

**Large Family Firm Groups and New Competitive
Conditions in Mexico Since 1995:
Tendencies and Challenges**

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I . Introduction

The objective of this article is to analyze the evolution and challenges of the large “family” firm groups² (LFGs) in Mexico since the 1995 crisis. We will consider this evolution, in its relation with the new competitive conditions and the problems for economic development of the country.

The macroeconomic reforms applied during 1990- 1994 in Mexico promoted a switch from a “protectionist” market context to an open economy one. The outcome was a segmented national economy where a growing international commerce and a stagnated local market coexist. That implies that Mexican economy may have problems with its long term development. Under those conditions and the pressure produced by the increased presence of foreign firms in the country, some LFGs have managed their strategies to become successful multinational firms of a regional scope in the three Americas. The cost of this strategy for the national economy is that those LFGs have moved their demand for intermediate goods from local providers to foreign ones, and so contributed to built the stagnated local market mentioned above. After the 1995 crisis, the LFGs confronted huge economic and financial problems because of their relatively weak competitive positions in foreign markets and because they had financed their international expansion with foreign debt, meanwhile they lost their financial arms because of the bankruptcy of their own banks.

Thus, the LFGs have been forced to develop new strategies under the changing conditions of the global economy, at the same time that the country needs to find ways to rearticulate its foreign and local markets to recover growth trend in a long term. As a preliminary conclusion, this study suggests that the LFGs can be a relevant actor to consolidate the local market and the internal industrial linkages, using their market power to demand to local

2 The large “family” firm group (LFG) is a traditional corporate structure in Mexico, developed along the twenty century, and particularly since the 1950s. There are characterized by the fact that the owners of the controlling shares are a family or a single person, and by their oligopolystic market power in the local markets under the Import Substitution Industrialization (ISI). The radical economic switch toward an open and market-ruled economy because of the macroeconomic reforms promoted by the Government in the first middle of the 1990s created a huge challenge for those LFGs, and they have to learn to compete under the global economy conditions. For an analysis of the LFGs under this circumstance and their limits, see Garrido (1998, 1999) and Hoshino (2001).

SMEs (small and medium enterprises), intermediary products for its export production. But, this requires a new economic reform to promote the links.

To argue this hypothesis, first, we will present the main problems of the new economy that has emerged since the structural changes in the 1990s. Second, the evolution of the system of industrial firms will be considered showing an increased concentration of economic power in the largest firm. In the following point, we will show that the emergence of FDI, particularly the in-bond firms, is a relevant factor to explain the changes in the large firms. Finally, we will explore the situation and the perspectives of the LFGs. We will conclude with some considerations about the policy implications of the situation, in order to rearticulate the LFGs' evolution and the national economic development of Mexico.

II. The Mexican Economy and the Crisis of 1995

The economic crisis in 1995 set a turning point in the brief economic expansion that began with the macroeconomic reforms in the beginning of the 1990's.³

This crisis was so extraordinary in its proportion that it was called the worst one in the modern Mexican economic history⁴. Nevertheless, after the first huge disequilibrium, this crisis led to a rapid recovery as indicated with the macroeconomic figures in Table 1.

Table 1 Evolution of Macroeconomic Indicators 1995-2002

| | 1995/01 | 95/06 | 95/12 | 96/06 | 96/12 | 97/06 | 97/12 | 98/06 | 98/12 | 99/06 | 99/12 | 2000/06 | 00/12 | 01/06 | 01/12 | 02/05 |
|-----------------------|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------|-------|-------|-------|-------|
| Inflation | 10.23 | 24.46 | 35 | 40.49 | 34.38 | 23.32 | 20.63 | 15.21 | 15.93 | 18.23 | 16.59 | 10.04 | 9.49 | 7.16 | 6.37 | 4.72 |
| Foreign Exchange Rate | 6.2 | 6.28 | 7.75 | 7.6 | 7.89 | 7.97 | 8.15 | 9.1 | 9.95 | 9.55 | 9.6 | 9.95 | 9.8 | 9.15 | 9.26 | 9.79 |
| Cetes Rate 28 days | 37.7 | 47.56 | 48.65 | 27.72 | 27.24 | 20.11 | 18.89 | 19.53 | 33.53 | 20.98 | 16.45 | 15.57 | 16.98 | 9.46 | 6.29 | 6.67 |

Note: CETES: Certificates of the Treasury

Source: Author's elaboration based on INEGI.

After the initial shock provoked by the crisis, the inflation rate decreased rapidly to the level unknown in the country, while the interest rates decreased remarkably to very low levels in

3 The main changes promoted with this reform was to open the economy to foreign competition, to reduce the participation of the State in the markets, and to promote the activity of the private firms as the leading actor of the economy. For an analysis of the process that led into that 1995 crisis, see Garrido (1996).

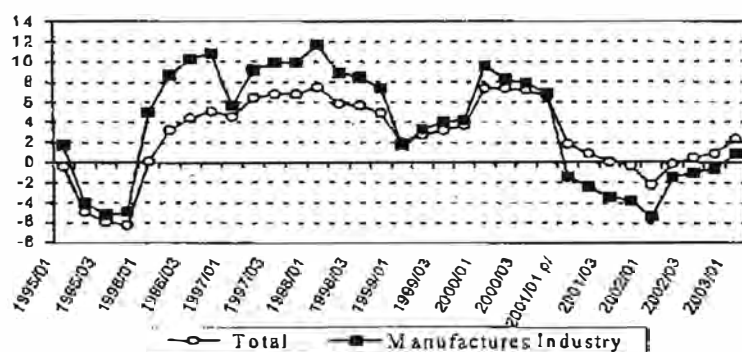
4 For an analysis of the cyclical crisis in Mexico since 1976 and the new conditions since 1995, see Garrido (2003)

real terms, and the exchange rate stabilized at around 9.50 pesos per dollar with growing overvaluation in real term. All this has created the perception that the situation of Mexican economy is good enough, and consequently that a favorable environment for business has emerged in the country.⁵

On the contrary, a more detailed analysis shows the existence of troublesome aspects which have developed in the Mexican economy during these years. The Gross Domestic Product, and the industrial production in particular, have experienced strong fluctuations, up to the present recession as shown in Figure 1.

Figure 1 Total GDP and Manufacture GDP 1995-2003

(Annual variation quarterly rate)



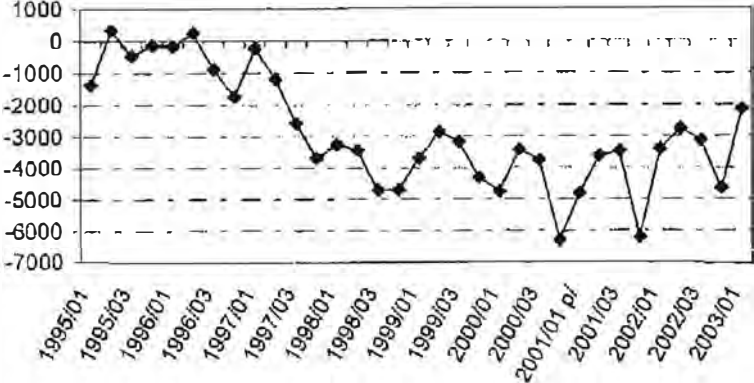
Source: BIE- INEGI

The rates of the both measures met a strong fall in the 1995 crisis, then recovered rapidly in 1996, and continued doing so until 2000. The recovery was stronger in the manufacturing production than in the whole economy. In the early 2001, the manufacture production was back to a recession along with the trends of the international economy, in particular with that of the

⁵ The defenders of the market-oriented reforms accept that the achievements of these reforms for Mexico and Latin America are still limited. However, they do not consider that this is the result of such reforms, but of the lack of some other reforms to complete the structural change. So they claim the need of a “second generation” reform to complete the pending issues from the “first generation” applied in the 1990’s. Broadly this second generation reform should promote the State reform, an institutional change for the government’s entities that cover the human resources development and also the reform of the legal aspects relevant for the firms. For an analysis of these themes, see Camdessus (1997), Navia and Velasco (2002), Kucynsky and Williamson eds.(2003).

USA. These trends in the national economy have been accompanied by unfavorable balances in the foreign trade, as we can see in Figure 2.

Figure 2 Commercial Balance 1995- 2003 (Millions of dollars)

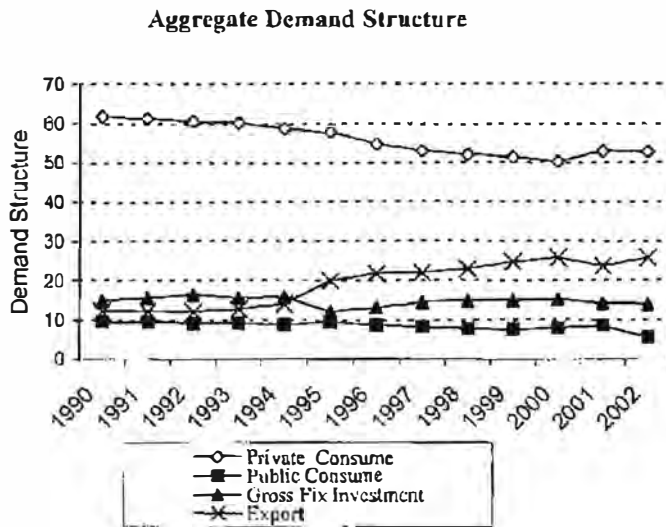


Source: BIE- INEGI

The trade deficit has been steadily growing since the middle of 1996, which has been financed by the foreign capital inflows (short term capitals and FDI). The amount of the foreign inflows has surpassed the need to cover the commercial balance, thereby putting pressure towards the overvaluation of the Peso. The growing trade deficit was a result of the growth of the exports at a lower rate than that of the imports. This shows the new inelasticity created by the exporting model based upon the imported intermediate inputs.

That instable characteristic of the new economic structure of Mexico, demonstrated by the trend of commercial imbalance, has been accompanied by the structure of aggregate demand and supply illustrated in Figure 3. As the figure shows, the new economic model is one of the export-led growth style, but complemented with a stagnated local demand (public and private, investment). In the other hand, the structure of the supply side shows that the local production measured by the gross national product (GNP) has declined while the imported products has become an increasing part of the aggregate offer. This is because the policy reforms have promoted the competitiveness of export production using imported intermediate inputs instead of local inputs. Those figures show a segmented economy with a growing international market and a stagnant local market.

Figure 3 Structure of the Aggregate Demand and Supply 1990- 2002
 (As a percentage of total)



The current Mexican economic organization has another relevant factor, because almost all of the commercial banks have been acquired by foreign firms as a consequence of the 1995 crisis (Table 2).

Table 2 Institutional Property of Mexican Banks (June 2003)

| Bank | Assets | | Type of Property |
|-----------------------------|---------------------|------------|------------------|
| | Stocks | % | |
| BBVA/ BANCOMER | 435,088.51 | 25.22 | Foreign |
| BANAMEX/CITIBANK | 424,551.60 | 24.6 | Foreign |
| SERFIN/ SANTANDER | 209,805.27 | 12.16 | Foreign |
| BANORTE | 197,072.37 | 11.42 | National |
| BITAL/ HSBC | 159,696.44 | 9.26 | Foreign |
| The rest: 15 foreign banks | 168,320.37 | 9.76 | Foreign |
| The rest: 11 national banks | 130,706.79 | 7.57 | National |
| Foreign Banks Total | 1,397,462.19 | 81% | |
| National Banks Total | 327,779.16 | 19% | |

Source: Comisión Nacional Bancaria y de Valores (CNBV).

Furthermore, the shift in the ownership of the banks also implies that LFG's lost their financial branches. It has had significant influence upon the LFGs' strategic development, as we will discuss later.

In sum, the national economy has developed contradictory tendencies. While the macroeconomic conditions appear relatively favorable, the performance of the foreign trade is adverse, and there is a disarticulation of the internal and international markets, which may have severe impact on the development of the country in the long run.

III. The Evolution of the Industrial Firm System ⁶

Considering that the economic reforms was aimed to improve the activities of private firms instead of the State intervention, it is important to see what was the evolution of the industrial firm system as a core of the economic activity, and in the context of the competition of the LFGs. We use the economic census of 1988, 1993 and 1998 for the analysis as seen in Table 3.⁷

In this table, we have information for the total plants at the three census, with details about the small, medium and large plants for the same years. All the registered information in this table includes the in-bond assembly plants, although that concept was not presented as such in the 1988 and 1993 Census⁸.

First of all, we observe a progressive evolution in the number of plants, employment level, total gross production (TGPV) value, total gross capital formation (TGCF) and the Gross Aggregate Value (GAV), though this tendency could be influenced by the years when the census were made. The year 1988 was one with a lower performance because the Mexican economy was in a crisis; while 1993 and 1998 were a couple of upsurge moments of the economy. In general, the progressive activity in the sector indicate that the firms' infrastructure and the productive capabilities of industry was preserved during those years, although this could be achieved through accelerated births and deaths of firms, particularly of the small ones.

When we consider the plant's sizes, we find diversified performance. For the small plants, we see growing figures for the number of plants, employment, and TGPV, but with a lower rate of growth than those registered nation wide. On the other hand, the medium plants have a similar evolution to the one developed by the manufacturing industry as a whole, in terms of the increase in the number of plants, employment, and production levels.

Finally, large plants have the most striking performance. On one hand, there is an increase in the number of plants and employment by 50% from 1993 to 1998. The impressive

6 See the Secretaria de Economía's "Business Developing Plan 2001-2006" (Plan de desarrollo empresarial 2001-2006) for the government's proposal to face the difficulties and the differences in the firm system.

7 See Garrido (2002) for details of the performance of firms during the period.

8 The in-bond industry began in Mexico 1965, because of governmental rule that authorized firms to import goods to be exported after they did some few local transformations, mostly profiting local low salaries. As we will show later, this in-bond industry has an accelerated rate of growth after the NAFTA agreement.

Table 3 Small, Medium, and Large Industrial Plants in the 1988, 1993 and 1998 Census

| Stratum and year | Economic Units | Total employed personnel | Thousands of pesos of 1993 | | | | | |
|------------------|----------------|--------------------------|----------------------------|---------------------|----------------------------|---------------------------|-----------------|----------------------|
| | | | Total Remun- erations | Net Fixed Assets | Gross Capital Formation | Total Gross Production | Total Inputs | Gross Added Value |
| Total | | | | | | | | |
| 1988 | 11,610 | 2,125,561 | 38,162,827 | 259,742,292 | 15,913,310 | 350,538,671 | 224,944,976 | 125,593,695 |
| 1993 | 13,903 | 2,378,079 | 63,906,509 | 224,958,354 | 17,361,697 | 456,892,653 | 296,721,975 | 160,170,678 |
| 1998 | 15,952 | 3,143,896 | 65,675,764 | 278,522,023 | 28,740,737 | 562,285,724 | 377,255,153 | 185,030,571 |
| Small | | | | | | | | |
| 1988 | 7,004 | 380,801 | 4,248,032 | 15,237,051 | 1,451,410 | 39,163,727 | 26,360,189 | 12,803,538 |
| 1993 | 8,414 | 461,825 | 8,801,896 | 23,000,456 | 2,007,481 | 55,297,954 | 36,147,542 | 19,150,412 |
| 1998 | 9,147 | 504,111 | 7,513,794 | 22,122,478 | 2,026,819 | 58,542,555 | 39,490,108 | 19,052,446 |
| Medium | | | | | | | | |
| 1988 | 3,758 | 805,778 | 12,980,502 | 56,246,750 | 3,566,616 | 112,589,401 | 71,636,582 | 40,952,819 |
| 1993 | 4,542 | 961,400 | 24,841,292 | 83,691,377 | 7,290,685 | 158,113,564 | 99,945,466 | 58,168,098 |
| 1998 | 5,431 | 1,178,509 | 22,555,619 | 99,446,897 | 8,753,554 | 184,835,828 | 119,760,177 | 65,075,651 |
| Large | | | | | | | | |
| 1988 | 848 | 938,982 | 20,934,294 | 188,258,490 | 10,895,285 | 198,785,544 | 126,948,205 | 71,837,338 |
| 1993 | 947 | 954,854 | 30,263,322 | 118,266,521 | 8,063,531 | 243,481,135 | 160,628,967 | 82,852,168 |
| 1998 | 1,374 | 1,461,276 | 35,606,351 | 156,952,648 | 17,960,363 | 318,907,341 | 218,004,867 | 100,902,474 |

Source: Author's elaboration based on the President's First Annual Report, 2001.

1/ Based on the 1989, 1994 and 1999 Economic Census data; We adopted the new criteria for the firms stratification as published on March 30, 1999 on the "Diario Oficial de la Federación". That is based on the number of the employees instead of the previous one which was based on both the number of employees and the net sales. In the micro, small, medium and large stratum¹ from the industry, commerce and services formation. The stratification rates for the number of employees differ from one sector to another; There used to be criteria definition for the businessmen only, then the criteria were extended for commerce and services. For the industry, plants with 30 or less employees are considered to be the micro; 31 to 100 employees as the small one; 101 to 500 employees as the middle-sized one; and over 501 as the large ones. 2/ Producer Economic Units for 1988 and 1993 and Producer and Auxiliary Economic Units for 1998. 3/ Producer and Auxiliary Economic Units for 1988 and 1998 Producer Economic Units for 1993. 4/ It is the sum of the total remunerated employees average total and non-remunerated ones of the economic units. The average for every Economic Unit is calculated dividing the sum of the employed personnel who worked during June 30 and December 31 by two. The remunerated Average Personnel is the remunerated personnel per Economic Unit Average sum and the Non-remunerated personnel Average is the sum of the Non-Remunerated personnel averages per economic unit. 5/ It consists in all the salaries and Non-remunerated personnel Average is the sum of the Non-Remunerated personnel averages per economic unit. wages payments made by the Economic Units to the remunerated personnel during the year, as well as the additions to those payments for profits distribution and social services. 6/ It is the return cost value or the market price of all those durable goods owned by the Economic Units up to December 31 every year that are used in other goods and services' production and last more than a year. 7/ It is the resulting value of the total inputs value subtraction to the gross total production (this shows the added value to the inputs during the productive process until they become finished goods.(Generated Wealth). This added value has not deducted the fixed assets depreciation payments.

growth is also observed in the GAV and TGPV while the growth is even more notable in the case of TGCF which doubled the registered amount in the same period.

As a conclusion of this analysis, we can say that the performance of the different sizes of plants seems to correspond to historical patterns, as small plants are more sensitive to internal market conditions, medium-size plants behave along the general tendency, and the large ones' dynamics increases in a greater proportion than the others, which has created an increasing economic concentration. We have to remember that large and medium firms are under firms that have several plants, therefore, more than 2,300 medium and large plants are, in fact, under a few hundred of large firms, in other words, concentration under even lesser economic groups. At the same time, this last point brings about a new question: what kind of firms explain those widechanges in the larger plants during the five year period 1993-1998? This is important for our analysis of the LFGs because it can help us to understand the changes in competitive conditions for those kind of firms. In the next section, we will show that this change is due to the impact provoked by the important increase on foreign direct investment (FDI) during the period.

IV. The Large Foreign Firms

In general, the foreign firms have had increased their presence in the Mexican firm system during the recent years because of the NAFTA agreement and for the competitive advantage of relatively low local salaries in relation to those in the USA⁹. This produced an increased participation of foreign firms in many different economic areas, in the manufacture industry in particular¹⁰. Investment by foreign firms can be classified in three different groups, according to the nature of the investment.

On one hand, we find foreign firms which bring in new investment or reinvest their profits in the case of the already settled firms. This kind of investment increases the productive capacity of the country. On the other hand, we have the foreign firms that buy existing Mexican firms in a classical merger and acquisition process (M&A). This kind of investment only

9 The North American Free Trade Agreement begun in 1994, and created strong incentives for foreign firms to invest in Mexico, trying to capture the benefits of operate under this umbrella that makes easier to sell from Mexico to the USA. This incentive was complemented with a second one, the low local salaries compared with USA.

10 See Dussel et al. (2003) for a wider analysis of the conduct of the direct foreign investments in the 1990s.

produces a shift of the property rights to foreign firms. Finally we have the foreign firms that come to Mexico and install in-bond plants, developing phases of a specific productive process within an international production chain. This kind of investment has strong impact on employment, buy inputs in foreign markets, and contribute very little to produce value added in the country.

Table 4 shows the amounts of foreign investments according to the types explained above. As we can see, the total foreign investment in 1995 had an abrupt downturn in comparison with 15 thousand million dollars in 1994, but it recovered later, and even registered a historical 26 thousand million dollars in 2001¹¹. With all this, the new investments have been fluctuating between 30 and 60 per cent of the total, although in 2001 they reached a record of 75% of the total.

Table 4 Foreign Investments in Mexico(FDI and M&A) (1994- 2003)¹¹ (in million dollars)

| | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | | Acum.1994-2003 ²¹ | |
|------------------------|----------|---------|---------|----------|----------|----------|----------|----------|----------|---------------------------|-------|------------------------------|-------|
| | | | | | | | | | | Jan.-June | | 2003 ²¹ | |
| | | | | | | | | | | Value | % | Value | % |
| TOTAL | 15,045.6 | 9,647.9 | 9,951.7 | 14,175.8 | 12,248.0 | 13,054.7 | 16,075.3 | 26,204.0 | 14,622.5 | 5,216.7 | 100.0 | 136,242.2 | 100.0 |
| New investment | 9,745.4 | 6,960.0 | 6,295.7 | 10,461.6 | 6,094.8 | 5,610.2 | 7,042.3 | 19,402.5 | 7,459.0 | 1,514.5 | 29.0 | 80,586.0 | 59.1 |
| Profits Re-investment | 2,366.6 | 1,572.0 | 2,589.7 | 2,150.0 | 2,864.0 | 2,303.5 | 3,784.5 | 3,733.0 | 2,133.2 | 1,511.6 | 29.0 | 25,008.1 | 18.4 |
| Accounts between Firms | 2,038.8 | -250.4 | -350.2 | -116.1 | 1,178.7 | 2,363.0 | 2,265.5 | 896.3 | 2,986.8 | 1,195.2 | 22.9 | 12,207.6 | 9.0 |
| In-bond Firms | 894.8 | 1,366.3 | 1,416.5 | 1,680.3 | 2,110.5 | 2,778.0 | 2,983.0 | 2,172.2 | 2,043.5 | 995.4 | 19.1 | 18,440.5 | 13.5 |
| M&As | 1,839 | 785 | 4,100 | 8,691 | 4,604 | 2,448 | 7,320 | 12,500 | Total | M&A (1994-2001) 39,5115.6 | | | |

Source: FD from Secretaría de Economía, Dirección General de Inversión Extranjera. M&A from Thompson Consulting data base.

1/ It is important to note that FI and M&A information are of different sources and that the second is not included in the first one.

It is interesting to note that new investments account for around 60% of the FDI, and that between 1994 and 1997 (years between the national census of 1993 and 1998) it registered a little

11 It is necessary to say that the significant part of the FDI in 2001 was explained by the acquisition of Banamex by Citibank for 12.5 millions dollars.

bit more than 40% of these new investments for the period 1994- 2003. On the other hand, the importance of reinvestments of profits has fluctuated so that we can see their share growing from 15 to 26% of the total and getting 29% during the first semester of 2003.

We also refer another important mode of foreign investment in Mexico, such as the mergers and acquisitions (M&A), as seen on the last line of Table 4¹². The figures only give a comparative idea of this kind of investment in relation to the other kinds of FI, because those M&A registered for each year can be produced through several years. But, the total amount registered between 1994 and 2001 inform of the all M&A realized during this time, so this data give a more approximated indicator to show the importance of this kind of FI. To see the meaning of the M&A in the property structure of firms in Mexico, it is useful to mention that the total M&A transactions reported during this time correspond to 819 Mexican firms of different sectors sold to foreign investors. This figure is relevant considering that according to the 1997 Economic Census, it was the total of approximately 33,000 medium and large plants, and that total represents a much smaller number of firms in the Mexican Economy. All this means that M&A produces a significant property transferring from Mexican to foreign firms, weakening the relative position of the local entrepreneurial actors in the firm system as a whole.

Now we consider the economic sectors where the FDI took place since 1994, presented at Table 5. We can see that the FDI has been concentrated in the manufacture, commerce and financial sector. The latter is related with the bankrupt of banks and foreign acquisition already mentioned, while the case of commerce is referred mainly to the large supermarket firms sold to the US firms.

On the other hand, the FDI in the manufacture represented 50% of the total, and this has been concentrated in a few industrial sectors as we can see in Table 6. Although relative amounts fluctuate through time, it is clear that there is a dominant share of the metal products sector, followed by that of food and tobacco, and the chemical industry on the third place.

In relation with our previous discussion about the extraordinary growth in the number of large manufacturing establishments, we can see, on Table 6, that in the period between 1994 and 1997 a little more than 40% of the total FDI was concentrated in the manufacturing sector for the

12 For a wider analysis of the mergers and acquisitions in Mexico during the 1990s, see Garrido (2001).

Table 5 Main Sectors with Foreign Direct Investments in Mexico ^{1/}

(in million dollars)

| Sectors | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | | Acum. 1994-03 ^{2/} | | | |
|----------------------------------|----------|---------|---------|----------|---------|----------|----------|----------|----------|-----------|------|--------------------------------|------|-------|---|
| | | | | | | | | | | Jan.-Jun. | | Value | % | Value | % |
| | | | | | | | | | | Value | % | | | | |
| TOTAL | 10,640.2 | 8,326.3 | 7,712.2 | 12,141.9 | 8,205.3 | 13,054.7 | 16,075.3 | 26,204.0 | 11,400.7 | 4,156.8 | 100 | 117,917.4 | 100 | | |
| Agriculture | 10.8 | 11.1 | 31.8 | 10.0 | 28.7 | 80.9 | 91.3 | 4.6 | 4.8 | 0.0 | 0.0 | 274.0 | 0.2 | | |
| Extractive | 97.8 | 79.1 | 83.8 | 130.2 | 42.4 | 127.1 | 178.3 | 35.4 | 197.0 | 7.6 | 0.2 | 978.7 | 0.8 | | |
| Manufacture | 6,186.9 | 4,849.6 | 4,712.3 | 7,292.0 | 5,112.0 | 8,931.9 | 9,154.3 | 5,558.8 | 5,052.8 | 2,248.3 | 54.0 | 59,098.9 | 50.1 | | |
| In-bond Firms | 894.8 | 1,366.3 | 1,416.5 | 1,680.3 | 2,110.5 | 2,778.0 | 2,983.0 | 2,172.2 | 2,043.5 | 495.4 | 23.9 | 18,440.5 | 15.6 | | |
| Water and Electricity | 15.2 | 2.1 | 1.1 | 5.2 | 26.6 | 139.5 | 116.8 | 280.6 | 30.8 | 57.0 | 1.4 | 674.9 | 0.6 | | |
| Construction | 259.4 | 26.2 | 25.5 | 110.4 | 117.4 | 129 | 170 | 73.5 | 109.8 | 36.8 | 0.9 | 1058 | 0.9 | | |
| Commerce | 1250.7 | 1009 | 727.1 | 1900.4 | 941.8 | 1224.6 | 2,216.6 | 1,510.2 | 1,419.0 | 531.1 | 13 | 12730.5 | 11 | | |
| Transport and Communication | 719.3 | 876.3 | 428 | 681.5 | 435.9 | 228.5 | -2,363.7 | 2,889.3 | 740.6 | 229.2 | 5.5 | 4864.9 | 4.1 | | |
| Financial Services ^{3/} | 941.4 | 1066 | 1215.2 | 1103.3 | 729.3 | 729.9 | 4,760.4 | 14,383.6 | 3,088.6 | 852.6 | 21 | 28870.3 | 25 | | |
| Other Services ^{4/} | 1158.7 | 406.9 | 487.4 | 908.9 | 771.2 | 1463.3 | 1751.3 | 1468 | 757.3 | 194.2 | 4.7 | 9367.2 | 8 | | |

Source: Secretaría de Economía. Dirección General de Inversión Extranjera.

^{1/} For the 1994-1998 period, the Foreign Direct Investments (FDI) is integrated with the amounts informed to the RNIE up to June 30, 2003, and made real in the same year, plus the fixed assets imports of the in-bond firms. Since 1999, we include the new investments out of the Stock Capital, profits reinvestments and accounts between firms informed to the RNIE. ^{2/} From January 1, 1994 to June 30, 2003. ^{3/} Financial, administrative and rental of Services. ^{4/} Services for the community, social services; hotels and restaurants; professionals, technical and personal.

1994-2002 period. This may help to explain partially the increase in the number of large establishments.

Another important type of foreign direct investment is the in-bond assembly plants. As we can see on Table 6, the share of investment in the in-bond firms in the total FDI is unsteady, fluctuating between 10 and 20% of the total. However, the importance of the investment in the in-bond firms is larger if we take its share in the FDI in the manufacturing industry, where their share goes up to 30% of the total.

Table 6 Foreign Direct Investment in the Manufacturing Sector

(in million dollars)

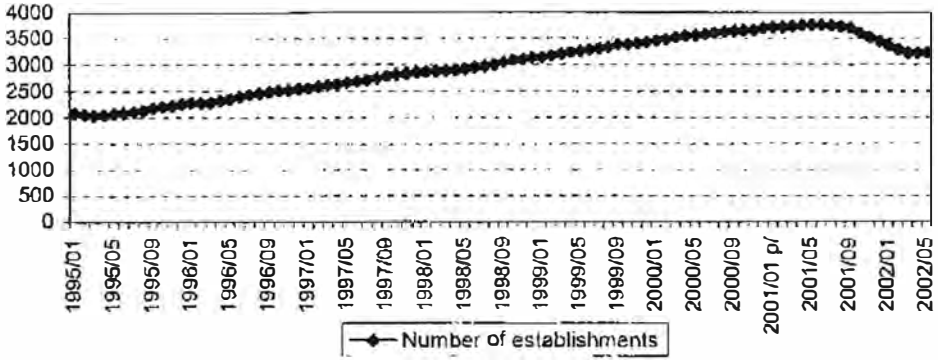
| Subsector | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | | Acum. | |
|---------------------------------------|--------|---------|---------|---------|---------|---------|---------|---------|---------|-----------|--------------|------------|--------------|
| | | | | | | | | | | Enc.-Jun. | | 1994-03 2/ | |
| | | | | | | | | | | Valor | Part. % | Valor | Part % |
| Manufacturing | 6186.9 | 4849.6 | 4712.3 | 7292 | 5112 | 8931.9 | 9154.3 | 5558.8 | 5052.8 | 2248.3 | 100 | 59098.9 | 100 |
| Food, Beverages and tobacco | 1807.8 | 651.2 | 502.2 | 2952.9 | 730.9 | 991.7 | 1197.6 | 962.4 | 341.5 | 428.9 | 19 | 10567.1 | 17.9 |
| Metal products, machinery & equipment | 1888.7 | 2892.6 | 2212.3 | 2755.4 | 2326.3 | 5371.2 | 4232.6 | 3035.3 | 2667.1 | 1018.1 | 45 | 28399.6 | 48.1 |
| Chemical Industry, Oil & Coal | 645.5 | 573.1 | 1196.9 | 815.4 | 1162.8 | 955.5 | 1332.6 | 380 | 1031.2 | 368.7 | 16 | 8461.7 | 14.3 |
| Non metal mineral products | 51.2 | 89.6 | 29.7 | 5.8 | 14.2 | 230.9 | 143.3 | 96.2 | -77.9 | 8.9 | 0.4 | 591.9 | 1 |
| Basic Metal Industries | 1342.3 | 142.5 | 324.8 | 105.7 | 54.3 | 268.5 | 286.2 | 184 | -1.4 | 27.8 | 1.2 | 2734.7 | 4.6 |
| Other subsectors | 451.4 | 500.6 | 446.4 | 656.8 | 823.5 | 1114.1 | 1962 | 900.9 | 1092.3 | 395.9 | 18 | 8343.9 | 14.1 |
| In-bond Firms | 894.8 | 1,366.3 | 1,416.5 | 1,680.3 | 2,110.5 | 2,778.0 | 2,983.0 | 2,172.2 | 2,043.5 | 995.4 | 44.27 | 18,440.5 | 31.20 |

Source: Secretaría de Economía. Dirección General de Inversión Extranjera.

1/ For the 1994-1998, FDI is integrated with the data presented by RNIE up to June 30, 2003 and made real in that year, plus the fixed assets imports from the in-bond firms. Since 1999, we include the new investments out of the Stock Capital, profits reinvestments and accounts between firms informed to the RNIE. 2/ From January 1, 1994 to June 30, 2003.

As we know, those in-bond assembly plants are also important for Mexico because of their impact on exports, where they represent 50% of the total, and because of their capability to create jobs. As we can see for the period 1995 - 2001, jobs created by the in-bond firms more than doubled from 600 thousand to one million 300 thousand. This was correlated with a similar magnitude of growth in the number of establishments, which also doubled, from 2 thousand to 3,800 in the same period. All this can be seen on Figure 4 and 5.

Figure 4 Evolution of the In-Bond Assembly Plants 1995-2002



Source: INEGI

Figure 5 Employment and Evolution of the In-Bond Assembly Plants 1995-2002



Source: INEGI

The increase of the in-bond assembly plants is also important in order to explain the increase of medium and in particular of large manufacturing plants, which was considered before. In the first approach, this can be deduced of the fact that the average size of the in-bond assembly plants has over 350 workers, as we can see on Table 7. This size belongs to the medium plants in the census. Due to the available information through newspapers, we know that there are in-bond assembly plants with more than 5 thousand workers, for example in Ciudad Juárez, and we also know that the owners of those plants spread their business in many medium-sized plants, which altogether form one large establishment.

**Table 7 Evolution of the Average Size of the Plants of In-Bond Firms
1995- 2002 (number of employes)**

| YEAR | AVERAGE SIZE |
|---------|--------------|
| 1998 | 334 |
| 1999 | 339 |
| 2000 | 350 |
| 2001 p/ | 353 |
| 2002 | 318 |

Source: INEGI

The impact of the in-bond assembly plants' upon the manufacture firm system in Mexico can be shown when we compare the increase in the number of medium and large establishments between 1993 and 1998 with that of the in-bond assembly plants for the same period, as shown in Table 8. Without any intention to assert that there is a simple relationship between two, the relative importance of the increase of the in-bond assembly plants is significant when we compare it with that of the medium and the large plants.

Table 8 Comparison between Manufacturing Plants from the Census and In-Bond Firms

| Plant Size | Increase in the number of plants between 1993 and 1998 | Increase of the in-bond plants between 1993 and 1998 |
|------------|---|--|
| Medium | 889 | 987 |
| Large | 427 | |
| Total: | 1,316 | 987 |

Source: Author's elaborations based on INEGI's Economic Census.

Nevertheless, there was a fall in the number of the establishments of the in-bond assembly plants between June 2001 until May 2002. What is more important was the fall in the number of jobs they generated which started in October 2000 and lasted until march 2002. Almost 300 thousand jobs were lost during the period, as seen on Figure 5.

Since October 2000 we can see a slight recovery, but what is worrying is that this decrease in employment could not be a temporary phenomenon, but it could be a result of the loss of competitiveness of Mexican in-bond firms, compared with their counterparts in other countries, such as China. This could be due to the increase in labor cost in terms of the dollar in Mexico, plus the effects from changes of the taxation regime which was brought in under the NAFTA. This could mean significant changes in the manufacture firm system as Katz (2001) discusses, and it may have deep effects in the social equilibrium of the whole country because of the impact of the in-bond assembly plants on the employment during the last decade.

As synthesis of this section, we can say that the foreign firms have brought changes to the large firms in Mexico during the second half of the 1990s in several ways. A mix of direct investment, transfer of the property rights because of M&A, and development of the in-bond industry have increased the role of the large foreign firms in the country. This means a new competitive structure in the large firm sector of the country, and implies a huge challenge for the Mexican LFGs.

V. The Large Family Groups after the 1995 Crisis

The crisis of 1995 produced different and contradictory changes in the LFGs, that are still in process. To introduce the analysis, we will present a brief description of the situation of these LFGs before the crisis.

1. Changes of the LFG in the early nineties

As mentioned before, the LFGs confronted a great challenge at the end of the 1980s because of the economic reforms undertaken by the government when it opened the economy to the foreign competition. This implies a extraordinary change to the LFGs, that used to move in a “protectionist” context.

In general, it is possible to say that those LFGs gave a proactive answer to that new competitive conditions, with strategies that they adapted to the new competitive conditions

without losing their peculiar characteristics as LFGs, in terms of their traditional ownership and government¹³.

Although the ideology of the economic reformers promotes a free market world, the LFGs assume strategies more close to the "Visible Hand" approach (Chandler, 1977). These strategies combine a set of different aspects, and they change along the time, but we can point out some fundamental factors in general. One was the defense of its local markets. They do it by using their market power and by establishing strategic alliances with foreign competitors. Another was their attitude toward their competitiveness. They tried to enhance their competitiveness by restructuring firms within the groups and by modernizing plants in the country. The third issue was the business structure. In many cases, they diversified their business, mainly buying banks at the moment of the privatization of the banking sector in 1990. The fourth factor was the governance of the LFGs which has transformed to be a most modern and professional management but still under the family control. Finally, a very important issue was the reaction of the LFGs to the context of the global competition of the 1990s, driven by challenge of "To eat or to be eaten" that has emerged with the worldwide wave of M&A. The Mexican LFGs, as well as others in Latin America, chose to confront the new competitive conditions of the open economy with a very quick movement to increase their size, developing international production to search the markets, in the sense of Dunning (1988). They realized a wide set of M&A operations in different countries in the Americas, and even in Europe and Asia. As a consequence of this strategy, the LFG has become multinational firms of an American scope, and in the case of Cemex, it has come to be a global firm. The outcome of this processes in 1997 is shown in Table 9.

The strategy of international expansion has been taken by firms of different countries in Latin America, but only a handful of them succeed in this objectives. Mexican LFGs has got a leading position in this regional competition altogether with Brazilian and Chilean firms. Table 10 shows the ranking of a sample of 50 large firms in Latin America in 1994.

But this strategies to promote an accelerated increase of the size of the LFGs by the internationalization of its production, had two important problems that will be evident after the

13 For the analysis of the LFG transformation in the context of the macroeconomic reforms as well as the strategies taken for the internationalization as a way to face the new conditions of competition, see Garrido (1998, 1999).

Table 9 Geographical Distribution of the Multinational LFGs (1997)

| LFG/ Firm internationalised | Sector of activity | North America | | Central America | | | | | | | The Caribbean countries | | | South America | | | | | | Europe | | | | Asia | | | | | |
|---|--|---------------|--------|-----------------|--------|------------|-------------|-----------|----------|-----------|-------------------------|-------------|------------------|---------------|----------|-----------|-------|------|--------|---------|---------|---------|-------|--------|----------------|---------|-----------------|-----------|--|
| | | United States | Canada | Panama | Belize | Costa Rica | El Salvador | Guatemala | Honduras | Nicaragua | Dominican Rep. | Puerto Rico | Trinity y Tobago | Venezuela | Colombia | Argentina | Chile | Peru | Brazil | Bolivia | Ecuador | Holland | Spain | France | United Kingdom | Germany | Philippines nas | Indonesia | |
| LFGs Diversified | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | Alfa-Alpek | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | Carso. Carso Global | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | Desc - Agrobios | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | Emp. La Moderna-Seminis | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | Visa- Femsa Cerveza y Coca Cola | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | Vitro Vidrio Plano, Cristaleria, Envases | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| LFGs Specialized in a Line of Products | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | Bimbo | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | Cemex | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | DINA | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | Geo | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | Gruma | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | Grupo Posadas | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 | Televisa | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Source : Basave (1993) and documents from the firms.

Table 10 Ranking of 50 Large Firms in Latin America M(50), 1994

(in million dollars)

| Rk | Sectorial | M Leadership | Firm | Country | Sector | Type of property | Total Sales |
|------|-----------|--------------|--------------------------|-----------|--------------------|------------------|-------------|
| (50) | (L) | | | | | | |
| 1 | L | | Aulolatina (Ford & VW) | Brazil | Automobile | P* | 9,660.3 |
| 2 | L | | Telmex | Mexico | Telecommunications | P | 8,635.5 |
| 3 | | | Fiat | Brazil | Automobile | P* | 6,099.6 |
| 4 | | | General Motors | Brazil | Automobile | P* | 5,873.2 |
| 5 | L | | Souza Cruz (BAT) | Brazil | Tobacco | P* | 4,290.0 |
| 6 | L | | Vitro | México | Glass | P | 4,194.7 |
| 7 | | | Chrysler | México | Automobile | P* | 4,001.7 |
| 8 | L | | Gessy Lever | Brazil | Hygiene/ Cleaning | P* | 3,445.5 |
| 9 | | | Carso | México | Tobacco | P | 3,348.1 |
| 10 | L | | Cemex | México | Cement | P | 3,146.6 |
| 11 | L | | Codelco | Chile | Mining | E | 2,993.4 |
| 12 | | | Telesp | Brazil | Telecommunications | E | 2,952.2 |
| 13 | L | | Visa | Mexico | Beverage/Beers | P | 2,776.5 |
| 14 | L | | Alfa | México | Steel | P | 2,773.5 |
| 15 | | | Vale do Rio Doce | Brazil | Mining | E | 2,760.9 |
| 16 | | | CSN | Brazil | Steel | P | 2,653.4 |
| 17 | L | | Nestlé | Brazil | Foods | P* | 2,538.1 |
| 18 | | | Copersucar | Brazil | Foods | P | 2,340.9 |
| 19 | | | Sabritas | México | Foods | P* | 2,220.0 |
| 20 | | | Grupo Acerero del Norte | México | Steel | P | 2,170.0 |
| 21 | L | | Copene | Brazil | Petrochemical | P | 2,104.5 |
| 22 | | | Telefónica | Argentina | Telecommunications | P* | 2,099.6 |
| 23 | | | Usiminas | Brazil | Steel | P | 2,084.7 |
| 24 | L | | ICA | México | Construction | P | 2,048.3 |
| 25 | | | Embratel | Brazil | Telecommunication | E | 2,025.9 |
| 26 | L | | TELEVISA | México | Mass media | P | 1,904.3 |
| 27 | | | Modelo | Mexico | Beverage/beer | P | 1,878.2 |
| 28 | | | Brahma | Brazil | Beverage/ beer | P | 1,870.0 |
| 29 | | | Bimbo | México | Food s | P | 1,795.4 |
| 30 | L | | Desc | México | Auto parts | P | 1,637.3 |
| 31 | | | Coca Cola | Argentina | Beverage/ beer | P* | 1,627.1 |
| 32 | | | Massalin (Philip Morris) | Argentina | Tobacco | P* | 1,409.8 |
| 33 | | | Procter & Gamble | México | Hygiene / Cleaning | P* | 1,360.0 |
| 34 | | | Fincol | Brazil | Construction | P* | 1,203.8 |
| 35 | L | | Basf | Brazil | Chemistry | P* | 1,180.9 |

| | | | | | | |
|----|---|--------------------------|--------|--------------------|----|---------|
| 36 | | Philip Morris | Brazil | Tobacco | P* | 1,156.1 |
| 37 | | Industrial Minera | México | Mining | P | 1,148.5 |
| 38 | L | Kimberly-Clark | México | Paper | P | 1,146.6 |
| 39 | | Celanese | México | Chemistry | P | 1,075.8 |
| 40 | | Rhodia | Brazil | Petrochemical | P* | 1,068.0 |
| 41 | L | Transportación Marítima, | México | Shipping | P | 1,000.9 |
| 42 | | Hoechst | Brazil | Chemistry | P* | 975.1 |
| 43 | | Papeles y Cartones | Chile | Paper | P | 925.3 |
| 44 | | Grupo Tribasa | Mexico | Construction | P | 908.6 |
| 45 | | Grupo Mexicano de | México | Construction | P | 898.6 |
| 46 | | Cydsa | Mexico | Petroquimichal | P | 885.5 |
| 47 | | Robert Bosch | Brazil | Auto parts | P* | 875.0 |
| 48 | | Klabin | Brazil | Paper | P | 825.1 |
| 49 | | Avon | Brazil | Hygiene / Cleaning | P* | 790.0 |
| 50 | | Colgate-Palmolive | México | Hygiene / Cleaning | P* | 789.0 |

Type of Ownership : P: Local ownership P*: Foreign ownership E: State ownership

Source: Author's elaboration based on "Las 500 mayores empresas en América Latina"
Revista América Economía,

Table 11 R&D Expenditures by Source of Financing, Share(%) in National Total, 2001

| | Business enterprises | Other (other national sources + abroad) | Government |
|---------------|----------------------|---|------------|
| Mexico (1999) | 24 | 15 | 61 |
| Korea | 72 | 3 | 25 |
| Japan | 73 | 9 | 18 |
| United States | 68 | 5 | 27 |
| Canada | 42 | 27 | 31 |

Source: OECD, MSTI database, May 2003.

1995. The first one was that they developed its new international activity, focusing on its most competitive product, which was in general traditional consumer goods (beer, bakery, corn, etc) or basic intermediate goods (glass, cement). Those LFGs had goods skills in this kind of products because of its experience during the ISI, but when they enter in the international production, they do not assume the need of a strong R&D investment to maintain their competitiveness in the global economy.

As shown by the OCDE statistics, Mexico has the lowest level in private investment in R&D among the OCDE countries, far from Japan or Korea or even of its commercial partner in the NAFTA. See Table 11.

Instead of improving its own R&D capacities, the LFGs prefer to buy technology in the international markets or to have a technological alliance with a world leader firm. So its competitiveness will have limits because of the difficulty to compete with the global giants in the international markets, and because of its limited capacity to innovate.

The second problem derived of the strategy of internationalization assumed by the LFGs, was the way they decide to have a quick increase of its size. The M&A process demands huge amounts of capital, which were not available in the local financial markets¹⁴. Given the new financial relation of Mexico with the international finance because of the Brady Negotiation of the external public debt, the LFGs could solve this problem obtaining the funds in the international financial markets. But when the LFGs decide to do this, they have to articulate a complex strategic financial behavior that should combine cost- benefits impact of the financial structure to maintain the property and the control of the corporation by the family owners¹⁵.

To do this, the LFGs apply a traditional financial strategy of large firms in the developing countries, covering the financial needs using external funds instead of its own funds¹⁶. So they combine debt financing to get the low international financial costs seen in the 1990s, and share financing, done without risking control because they

14 For an analysis of the conditions of the local financial markets with the privatisation of banks and the international financing of the LFG in the early 1990s, see Garrido and Peñalosa (1996).

15 For this analysis, we follow the Jensen and Meckling(1976)'s argument of the owner that sell part of the company but at the same time continue as the agent. So, in this particular structure of ownership the owner-agent has the possibility to implement strategies that increase its total revenues and reduce the revenues of the minority shareholders.

16 See Singh and Hamid (1992).

preferred to issue non-voting right equities. But after the 1995 crisis, under the local financial system's conditions and the changing situation of the international economy, most of these LFGs confront important financial problems because of the impact of the important foreign currency indebtedness, that we will discuss later

This financial strategy of the LFGs in the 1990s can be analyzed considering the information of a sample of the 40 largest firms which participate in the stock market during 1992-2002 ¹⁷. The sample's size is due to the number of the firms that published information during the years of the period. Nevertheless, this is a significant sample considering that only 160 firms are listed in the Mexican Stock Exchange. The monetary values of the data base are expressed in thousands of constant 1990 peso to make time comparison possible.

In Table 12 we can see the outcome of this exercise for the firms' sample. As in the Singh and Hamid's research, we divided the sample of firms in five groups, according to the net assets amount, as it is informed in the table's note. The period was segmented in four intervals, attending to the country's different economical circumstances since the beginning of the 1990s (1992-1994: the expansion after the reforms; 1995-1997: recession after the 1995 crisis; 1998-2000: economic growth; 2000-2002: another economic contraction).

The table shows broadly the sample firms' preference for a very little use of their own funds as a financing source, what is different according to each period's circumstances and the relative size of the net assets. What is more, on the smaller assets size firms, the own funds account for the last periods has a deficit position. For the foreign financing, predominance of the equities usage compared with the debt contract is remarkable, although this varies according to the referred periods and also because the net assets size.

17 In this analysis, we followed the exercise done in Singh and Hamid (1992), where they discuss the differences of the corporate finance of the firms in the developing countries and that in the developed countries during the 1980s. Mexico was included in the argument. In the paper, they showed that the firms in the developing countries used more debt funding and equities than their own funds, compared to the firms in the developed countries. Having access to external funds, these conglomerates try not to risk their own funds, which in one way or another, are made a side by the group of control.

TABLE 12 Evolution of Financial Strategies of the 40 Largest Manufacturing Firms in the 1990s (ordered by quarter of the year Q_n)

| | Net assets Average** | Net Assets Increase | Profit Rates | | Profits Before Taxes *** | Profits After Taxes *** | Domestic Financing | Foreign Financing (debt) | Foreign Financing (Shares) | Profits Return |
|--------------------|-------------------------|---------------------------|--------------|--------|-----------------------------------|----------------------------------|-----------------------|--------------------------------|----------------------------------|-------------------|
| | | | PBT | PAT | | | | | | |
| 1992 – 1994 | | | | | | | | | | |
| Q1 | 41,844,316 | 42.3 | 6.6 | 4.4 | 70.03 | 78.2 | 2.5 | 21.4 | 76.1 | 1.9 |
| Q2 | 12,621,708 | 68.3 | 6.3 | 2.6 | 20.20 | 14.2 | 0.2 | 24.5 | 75.3 | 2.4 |
| Q3 | 5,830,802 | 54.9 | 4.8 | 2.5 | 7.13 | 6.3 | 0.3 | 15.6 | 84.1 | 2.3 |
| Q4 | 1,746,359 | 56.8 | 6.3 | 2.5 | 2.78 | 1.9 | 0.0 | 13.0 | 87.0 | 2.6 |
| Q5 | 382,079 | 179.4 | -1.5 | -3.7 | -0.14 | -0.6 | -4.0 | 9.7 | 94.3 | 0.3 |
| 1995 – 1997 | | | | | | | | | | |
| Q1 | 55,793,872 | 2.2 | 14.5 | 11.9 | 71.3 | 74.2 | 13.6 | 44.3 | 42.1 | -1.8 |
| Q2 | 16,436,370.3 | 1.3 | 13.3 | 9.4 | 19.3 | 17.3 | 10.4 | 40.3 | 49.3 | -1.0 |
| Q3 | 6,850,675 | 11.7 | 14.3 | 10.6 | 8.6 | 8.1 | 13.1 | 28.4 | 58.4 | -2.6 |
| Q4 | 2,405,402 | 31.0 | 10.3 | 8.2 | 2.2 | 2.2 | 9.3 | 11.0 | 79.7 | -1.0 |
| Q5 | 68,199 | 82.5 | -229.5 | -243.5 | -1.4 | -1.9 | -242.6 | 271.5 | 71.2 | -0.9 |
| 1998 – 2000 | | | | | | | | | | |
| Q1 | 50,936,781 | -0.9 | 12.8 | 8.9 | 70.15 | 73.6 | 11.9 | 38.6 | 49.5 | -3.0 |
| Q2 | 15,804,060.7 | -7.6 | 11.1 | 6.3 | 18.92 | 16.2 | 8.3 | 25.0 | 66.7 | -2.0 |
| Q3 | 7,074,871 | -3.8 | 11.5 | 8.0 | 8.75 | 9.3 | 9.8 | 32.3 | 57.9 | -1.8 |
| Q4 | 2,813,411 | -4.2 | 7.1 | 2.2 | 2.16 | 1.0 | 3.8 | 25.2 | 71.0 | -1.6 |
| Q5 | 373,556 | 4.5 | 0.6 | -1.1 | 0.03 | -0.1 | -0.6 | 27.0 | 73.5 | -0.5 |
| 2001 – 2002 | | | | | | | | | | |
| Q1 | 49,305,577 | -0.4 | 10.6 | 6.2 | 64.05 | 64.4 | 9.3 | 38.0 | 52.7 | -3.1 |
| Q2 | 14,854,924 | 1.5 | 16.0 | 10.3 | 29.11 | 32.3 | 12.9 | 25.8 | 61.3 | -2.7 |
| Q3 | 6,740,261 | 7.6 | 9.5 | 3.9 | 7.81 | 5.5 | 7.2 | 9.6 | 83.2 | -3.3 |
| Q4 | 2,006,357 | -3.6 | -1.7 | -2.7 | -0.42 | -1.1 | -1.0 | 41.8 | 59.2 | -1.7 |
| Q5 | 126,509 | 6.2 | -35.8 | -42.0 | -0.55 | -1.1 | -26.6 | 123.6 | 3.1 | -15.4 |

Source: Author's elaboration based on Mexican Stock Market data – Economica Data Base.

*Percentages with respect on the net assets average ** Thousands of pesos from 1990 up to 31/12/ for that year *** The percentage was calculated with respect on the total profits before and after taxes. PBT: Profits before taxes. PAT: Profits after taxes.

Q1: Net Assets: 40 to 60 millions pesos from 1990; Q2: 12 to 17 millions; Q3 5 to 8 millions; Q4 : 1 to 3 millions; Q5: 60 to 400thousand pesos

Finally, the continuous punishment to the shareholders' right is a remarkable aspect, that can be seen in the negative sign of the profits return. We consider this as a 'insiders' policy practiced by the family control group, who offset the low profits with incomes coming from other means in spite of the minority shareholders. This situation could be kept without the minority shareholders giving up this investments, because they got high incomes with the shares' constant price increases during the 1990's stock market upsurge. Consequently, our exercise seems to confirm a strategic pattern of conduct for the LFGs with regard to their project funding, using the foreign financing as a preference in particular on equities, under the limitations we already discussed.

2. The Evolution and Trends of the LFGs after the Crisis of 1995

The crisis of 1995 meant a lot of complex changes for the LFGs, creating new trends and defies for its future development. Considering the limits of scope of this article, we will outline two main questions relevant to explain those changes.

The first one was the transformation of its corporate structure because of the bankruptcy of banks during the 1995 crisis. As we mentioned before, during the financial reform of 1990, these LFGs reestablished their traditional corporate structure as industrial and financial conglomerates, when they bought commercial banks and then organized them into a universal bank structure. Since 1995, the Mexican banks have gone to bankruptcy, and they were bailed out by the government and finally sold to foreign banks, as we mentioned before. This produced a radical change in the traditional financing conditions of those LFGs, because their international expansion was financed with a combination of funds obtained in their own financial firms and the international financial sources mentioned before¹⁸. The loss of its financial firms, seems to have left those LFGs in a more financially weak situation in general, and with greater foreign exchange risks because of their significant foreign debt that we will consider later.

18 The bankruptcy of the commercial banks also produced an important change in the relative structure of LFGs because some of them pass through these crisis without problem. This is the case of Carso group of the Slim family, who are the owner of Inbursa financial group, with a bank oriented to large business and the most powerful stockbroker firm in the Mexican Stock Exchange. In the context of the stagnation of the performance of the LFG that we will consider later, the Carso group continue growing very fast buying new business in Mexico and outside of the country.

The second relevant question we want to point out is, that the crisis of 1995 developed the economic and financial limitations of the LFGs' strategies that we already presented in the first part of this section. This made the LFGs face the risk to loose part or the total of their firms in favor of other national or foreign firms, opening an unusual situation for the system of firms in the country.

To analyze these economic and financial performance of the LFGs since 1995, we will consider the same sample of the 40 large Mexican firms presented before. We will begin with the economic performance. In order to simplify the data, we will only use the data from 1995 and 2002, to show the changes between both years.

First we consider the tangible assets variation, that can be seen on Table 13. We have a wide range of sizes among the firms included in the sample, that is representative of the firms that are quoted in the Mexican Stock Exchange. Also, it is necessary to note that in this sample we have firms belonging to LFGs (in some cases more than one) and some few foreign firms. Thus, the sample is representative of a set of large firms in the country, wider than LFG.

About the trends of the tangible assets of these firms among 1995 and 2002, we can say first that the top ten of the ranking belong to LFGs and there were no major changes in the structure of participation, what we interpret as an evidence of the continuity in the situation of this kind of firms in the country after de crisis. Second, it is relevant to indicate that only one third of the firms increased their assets in more than ten per cent during 1995-2002 which was the cumulative increase of the GDP for this years, while the others stay steady or went down in this measure. Even, we can see seven of them (Ahmsa, Savia, Sinec, Dina, Qmma, Syncro, Qtel, Ponderosa, and Ecko) that suffer huge reduction in it assets, and even collapsed, for instance, Dina, Ahmsa, and Qtel who went to bankruptcy.

As the second indicator of performance we present in Table 14, the sales (on the left side) and local/ foreign market structure (right side) evolution between the same years. We can point out that as in the previous table, the sales ranking shows the leadership of the LFGs and the continuity on the structure of the firms participation inside that variable's ranking. In respect to the sales, it appears two different groups: one which has maintained the same level or have had a heavy downturn in its sales in real terms, and the other which has increased the sales from 20% to 300 % during this

Table 13 Tangible Assets Ranking* in 1995 and 2002 (June)

| 1995 | | | 2002 | | | Assets 2002 to |
|------|----------------------|------------|------|----------------------|------------|--------------------------|
| Pos. | Firm | Assets | Pos. | Firm | Assets | Assets 1995 ¹ |
| 1 | CEMEX | 46,864,630 | 1 | CEMEX | 45,778,273 | 0.98 |
| 2 | ALFA | 24,922,611 | 2 | ALFA | 22,810,965 | 0.92 |
| 3 | AHMSA* | 22,900,195 | 3 | GMODELO | 14,844,719 | 1.57 |
| 4 | VITRO | 14,339,476 | 4 | HILSAMEX | 10,764,176 | 0.83 |
| 5 | HILSAMEX | 12,907,595 | 5 | VITRO | 10,526,118 | 0.73 |
| 6 | GMODELO | 9,443,622 | 6 | GRUPO DURANGO | 8,836,480 | 1.57 |
| 7 | APASCO | 7,287,474 | 7 | KIMBERLY | 7,741,525 | 1.08 |
| 8 | KIMBERLY | 7,188,842 | 8 | BIMBO | 7,509,762 | 1.09 |
| 9 | TAMSA | 7,009,323 | 9 | APASCO | 6,050,377 | 0.83 |
| 10 | BIMBO | 6,906,391 | 10 | GRUMA | 5,689,384 | 1.23 |
| 11 | GRUPO DURANGO | 5,634,986 | 11 | TAMSA | 4,358,185 | 0.62 |
| 12 | SAVIA | 5,523,599 | 12 | PEPSI | 3,329,827 | 1.01 |
| 13 | GRUMA | 4,627,591 | 13 | KOF | 2,924,042 | 0.91 |
| 14 | PEPSI | 3,285,280 | 14 | IHCB | 2,564,509 | 3.85 |
| 15 | KOF | 3,217,133 | 15 | CEMENTOS CHIHUAHUA | 2,485,735 | 1.16 |
| 16 | SIMEC | 2,836,503 | 16 | SAN LUIS CORPORATIVO | 2,477,116 | 1.47 |
| 17 | GRUPO CONTINENTAL | 2,631,796 | 17 | GRUPO SALTILLO | 2,310,720 | 0.91 |
| 18 | GRUPO SALTILLO | 2,550,711 | 18 | MASECA | 2,029,144 | 0.93 |
| 19 | MASECA | 2,191,486 | 19 | CAMESA | 1,832,118 | 2.40 |
| 20 | CEMENTOS CHIHUAHUA | 2,138,349 | 20 | GRUPO CONTINENTAL | 1,792,354 | 1.07 |
| 21 | SAN LUIS CORPORATIVO | 1,680,213 | 21 | SIMEC | 1,697,815 | 0.60 |
| 22 | DINA | 1,515,296 | 22 | PARRAS | 1,252,484 | 1.24 |
| 23 | SYNCR0 | 1,333,167 | 23 | SAVIA | 1,233,561 | 0.22 |
| 24 | PARRAS | 1,006,918 | 24 | CMOCTEZUMA | 1,117,346 | 2.00 |
| 25 | PONDEROSA | 947,329 | 25 | HERDEZ | 765,701 | 1.81 |
| 26 | IASA | 782,750 | 26 | GEMBUNIDAS | 764,268 | 1.22 |
| 27 | CAMESA | 763,972 | 27 | JUGOS DEL VALLE | 682,112 | 1.53 |
| 28 | IHCB | 665,883 | 28 | DINA | 521,349 | 0.34 |
| 29 | GEMBUNIDAS | 626,621 | 29 | IASA | 511,897 | 0.65 |
| 30 | CMOCTEZUMA | 557,429 | 30 | QUMMA | 272,218 | 0.35 |
| 31 | JUGOS DEL VALLE | 444,835 | 31 | G.B. INDUSTRIAS | 208,625 | 7.79 |
| 32 | HERDEZ | 423,428 | 32 | SYNCR0 | 135,908 | 0.10 |
| 33 | QUMMA | 374,401 | 33 | ECKO | 109,410 | 0.54 |
| 34 | ECKO | 203,118 | 34 | REGIO EMPRESAS | 91,547 | 0.72 |
| 35 | MACMA | 187,687 | 35 | MACMA | 89,936 | 0.48 |
| 36 | REGIO EMPRESAS | 126,521 | 36 | DIXON | 49,269 | 1.37 |
| 37 | QTEL** | 68,240 | 37 | NUTRISA | 25,312 | 1.40 |
| 38 | DIXON | 36,069 | 38 | PONDEROSA | n.c | n.c |
| 39 | G.B. INDUSTRIAS | 26,778 | 39 | QTEL** | n.c | n.c |
| 40 | NUTRISA | 18,067 | 40 | AHMSA* | n.c | n.c |

Source: Author's elaboration based on the Mexican Stock Market Firms data.

* Tangible Assets = fixed assets + buildings and infrastructure construction + machinery and equipment + other equipments. The assets comparison from 2002 to 1995 is referred to the assets ranking in 2002.

Table 14. Sales and Market Structure Ranking 1995- 2001

| Sales Ranking (Thousands of pesos in 1990) | | | | | | Market Structures ¹ | | | | |
|--|------------|-----------|-------------|------------|----------|--------------------------------|----------|---------|-------------|---------|
| 1995 | | | 2002 (July) | | | Sales 95-02 | 1995 | | 2002 (July) | |
| Pos. | Firm | Sales | Pos. | Firm | Sales | | Domestic | Foreign | Domestic | Foreign |
| 1 | ALFA | 9,212,142 | 1 | CEMEX | 11877107 | 1.40 | 0.35 | 0.65 | 0.40 | 0.60 |
| 2 | CEMEX | 8,482,852 | 2 | ALFA | 8599768 | 0.93 | 0.62 | 0.38 | 0.67 | 0.33 |
| 3 | VITRO | 5,817,597 | 3 | GMODELO | 6348450 | 1.54 | 0.81 | 0.19 | 0.76 | 0.24 |
| 4 | GMODELO | 4,134,556 | 4 | VITRO | 5330151 | 0.92 | 0.76 | 0.24 | 0.74 | 0.26 |
| 5 | SAVIA | 4,013,029 | 5 | KOF | 3433743 | 1.42 | 0.62 | 0.38 | 0.83 | 0.17 |
| 6 | AHMSA* | 3,330,021 | 6 | GRUMA | 3379233 | 1.03 | 0.46 | 0.54 | 0.37 | 0.63 |
| 7 | GRUMA | 3,277,306 | 7 | KIMBERLY | 2869430 | 0.97 | 0.94 | 0.06 | 0.94 | 0.06 |
| 8 | HILSAMEX | 2,973,415 | 8 | HILSAMEX | 2217848 | 0.75 | 0.74 | 0.26 | 0.85 | 0.15 |
| 9 | KIMBERLY | 2,953,682 | 9 | PEPSI | 2213984 | 1.86 | 1.00 | 0.00 | 1.00 | 0.00 |
| 10 | KOF | 2,413,826 | 10 | GRUPO | 1778617 | 1.35 | 1.00 | 0.00 | 1.00 | 0.00 |
| 11 | DINA | 1,764,502 | 11 | APASCO | 1755570 | 1.57 | 0.98 | 0.02 | 1.00 | 0.00 |
| 12 | MASECA | 1,454,639 | 12 | GRUPO | 1665901 | 1.68 | 0.85 | 0.15 | 0.67 | 0.33 |
| 13 | GRUPO | 1,319,005 | 13 | GRUPO | 1262765 | 1.15 | 0.51 | 0.49 | 0.58 | 0.42 |
| 14 | SYNKRO | 1,298,731 | 14 | SAVIA | 1145303 | 0.29 | 0.67 | 0.33 | 0.07 | 0.93 |
| 15 | TAMSA | 1,235,652 | 15 | TAMSA | 1144687 | 0.93 | 0.31 | 0.69 | 0.32 | 0.68 |
| 16 | PEPSI | 1,189,893 | 16 | SAN LUIS | 899709 | 1.53 | 0.18 | 0.82 | 0.24 | 0.76 |
| 17 | APASCO | 1,116,442 | 17 | MASECA | 870134 | 0.60 | 0.99 | 0.01 | 1.00 | 0.00 |
| 18 | GRUPO | 1,095,824 | 18 | HERDEZ | 787266 | 1.22 | 0.96 | 0.04 | 0.94 | 0.06 |
| 19 | GRUPO | 994,374 | 19 | JUGOS DEL | 701959 | 2.12 | 0.97 | 0.03 | 0.83 | 0.17 |
| 20 | SIMEC | 706,613 | 20 | IICB | 656331 | 3.54 | 0.68 | 0.32 | 0.84 | 0.16 |
| 21 | HERDEZ | 647,725 | 21 | CEMENTOS | 624171 | 1.94 | 0.53 | 0.47 | 0.56 | 0.44 |
| 22 | SAN LUIS | 588,902 | 22 | GEMBUNIDAS | 550905 | 1.33 | 1.00 | 0.00 | 1.00 | 0.00 |
| 23 | PARRAS | 457,718 | 23 | CAMESA | 522915 | 2.10 | 0.35 | 0.65 | 0.78 | 0.22 |
| 24 | GEMBUNIDAS | 393,532 | 24 | CMOCTEZUMA | 471853 | 5.02 | 1.00 | 0.00 | 1.00 | 0.00 |
| 25 | JUGOS DEL | 331,046 | 25 | PARRAS | 408476 | 0.89 | 0.53 | 0.47 | 0.77 | 0.23 |
| 26 | PONDEROSA | 323,765 | 26 | SIMEC | 360998 | 0.29 | 0.63 | 0.37 | 0.90 | 0.10 |
| 27 | CEMENTOS | 322,328 | 27 | DINA | 111221 | 0.06 | 0.11 | 0.89 | 0.92 | 0.08 |
| 28 | CAMESA | 249,322 | 28 | REGIO | 79535 | 0.51 | 0.97 | 0.03 | 0.97 | 0.03 |
| 29 | QUMMA | 185,916 | 29 | QUMMA | 78680 | 0.42 | 0.97 | 0.03 | 1.00 | 0.00 |
| 30 | IICB | 185,247 | 30 | G.B. | 78229 | 5.68 | 0.99 | 0.01 | 0.52 | 0.48 |
| 31 | REGIO | 156,158 | 31 | SYNCRO | 70206 | 0.05 | 0.18 | 0.82 | 0.95 | 0.05 |
| 32 | CMOCTEZUM | 94,017 | 32 | IASA | 64190 | 0.73 | 0.51 | 0.49 | 0.97 | 0.03 |
| 33 | IASA | 87,631 | 33 | DIXON | 58386 | 1.73 | 0.72 | 0.28 | 0.81 | 0.19 |
| 34 | QTEL** | 75,097 | 34 | ECKO | 58277 | 0.88 | 0.95 | 0.05 | 0.90 | 0.10 |
| 35 | MACMA | 69,689 | 35 | NUTRISA | 48952 | 1.99 | 1.00 | 0.00 | 1.00 | 0.00 |
| 36 | ECKO | 66,125 | 36 | MACMA | 33623 | 0.48 | 1.00 | 0.00 | 1.00 | 0.00 |
| 37 | DIXON | 33,831 | 37 | PONDEROSA | 450 | 0.00 | 0.83 | 0.17 | 1.00 | 0.00 |
| 38 | NUTRISA | 24,660 | 38 | BIMBO | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. |
| 39 | G.B. | 13,762 | 39 | QTEL** | n.c. | n.c. | 0.02 | 0.98 | 0.00 | 0.00 |
| 40 | BIMBO | n.d. | 40 | AHMSA* | n.c. | n.c. | 0.65 | 0.35 | n.c. | n.c. |

Source: Author's elaboration based on the Mexican Stock Market's Firms.

Note: The comparison between the Domestic and Foreign market structures in 1995 and 2002 is for the Firms listed in the Sales ranking 2001

years. In relation to the market structure of sales among local and foreign markets, in 1995 nearly two third of the firms in the sample obtained 10% or more of their sales in foreign markets, which confirms the world market orientation of the economic activity of the large firms in Mexico. But in 2002 we see a relative downturn in this trend, particularly in the smallest firms of the sample, probably due to impact of the international crisis. Combining both sides of the table, one can see a relation among the evolution of sales and the market structure of those sales. That is, in general, the firms more oriented to local market register an increase in their sales, meanwhile those firms with an export orientation see their sales going down. Finally, it is also possibly to see that the sales of a quarter of the firms in this sample see a huge downturn in sales, part of which shows similar downturn of tangible assets in the previous table. (Savia, Simec, Dina, Regio, Omma, Syncro, Ponderosa, Qtel, Ahmsa). In sum, this table shows the dependence of the large firms on the foreign market, but also weakness of the local market to compensate its foreign operations when the latter goes down.

The third indicator of performance of this sample is the profitability of the firms, measured by its return on equity (ROE) as shown in Table 15. In 1995 due to the impact of the crisis, a half of the firms had a ROE under the real rate of interest (9%), and in 2002 we have again a similar picture, now as consequence of the international crisis¹⁹. In general, the interval 1995-2002 shows a very low profit rates for this sample. Along with the bad performance shown by the other two indicators of these 40 firms, it suggests that, in general, their performance has been following an unfavorable tendency.

Both the scanty increase in the assets and the total sales stagnation, the weak commercial expansion towards the international markets and the low, or even negative profitability over capital evolution during the period, suggest an economic vulnerable situation for these Mexican large firms after 1995. Nevertheless to delimit the conclusions, we must say that there is possibility of underestimating the LFGs' situation because of lack of information. It seems to be necessary to remark that a small number of these large firms, yet very powerful, have developed themselves as regional multinational firms. This means that they have important assets in foreign markets and such thing balances their income inflow, where the foreign currency incomes

¹⁹ Paradoxically, two firms that went to bankruptcy (Dina and Syncro) show very high ROE's. That was because of financial profits of the firms in financial markets.

Table 15 Capital's Profitability (ROE) 1995 and 2002 (July)

(Net Profit/ Capital)

| Firm | 1995 | 2002** |
|----------------------|--------|--------|
| AHMSA* | 6.3% | - |
| ALFA | 11.9% | 0.5% |
| APASCO | 1.5% | 18.0% |
| BIMBO | n.d | n.d |
| CAMESA | 19.1% | 2.1% |
| CEMENTOS CIHUAHUA | 7.6% | 13.3% |
| CEMEX | 20.2% | 10.3% |
| CMOCTEZUMA | 5.0% | 22.8% |
| DINA | -27.9% | 117.8% |
| DIXON | 11.8% | -1.6% |
| ECKO | -15.7% | 3.2% |
| G.B. INDUSTRIAS | 10.1% | 1.5% |
| GEMBUNIDAS | 6.6% | 9.7% |
| GMODELO | 5.7% | 9.3% |
| GRUMA | 29.7% | 1.3% |
| GRUPO CONTINENTAL | 11.2% | 19.5% |
| GRUPO DURANGO | 9.0% | -9.4% |
| GRUPO SALTILLO | 8.5% | 6.3% |
| HERDEZ | 10.2% | 8.2% |
| HILSAMEX | 3.5% | -32.2% |
| IASA | -16.2% | 0.0% |
| IHCB | 12.0% | 6.1% |
| JUGOS DEL VALLE | -1.6% | 1.4% |
| KIMBERLY | 18.5% | 25.7% |
| KOF | 12.6% | 37.4% |
| MACMA | 6.6% | -13.2% |
| MASECA | 17.8% | 7.8% |
| NUTRISA | -1.0% | 2.9% |
| PARRAS | 1.2% | -41.6% |
| PEPSI | -4.9% | 8.1% |
| PONDEROSA | 12.0% | -28.8% |
| QTEL | -37.5% | -3.4% |
| QUMMA | -7.0% | -19.9% |
| REGIO FIRMS | 1.3% | 8.3% |
| SAN LUIS CORPORATIVO | 27.1% | 14.3% |
| SAVIA | 15.0% | -14.7% |
| SIMEC | -11.2% | 3.0% |
| SYNKRO | 250.9% | 101.6% |
| TAMSA | 2.8% | 7.5% |
| VJTRO | 4.8% | -7.5% |

Real rate of interest: 9 % for 1995; 5% for 2002

Source: Own elaboration based on the firms' financial balances.

create new conditions for the strategy and business management²⁰.

Now we will consider some financial indicators to show that the tensions of the financial strategies which were analyzed before, led to a serious financial fragility, such as the one that these corporations seem to face due to their foreign debt funding.

The first indicator is the relation of the total liability to net worth presented on Table 16, which shows a solvency measure of the firms to back up their bonds. We observe in this table that the common trend after the 1995 crisis was of a downturn in this rate, but then we see it increase as consequence of the firms' indebtedness rises. In some cases, like Ahmsa, Dina, Savia or Vitro, these ratio was very high and led to severe financial problems, and even to bankruptcy. However, in general the ratio appears in a normal level.

However, these indebtedness implications become more clear when we analyze its structure, in terms of its local and foreign currency components and of the short and long run structures for each of them. This can be found on Table 17.

The most important component of the liabilities is contracted with foreign currency in 1995 and 2001, as we can see in the table. This is an outcome of the situation of the local financial system that led those firms to solve its financial needs in the foreign markets.

About the temporal structure of the credit in both currencies, the assets valued in pesos in 1995 were clearly concentrated for the short term, while the liabilities in dollars had a larger balance between both short and long terms. In 2002 there was a tendency to increase local currency liabilities with respect to the ones in foreign currency, but the short-term funding in the local currency remained important. The liabilities valued in dollars are still the main component for financing, but unlike the pesos segment, it shows more balance generally between the short and long term.

Concluding what we have discussed in this section, we can say that in general terms the LFGs had a very weak performance since 1995, as seen in their assets, sales, and the profitability they offer to the shareholders. This seems to show the limits in their competitive forces in the context of the global economy. Also, these firms keep their traditional strategy to finance the investments: using external funds instead of their own funds, issuing debt and non voting rights equities. All this is to implement

20 This topic goes beyond the intention of this paper. See Garrido (1999, 2000) for a further analysis.

Table 16 Total Liability to Net Worth (%)

| Firm | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002** |
|-------------------|-------|-------|-------|------|------|------|-------|--------|
| AHMSA* | 1.59 | 1.37 | 1.58 | 2.11 | 2.10 | 3.37 | 3.83 | - |
| ALFA | 1.27 | 0.94 | 1.11 | 1.44 | 1.24 | 1.92 | 1.92 | 1.84 |
| APASCO | 0.45 | 0.33 | 0.28 | 0.31 | 0.30 | 0.69 | 0.70 | 0.69 |
| BIMBO | 0.41 | 0.50 | 0.41 | 0.65 | 0.50 | 0.57 | 0.78 | 1.29 |
| CAMESA | 0.59 | 0.45 | 0.51 | 0.54 | 0.42 | 0.59 | 0.50 | 0.55 |
| CEMENTOS | 0.43 | 0.44 | 0.40 | 0.39 | 0.35 | 0.67 | 1.06 | 1.04 |
| CEMEX | 1.22 | 1.29 | 1.18 | 1.04 | 0.84 | 1.06 | 0.99 | 1.14 |
| CMOCTEZUMA | 0.08 | 0.12 | 0.07 | 0.12 | 0.11 | 0.29 | 0.27 | 0.23 |
| DINA | 3.12 | 3.67 | 4.44 | 8.65 | 1.23 | 6.92 | -3.27 | -2.79 |
| DIXON | 0.11 | 0.12 | 0.33 | 0.31 | 0.21 | 0.54 | 0.57 | 0.74 |
| ECKO | 0.70 | 0.84 | 0.44 | 0.62 | 0.64 | 0.48 | 0.54 | 0.47 |
| G.B. INDUSTRIAS | 1.29 | 2.12 | 2.16 | 3.69 | 6.16 | 1.15 | 1.32 | 1.34 |
| GEMBUNIDAS | 0.18 | 0.24 | 0.23 | 0.25 | 0.32 | 0.52 | 0.52 | 0.41 |
| GMODELO | 0.08 | 0.09 | 0.11 | 0.10 | 0.10 | 0.28 | 0.26 | 0.24 |
| GRUMA | 1.36 | 0.54 | 0.61 | 0.70 | 0.81 | 0.91 | 0.82 | 0.76 |
| GRUPO CONTINENTAL | 0.58 | 0.52 | 0.38 | 0.28 | 0.19 | 0.43 | 0.33 | 0.30 |
| GRUPO DURANGO | 1.33 | 1.34 | 1.27 | 1.52 | 1.32 | 2.73 | 1.73 | 1.94 |
| GRUPO SALTILLO | 0.50 | 0.43 | 0.52 | 0.59 | 0.52 | 0.91 | 0.76 | 0.90 |
| HERDEZ | 0.79 | 0.96 | 1.05 | 1.34 | 0.79 | 1.26 | 1.29 | 1.34 |
| HILSAMEX | 1.13 | 0.87 | 1.01 | 1.37 | 1.26 | 1.66 | 2.07 | 2.21 |
| IASA | 0.95 | 1.06 | 1.14 | 1.25 | 1.37 | 1.14 | 1.14 | 1.32 |
| IHCB | 0.23 | 0.16 | 0.16 | 0.06 | 0.12 | 0.20 | 0.50 | 0.59 |
| JUGOS DEL VALLE | 0.47 | 0.61 | 0.78 | 0.95 | 0.93 | 1.89 | 1.11 | 1.24 |
| KIMBERLY | 0.75 | 0.49 | 0.41 | 0.45 | 0.55 | 0.83 | 0.91 | 1.24 |
| KOF | 1.13 | 1.12 | 1.17 | 1.18 | 0.90 | 0.99 | 0.85 | 0.81 |
| MACMA | 0.48 | 0.64 | 0.67 | 0.73 | 0.42 | 0.69 | 0.77 | 0.84 |
| MASECA | 0.29 | 0.31 | 0.25 | 0.29 | 0.15 | 0.29 | 0.28 | 0.24 |
| NUTRISA | 0.11 | 0.08 | 0.11 | 0.14 | 0.21 | 0.37 | 0.33 | 0.22 |
| PARRAS | 0.67 | 0.64 | 0.80 | 0.91 | 1.58 | 2.86 | 4.12 | 5.28 |
| PEPSI | 0.62 | 0.63 | 0.58 | 0.86 | 0.75 | 1.27 | 1.27 | 1.40 |
| PONDEROSA | 0.91 | 0.60 | 0.59 | 0.47 | 0.61 | 0.44 | 0.63 | 0.52 |
| QTEL | 2.06 | 10.22 | 25.97 | 4.72 | 1.88 | 1.10 | 1.10 | 1.10 |
| QUMMA | 0.88 | 0.41 | 0.18 | 0.40 | 0.36 | 0.63 | 0.90 | 1.10 |
| REGIO FIRMS | 2.37 | 1.87 | 1.95 | 2.09 | 1.98 | 1.08 | 0.80 | 0.69 |
| SAN LUIS | 4.00 | 1.84 | 2.28 | 4.05 | 3.69 | 3.35 | 4.48 | 4.42 |
| SAVIA | 1.75 | 1.29 | 0.25 | 0.42 | 1.83 | 2.18 | 0.75 | 0.69 |
| SYNKRO | 11.15 | 2.34 | 0.72 | 0.96 | 0.50 | 0.70 | 1.91 | 0.67 |
| TAMSA | 0.69 | 0.47 | 0.27 | 0.27 | 0.23 | 0.67 | 0.65 | 0.68 |
| VITRO | 1.55 | 1.99 | 1.46 | 1.88 | 1.80 | 2.47 | 2.54 | 2.62 |

Source: Author's elaboration with the Mexican Stock Market Firm's data.

Note : Qtel case is explained by the Firms' imminent net worth disappearance.

Table 17 Liabilities Structure on Local and Foreign Currency (%)

| FIRMS | 1995 | | | | | | 2002 | | | | | |
|-----------------|----------------|-------|--------|------------------|-------|-------|----------------|-------|--------|------------------|-------|-------|
| | Local Currency | | | Foreign Currency | | | Local Currency | | | Foreign Currency | | |
| | Liabilities | | | Liabilities | | | Liabilities | | | Liabilities | | |
| | SR | LR | T | SR | LR | T | SR | LR | T | SR | LR | T |
| AHMSA* | 9.5% | 4.6% | 14.1% | 27.6% | 58.2% | 85.9% | n.q. | n.q. | n.q. | n.q. | n.q. | n.q. |
| ALFA | 13.0% | 1.1% | 14.1% | 34.4% | 51.5% | 85.9% | 11.8% | 1.1% | 12.9% | 31.0% | 56.1% | 87.1% |
| APASCO | 11.7% | 0.0% | 11.7% | 9.8% | 78.5% | 88.3% | 26.1% | 0.0% | 26.1% | 17.2% | 56.7% | 73.9% |
| BIMBO | 37.0% | 0.0% | 37.0% | 46.7% | 16.3% | 63.0% | 9.0% | 22.7% | 31.7% | 37.8% | 30.4% | 68.3% |
| CAMESA | 13.3% | 0.0% | 13.3% | 48.2% | 38.4% | 86.7% | 43.1% | 0.0% | 43.1% | 28.4% | 28.5% | 56.9% |
| CEMENTOS | 3.9% | 10.3% | 14.1% | 22.0% | 63.9% | 85.9% | 5.2% | 46.4% | 51.6% | 9.9% | 38.6% | 48.4% |
| CEMEX | 1.8% | 2.7% | 4.5% | 28.2% | 67.3% | 95.5% | 2.3% | 0.0% | 2.3% | 32.2% | 65.5% | 97.7% |
| CMOCTEZUMA | 40.1% | 0.0% | 40.1% | 59.9% | 0.0% | 59.9% | 98.3% | 0.0% | 98.3% | 1.7% | 0.0% | 1.7% |
| DINA | 7.3% | 0.0% | 7.3% | 11.9% | 80.7% | 92.7% | 25.2% | 1.1% | 26.3% | 13.3% | 60.5% | 73.7% |
| DIXON | 66.4% | 0.0% | 66.4% | 23.2% | 0.4% | 33.6% | 93.1% | 0.0% | 93.1% | 6.9% | 0.0% | 6.9% |
| ECKO | 28.6% | 35.0% | 63.6% | 36.4% | 0.0% | 36.4% | 34.8% | 39.9% | 74.6% | 4.7% | 20.6% | 25.4% |
| G.B. INDUSTRIAS | 99.5% | 0.5% | 100.0% | 0.0% | 0.0% | 0.0% | 34.0% | 0.0% | 34.0% | 56.2% | 9.8% | 66.0% |
| GEMBUNIDAS | 80.9% | 2.4% | 83.3% | 16.7% | 0.0% | 16.7% | 90.2% | 0.0% | 90.2% | 2.2% | 7.6% | 9.8% |
| GMODELO | 86.3% | 0.0% | 86.3% | 13.7% | 0.0% | 13.7% | 92.0% | 0.0% | 92.0% | 8.0% | 0.0% | 8.0% |
| GRUMA | 7.3% | 2.3% | 9.6% | 20.1% | 70.3% | 90.4% | 5.5% | 0.1% | 5.6% | 25.2% | 69.2% | 94.4% |
| GRUPO | 46.2% | 44.4% | 90.6% | 1.1% | 8.3% | 9.4% | 95.4% | 0.0% | 95.4% | 4.6% | 0.0% | 4.6% |
| GRUPO DURANGO | 9.7% | 4.5% | 14.2% | 39.6% | 46.2% | 85.8% | 8.6% | 0.0% | 8.6% | 16.5% | 75.0% | 91.4% |
| GRUPO SALTILLO | 29.1% | 3.1% | 32.2% | 22.6% | 45.2% | 67.8% | 21.8% | 0.0% | 21.8% | 9.0% | 69.1% | 78.2% |
| HERDEZ | 44.9% | 2.1% | 47.0% | 53.0% | 0.0% | 53.0% | 49.9% | 28.0% | 77.9% | 4.9% | 17.2% | 22.1% |
| HILSAMEX | 10.3% | 1.5% | 11.8% | 24.1% | 64.1% | 88.2% | 23.3% | 2.3% | 25.7% | 29.7% | 44.6% | 74.3% |
| IASA | 50.9% | 30.7% | 81.6% | 17.8% | 0.6% | 18.4% | 73.4% | 10.5% | 83.9% | 15.2% | 0.9% | 16.1% |
| IHCB | 51.6% | 0.0% | 51.6% | 48.4% | 0.0% | 48.4% | 38.1% | 0.0% | 38.1% | 35.7% | 26.2% | 61.9% |
| JUGOS DEL | 61.6% | 11.1% | 72.7% | 17.5% | 9.8% | 27.3% | 36.0% | 0.7% | 36.7% | 29.8% | 33.5% | 63.3% |
| KIMBERLY | 11.7% | 0.0% | 11.7% | 38.2% | 50.1% | 88.3% | 41.2% | 10.3% | 51.5% | 12.5% | 36.0% | 48.5% |
| KOF | 8.8% | 0.0% | 8.8% | 16.0% | 75.2% | 91.2% | 33.1% | 0.0% | 33.1% | 4.7% | 62.2% | 66.9% |
| MACMA | 46.7% | 36.0% | 82.7% | 2.2% | 15.1% | 17.3% | 71.9% | 16.7% | 88.6% | 7.6% | 3.8% | 11.4% |
| MASECA | 61.6% | 4.6% | 66.2% | 15.2% | 18.6% | 33.8% | 79.7% | 0.0% | 79.7% | 20.3% | 0.0% | 20.3% |
| NUTRISA | 100.0% | 0.0% | 100.0% | 0.0% | 0.0% | 0.0% | 100.0% | 0.0% | 100.0% | 0.0% | 0.0% | 0.0% |
| PARRAS | 28.9% | 8.9% | 37.8% | 42.3% | 19.9% | 62.2% | 5.8% | 1.4% | 7.3% | 51.9% | 40.9% | 92.7% |
| PEPSI | 15.4% | 0.3% | 15.7% | 13.8% | 70.5% | 84.3% | 30.7% | 0.0% | 30.7% | 0.8% | 68.5% | 69.3% |
| PONDEROSA | 10.4% | 0.0% | 10.4% | 79.4% | 10.2% | 89.6% | 100.0% | 0.0% | 100.0% | 0.0% | 0.0% | 0.0% |
| QTEL | 31.2% | 8.7% | 39.9% | 60.1% | 0.0% | 60.1% | 100.0% | 0.0% | 100.0% | 0.0% | 0.0% | 0.0% |
| QUMMA | 48.5% | 14.2% | 62.8% | 18.8% | 18.5% | 37.2% | 65.4% | 4.8% | 70.2% | 9.4% | 20.4% | 29.8% |
| REGIO FIRMS | 37.0% | 48.9% | 86.0% | 14.0% | 0.0% | 14.0% | 62.6% | 24.2% | 86.8% | 13.2% | 0.0% | 13.2% |
| SAN LUIS CORP | 6.0% | 0.0% | 6.0% | 61.8% | 32.2% | 94.0% | 7.5% | 0.0% | 7.5% | 56.1% | 36.4% | 92.5% |
| SAVIA | 4.3% | 0.2% | 4.4% | 57.1% | 38.5% | 95.6% | 13.7% | 0.4% | 14.1% | 82.9% | 3.0% | 85.9% |
| SIMEC | 7.0% | 6.2% | 13.2% | 48.6% | 38.3% | 86.8% | 21.6% | 0.0% | 21.6% | 21.2% | 57.2% | 78.4% |
| SYNKRO | 32.2% | 11.9% | 44.0% | 48.2% | 7.8% | 56.0% | 97.0% | 0.0% | 97.0% | 3.0% | 0.0% | 3.0% |
| TAMSA | 6.2% | 0.0% | 6.2% | 40.7% | 53.2% | 93.8% | 15.7% | 0.0% | 15.7% | 48.0% | 36.3% | 84.3% |
| VITRO | 10.6% | 30.4% | 41.0% | 21.1% | 37.9% | 59.0% | 18.9% | 7.7% | 26.6% | 37.4% | 36.0% | 73.4% |

Source: : Author's elaboration with the based on the Firms information.

SR: Short Run; I.R: Long Run; T: Total

the strategy of an accelerated growth, while taking care to assure that the controlling group will get income through different perceptions, and on the other hand, to manage the property and control reducing the corporate assaults threats. However, this financial strategy has vulnerable sides because of the possibility of not being able to honor the debt service and the possibility to have exchange rate and interests rates risks in the international markets, where the main component of their liabilities lies. Finally, the low performance of the stock markets after their previous fall with the 2001 crisis in the USA could lead to foreign businessmen's reaction, when the low profits could not be offset by the hike in the share's prices as happened in the past. This could mean that to keep financing through shares, these firms will face pressure to increase the distribution of the profit, or to change the corporate control if the latter never comes.

Thus, the LFGs perspective is problematic, and it is strongly determined by the international market path on which they operate and by the capability to manage their economic and financial positions. The predictable evolution is that the processing the tensions provoked by the market's contraction, can drive some of these conglomerates to transfer their property's control to foreign firms. That already has happened in the case of Savia, Dina, and Synkro. However there are some cases, such as Grupo Modelo and Carso, that have another strategy to undertake very little foreign currency credit.

VI. Conclusions and Policy Suggestions

The perspective of the LFGs at their interplay with the national economy and the financial system is highly problematic.

As we have discussed, the national economy presents a contrasted configuration with concerning disequilibria factors. On this respect, the government's point of view coincides with the international institution's recommendations. That is, it was not enough with the reforms introduced in the 1990's, and thus the second wave of reforms is needed (institutional aspects, electricity generation, etc.) to reach a constant growth in the national economy. Under these recommendations, the policy options to enhance the macroeconomic order are very limited because of the rule of the international markets today and the relationship of Mexico with the USA. The absolute priority given to the price stability is achieved sacrificing the local market dynamics, while the opening to foreign market stops the local competitive development, and finally, the

need to keep foreign funds flowing into Mexico sets the obligation to keep the macroeconomics and opened economy conditions, because under the current economic order, the finance of commercial balance disequilibria depends on them.

As we have argued, in this context the heterogeneous frame of the national firms faces complex challenges. The SMEs can not find economic and financial conditions to overcome their traditional backwardness and to undertake a competitive configuration according to what the global economy demands. The successful LFGs seem to face limits to maintain its dynamics of international growth, both because of the conditions in the markets they operate and because of the difficulties that emerge from their financing strategies. At the same time, the foreign firms are growing their participation in the Mexican economy, and this is problematic. First, because of the exhaustion in the competitive advantage of Mexico for the in-bond assembly firms; second due to the fact that the foreign acquisition of Mexican firms generates unstable conditions because their decision centers are outside Mexico and their objective are conditioned to global business games under the conglomerates' decisions.

Accordingly, if there are not new political events that can modify the tendencies, it is likely that foreign acquisition of Mexican firms continues, thus worsening the internal market and increasing risky position for the LFGs.

Nevertheless, this is not an inevitable situation, nor one without an exit. It is possible to imagine new paths to have an economic organization with a successful long term insertion in the global market along with the creation of a dynamic domestic market and development of a progressive innovation system to make the competitive capabilities endogenous²¹. For this kind of strategy, the LFGs can be a very powerful tool at the same time that they can find a better long term way of growth for themselves. This means that the LFGs can rearticulate the Mexican economy by increasing their demands to the local SME firms, in a logic to generate growing systemic competitiveness. Altogether, this means to generate a virtuous circle of economic development for the long run in the country, undertaking the collective mission to make the market economy organization for this to be possible.

21 We have the Messner (1998) argument on systemic growth as a reference.

Bibliography

- Banco Mundial [2000]. *Mexico. A Comprehensive Development Agenda for the New Era*. Washington, D.C.: Banco Mundial.
- Bianchi, Patricio [1997]. *Construir el mercado*. Buenos Aires: Universidad Nacional de Quilmes.
- Calvo, Guillermo [1996]. *Why is the Market So Unforgiving?* Maryland: University of Maryland.
- Camdessus, Michel [1997]. "Toward a Second Generation Reform in Latin America" Speech delivered at National Bank Convention. Buenos Aires. <<http://www.imf.org>>
- Chandler, Alfred D. Jr. [1977]. *The Visible Hand: The Managerial Revolution in American Business*. Cambridge.
- Cimoli, Mario ed. [2000]. *Developing Innovation Systems: Mexico in the Global Context*. London: Continuum.
- Dunning, John [1988]. *Expanding International Production*. London: Unwin Hyman.
- De Gortari Ochoa, Francisco [2000]. "Determinantes del acceso al financiamiento del exterior de los corporativos mexicanos." *Gaceta de Economía*. Año 6, No 12.
- Dussel, Peters Enrique coord. [2003]. *Condiciones y efectos de la inversión extranjera directa y del proceso de integración regional en México durante los noventa*. México: UNAM-Plaza y Valdés.
- Garrido, Celso [1996]. "El sistema financiero en México a principios de los noventa. Crisis de una reforma contradictoria." En Gonzalo Rodríguez Prada coord., *La macroeconomía de los mercados emergentes*. Alcalá de Henares: Facultad de Ciencias Económicas, Universidad de Alcalá.
- _____ [1998]. "Las grandes empresas industriales en México durante los noventa." En Wilson Peres ed., *Las grandes empresas industriales en América Latina durante los noventa*. México: CEPAL - Siglo XXI.
- _____ [1999]. "Las multinacionales mexicanas." En Daniel Chudnovsky ed., *Las multinacionales latinoamericanas: sus estrategias en un mundo globalizado*. Buenos Aires: FCE.
- _____ [2001]. *Fusiones y adquisiciones de grandes empresas en México durante los noventa*. Santiago: CEPAL.
- _____ [2002]. "Las pequeñas y medianas empresas manufactureras en México. Su evolución en los noventa." En Wilson Peres ed., *Las pequeñas y medianas empresas industriales en América Latina y El Caribe*. México: CEPAL-Siglo XXI.
- _____ [2003]. "Mexico's Financial System and Economic Development: The Structural Factors of the Present Crisis and Challenges for the Future." In Kevin J. Middlebrook and Eduardo Zepeda eds., *Confronting Development*. Stanford: Stanford University Press.
- Garrido, Celso, and Tomás Peñalza [1996]. *Ahorro y sistema financiero Mexicano*. México: Editorial Grijalbo.

- Gil Diaz Francisco, and Agustín Carsten [1996]. "One Year of Solitude." *American Economic Review* <<http://www.e-aer.org>>.
- Jensen M., and Meckling W. [1976]. "Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure." *Journal of Financial Economics*, 3
- Hoshino, Taeko [2001]. *Industrialization and Private Enterprise in Mexico*. Chiba: Institute of Developing Economies.
- Katz, Jorge [2001]. *Cambios en la estructura y el comportamiento del aparato productivo latinoamericano en los años 1990: Después del "Consenso de Washington" ¿qué?* En Gabriela Dutrenit, Celso Garrido y Giovanna Valenti eds, México: Universidad Autónoma Metropolitana.
- Kuczynsky, Pedro Pablo, and John Williamson eds. [2003]. *After the Washington Consensus: Restarting Growth and Reform in Latin America*. Washington: IIE.
- Martínez, Lorenza y Alejandro Werner [2002]. "El régimen de tipo de cambio y la composición de la deuda corporativa. La experiencia mexicana." Documento de investigación 2002-02, Dirección de General de Investigación Económica, Banxico, México
- Messner, Dirk [1998]. *Latinoamérica hacia la economía mundial: Condiciones para el desarrollo de la "competitividad sistémica."* Materiales de Trabajo No5. México: Fundación Friederich Ebert. <<http://www.fes.org.ar>>
- Navia, Patricio, and Adrian Velasco [2002]. "The Politics of Second Generation Reforms in Latin America." Paper presented at II Conference of Latin America, Montevideo: <<http://www.kshome.harvard.edu>>
- Singh, Ajit, and Javid Hamid [1992]. "Corporate Financial Structures in Developing Countries." In collaboration with Bahram Salimi and Yoichi Nakano, Technical Papers No. 1. Washington, D.C.: International Financial Corporation.