9.



Source: Secretariat of Labour and Social Welfare, National Employment Survey, several years.

The evolution of workers wages and the returns on capital suggest that in Mexico there is a limitless supply of labour, which prevents the increase of wages and results in a rise in average returns on capital and a dualistic economy. In this context, one could propose that the boom in Mexican exports has not led to the transference of excees labour to the more profitable export sectors. Changes in the structure of production that emerged from reforms implied a step backwards as sources of GDP and employment. (See Table N° 7). Maquila is the most dynamic export activity but its contribution to national value added and total employment in manufacturing has remained minimal as we will see.

# TABLE NO 7CHANGES IN THE STRUCTURE OF EMPLOYMENT BY SECTOR

	Arge	ntina	Color	Colombia		Brazii		Chile		)
	1990	2003	1990	2003	1990	2002	1990	2003	1990	2003
Employment in agriculture (% of total employment)	12.5	1.3	26.6	21.6	22.8	20.6	19.3	13.6	22.6	16.3
Employment in industry (% of total employment)	32.4	19.9	22.9	19.1	22.7	20.0	25.2	23.4	27.8	25.0
Employment in services (% of total employment)	55.5	78.3	50.4	59.3	54.5	62.5	56.5	63.0	39.6	58.4
Unemployment, total (% of total labor force)	7.3	15.6	10.2	14.2	3.7	9.7	5.7	7.4	2.7	3.0

The evolution of average wages also suggests different trends according to the countries involved. In Chile, in accordance with the growth in productivity and employment, there is a rise in average remunerations, in spite of radical labour reforms carried out in the recent 5-year terms of government. The increase in wage indices in Mexico and Brazil are not

supported by gains in productivity, nor do they tally with high employment in the informal sector in Mexico or unemployment in Colombia.<sup>7</sup>

# **GRAPH 10**

Index of Average Real Wages 1995=100



Source: Own calculations based on ECLAC, Base de Estadísticas e Indicadores Sociales, 2006

### VI. Are Work Opportunities Improving?

Due to the lack of unemployment insurance in countries such as Mexico, unemployed people very quickly find work in any kind of activity, mainly in informal employment. As a consequence, the rate of open unemployment in Mexico is small, often negligible, and the EAP and the occupied EAP are almost identical. This is why the recent evolution of the Mexican economy has been characterized by rates of unemployment that border on 3% annually, close to the "natural" unemployment rate. Such a low unemployment rate would suggest that the labour market was highly tensioned. Any increase in the growth rate of the economy would induce inflationary wage pressures or demand a significant increase in productivity. As we have seen, productivity has stagnated and real wages declined. All this suggests that the labour market does not show any tensions and the low "open" unemployment rates hide the figures for precarious employment or jobs in the informal

<sup>&</sup>lt;sup>7</sup> This could well be related to the re-valuation of the currency, used as an anti-inflationary measure, making exportable goods artificially expensive, with severe consequences in employment.

sector. During 1994-2000 the rhythm of employment growth was slower than in 1984-93. The deceleration of the capacity to create jobs registered by manufacturers confirms our conclusions regarding the loose relationship between the remarkable advances in exports of the maquiladoras and employment in manufacturing. The result is that the number of new workers that join the labour market year after year find jobs in the informal sector or in tertiary activities of lower productivity and poor salaries. Table 8

## TABLE 8

	ESTRUCT	URE OF E	EMPLOYMEN	I IN MEXICO	
	Agriculture	Mining	Manufacture	Construction	Services
1960	43.7%	1.4%	11.0%	5.6%	38.2%
1965	39.0%	1.3%	12.6%	6.0%	41.1%
1970	34.7%	1.2%	13.4%	6.3%	44.4%
1975	30.4%	1.2%	13.1%	7.5%	47.7%
1980	26.1%	1.3%	12.9%	9.0%	50.8%
1982	26.2%	1.1%	11.7%	10.2%	50.8%
1985	27.8%	1.2%	11.2%	8.9%	51.0%
1990	24.0%	0.7%	12.6%	9.7%	52.9%
1995	22.6%	0.5%	11.2%	9.7%	56.0%
2000	20.0%	0.4%	12.8%	12.2%	54.6%
2001	20.0%	0.4%	12.2%	11.8%	55.6%
2002	19.9%	0.4%	11.5%	12.0%	56.2%
2003	20.1%	0.4%	11.1%	12.2%	56.1%
2004	20.5%	0.4%	11.5%	12.6%	55.2%

#### **GRAPH NO. 11**

Agriculture: Includes Agriculture, livestock, forestry, hunting and fishing.

Mining: Includes oil extraction.

Manufacture: All manufactured goodss.

Services: Electricity, public services, communications, commerce, social services and finances Source: Sistema de Cuentas Nacionales de México. INEGI, Several years.

The services and construction sectors absorbed the largest increases in employment, in which, generally workers do not have social security or health insurance. Migration also absorbed part of the increases in the ECP. From 1991 to 2003 the average rate of growth in

the formal sector was 2%, while informal employment expanded at 7%. The inflation employment in the services sector, and the reduction, or stagnation, in agriculture and manufacturing implies reallocation of labour towards less efficient jobs with lower potential to contribute to improved productivity levels of the economy. Graph No 11

The precariousness of employment in Mexico is illustrated, among other indicators, by the so-called "rate of partial employment or unemployment", which covers the economically active population working less than 15 hours a week, which represents 7.4% of the EAP and those who work more than 35 hours per week and earn less than the minimum wage, which covers 15.7 % of the EAP. In 2004, 38% of the total employed work force received less than minimum wages, that is 8 US dollars per day, and, in rural areas, this was the level of income for 48% of those in employed.



GRAPH NO. 11

MEXICO: Evolution of the structure of employment, 1991-2004

Source: Diagnóstico de la situación de la ocupación y el empleo, STPS, México, December, 2003.

No wonder migration has increased despite NAFTA. To slow down migration was an explicit objective of the accord. "NAFTA will allow us to export goods instead of persons"

was advocated on both sides of the border. In 2005, remittances of Mexican workers abroad reached 20 billion dollars. Assuming constant remittances per worker, the increase in total remittances responds to the growth of the number of migrants, GRAPH 12. In effect the rate of growth escalated. Contrary to what was supposed, poverty and inequality intensified and migration accelerated as concluded by Polansky, 2003.





Source: Our own calculations based on: *Cuarto Informe de Gobierno, Datos de la Cuenta Corriente*. Pág.307. Sept. 2004 Remittances constitute an indirect way to estimate the worsening of the economic conditions for Mexican workers, and those from other Latin American countries, such as Colombia, El Salvador or Ecuador, and all those countries in which remittances have become an important source of income.

GRAPHS No. 14 and 16 throw light on the relationship between the growth of the GDP, the economically active population (EAP), and the generation of employment between 1980-2003. The total GDP for Brazil, Mexico and Colombia show an ascending rate, the greatest expansion being that of Brazil. Surprisingly, the Chilean economy loses dynamism and the Argentine economy comes to a standstill.

In all these countries the employment growth rate decelerates and, in the case of Argentina, Brazil and Colombia, it is considerably less than the expansion of the EAP, whereby the gap between the employed population and the PEA is widened. The width of the gap could indicate unemployment or not, depending on the movement of the rate of participation and the proportion of unemployed not seeking employment.



**GRAPH 14** Mexico: Growth rates of employment Changes

**Source:** Our own calculations based on ECLAC, *Base de Estadísticas e Indicadores Sociales*, 2006 The path followed by the Chilean economy in Graph 15 is interesting and unique: it shows a greater deceleration of the GDP and lesser, though marked, deceleration in employment and a widening gap regarding the EAP. This could be interpreted as indicating that the Chilean economy has exhausted its margins of extensive growth and that in the future growth should be backed by substantial increases in productivity. Mexico constitutes a contrast, in the sense that the GDP grew in line with the EAP.

## **GRAPH 15**

Chile: Annual Average Rates of growth of the GDP, Employment and the Economically Active population. 1981-2004. In percentages



Source: Our own calculations based on ECLAC, *Base de Estadísticas e Indicadores Sociales*, 2006 In Argentina the ECP grew after 1996 with the explosion of the crisis, since declining incomes pushed more people to look for jobs, precisely when employment generation was falling. The result of these two movements was even lower salaries.

Most dramatic are the distances between economic growth and employment generation in Brazil during the period from 1990 to 2000 when the economy expanded at rates that were two times higher than the employment it generated. In a country with a large informal sector, this means that the reserves of unutilized labour resources were increasing and poverty intensifying while the economy had a flourishing period. Instead of an economic marvel Brazil can be a symbol of an economy developing with dramatic structural disequilibrium and extreme poverty. Graph No.16

## **GRAPH 16**

Argentina: Annual Average Rates of growth of the GDP, Employment and the Economically Active population. 1981-2004. In percentages



Source: Source: Own calculations based on ECLAC, Base de Estadísticas e Indicadores Sociales, 2006

**GRAPH 17** 

**Brazil:** Annual Average Rates of growth of the GDP, Employment and the Economically Active population. 1981-2004. In percentages



Source: Our own calculations based on ECLAC, *Base de Estadísticas e Indicadores Sociales*, 2006 It has been suggested that the major difference in the rates of economic growth and the capacity to generate employment and improve incomes lies in the degree of openness, the type of goods exported and the functioning of the labour market, that is to say, how it has been liberalized and that the Mexican model exceeds the models of South American countries (Stallings, 2000). Chile and Mexico have similar coefficients of openness of their economies, the former basing its growth on exports of natural resources and manufactured goods, and latter on the sale of manufactured goods, with an increased participation of *'maquila'*. It could be said that both export goods that are intensive in natural resources and/or employment. Chile has greater vertical integration of production and is looking to increase the national value added in her exports. Mexican production is less integrated since *'maquila'* only incorporates cheap labour in the final segments of the productive process resulting in rather small national value added in Mexican exports, as we shall see later. In terms of employment it appears that the Chilean model surpasses the Mexican one as it absorbs a larger workforce.

Argentina, Brazil and Colombia have similar degrees of specialization, but differ from Chile in the performance of the GDP and employment, since these have not managed to reduce the growing disparity between the EAP and jobs.

## X. Hypotheses for The Case Of Mexico. How Far Can One Generalize?

The claimed evolution in productivity and wages in the case of Mexico could, at least partly, be explained by the intensive changes in the structure of production toward activities with lower value added content, the effect of which could be described as the continuation of a process of a premature de-industrialization and de-agriculturalization of the economy. Additionally, in Mexico the increased proportion of *maquila* in the total production and exports of manufactured goods, as well as the deterioration in the portion of capital per worker, which can be linked to the former element, should be considered. Maquila does not appear in the other countries here analyzed, or its weight is considerably less, as in the case of Colombia.<sup>6</sup> The changes in the productive structure of the agricultural sector, induced by the liberalization of the sector and NAFTA, caused a reduction in the absorption of labour in that sector. (Romero and Puyana, 2005; Polanski, 2003).<sup>7</sup>

The assembly of imported parts and components, to be re-exported as finished products, began in Mexico in the early 60s, under tax stimuli both by the Mexican and American

<sup>&</sup>lt;sup>6</sup> Since the 60s, Colombia has established a "Draw Back" programme and numerous "free zones", to stimulate exports. Their effect has been of little impact.

authorities, which contrary to what was proposed, discriminated against the integration of national added value and limited expansion in activities with less capacity for creating chains of production and developing networks of Mexican suppliers. The result was that in 2002, the added value of the maquila represented only 1.52% of the national GDP (GRAPH NO 17). That small proportion does not tally with the weight of exports from *maquiladoras* in the GDP: 15.0%. It is lamentable that after 40 years of the existence of the maquila, the integration of national added value should be so small, only 1.39% in 2004 (Graph 17). Not even the growth in maquila production and employment, or the exports from *maquila*, has been able to raise the portion of the manufacturing sector in employment, neither have they had any impact on the level of remunerations, nor has there been an improvement in productivity.

#### **GRAPH No. 17**

Mexican Maquila Contribution to the National Value Added as Percentage of total GDP 1988-2004



Source: Puyana & Romero, 2006

It is worth mentioning that the reduction of employment in tradable sectors is a trend common to all the countries under analysis as observed in Table No 5, above. In all of them, the services sector is the one absorbing the burden of employment generation. We call that tendency a premature "tertiarization" of the economies. All the countries selected, except Chile reduced the speed of Gross Capital formation as percentage of the GDP, from 1980 to 2004; the most dramatic fall is registered for Argentina. Mexico is behind Chile and Brazil. As pointed out before, a low investment ratio negatively affects both productivity and competitiveness, and severely compromises the development of tradable sectors. A similar picture emerges when capital accumulation per worker is analyzed. Between 1980 and 2004, Mexico, Brazil and Colombia reduced the capital endowment per worker between one half and one third while Chile managed to double it during the same period. One could say that in Chile there existed a policy of stimulating productivity growth by heavily investing in both education and capital formation. As Bergoeining et al 2005, concluded, Chile in contrast to Mexico registered, policy driven productivity growth. Table No. 9 shows the striking differences in capital formation.

	ļ	rgentina		Colombia			Brasil			Chile			Mexico		
	1980	1990	2004	1980	1990	2004	1980	1990	2004	1980	1990	2004	1980	1990	2004
Gross fixed capital formation (% of GDP)	nd.	nd.	19.15	16.78	16.59	18.59	22.90	20.66	19.60	16.66	23.14	22.10	24.76	17.88	20.18
Ratio K/L (constant 1995 thousand US\$ /Worker) Index relation K/L 1980=1	4.82 1	1.65 0.34	2.56 0.53	1.00 1	0.73 0.73	0.82 0.82	2.01 1	1.50 0.75	1.49 0.74	1.95 1	2.21 1.13	3.20 1.64	4.71 1	2.62 0.56	3.02 0.64

TABLE NO. 9

Source: World Development Indicators, 2006

In the Latin American region, investments, in the form of gross capital formation (GCF) as percentage of the GDP is lower than in the seventies and the beginning of the eighties, confirming the lower investments per worker we presented above. Under these we can suggest that very little has been achieve in transference and appropriation of new technologies. During the nineties, FDI grew faster than domestic and public national investments, reaching almost five per cent of regional GDP as illustrated in Graph 18

### Graph 18: Latin America: Evolution of Gross Capital formation and Foreign Direct Investments as percentage of GDP. 1970-2004



Source: Our own calculations byased on WB, WDI, 2006

During the period 1982-2000, domestic investment per worker grew at an annual rate of 1.8% (just one third of the level in 1940-82) and foreign investment at an annual rate of 11.6% (five times higher than before). The result could indicate that in the second period, foreign investment crowded out domestic investment. Nevertheless, DFI represents a small fraction of the total.

In Mexico, the presence of companies with DFI is much more important in export activity. In fact, firms with direct foreign investment (DFI) account for around 70% of the total non-oil exports, Table 10. DFI is more important in manufacturing, where 90% of all firms in the tradable sectors are located. It has been suggested that the origin of capital is related to the low domestic content of Mexican exports. Mexican exports produced by firms with DFI are only one part of the production process carried out by these firms in the rest of the world due to the fragmented processes of production. The foreign firms tend to buy their inputs in the region where they concentrate most of their operations (in a region where, due to an "accumulative process" of economies of scale, and learning by doing, the inputs for that particular industry are produced more efficiently than in any another part of the world<sup>8</sup>), and it is only natural that they are not interested in buying Mexican made components or capital goods.

# Table 10 Exports performed by companies with Direct Foreign Investment in total Mexican non-oil exports. (Percentage)

<sup>&</sup>lt;sup>8</sup> Krugman (1995), p. 1263.

1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004 p	2005
63.4	68.8	67.9	71.1	71.3	71.6	73.5	73.8	72.6	70.6	69.0	70.0	70.1
P: Prelin	ninary.											

**Source**: Bank of Mexico.

Policymakers in many developing and transition economies place attracting direct foreign investment (DFI) high on their agenda, expecting DFI to bring new technology and knowhow, and thus contribute to increasing the productivity and competitiveness of domestic industries. As the economic rationale for this special treatment, policy makers cite positive externalities generated by DFI through productivity spillovers to domestic firms, despite the fact that there is no proof that positive productivity externalities generated by DFI actually exist. As Dani Rodrik (1999) remarks, "today's policy literature is filled with extravagant claims about positive spillovers from DFI but the evidence is sobering." Difficulties associated with disentangling the different effects at play, in addition to data limitations, have prevented researchers from providing conclusive evidence of positive externalities resulting from DFI.<sup>9</sup>

A recent study in Lithuania concludes that the spillovers from DFI take backward linkages, with no indication of horizontal integration of the productive process. "These results are consistent with the existence of knowledge spillovers from foreign affiliates to their local suppliers but they may also be due to increased competition in upstream sectors. The latter may be the case if multinationals entering down stream sectors force less productive domestic producers to exit, thus lowering the demand for domestically produced intermediates, either because they are more efficient and need fewer inputs or they choose to import their inputs (due to their higher quality, constraints imposed by the parent company, etc.).<sup>10</sup> That may be the case with the Mexican *maquila*.

#### CONCLUSIONS

Latin American economic development during the last two decades has failed to fulfill expectations. Several studies have investigated the reasons why. This study is a new effort

<sup>&</sup>lt;sup>9</sup> For an updated review of the literature on the effects of DFI see Smarzynska (2003), pp. 2 and 3. She concludes that "…most of these studies, either fail to find a significant effect or produce the evidence of negative horizontal spillovers, i.e., the effect the presence of multinational corporations has on domestic firms in the same sector".

<sup>&</sup>lt;sup>10</sup> Smarzynska (2003), p. 3.

to shed light on the problems that affect economic and social development of the region. The paper analyzes the economic development of Mexico and compares it with the experiences of Argentina, Brazil, Chile and Colombia. All together they concentrate 85 per cent of the total regional added value.

Latin American economies did not grow faster than they had three decades before the crisis erupted in 1982. To overcome the crisis all Latin American countries implemented reforms, opened their economies to foreign competition and redefined the economic model. Mexico and all these countries fully implemented the so-called 'first wave' of reforms. Now, there is pressure to go ahead with new reforms even before it is sufficiently clear why results are far from reaching the announced objectives.

Mexico is an interesting case to study since the country was one of the early, radical reformers and because of its strong integration with the USA economy, a path many Latin American countries, or governments, are eager to follow. Mexico was supposed to have had all the conditions necessary for the reforms to deliver results, or at least for it to be able to harvest all the positive effects regional economic integration can induce.

After more than fifteen years of economic reforms, and ten since the NAFTA was set in motion, the effects indicating a change in the model and integration with the United States' economy have not yet crystallized. Even though it is true that there have been periods of growth for the Mexican GDP, these have only been sporadic, and have not shown a fully sustained approach to the income and welfare levels of Mexico's NAFTA partners. To detect whether there is a trend towards convergence in per capita income of NAFTA members is the objective of this analysis.

The "export promotion strategy" adopted by Mexico since December 1982 has notably increased the country's participation in world trade, and significantly attracted DFI, but it has not appreciably increased productivity growth or real per capita income. With the "structural reforms" initiated two decades ago it was expected that Mexico would enter upon a rapid growth path, but the results have been unsatisfactory. As yet the country has not significantly increased its productivity in any way and the Mexican economy has become less competitive than ever, this being reflected in the average growth rate of

Mexican per capita income *vis-à-vis* what it was prior to 1982, and compared with that of its main trading partners.

Latin American countries are indeed more open and exposed to foreign competition than in previous decades. All the countries invested in education and succeed in controlling inflation and fiscal deficits. Nevertheless, with the exception of Chile, neither Mexico nor the other countries managed to increase their per capita GDP, nor did they shorten the distance separating them from the USA, in economic terms.

We have detected a negative correlation between the high rhythm of growth of the GDP external coefficient shown by Mexico and the expansion rate of its economy. The same negative correlation was established for all the countries under study, including Chile. Then, contrary to the rhetoric, openness alone is not necessarily a clear road to growth.

We found that productivity of labour stagnated or decreased in all countries, with the exception of Chile that doubled its productivity level between 1990 and 2002. And it is the lack of productivity gains that explains Latin America's feeble growth record.

Despite improvements in education and faster export growth, employment conditions do not show signs of any radical improvement. On the contrary, real salaries stagnated in Mexico, Brazil and suffered an important reduction in Argentina. Again, Chile is the country with the largest salary gains and, strange to say, Colombia followed almost at the same speed. Once more, we found it difficult to explain the divergent trend in employment and salaries amongst different countries. And it looks as if it is not the implementation of liberal labour reforms or the lack of them that explains unemployment and low salaries.

We found no evidence to confirm that the key factor explaining differences in productivity gains, growth of the GDP/C and in salaries is the degree of openness or the type of specialization of production and exports, either in assembled manufactured goods, as in Mexico, or in natural resources and resource based manufacturing, as in Chile, Brazil, Argentina and Colombia. Mexico did not perform much better than Brazil in productivity or growth, and Chile by far surpassed both Mexico and Brazil. Argentina, an exporter of food and agricultural products, did worse than Brazil, a country with similar specialization. Mexico has indeed the lowest unemployment, but the country also has very low productivity gains and stagnating real salaries.

In our opinion what establishes the bases for growth is, first and foremost, the rhythm in capital accumulation and in increase of the capital stock per worker. In these factors, all countries but Chile not only stagnated, but receded from the level of 1980. With less capital per worker it is no wonder that productivity did not expand and salaries decreased.

This paper gives rise to two types of reflections. One for those who tenaciously insist on trying to prove (or disprove) the universal benefits of trade liberalization for productivity and growth, by means of cross country studies. There are many specific factors in each country that can offset or enhance the possible positive effects of trade liberalization. Therefore studies should be carried out for each individual case analyzing all the factors involved, including specific historical factors. This is specially important when trying to generalize for the entire Latin American region. We found the region to be much more diverse than we had assumed and it was difficult to encapsulate the rich experiences each country offers in rigid model abstractions.

The second reflection is addressed to policy makers: trade liberalization, reduction in the scope of state action and opening the country to FDI are not sufficient, by themselves, to bring about generalized increases in productivity and in the living standards of the population.

The remedy for the stagnation of Latin American economies may rest in designing and implementing more imaginative measures than those applied up to now. It requires a comprehensive economic policy that will generate the conditions for a truly virtuous circle of innovation, productivity, growth, and international trade.

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