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I. Mexican Business in the last twenty years

Entrepreneurship in Mexico has become more dynamic as a result of structural reforms introduced in the last twenty years. The census data shows that creation of new businesses in the period 1994 to 2004 was 162 thousand per year, so the size of the business community increased from 2.5 to 4,2 million, that meant a net average growth rate of 5%. The percentage of new ventures is much higher than in the rest of Latin America and similar to that of East Asia. That meant that for each firm that already existed in the market, 1.7 new firms entered the market.

Creation of new businesses was against all odds, Government support for business creation was weak during this period, due to the collapse of the financial system in 1994, that dried up financial resources and pushed entrepreneurs to develop their own financial network to create new ventures. The Government network to support businesses was quite limited for the whole period of analysis, focusing mainly on training but with budget restrictions.

Table 1. Entrepreneurship in Mexico 1993 to 2004

	1993	1998	2004	Change 1994 to 2004	Average annual change 1994 2004 (%)
Total	2.512.631	3.130.714	4.290.108	1.777.477	4,98
Manufacturing	288.562	361.579	481.084	192.522	4,76
Trade	1.280.922	1.497.526	2.120.483	839.561	4,69
Non financial services	927.500	1.242.396	1.588.970	661.470	5,02
Other sectors	33.746	82.235	99.571	65.825	10,34

Fuente INEGI. Enumeración Urbana de Establecimientos 1993, Enumeración Integral 1998. México 1999. Censos Económicos 2004

Lack of government guidelines and support for businesses created a heterogeneous business sector. In 2004 the Economic Census states that productivity in the manufacturing sector by firm size was an average of 5 thousand dollars for micro businesses, while that of large businesses was of 29 thousand dollars in the manufacturing sector, a ratio of 5.8 times. Greater differences among firms become more clear-cut if we consider the size of average assets per business: micro firms averaged assets of only 16,7 thousand dollars, small firms of 643 thousand, medium sized firms of 4,4 million and large firms of 30 million dollars – the assets difference ratio is of 1.7 thousand times.

The opening of the economy, the enactment of the North American Free Trade Agreement (NAFTA) and the collapse of central government promotion policies encouraged entrepreneurship. The new entrepreneurial culture developed, was based on the help-yourself-philosophy, within a changing environment toward entrepreneurs, as they became a respectable figure in the Mexican society. This led to a change in political participation, creating transformation conditions for a political debate that led to the collapse of the Partido Revolucionario Institucional – an authoritarian bureaucratic entity that ruled the country for seventy years. New administration inauguration in December 2000, opened a

reengineering period where new rules of the game were set, and the role of the public sector in the economy is being redesigned.

By many standards, Mexico is a strong economy. In terms of total GDP, the combination of a population of 105 million and a per capita GDP of over US \$6,230 makes Mexico the tenth largest economy in the world. It is the United States' second most important trading partner, after Canada, and it is competing with China, which has obtained third place. Economic liberalization has resulted in a dramatic transformation of both the quantity and structure of trade: from 1980 to 2004, exports increased twelve-fold and there was a major shift from oil-related to manufacturing exports. However, despite the huge increase in exports, economic growth has been quite mediocre. During the 1980s (commonly referred to as Latin America's lost decade), per capita GDP growth was negative. Despite the major liberalization efforts taking place after 1985, growth rates in the 1990s were still less than half the growth achieved during the 1960s and 1970s, and at the turn of the century, growth has become even less dynamic. This performance is even worse when compared to its primary trading partners and competitors. Mexico has consistently lagged behind its partners in the NAFTA area and behind some major East Asian competitors, and has maintained a performance similar to that of Brazil (Table 2).

Table 2. Economic Performance in perspective (GDP annual growth)

	1980- 1990	1991- 2000	2001 -2004	1980 - 2004
Mexico	2,5	3,5	1,6	2,8
NAFTA partners				
United States	2,9	3,3	2,5	3,0
Canada	2,7	3,0	2,4	2,8
Main competitors				
China	9,2	10,1	8,4	9,5
Korea, Rep.	7,8	6,2	4,6	6,7
Brazil	2,3	2,7	1,6	2,4

Source: World Bank WDI online June 2005; 2004 data are from INEGI; Bureau of Economic Analysis; Statistics Canada; Korea National Statistics Office; and IBGE.

One of the aims of NAFTA was for manufacturing to become the driving force of the economy. Unfortunately, however, the behavior of the Mexican industrial complex has been below expectations. Its average rate of growth has been 3.6 percent for the period from 1988 to 2003, due to a low productivity growth rate of 2.5 percent. Even more concerning is the decreasing total factor productivity (TFP). There are a variety of estimates of total factor productivity, yet all of them show that the TFP for Mexico experienced a sharp decline during the 1980s, and it has remained relatively stagnant during the 1990s. Take, for instance, the performance of what can be considered a symbol of NAFTA: *maquiladoras*. They registered yearly personnel increases for 37 consecutive years, and reached their maximum level of employment at 1.35 million in 2000. Yet, following November 2000, they shed 14% of their work force and 23% of plants closed. This could easily be dismissed as part of an adjustment from the contraction of the US economy. Yet, the underlying reasons are more structural than cyclical. An estimated 50% of the *maquiladoras* that left the country moved

elsewhere, mainly to Asian countries —particularly China. As long as foreign firms are in Mexico for cost considerations, and there is little local content, firms will be footloose, migrating to lower cost locations as relative wages start to increase.

As other countries, particularly China, join the WTO, Mexico's position becomes increasingly vulnerable. These countries are operating on global economies of scale, rather than only in the North American region. Mexico is now stuck between being considered low-cost (but not as low as China) and higher value added producers, and it needs to move up the value chain. Mexico developed various pockets of excellence and high productivity associated with multinationals operating in high-tech and higher middle-tech industries and national conglomerates operating in mature industries. These are no longer *maquila* operations, as they employ many professionals and include in-house design and engineering. Yet these pockets of excellence are still often enclaves with few linkages to the rest of the economy. This is Mexico's growth paradox: there is a promise of higher productivity, value added and wages, however this promise remains only very partially realized. The explanation for this paradox is that NAFTA-induced changes produced very little impact on firm-level learning and innovation. NAFTA gains are almost exclusively relegated to reallocation between and within sectors, rather than corresponding to an increase in technical efficiency ('within plant effect'). Indeed, this is what economic theory would predict: one would first expect reallocation effects based on changes in relative prices, followed by micro-level increases in efficiency based on learning and innovation. A second-generation NAFTA agenda would be focused on achieving dramatic increases in the 'within the plant effect' of rapid firm-level productivity growth.

Mexico is now at a crossroads: it cannot yet compete on the basis of knowledge assets (such as OECD countries), yet its traditional comparative advantage is eroded by low cost competitors. Both government and industry leaders are extremely concerned about Asian countries attracting many of the firms now established in Mexico. This was clearly shown when Mexico tried to block China's accession to the WTO. However, these leaders seem to view the problem of the lack of competitiveness as mostly one arising from differences in labor costs, ignoring the close relationship between the country's performance and its technological capabilities (in a broad sense, including adoption, adaptation and creation). Failure to recognize this critical link will result in further loss of productivity. Take, for instance, Mexico's export performance vs. China's. In exports to the US (about 90% of Mexican exports), Mexico had a strong, and similar performance to China from the start of NAFTA up to 2000, but has lost ground since then. Both Mexico's and China's exports to the US increased by 17% from 1996 to 2000, yet from 2001 to 2003 Mexican exports increased by 2.5%, while exports from China increased by 22%. Nor is this a purely cyclical phenomenon. Of the 141 products that Mexico exported to the US in 2003, 54 experienced a reduction in exports, totaling \$5.5 billion, while for those 54 export products, China experienced an increase of \$11.8 billion. At the same time, while Mexico experienced an increase in the exporting of the remaining 87 products in the amount of \$8.9 billion, \$3 billion of that amount was due to oil exports. Meanwhile, China experienced an increase of \$15.3

billion in its exports of those 87 products. Mexico is losing exports in several products that are among its 15 largest exports (passenger cars, computer accessories, apparel and household goods). Even more emblematic and concerning is that Mexico is losing exports even in products which, due to their size or weight, would be expected to enjoy a significant advantage (furniture, household appliances).

Underlying this sense of urgency is the fact that Mexico is losing ground in terms of quality of competitive environment for firms, in relation to its main training partners and competitors. Not only is Mexico's competitive position quite low for an economy so highly integrated with US and Canadian economies. Even more alarming is the reality that its position is weakening, whereas the competitive positions of China and Korea are improving. Falling TFP, stagnant value added of exports, and a still unsatisfactory competitive environment all indicate that 'the flight of firms,' which seems to be replacing the capital flight of the 1980s, is not merely a transitional phenomenon. Instead, it is the tip of the iceberg, signaling a need to deepen NAFTA economic openness through concerted action by the government and the private sector to dramatically improve the investment climate, and to create an environment more conducive to generating, diffusing and applying knowledge.

II. Emergence of Mexican Multinational Corporations

Amid the lack of competitiveness of Mexico, there is a rising group of businesses that have been increasing their competitive edge, mainly among large enterprises, that could compare with world-class businesses. Mexican companies pursued a variety of strategies that far from stemming from a master or common plan reflected their own conditions and particular strategies. Under this situation there has been only a limited number of large Mexican companies that have been able to build up their position in the national, as well as in the international market. A ranking of the 40 largest Mexican companies between 1995 and 2002 based on each company's results on the assets, sales and profit value showed that only a select group has been able to move from a crisis situation towards a level of national and world competitiveness. Thus, only this reduced group has turned into what today is referred to as the multinational regional business² with important assets. To survive in a context marked by crisis and slow growth of the national market, the core of the largest and most powerful Mexican companies kept a proactive response by becoming multinationals.

Most of the large Mexican companies are located in the middle technology segment (table 3) and are oriented mainly to the domestic market, where they have the largest part of their sales. Between 1995 and 2002 only 9 of the main 40 Mexican companies increased, either their exports or their sales to foreign markets. Amongst these, only 5 carried out more than 50% of their total sales in

² Garrido, Celso. 2006. "Empresas, economía nacional y sistema financiero en México. Evolución desde 1995, tendencias y desafíos", in Pozas María de los Ángeles (editor) *Estructura y dinámica de la gran empresa en México: cinco estudios sobre su realidad reciente*. México, El Colegio de México.

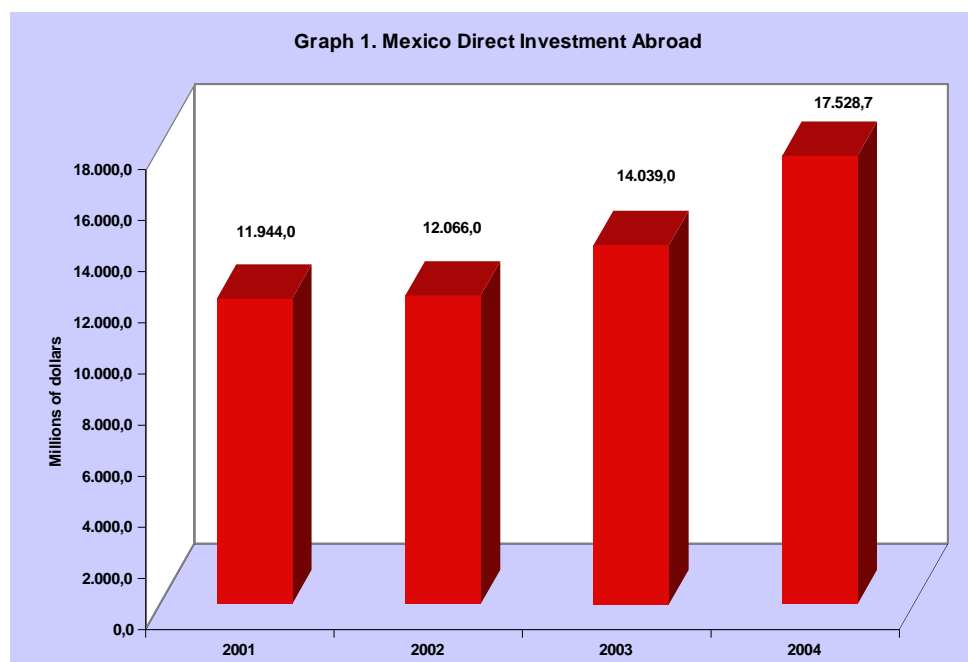
foreign markets.³ On the contrary, the main destiny of the large foreign companies' production based in Mexico is the foreign market. In the automobile sector this accounts for 81%, in the chemicals sector it is the 86%, and in the information technology 51%.

Table 3. Firms by size and industry by level of technology (number of units and share of total)

	Total	Size			Large
		Micro	Small	Medium	
Total manufacturing	328.718	306.083	16.205	3.379	3.051
Share of total (%)	100,0	93,1	4,9	1,0	0,9
Resource Based	53,7	51,3	1,8	0,3	0,2
Low Technology	26,2	24,2	1,5	0,3	0,2
Medium Technology	19,1	16,9	1,5	0,4	0,3
High Technology	1,0	0,6	0,2	0,1	0,1

Source. Own estimates based on INEGI. Censos Economicos 2004

Large firms in the medium and high technology profile became competitive at World level, and some of them began to invest abroad, in 2004 the level of Mexican Direct Investment abroad was around 17.5 billion dollars⁴ up from the 11.9 billion of 2001, outflows have increased from 122 million a year to 3.5 billion a year, as Mexican companies have become more competitive. There is no detailed information of where they invest, so its only company by company that is possible to get an outlook of where and what corporations are the ones involved in investment abroad.



³ Taken from Pozas, María A. (2005) "Nuevas tendencias en la inserción de las grandes empresas en la economía mundial", paper presented for the workshop, "El futuro del trabajo en México". AMET. Tecnológico de Monterrey (october 11).

⁴ As specified in the web page of Banco de México on May 2006.

Large businesses have taken advantage of NAFTA and of all free trade agreements signed with different countries and have reached alliances with international and domestic businesses. Foreign companies looked for Mexican to get into the domestic market more easily and Mexican companies searched for partners mainly in the United States and Latin America to get into foreign markets. This has been reflected in the capital mix of the largest 500 firms, where there is an increasing share of foreign firms in the capital of large Mexican firms (table 4).

Table 4. Alliances of the 500 Largest Companies in Mexico (distribution by source of capital)

Year	National %	Foreign %	Mixed with national majority %	Mixed with foreign majority %
1992	63,50	12,00	21,00	3,50
1993	63,25	18,00	15,00	3,75
1994	61,39	18,23	15,88	4,50
1995	59,53	18,78	15,05	6,64
1996	67,54	18,46	9,26	4,74
1997	70,93	14,68	12,18	2,21
1998	65,52	17,74	16,06	0,68
1999	65,52	17,74	16,06	0,68
2001	65,13	28,95	4,60	1,32
2002	64,80	28,95	4,60	1,65

Source: Pozas, Maria A. (2005) with information from *Expansi—n* digitalized series 1994-2003.

*The annual data base of *Expansi—n* compares information of the two previous years so the information on 1994 includes data from 1992 and 1993.

Large firms that have become multinational have concentrated in Mexico City and in Monterrey that are home of the most dynamic and modern firms in the country, some of them have reached register in different data base as the one collected by Forbes company

Table 5. Mexico's Biggest Public Companies that are Multinational (data on US billions)

Rank	Name	Headquarters location	Country	Industry	Sales	Profits	Assets	Market Value
243	Cemex	Monterrey	Mexico	Construction	15,33	2,11	26,44	23,82
300	América Telecom	Mexico City	Mexico	Telecommunications services	17,17	1,11	22,85	20,13
411	Carso Global Telecom	Mexico City	Mexico	Telecommunications services	15,36	1,05	23,81	8,36
670	Femsa	Monterrey	Mexico	Food, drink & tobacco	8,4	0,52	10,72	10,31
777	Grupo Carso	Mexico City	Mexico	Conglomerates	7,36	0,81	7,88	5,99
806	Grupo Mexico	Monterrey	Mexico	Materials	5,48	0,67	9,43	6,66
872	Grupo Financiero Banorte	Monterrey	Mexico	Banking	3,91	0,54	17,89	4,94
893	Grupo Modelo	Monterrey	Mexico	Food, drink & tobacco	4,02	0,56	6,6	11,2
939	Grupo Televisa	Mexico City	Mexico	Media	3,06	0,58	7,07	11,57
1058	Coca-Cola Femsa	Monterrey	Mexico	Food, drink & tobacco	4,18	0,49	5,9	5,62
1072	ALFA	Monterrey	Mexico	Conglomerates	6,53	0,73	5,94	3,1
1392	Grupo Bimbo	Mexico City	Mexico	Food, drink & tobacco	5,29	0,27	3,33	4,17
1416	Inbursa Financiero	Mexico City	Mexico	Banking	1,76	0,27	8,11	4,72
1828	Grupo Elektra	Monterrey	Mexico	Retailing	3	0,28	4,78	2,68
1873	Soriana	Monterrey	Mexico	Retailing	4,56	0,2	3,34	2,65
1934	Kimberly-Clark de Mexico	Mexico City	Mexico	Household & personal products	2,07	0,27	2,35	3,96

Source: Forbes.com section Rank: "World's biggest public companies"

In the following sections we will describe the main features of the multinational listed in table 5.

III. Mexico City business network: the global challenge

Central Mexico is the main business center it holds almost 20 percent of all established businesses (Distrito Federal 8.9 and Estado de Mexico 10,9 percent). Distrito Federal is home of 542 large businesses (more than 500 employees) that have been the leading force of structural change in the country, they are located in all sectors. Business history of the country began and continues to be held in this region, but with a continuous changing face, trade was the initial facade of the city, in the ninetieth and twentieth century manufacturing changed the whole area attracting people from the rest of the country, becoming one of the most populated cities all over the world. In the late twentieth century as the agglomeration faced pollution problems, many industries were forced out of the city. Little by little the city is becoming a service center, attracting new investments.

One of the main challenges of the business in the regions has been to transform themselves into world-class businesses, some of them has been able to do so, and has become global. Among the most successful cases are those in telecommunications, engineering services, food industry, financial sector and media and entertainment.

Emergence of each one of this industries into global success has followed different paths, telecommunications was linked to privatization, engineering services to the emergence of leading professionals from educational reforms of the fifties and sixties of the twenty century, media and entertainment to the government restriction for larger competition in the sector and banking to the privatization policy of the nineties. All of this Mexico City based businesses network reaches all regions in the world (as shown in table 6) and has expansion programs to get into more countries.

Table 6. Mexico city largest multinational corporations and locations where they have subsidiaries and business

America Telecom	Carso Global	Grupo Carso	Grupo Televisa	Grupo Bimbo	Grupo Financiero Inbursa	Ingenieros Civiles Asociados
Mexico USA Bermuda Brazil Guatemala Nicaragua El Salvador Colombia Argentina Honduras Uruguay Venezuela Spain	Mexico USA Guatemala Nicaragua Brazil Germany Spain China Chile	Mexico USA Guatemala Nicaragua Brazil Germany Spain China	Mexico USA Spain Colombia Chile	Mexico USA Argentina Brazil Chile Colombia Costa Rica El Salvador Guatemala Honduras Nicaragua Peru Uruguay Venezuela Czech Rep. Spain	Mexico USA	Mexico USA Brazil Argentina Chile Guatemala El Salvador Bolivia

Source: Annual Reports from: www.amtelecom.com.mx, www.cgtelecom.com.mx, www.gcarso.com.mx, www.televisa.com.mx, www.gibsa.com.mx, www.inbursa.com.mx, www.kimberly-clark.com.mx, www.lica.com.mx

The most successful Mexican multinational is Telefonos de México, that was privatized in the early nineties, to get into the bid, Carlos Slim put 12.9% of the total value and got into a joint venture with Southwestern Bell (12.5%), France Telecom (12.5%), other Mexican Investors (13,1%) and the rest (49%) was deposited by the government into a trust fund to be sold later. During the nineties Slim repurchased other Mexican Investors shares and the ones in the trust fund. By the size of the operation, Slim decided to create a holding company “Carso Global Telecom” (1996) which holds today 74% of all shares. In between they created a spin off to manage cellular and international investment, the new company was named America Telecom (AMX). Both companies are listed in the New York Stock Exchange since 2001, Carso Global Telecom manages traditional telephone services, while AMX focus on wireless communications. AMX is the largest of Latin America and the tenth of the world. Carso Global Telecom has invested in United States, in five corporation in Brazil: Embratel Participacoes, S.A, Telecomunicações, S.A, Star One S.A., Proveedor de Servicios Saelitales en Brazil, Telmex de Brazil, LTD. Proveedor de Servicios de Telecomunicaciones a clientes corporativos en Brazil; in Chile it has a holding company with the acquired shares of ATT, and it has open a business named Telmex Corporation; in Argentina it has four companies, Techtel – LMDS Comunicaciones Interactivas, Telmex Argentina, S.A.; Proveedor de Servicios de Telecomunicaciones a clientes corporativos en Argentina, Proveedor de Servicios de Datos en Argentina; in Colombia Telmex Colombia, S.A. and Proveedor de servicios de Telecomunicaciones corporativos en Colombia; and in Peru Telmex Peru. All this acquisition has allowed Telmex to develop economies of scale in this business, and it has opened the opportunity to get into new areas of telecommunications, that is the most dynamic area of business in Latin America.

CARSO Group brother company of Carso Telecom, has developed businesses in different industries: (1) Sanborns is the largest integrated store in Mexico, its business includes the largest library in Mexico, music store and restaurant services, and record disk retailer (Mixup, Discoland and Feria del Disco); (2) a pastry business el Globo; (3) Condumex (energy, autoparts and telecommunications); (4) Nacobre (cooper and aluminium producer); (5) Frisco in the chemical and mining industry; (6) Porcelanite high ceramic floors, and (7) Cigatam that is a cigarre retailer. The Group keeps operations in USA, Guatemala, Nicaragua, Brazil, Germany, Spain and China.

Other succesful case is Grupo Televisa that is the largest media group in the country, it opened operations in the 1950s when the government allowed TV signal to be carried out by private corporations, it got the concession of three channels. In 1972, it changed its name to Televisa, S.A. de C.V. to become a media producer and to get advertising as a financing mechanism, it got into cable TV, radio and disc production. In 1982 they got regional networks and in the early nineties the Azcarraga family took control over the company, transforming Televisa into Grupo Televisa. It keeps operations in Latin America (Colombia and Chile), United Status through Univision and in Spain. This corporation is one of the leading producers of media programs in the world and has a large influence on the hispanic population of the USA, its soap opera production has been quite successful in Asian countries.

Bimbo group is one of the oldest corporation in the bakery industry in Mexico, it open their doors in December 1945, with bread products, it has evolve to a very diversified operation of 4,500 products. It has 73 factories in Mexico, United Status, Latin America (Guatemala, Honduras, Costa Rica, El Salvador, Nicaragua, Colombia, Peru, Argentina, Chile, Uruguay, and Venezuela) and Europe(Czech Republic, and Spain). They have been quite successful in getting into the Hispanic market in the USA, where bakery Mexican style is quite demanded, so the company has been able to become the leader bakery store in the South.

Ingenieros Civiles Asociados (ICA) began its operations in 1947, a group of engineers led by Bernardo Quintana decided to engage in civil engineering services. In the first stage (1950s) activities were located in Mexico, experience was developed in infrastructure building and was the first to develop industrial parks complexes. During the sixties they began operations in Guatemala, Ecuador, Honduras, Dominican Republic, Panama and Chile, where large infrastructure projects were developed, in Chile they built the underground system and in Panama the airport pistas, success operations led the company to involve in the eighties and early nineties in more global operations, in El Salvador dams and irrigation systems, Belice airport, the Neuquen Bahía Blanca gas line in Argentina, housing in Waterview Florida, and the water system of Chicago. In the late nineties the prestige of the firm, allowed it to get contracts to build the Atacama gas line in Chile, Chile – Argentina gas line, and the Bolivia – Brazil gas line, speed train in Puerto Rico, the south highway network in Panama.

Medium sized businesses in the country are now developing a culture for transnational operations, so many high technology businesses have accepted the challenge, as is the case of the software industry. A successful firm that started operations in the 1980s is Hildebrando, the largest software producer in Mexico City. In fourteen years, Hildebrando has grown from a three-person project to a 500+ member organization. In February 2000, Warner-Lambert granted Hildebrando its "Best Quality Provider" award for the fifth consecutive year. Since 1998, Hildebrando has been featured yearly in *Expansion* magazine as one of Mexico's top 500 firms. Revenues have grown 5.6 times since 1993, reaching US\$14 million in 2001, a share of 2.3 percent of the market. Hildebrando has opened offices in Mexico City, Guadalajara, and Monterrey, as well as in Miami, Florida in the USA and Madrid, Spain. Their software factory, located in Mexico City, has the capacity and infrastructure to support 450 developers in a multitude of projects. According to their website, Hildebrando "strives to build strong lasting business relationships with clients," and over 60 percent of their revenue comes from customers who have done business with them for over 5 years. The client portfolio of the company shows how it has been successful in granting support to a variety of businesses in their effort to improve management. Hildebrando has fourteen years of experience developing information systems for a variety of industries, fourteen years that have allowed it to develop not only a great amount of knowledge about the technology available but also an extensive know-how regarding its application within the business environment.

Above cases allows us to have an overview of what type of multinational businesses has developed in central Mexico, that have been pushed into modernization not only by the industry specifics, but also by the restructuring of the city, most of them are in the service industry, that is the type of specialization that the city will continue to develop. In the next section we analyze the case the northern city of Monterrey. The area developed has become perhaps the second largest manufacturing network in the country, just after Central Mexico.

IV. Monterrey: the industrial city of the border

Monterrey is a city in the state of Nuevo León, 200 kilometers to the south of Laredo, Texas. It has a great industrial tradition given that for over a century, it has hosted some of the most symbolic companies in Mexico such as Cervecería Cuauhtémoc Moctezuma or the Fundidora de Monterrey (which shut down operations in 1986). Its business class has distinguished itself for being one of the most innovative and creative, not only in Mexico, but in all Latin America. Moreover, its industrial strength gives Monterrey a remarkable difference with respect to the rest of the Mexican border zones. In all of the border cities of Mexico and the United States the assembling plants or *maquilas* dominate the business spectrum, while in Monterrey industries have been established around the cement, glass, petrochemical, metallurgic and foods and beverages sectors. It has also been said that its companies have a long-lasting tradition of functioning both in the Mexican and the United States market.

According to Forbes magazine (March 29, 2006), 7 out of the 17 Mexican companies that appear in the list of the 2000 largest of the world, are based in Monterrey: Cemex, Femsa, Banorte, Coca-Cola Femsa, Alfa, Elektra and Soriana (see table 7).

Table 7. Monterrey Biggest Public Companies that are Multinational (data on US billions)

Rank	Name	Industry	Sales	Profits	Assets	Market Value
243	Cemex	Construction	15,3	2,11	26,44	23,82
670	Femsa	Food, drink & tobacco	8,4	0,52	10,72	10,31
806	Grupo Mexico	Materials	5,5	0,67	9,43	6,66
872	Grupo Financiero Banorte	Banking	3,9	0,54	17,89	4,94
893	Grupo Modelo	Food, drink & tobacco	4,0	0,56	6,6	11,2
1058	Coca-Cola Femsa	Food, drink & tobacco	4,2	0,49	5,9	5,62
1072	ALFA	Conglomerates	6,5	0,73	5,94	3,1
1828	Grupo Elektra	Retailing	3,0	0,28	4,78	2,68
1873	Soriana	Retailing	4,6	0,2	3,34	2,65

Source: Forbes.com section Rank: "World's biggest public companies"

After the 1982 crisis, the main problems faced by the Monterrey companies were the debt growth and an increase of the "idle capacity" derived from the market contraction and as a consequence of a fall in its investment. The majority of the companies implemented a strategy to refinance their passives and facilitate the entry of foreign capitals. In order to make clear the importance of the debt in this context, we can mention that in the year 1986, Monterrey corporations' debt represented one third of the total private debt in Mexico. In general, the response of several of these companies (Cemex, Vitro, IMSA, Pulsar and Alfa) was to reorient the productive effort towards the foreign markets, and also, invest there. These strategies proved to be effective, because thanks to them it was possible to resist another financial crisis in 1995.

The story of Cemex is amazing. In the past 25 years of relentless changes it has passed from being a local company in an underdeveloped country, becoming the third largest cement company in the world. The name of Monterrey is, now more than ever, linked to what that company stands for. Emerging from local capitals and consolidated under the import substitution program (1940s-1960s), Cemex was, ever since it began, a company that basically satisfied the local and national needs. The 1982 crisis meant a great change in its operations strategy with the contraction of the national market. The events that took place in the international cement sector also affected its perception of opportunities and threats, since the European cement groups were starting to take over of a great amount of plants in the United States, Canada and South America. Cemex was then forced to adapt and become aggressive to defend its own market in Mexico. Thus, the initial strategy consisted in consolidating its position in the national market, while at the same time it began exporting to the international markets. By 1985 Cemex had a participation of 33% of the whole Mexican market. Later on the company initiated a cycle of acquisitions in the national market: in 1987 it bought Anahuac and in 1989, Tolteca. Such moves gave it the 67% of the domestic market, and it became the sixth world producer. Its exports grew and in 1987 and 1988 over 27% of its production went to the world markets, especially to the

United States. Ever since 1985 its strategy was focused in conquering more space in the United States market through co-ownership and exports.

In 1990 this strategy had to be modified because of the antidumping lawsuit in 1989 against the Mexican cement. Thus, Cemex began to acquire cement plants in the United States to sell directly to its clients in that market. This situation made the company consider the market diversification option, so that it would not have to depend only or mainly in the United States. This triggered the idea of becoming a global corporation trying to locate in emerging markets, such as Spain, where it bought in 1992 the company Valenciana de cementos and LACSA, both for USD\$1 849 million. After these first movements Cemex began acquiring companies all over the world: Venezuela (1994), Panama (1994); the Dominican Republic, Colombia, the Philippines, Indonesia, Chile and Costa Rica between 1995 and 1999. Something to highlight is that during the 1995 crisis, Cemex reinforced its world strategy and added the trading business. In 1995, the exports were directed to 54 countries in four continents. 21% of what the company commercialized in these markets was in its trading character, that is, plants not owned by itself. In the year 2000 Cemex bought the US giant Southdown becoming the most important cement producer in the United States. It is important to point out that what the company did during the nineties is quite relevant, because of all the cement companies in the world only Cemex is based in an underdeveloped country.

Cemex has kept its acquisition cycle throughout the world, particularly in emerging markets, absorbing competitors and taking over their market shares. The acquisition of the British company RMC in the 2005 stands out because Cemex spent US\$5,000 million dollars and with that move it will have access to the European Union market, particularly to the new member countries such as Hungary and Poland. At present it is focusing in key markets such as Brazil, Russia, India and China. The world market has turned into its pillar and sales abroad represent 81%. Besides to all these good news, the US government finally removed the antidumping tariff to Mexican cement sales which will definitively benefit Cemex.

On its part, IMSA group a very important producer of steel and metal products, has also carried out a set of selling operations, such as the one that took place on April 2006, where it sold all its operations in the Chilean CAP S.A. However the company has kept its dynamism since that sell was accompanied with an investment plan for the Latin American region – estimated in US\$ 180 million in 2006- and a restructuring of its operations: the group has decided to concentrate its capacity and operations in one steel company, IMSA Acero. This decision made IMSA Acero the biggest steel company in Mexico in terms of sales. According to estimates made by the group, the restructuring process will generate savings for over US\$ 600 million and it includes the operations, creation of value and staff. Following this pattern, the relocation of the Richmond, California station which will now be set in Shreveport, Louisiana has been proposed; another example of this strategy is the decision to invest US\$120 million in the enlargement of the Monterrey station in order to produce a new line of steel sheet, which will diversify its products and innovate in the sector.

IMSA Group exports its products to over 30 countries in the five continents and has distribution and manufacturing operations in Mexico, the United States, Europe, Central and South America. The importance of its activities in the international market can be grasped easily if we consider that 50% of its income in 2005 came from the abroad.

Grupo Maseca (Gruma), has a capacity of 80 plants in 13 countries of the American continent, exporting its products to 50 countries. At the present time, Gruma has a strategy of national and international expansion. On the national level, the company increased its market share of corn flour from 65 to 75% when it bought its main competitor in Nuevo León, Agroinsa, in October of 2005. Internationally, Gruma has been aiming at extending its distribution and production points in such a way that the investment has mainly focused in creating plants in places that now demand the product, but that it has to be brought from other places. For example, China had to be supplied by the product made in Los Angeles, or Russia that had to be supplied by the production in Italy. Because of this situation, Gruma is now building a plant in Shanghai and this year it will begin the Russian station to reduce the costs and guarantee its freshness. Another example of the expansion strategy by Gruma can be noted in the recent acquisition of the Rosita Investments factory in Australia, which provides an annual revenue of US\$22 million. These three cases are specially important for the strongest bet Gruma has made for its growth is concentrated in Asia and Oceania, where the company projects an investment of US\$ 1,000 million in the next five years; and the goal is to reach countries such as Malaysia, Indonesia or India. The next step for Gruma would be to enter Africa, which has been planned to be carried out in two years.

Moreover, Gruma has declared its intention to duplicate its capacity in the United States by 2009. Today Gruma already has the 20% of the tortilla and corn flour market in the U.S., which reports 50% of its total utilities and close to 60% of its total incomes.

Even in the cases in which it has sold companies Gruma has acted over a strategic pattern of expanding to foreign markets. As an example we can take the operation that took place when it sold the Venezuelan Molinos Nacionales C.A. because that allowed the company to buy more assets in another business: Derivados de Maíz Seleccionados S.A., which gave Gruma 60% of the participation in that company.

One more case of success is represented by Femsa, which has the second largest Coca-Cola bottling group in the world, one of the most important brewing companies in Mexico and one of the fastest growing businesses in the world, the Oxxo a convenience-stores chain. Being a traditional company in Monterrey, it has been able to adapt to new times and to innovate in its products and services. Having some of the most popular beers in the country and internationally, this company has become specialized in the business and is now expanding towards new markets, such as Canada or Brazil. In Canada its main beers –Dos Equis (XX) and Sol- have been successfully introduced and in Brazil the company has bought the 68% of Cervejarias Kaiser allowing it to

enter this new space. Moreover, Femsa has a national expansion plan of building a mega-distribution center in Puebla that will be accompanied by a brewing plant with an investment of US\$ 46 million which is expected to generate over 500 direct jobs and benefiting 12,000 farmers. The Femsa beverages are sold in about 2 million sale points, which satisfy a population of over 170 million in nine countries. Its main export market for these type of products remains to be the United States, which still accounts for 90% of its exports.

The case of the Oxxo is an impressive one. It has an opening stores rate that is faster than the United States' Starbucks: one Oxxo is open every 14 hours in Mexico. This business has an annual growth rate of 20% and expects to open over 650 stores per year. Limited until today to Mexico, Femsa expects the store to begin its expansion to Latin America in 2006.

Other big companies have not had the same success. Therefore they have adapted their strategies, ranging from a restructuring in their main activities, combined with policies to attract foreign investment to balance up domestic competition. There are other companies striving for survival with huge debts, low sales and that could eventually disappear.

Vitro, is a glass company which is a major participant in the flat glass, glass containers and glassware businesses. The company has been severely affected by a large debt which in early 2006 was estimated at around US\$ 1.3 billion. This has forced the company to concentrate its efforts in its competitive lines and in increasing its exports. Vitro has followed a divestment strategy to remain competitive in its core production. Until July of 2005 the company had ended seven strategic alliances with foreign partners in non-strategic sectors. In the last two years, Vitro has sold five companies in sectors such as household appliances. Except one, in all of the cases its foreign partner has kept the plants in Mexico. As has been said, in some cases, the sales that have been registered (such as the sale of Crisa by Vitro or the ones made by Cydsa in 2005) have responded to the need of reducing the amount of their debts. Nevertheless, we also find cases in which the goal, more than just cutting down debts, has been to focus the company's production in one sector, concentrating and increasing the expansion potential of a limited number of products. Vitro has sold Vifisa (dedicated to the development of fibres), Vancan, Bosco Plastics or Química M. These sales, were accompanied with an investment plan of US\$100 million for the year of 2006 with the objective of reinforcing the businesses now called strategic: flat glass and glass containers; with special emphasis on the automobile industry and the food sector. In the case of the automobile industry the investment will be around USD\$ 9 million in 2006, involving the development of new production platforms, introduction of new products and productivity improvement; such changes should result in a sales increase of over 6%. Vitro is also building up new alliances and acquisitions mainly in its flat glass division where it recently associated to Asahi Glass looking for a technological improvement.

Some companies have accompanied the divestment and concentration trend with an increase in the investment not only in the strategic sectors inside

Mexico, but are also expanding to certain geographic zones which possess a great potential for their growth. For example, in the case of Vitro, the growing Hispanic market in the United States appears as an opportunity that has given the company growth rates of over 10% in exports: only during the first trimester of 2005 the sales of glass containers grew 18% in comparison to 2004, while the exports grew in 12% .

Alfa is a very important conglomerate that has displayed a similar strategy to the one implemented by Vitro. Its sales are about \$6.3 billion. For many years the group operated in a wide range of industries such as the steel and the food and canning sector. However, in the last years it has focused at strengthening its most profitable businesses. This strategy led to the sale of Hylsamex (steel) to its Argentinean partner Techint. On the other hand it has favored an expansion of Nemak operations. Nemak produces aluminum engine heads for automobiles in plants near Monterrey Mexico and in the Czech Republic. It currently supplies 23 automobile plants in North America, Europe, South America, China and Australia. Nemak just acquired two aluminum casting companies in Canada and is planning to set up operations in China and the US. Sigma, in the food sector is another strategic company for Alfa given its high profitability and the consolidated position it has. And finally, the petrochemical industry represents another niche of opportunity for Alfa which in 2004 increased its foreign sales by 43%.

The exceptions to the success of the Monterrey companies are exemplified by Cydsa and Pulsar. Cydsa is a company that was born in 1945, that is, during the beginning of the substitution of imports period. Specialized in chemicals, plastic and textiles, this group had 18 companies by the year 2000. The company started at the textile and cellulose sector, but it was during the sixties when its largest waves of expansion took place thanks to alliances with foreign companies such as BF Goodrich and a diversification of its products through the acquisition of chemicals and water companies. This was probably one of the companies that better managed the eighties crises, but after 1995 shock the sales stopped growing and began their decrease, and in 2005 reported a major loss of US\$ 44.6 million. Today, this company has sold all its subsidiaries to be able to pay its debts and has had to sell 60% of its assets to foreign capital.

The Grupo Pulsar, now extinct, was once one of the most important corporations in Monterrey. It began in the 1981, in the eve of the Mexican economic crises and in 1985 it acquired one of the most important tobacco companies in Mexico: Cigarrera La Moderna, as well as an agricultural company. It also set up a construction company, Grupo Krone. In 1988, it acquires an insurance company, Seguros La Comercial and enters the agro-genetic sector in an attempt of producing special seeds. In the 1990s, Grupo Pulsar expands itself by buying companies in Mexico related either to the insurance sector or the agricultural area and in 1995 it creates Seminis, a high-tech fruit and vegetables seed producer. By 1996 it kept creating companies and diversifying its products: it makes Bionova, a company for packing and processing of fresh products; Merkafon, a teleservices company; Omega, a real estate company. By 1997 it enters in the health business after signing an agreement for coordinating with the Hospital Medica Sur and has the control over the Santa Engracia Hospital in

Monterrey. At its peak, Savia the holding through which all these enterprises were managed, reported sales close to US\$3 billion and had operations in 110 countries.

Its main bet was the seeds and genetically modified products business. In its best years the company was able to gain 22% of the international seeds market. To finance its expansion the company acquired a US\$1.3 billion debt and started to sell some of its other businesses. In 1997 it sold its tobacco company Cigarrera La Moderna for US\$ 1.7 billion to the British American Tobacco industry. And later on it sold Seguros Comercial América (an insurance company) to the dutch company ING.

Nevertheless, Pulsar began losing its capability to sustain all those projects and begins selling them. Among the main causes of such downfall were the problems that Seminis faced: an overinvestment caused by a rapid improvement of the seeds which led to an over production. An inadequate planning of the varieties of seeds that had to be produced in a moment where the demand contracted, particularly in the US. This last reason is also related to the fact that environmentalist NGOs like Greenpeace conducted huge campaigns against genetically modified food. Other aggravators were climate changes and a strong Mexican currency that act in detriment of Seminis exports. In 2003 Pulsar had to sell Seminis to the Fox Pain investment fund who later on ceded it to Monsanto.

V. Scenarios for Mexican Foreign Direct Investment Abroad.

As the Mexican economy has opened to global competition and the aim is to get competitive at world level, Mexican firms has accepted the challenge and are moving toward transnational businesses, it is expected that more and more firms will get into this area. But still is to soon to have a clear cut scenario of how they will evolve. To understand the behavior of the large Mexican multinationals we have to take into account the strong shocks suffered by the Mexican economy in the last 25 years. At least two financial crisis, in 1982 and 1995; a very aggressive liberalization policy and slow or modest growth rates. A small group of Mexican companies were able to overcome the internal conditions and became multinationals. They have been very successful mainly in areas with intermediate technology levels.

Other companies have been struggling to survive amidst international competition. For many of the latter, outstanding debts have been a determinant factor that has forced them to implement downsizing and consolidation in the areas where they are more competitive. These companies have sold plants and non strategic business to get fresh resources that enable them to pay their debt and finance their new investments. Most of them has gone abroad to widen their businesses and benefit from more dynamic markets. Another group of least favored companies has been gradually disappearing in a process marked

by destruction of the small and medium size levels of the Mexican private sector.⁵

The managers of big companies have pointed out that high costs and the lack of incentives in Mexico, has forced them to look for better opportunities in other parts of the world. During the last five years they have invested abroad a total of US\$16 billion dollars. In 2005 they invested US\$5.2 billion. Nonetheless, given the low-level of intra-firm trade of Mexican multinationals, their globalization will not necessarily translate into an incentive for future Mexican economic development, which will continue being a huge challenge.

Finally, we think that in order to develop new high technology industries, an isolated effort of a large company is not enough. A clear example of this can be found in Pulsar's experience with its Seminis project. Successful stories reveal that a resolute state support and the alliance of the different Mexican groups to share the risks and minimize failure possibilities are decisive factors for a country with the problems that Mexico faces nowadays.

⁵ According to Reforma (April 14, 2006) between 2001 and 2005, 11,000 small and medium enterprises in the manufacturing sectors were shut down, leading to a loss of 529 thousand jobs. In the case of Monterrey, between 1994 and 2004, the share of local suppliers to maquila companies has fallen. This has led to an increased presence of foreign companies in the supplying networks (Fouquet and Moreno, 2006)

References

Cerutti, Mario (editor) 2003. *Del mercado protegido al mercado global. Monterrey 1925-2000*. México, Trillas.

----- 2002. *Propietarios, empresarios y empresa en el Norte de México*, México, Siglo XXI editores.

Garrido, Celso 2006. "Empresas, economía nacional y sistema financiero en México. Evolución desde 1995, tendencias y desafíos", en Pozas María de los Ángeles (editor) *Estructura y dinámica de la gran empresa en México: cinco estudios sobre su realidad reciente*. México, El Colegio de México.

----- 1999. "Las multinacionales mexicanas", en Chudnovsky Daniel (editor) *Las multinacionales latinoamericanas: sus estrategias en un mundo globalizado*. Buenos Aires, Fondo de Cultura Económica.

Fouquet, Anne y Moreno, Rebeca . 2006. "Ilusiones y transformaciones en la maquiladora de exportación regiomontana", *Comercio Exterior*, 56, 4, 312-325

Pozas, María A. 2006. "Tecnología y desarrollo en las cadenas productivas de las grandes empresas en México", en Pozas María A, *Estructura y dinámica de la gran empresa en México: cinco estudios sobre su realidad reciente*. México el Colegio de México.

----- 2005. "Nuevas tendencias en la inserción de las grandes empresas en la economía mundial", paper presented for the workshop, "El futuro del trabajo en México". AMET. Tecnológico de Monterrey (october 11).

----- 2002. *Estrategia Internacional de la gran empresa mexicana en la década de los noventa*. México, El Colegio de México.

----- 2001. "Monterrey Companies Strategic Alliances" en *Latin American Firms in the Globalization* . Japan, Institute of Developing Economies.