Governance of Large Corporations in Mexico and Productivity Implications

by

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Abstract

The main objective of this paper is to describe the essential features of large Mexican firms. The observed structure fits with the stylized facts of the business groups found in many developing countries. In particular, there is a high concentration of control rights, not only because of the fact that family members own large holdings of stock in these firms, but also because it is a common practice to use pyramids and to issue “no-voting” shares. It is argued that the lack of counterbalances and the excessive control rights in the hands of few large shareholders produce a rent extraction problem. Hence those stakeholders that potentially experience opportunistic behavior are reluctant to establish long-term relationships, with the corresponding negative consequences on the productivity of the firm.

JEL Classification system: G30, G21, K22
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1.- Introduction

Big firms, organized as business networks, are the main contributors to aggregate production in semi-industrialized nations. In particular, corporate governance of most large firms in Latin America has been traditionally organized as business groups.[1] These BGs are conglomerates owned and controlled by families or closed groups of investors. Each network of firms presents vertical and horizontal links, and thus the consortium takes advantage of economies of scale or scope, reduces transaction costs, earns monopolistic profits and diversifies risk by undertaking production in different economic activities. Cross shareholding among associated entrepreneurs and the exchange of positions in the board of directors are also characteristic features. Moreover, it is common to find that banks and other financial institutions are part of a BG. The management structure of these networks is rarely modern, since it is very centralized, makes use of a steep vertical hierarchy and has an authoritarian leadership that usually defines all strategies within the group, mainly through the use of holding companies.

The BG is typical of countries where financial markets are poorly developed, and where public offerings constitute a small percentage of the total capital of the firm. Some economists argue that business groups are the result of poor legal systems, where rights of minority shareholders and small creditors are scarcely protected.[2] Consequently, under these circumstances, a corporate governance based on large investors -either families, powerful manager/owners or banks- allows the control of the firms' operations and guarantees that investment will be recovered if a profit is made. On the other hand, the existence of these large investors creates a vicious circle that hinders capital markets. This is so because the rent expropriation capabilities of controlling shareholders reduce the interest of minority participation. In other words, when the legal system is inadequate and law enforcement is corrupt, fragmented shareholders will not trust management, making the involvement of large investors necessary. It can be said that in general the lack of social trust is the root behind the immaturity of the legal institutions.

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[1] See Leff (1978) and cited references

[2] See Kali (1999).

The ability of individuals to associate and to setup trustful relationships is an essential factor in defining the corporate governance in a given society. A strong social capital allows the creation of large and relatively open corporations,[3] where permanent links between different stakeholders are established. On the contrary, when the social capital is poor, the legal system is deficient, property rights are opaque and firms tend to be fragmented, family owned and with an inequitable distribution of control rights.[4]

The first objective of this paper is to describe the main features of large Mexican firms, in order to establish if the observed structure fits with the stylized facts of the BGs defined above. In such a case, a theory of business group governance can also be applied to the Mexican conglomerates. However, despite the frequency of this type of corporate governance in the developing world, there is not a fully developed theory that can be used to understand the behavior of these firms. Although this paper does not have the intention to provide a formal treatment of BGs, as a second objective, it raises some concerns with respect to the competitiveness of these business networks in the context of a global economy. It is argued that the lack of counterbalances and the excessive control rights in the hands of few large shareholders produce a rent extraction problem. Hence those stakeholders that potentially experience opportunistic behavior are reluctant to establish long-term relationships, with the corresponding negative consequences on the productivity of the firm.[5]

The rest of the article is organized as follows: In the second section, some data is reviewed to show the nature of the control rights in the Mexican business groups (MBGs), observing that property and control rights in large Mexican firms do not coincide nowadays. In the third section an empirical analysis is made to see how integrated and diversified the modern MBGs are, while some of their financial practices are reviewed in the fourth section, highlighting the banking linkages of industrial firms. In the fifth section, the productivity implications of these networks are considered, suggesting that business groups lacking long-term commitment are not very well equipped to face an open international competition. Finally, conclusions are presented.

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[3] See La Porta et al (1997).
[4] For an analysis on social capital see Fukuyama (1995).
[5] For a more comprehensive view on Mexican business groups see Castañeda (1998).

2.- Concentration of control in Mexican public firms

The purpose of this section is to show that even in large Mexican firms, there is a high concentration of control rights,[6] not only because of the fact that family members own large holdings of stock in these firms, but also because it is common to issue "no-voting" shares. This device, in conjunction with the use of pyramids, allows majority owners to retain the control of the BGs while economizing capital investments. Moreover, the main features of the Mexican legal system are reviewed, especially those which are considered the cause of the prevailing corporate governance. From this brief analysis it can be seen that the MBG structure gives relatively few monitoring rights to small investors and other stakeholders, such as workers and independent suppliers.

2.1.- Manager/owners, family holdings and boards controlled by large shareholders.

According to the data from the 20-F report of the Securities Exchange Commission (SEC) submitted by 25 Mexican firms listed on the New York Stock Exchange (NYSE) in 1996, the president of the board, usually the main stockholder and the general director,[7] does not have practically any opposition from independent board members. On average, only 20% of the firms present a majority of external members on the board -and this fact does not necessarily mean independence, since they could be related to another company of the same BG-. Besides, on average, 35.2% belong to the family of the president and 38.7% are executive managers. All in all, close to 57% of board members are either employees or relatives of the president. Table I shows more detailed information. These findings point to several facts of the big Mexican firms. (i) Large stockholders hold executive positions. (ii) Firms continue nowadays being family centered. (iii) The board of directors represents the interests of a block of large shareholders, instead of being formed by autonomous external auditors monitoring the interests of small shareholders.

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[6] The data used in this section is based on research done by Babatz (1997).

[7] In this sample the president and the general director coincide in 85.7% of the cases.

Table I
Composition of the board of directors
in 25 Mexican firms listed on the NYSE

Proportion of	Mean	Median	Min.	Max
External Directors	42.8	39.1	7.7	83.3
Directors with family ties with the president of the board	35.2	37.5	0.0	70.0
Executive directors	38.7	37.5	10.0	70.6

Source: 20-F Report, taken from Babatz (1997).

2.2.- Equity concentration in MBGs

The lack of transparency in MBGs and the loose requirements of the National Commission of Banks and Securities (CNBV) make it impossible to obtain detailed information about the degree of equity concentration in listed firms. Thus, besides the anecdotal information held by financial analysts and observers of the Mexican entrepreneurial sector, the only hard data available is derived from the concept of "related stockholders", published by the Mexican Stock Exchange (BMV), and from the stockholdings of board members declared in the 20-F report issued by the SEC. "Related stockholders" refers to individuals with at least 10% of the firms' equity who are frequently involved in the decision making of the firm. It should be clear that this classification does not allow us to identify whether we are dealing with only one owner or several large minorities. According to evidence presented in Babatz (1997), with data of 1996, the "related stockholders" of 79.3% of the firms listed on the BMV own at least 50% of the equity in those firms.

In order to obtain more specific information, an alternative is the 20-F report of the 25 Mexican firms listed on the NYSE, where firms are obliged to state the identity and percentage of equity of each of the main shareholders. Taking advantage of some regulatory changes, some large Mexican firms started to issue American Depository Receipts (ADRs) in 1991. Once a firm has decided to issue ADRs, it has to meet the more stringent disclosure requirements of the SEC under the accounting rules of the US GAAP. In terms

of retaining control, an important benefit for the large shareholders of an MBG is that investors holding ADRs usually vote as the controlling majority does. In 1996, 11 of the 25 Mexican firms listed on the NYSE presented a majority stockholder with more than 50% of the firms' equity. In Table II some additional descriptive statistics are presented with respect to ownership concentration. It stands out that in 43.8% of the 121 firms included in the BMV sample, "related stockholders" own more than 70% of the equity. Percentage that decreases to 32% and 12% for "related stockholders" of companies listed in the NYSE and for a "majority coalition" of the same firms, respectively.[8]

Table II
Ownership concentration of Mexican listed firms

Holdings of	No. Obs.	Median	Mean	St. Dev.	Min.	Max	Proportion of firms with Conc >.5	Conc >.7
Related stockholders (all firms)	121	66.8	65.6	18.7	18.1	99.8	79.3	43.8
Related stockholders (firms with ADR's)	25	63.7	59.9	18.1	18.6	87.1	76.0	32.0
Majority coalition (firms with ADR's)	25	48.0	49.0	17.4	11.0	79.0	44.0	12.0

Taken from Babatz (1997).

From the percentages presented above, it is evident that ownership concentration is very high in Mexico. Data collected by La Porta et al (1998a) in many countries around the world shows that concentration is indeed relatively high for international standards, even when comparing with countries whose legal system is based on the French civil code.[9]

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[8] A "majority coalition" is a majority stockholder or the largest coalition of shareholders. The stockholder is not defined as an individual investor but as members of a family or members tied by a contract that obliges them to vote unanimously.

[9] These authors define property concentration in a given country as the average percentage of common stockholdings owned by the three largest shareholders in the ten largest firms of the domestic private sector. Mexico's concentration indicator has a value of 0.64 well above the 0.20 presented in the United States, characterized by a corporate governance with fragmented stockholding, and even above the 0.40 found in the sample average.

2.3.- Control vs. ownership concentration

Based only on ownership data, it can be asserted that the control exerted by the block of large shareholders in Mexican firms is very important. Moreover, additional empirical data on voting rights shows that the control of majority owners in public firms is indeed overwhelming. A common practice in Mexico is the use of a dual-stock structure, where firms issue some of their equity in the domestic market through the use of non-voting rights stocks. A law passed in 1990 allows a firm to issue at most 25% of its equity in non-voting stock, in addition to the ADRs and the use of neutral funds, where foreign investors obtain financial rights but no voting rights. According to data presented in Babatz (1997), separation of the rule one-stock-one-vote takes place in 60% of the 121 Mexican public firms of the sample. On the contrary, the dual-stock structure is very rare in industrialized countries where the stock market is highly developed. The corresponding percentages for Canada, Japan, United Kingdom and United States are 10%, 1%, 1%, and 4%, respectively.

Leaving aside the fact that control can also be obtained by using pyramids, where one firm controls another, and by cross-shareholding. Data taken from the BMV and the 20-F report shows that in firms with dual structures vote concentration in “related stockholders” is on average 78.7%, while property concentration for the sample firms is just 58.3%. Data also shows that for a subset of firms defined by their listing on the NYSE, “related stockholders” concentration vote is lower (70.6%), yet still high, and property concentration is also lower (49.0%). Traditionally, the latter type of firms is larger in size. Moreover, concentration of control is not only high in average, it is also very frequent in public Mexican firms, since 90.9% of the sample presents a vote concentration higher than 50%, and of 92% when only firms listed on the NYSE are considered.

In Table III, where additional descriptive statistics are presented, one can observe the minimum capital participation needed to get a relative majority of voting rights (e*). In the case of firms with a dual structure -but no ADRs- this percentage is 37.5% (0.75/2). In Table III this quantity is adjusted, taking into consideration the fact that some firms issue ADRs (e^*_{ADR}). Thus the adjusted minimum capital participation is 46.7% on average

for firms with a simple stock structure, 36.5% for firms with dual-stock structure (as opposed to 37.5%), and 32.9% for the subset of 25 firms listed on the NYSE. The data also illustrates a phenomenon of "wasted voting power", defined like the extra equity that "related stockholders" keep above what is needed to retain the firm's control (conc(e)-e^*_{ADR}).[10] As can be seen from Table III, firms in general present a surplus, which is lowest for the 25 firms listed on the NYSE (16.1% on average). All in all, these numbers show that concentration of control is very extended.

Table III

Control structure in the Mexican Stock Exchange and ownership of "related stockholders" (percentages)

Panel A: Firms with singular structure

	Mean	Median	St. Dev.	Min.	Max	No. Obs
Equity concentration	68.4	68.2	17.6	18.6	99.8	88
Vote concentration	73.0	73.8	17.2	29.6	100.0	88
e^*_{ADR}	46.7	50.0	7.2	18.3	50.0	88
Conc(e)-e^*_{ADR}	21.6	22.1	16.3	-20.4	50.7	88
Firms with Conc(e) > 0.50	84.1					
Firms with Conc(vote) > 0.5	90.9					

Panel B: Firms with dual structure

	Mean	Median	St. Dev.	Min.	Max	No. Obs
Equity concentration	58.3	60.9	19.6	18.1	87.1	33
Vote concentration	78.7	79.6	21.3	21.2	100.0	33
e^*_{ADR}	36.5	39.1	8.1	10.2	46.5	33
Conc(e)-e^*_{ADR}	21.8	23.4	17.3	-24.6	45.7	33
Firms with Conc(e) > 0.50	66.7					
Firms with Conc(vote) > 0.5	90.9					

[10] These numbers seem to overstate the "wasted voting power" since the estimates include all stockholders with holdings of at least 10% of the equity, and not only the voting rights of the main stockholders.

Panel C: Firms with ADRs in the NYSE

	Mean	Median	St. Dev.	Min.	Max	No. Obs
Equity concentration	49.0	48.0	17.4	11.0	79.0	25
Vote concentration	70.6	65.0	20.1	44.0	100.0	25
e^*_{ADR}	32.9	34.2	10.8	10.2	49.2	25
Conc(e)-e^*_{ADR}	16.1	10.7	14.3	-4.2	36.9	25
Firms with Conc(e) > 0.50	44.0					
Firms with Conc(vote) > 0.5	92.0					

Source: Mexican Stock Exchange and 20-F Report, taken from Babatz (1997).

Despite the presence of "wasted voting power", there is statistical evidence that suggests that in Mexico deviation from one-stock-one-vote is negatively correlated with ownership concentration. Using a dummy variable for firms with a dual structure, Babatz (1997) shows that these firms have an ownership concentration of 8.1 percentage points lower than those in the rest of the sample. Furthermore, in his econometric analysis, Babatz finds that a reduction of 10 percentage points in the minimum capital required to control half the votes, originates a 10 percentage point reduction in ownership concentration. In other words, in Mexico this type of structure seems to be used as a mechanism to minimize invested capital and hence the cost of retaining control.

2.4.- The legal rights for investors and the institutional environment in Mexico.

The legal system in Mexico lacks the proper protection for the small investor, either stock or debt holders. With regard to equity investor rights the "Law of Mercantile Societies", approved in 1934, is the main piece of legislation dealing with the creation of a limited liability firm "sociedad anónima". It also establishes investor's property rights and the regulation of different monitoring/counseling bodies of the firm, such as the board of directors, the stockholders assembly and the commissioner. In the case of

public corporations, there are special regulations established in the "Law of Securities Markets" from 1975, in the "Rules of the Law for Promoting and Regulating Foreign Investment" from 1989, and in memorandums issued by the CNBV.[11] With regard to the board of directors, a fundamental flaw is the lack of rules for its composition. The relative absence of independent external auditors, as seen above, prevents the protection of minority shareholders.[12] Likewise, small shareholders have very limited channels to state their positions and to participate in decision making. In order to summon a stockholder assembly, it is necessary to have at least 33% of the voting rights. Besides, vote by mail is not allowed, and the discussion agenda, received usually only few days in advance, is very vague.

Despite the fact that commissioners are not employees of the firms, they are usually hired by the main stockholders and by their board. Thus the role of commissioners as independent auditors willing to disclose any conflict of interest is questionable. Small shareholders have few mechanisms to defend their interest in a court of law. Veto power is nil. Only "minorities" holding at least 33% of voting rights can delay any decision for three days, in order to get more information, and then ask a judge to stop any resolution considered against company regulations. Besides the difficulties to prove an explicit fraud in an environment of lax regulations and lack of transparency, only "minorities" can sue the administration in a civil demand in case of wrongdoing. This is added to the corruption and the inefficiency observed in the Mexican judiciary system. Even in the case of firms listed on the BMV, the information requirements are not very transparent. In particular, the statement of expenditures is not properly broken up and firms are not obliged to declare investments, sales and acquisitions involving individuals related to the company. Furthermore, there are practically no exit-clauses, where the company is obliged to repurchase the stock at the ex-ante prices, in case of disagreements with the assembly of stockholders.

On the other hand, with regard to creditors' rights, the scenario in Mexico is also very bleak. Debtors have the right to unilaterally file for reorganization and, even if it is not objected, unsecured creditors cannot pull

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[11] For more information on these topics see Babatz (1997)

[12] The only legal requisite is the possibility that a minority with a share of at least 10% of voting rights can name a representative on the Board, however the size of the Board is not defined by law.

their collateral out of the firm. Moreover, the procedure for reorganization is completely written by the bankrupt debtor and the current administration keeps running the firm pending a lengthy court resolution, as opposed to other countries, where an independent trustee is appointed while the future of the firm is decided. Likewise, in case of liquidation, creditors do not have privileged access to the firms' assets, since government and firm's employees are paid first. Obviously when a powerful MBG owns a bank, there are informal mechanisms to protect its interest as a creditor, given its political connections.[13]

3.- Diversification and integration in Mexican business groups

Some observers of the BG structure assert that these networks participate in diverse economic activities in order to obtain different benefits. For instance, diversification of risks, an efficient use of scarce resources -e.g. qualified personnel-, an increase in their political influence, the advantage of reputation effects of sharing a label, reduction of unitary costs in publicity; and reinvestment of their profits with a lower tax burden.[14] Furthermore, it is also said that these large firms benefit from substituting some market transactions by network transactions, along the different stages of production and commercialization. Because of deficiencies in the legal and judiciary systems, and the presence of severe asymmetrical information problems, entrepreneurs prefer to be vertically integrated. For the BG, it is usually less expensive to adopt a strategy to reduce opportunistic behavior and coordination problems, than to reduce the size of the business and avoid the diseconomies of scale caused by influence activities and a complex hierarchical structure.[15]

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[13] In order to have a broad perspective of the Mexican legal system with respect to other countries, see indicators presented in La Porta et al (1998b). From this data, it is clear that the small investors' protection in Mexico is very weak by international standards, even when comparing it with countries whose legal system comes from the same French Code.

[14] See Khanna and Palepu (1997).

[15] To the contrary, studies referring to developed countries assert that conglomeration is a wrong policy since it does not contribute to the generation of value, but rather to the redistribution of rents in favor of management, interested mostly in empire-building.

Despite the recent developments in the Mexican financial markets, the introduction of new management systems and the increased competition observed in product and input markets, there seems to remain in the MBG a high degree of integration and diversification, as can be inferred from the data presented below. Consequently, assuming certain degree of rationality in the selection of corporate structure, it can be argued that the benefits of network transactions and conglomeration are still larger than the cost of diseconomies of scale and the benefits of specialization and competition in a flexible environment.[16]

3.1.- Methodology to classify firms

With the aim of building a matrix where firms are classified in terms of diversification and vertical integration, a sample of 132 companies from the data bank <<Anuario Financiero de la Bolsa Mexicana de Valores, 1966>> is considered. On the horizontal axis of such a matrix, the degree of diversification is defined, according to the number of products and the nature of sectors where the company is involved, while on the vertical axis the number and type of vertical links of each firm is measured. The criteria to define diversification is mainly based on supply components, that is, it is assumed that two products are related when common inputs, skills and resources are used for their production and/or commercialization.[17] In order to determine the linkages and activities of each firm, the consulted sources were: “Las 500 empresas más importantes de México, 1996” edited by 'Expansión' and “Informes Financieros Trimestrales”. In the latter, only data on firms quoted on the BMV is presented.

An MBG is not necessarily organized by means of a holding company, since it can be structured as legally independent companies. Therefore, the degree of diversification-integration that is found in the sample represents

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[16] For developed countries, the virtues of competition, the flexibility of relationships with suppliers, and the use of managerial system like just-in-time inventories, make a lean firm more profitable. Subcontracting with multiple suppliers is more efficient in the long term, since it contributes to the dissemination of technology and motivates a continuous product improvement.

[17] Demand considerations are not analyzed due to a lack of detailed information, thus the fact that a good produced by a firm can be bought by firms classified in different sectors (e.g. diamonds used in industry and as a jewel) is ignored.

only a lower bound to the true phenomenon. An alternative methodology is to define the MBG by taking into consideration the exchange of positions in the boards of directors. In the Mexican firms, as opposed to the Anglo-Saxon case, the members of the boards are generally majority shareholders, and not mere external auditors representing the interest of small shareholders. However, it is also common that the controlling entrepreneurs of an MBG participate on the board of another MBG without performing a role in decision-making. Their presence could fulfill the need of monitoring their investments or to reinforce political and economic alliances. Given the difficulty of detecting the nature of these crossings, it is preferable that the classification matrix is limited to the consortiums legally defined. Likewise, it is preferred to use few categories in each axis to minimize the subjectivity involved in grouping the firms into different cells of the matrix.

(a) With respect to diversification, the following categories are considered in the horizontal axis.

Low Diversification (LD). In this category firms producing only one good or service are grouped together, or when several products are elaborated within the same industry.
Related Diversification (RD). This category comprehends those firms with several lines of production in diverse industrial branches, but using common inputs.
Non-related Diversification (ND). It includes the cases where the consortium has two or three non-related lines of production, that is, when the elaboration of these goods does not require neither the same productive processes nor the same inputs.
Conglomerated Diversification (CD). This category includes those conglomerates where four or more different goods or services are produced, which lack close productive links, besides considering firms where conglomeration is accompanied by a phenomenon of related activities.

(b) With respect to the other axis, vertical integration is classified as follows:

Nil Links (NL). In this category, those Groups with no link whatsoever in the vertical chain of production are considered. A link is understood as an association of two productive activities (divisions) within the same business. A backward link is defined when the firm is integrated with a supplier, and a forward link is defined when the firm is integrated with a corporate client.
Supporting Link (SL). In this classification those Groups whose associated firms carry out a secondary or supporting activity are considered. A supporting activity refers to those services that do not directly intervene in the productive process, but that are indispensable for the elaboration and sale of the product. Among these secondary services are: trading, distribution and retailing -i.e. forward links-; export services; administrative services; real estate leasing -in the case of construction companies-; shipping services; storage; printing; financial and professional services; production and sale of industrial uniforms, and so on.

Isolated Link (IL). The companies that present only one link in the vertical chain of production, either backward or forward, are grouped in this category. It also includes those consortiums that also have a productive link and a supporting link.
Multiple Links (ML). In this last definition those groups joining two or more productive links are included together with groups with several productive and supporting links.

3.2.- Integration-diversification matrix

The results of this empirical research are presented in Figure I. The first number in each cell refers to the number of firms in the corresponding category; the percentages with respect to the size of the sample are presented in their respective parenthesis. When moving from left to right, the groups present a larger degree of diversification until reaching the cell where truly conglomerated firms are defined. In turn, moving in the top-bottom direction implies a larger chain of production within the firm until reaching the cell where firms are heavily integrated. Consequently, the Northwest corner (NL-LD) shows those firms with lean structures, oriented to the production of good and services in one industry, and where the market is used for the purchase of their inputs and the sales of their outputs. On the contrary, the Southeast corner (ML-CD) corresponds to the groups with a dual conglomerate dimension: high level of linkages and different lines of production; thus, presumably, their expansion has been at the expenses of losing focus.

Figure I
Integration and diversification in MBGs

Integration \ Diversification	LD	RD	ND	CD
LN	22 (16.67%)	4 (3.03%)	2 (1.52%)	2 (1.52%)
SL	18 (13.64%)	8 (6.06%)	3 (2.27%)	2 (1.52%)
IL	19 (14.39%)	4 (3.03%)	4 (3.03%)	1 (0.76%)
ML	17 (12.88%)	10 (7.58%)	8 (6.06%)	8 (6.06%)

Source: Castañeda (1998)

These numbers show that many of the large Mexican firms continue, up to the end of the 20th century, presenting an important degree of vertical integration, which could be explained by the prevailing environment of low social trust that inhibits the development of long-term relationships between independent clients and suppliers. On the other hand, the conglomeration phenomenon seems to be circumscribed to a limited number of MBG. However, this result might be misleading since the associations among legally independent firms through a controlling group is still a common feature of Mexican corporate governance (e.g. Peñoles -mining-, Nacional Provincial -insurance- and Palacio de Hierro -retailing- are all members of Grupo Bal). Perhaps, the dominant trend of organizing these networks into different

holdings, attending to their nature, attempts to achieve some of the benefits provided by a focused structure.[18]

The matrix analysis shows that highly integrated and diversified firms have an important export capacity -as seen in the Appendix-. In particular, firms in the Southeast corner (ML-CD) are considered large exporters, contrasting with the pattern observed in the Northwest corner (NL-LD), where there are many firms producing only for the internal market. This outcome should not be interpreted as proof of the competitiveness of a structure of high integration-diversification. Evidence shows that the export capacity of these large firms is due, to a certain extent, to the wealth and power of the businessmen involved in these groups. Through the use of alliances that allowed forward integration with foreign partners, and by the acquisition of firms, MBGs have swiftly achieved the observed export capacity, yet it is dubious that their dynamism can be sustained unless some profound changes occur in their corporate governance.

Despite the fact that a reduced number of firms are located in the Southeast corner (ML-CD), they represent the largest MBG included in the sample. Therefore, in order to have a clearer picture of the importance of the integration-diversification phenomenon in Mexico, the cells of Figure II report the corresponding percentages of sales and (exports) that each category represents as a share of the total. As can be seen from this matrix, firms in the cell (ML-CD) represent close to one fifth of total sales and almost one fourth of total exports in the sampled firms. Likewise, highly integrated firms (row ML) generate 67.87% of net sales and 85.27% of exports. These results reinforce the assertion that conglomeration and integration are still relevant phenomena in the Mexican economy. Given the predominance of this corporate structure and its high export capacity, the possibility of a relationship between corporate form and economic performance requires further analysis.

[18] For instance, Grupo Monterrey, facing a conglomeration process and family expansion, decided in 1974 to divide itself in four holding companies -Alfa, Visa, Vitro and Cydsa- so that the corporate offices in each holding could act with certain autonomy in the formulation of strategies.

Figure II
Diversificaction-integration by sales

Integration \ Diversification	LD	RD	ND	CD
NL	4.03% (0.79%)	0.97% (0.12%)	0.47% (0.71%)	0.01% (0.0%)
SL	5.99% (1.05%)	10.23% (0.12%)	0.56% (1.91%)	1.71% (0.66%)
IL	3.5% (1.15%)	1.43% (3.55%)	2.99% (4.67%)	0.25% (0.0%)
ML	19.88% (37.97%)	15.51% (8.14%)	10.5% (16.0%)	21.98% (23.16%)

Note: Exports in parenthesis, Source: Castañeda (1998)

With this purpose in mind, Flores and Jiménez (1998) present a cluster analysis with 1996 data. In their research the sampled firms are classified according to their similarity on four performance ratios. Profits to total assets, investment to fixed assets, exports to net sales, and profits to net sales. Once firms are grouped into four categories, an analysis of cross tabulation is made to test for the existence of a relationship between corporate structure and economic performance in the sampled firms.[19]

In order to test for the hypothesis that economic performance is related to corporate structure, Pearson's statistical test is applied. The null hypothesis is not rejected with a 99% level of significance. In particular, out of the 8

[19] For this analysis the integration-diversification matrix was collapsed into four categories, so that the cross-tabulation produces a four times four matrix (not presented here).

MBGs classified in the cell (ML-CD), only one -Grupo Sidek- is located in category 4 of poor performing. Again, this is not a definitive test of the productive efficiency of huge conglomerates. Profitability and growth of these firms can result from a competitive advantage gained by considerations different from productivity, like monopoly power, their capacity for extraction of rents -as explained below-, or their financial capacity to make strategic alliances with transnational corporations.

4.- The importance of related credit

The deficiencies of legal and regulatory institutions, the scarcity of internal savings, and the severe credit rationing, caused by the endemic problems of asymmetric information, led to the creation of financial branches in the MBGs. Banks and other financial institutions affiliated with groups became important conduits for channeling external financing. Theoretically, a tight relationship between lenders and firms is conducive to the establishment of long-term financial contracts, allowing the undertaking of high productivity projects. However, credit allocation can also be inefficient and unstable when external financing is channeled through hierarchical internal markets, as those observed in the MBGs.

In these markets, stockholding, and not productivity, constitutes the leading criteria for credit allocation. Privileged firms have the incentive to over-borrow so they can take advantage of their rent extraction potential, especially if the dimensions of the conglomerate make it “too big to fail” in case of financial difficulties, with the consequent socialization of risks. The size of the firms, their banking connections, and their participation in the ownership of the bank are commonly used to deal with moral hazard and adverse selection. Unfortunately, the potential growth of the economy and its stability is harmed since these criteria do not necessarily coincide with the firms' productivity and true financial health.

4.1.- Related credit in Mexico

Due to the closed nature of the MBGs, it is an impossible task to be precise with the details of related credit in the Mexican financial system.

Nevertheless, by analyzing the financial information of firms quoted on the stock exchange, one can get a first approximation of the phenomenon. With this objective in mind, related credit is defined as the financing received by a firm with a board member who sits on the board of directors of the same bank granting the credit. In the Mexican case, these members, more than being employees of the financial institution, are important stockholders of the MBG that consolidates the lending bank and the borrowing firm. In Table IV a series of variables are illustrated. The percentage of board members in a bank with ties to public firms -that oscillates between 13.64% for the Banco Industrial and 100% for Interacciones-. The percentage of board members with related credit -that goes up to 33.3% for Inbursa-. The percentage of related firms that receive credit -that goes from 0% in Quadrum up to 37.9% in Bancomer-. The percentage of related credit with respect to the total credit received by the firms in the sample, that, with the exception of four cases (Quadrum, Banamex, Bital and Ixe), is larger than 30%, and has even reached 88.12% for Inbursa and 100% for Interacciones.

The law that formalized financial groups intended to limit the percentage of credit that could be "related"; however, ordinary practices in these groups show the opposite.[20] Despite the fact that these results are not definitive, they stress the relevance of these practices. The use of related credit is advisable when the benefits offered by a long-term relationship are overwhelming, yet this practice is negative for the economy if those benefits are offset by the costs brought on by preferential treatment. While in the system of universal banking (Japan, Germany) the former factor seemed to be the dominant one for many years, in the Mexican case, the latter is the prevailing one. The difference lies in the relative independence of the firm members in the case of the keiretsu and the submissive relationship observed in the MBGs, which in large part originates from the poverty of property rights observed in the latter structure.

[20] Although it is true that the largest public firms are usually part of an MBG, and thus the previous percentages can overestimate the phenomenon, it is also a fact that middle and small firms not included in the sample are ideal candidates to be rationed by the Groups.

Table IV
Firms with Related Credit. [21]

Credit Institutions	Percentage of board members linked directly to another firm	Percentage of board members with related credit	Percentage of firms with related credit	Percentage of the credit to linked firms
Atlántico	48.48	15.15	13.64	31.81
Banamex	50.00	24.32	31.15	6.24
Bancomer	44.90	27.55	37.29	57.49
Bancrecer	23.21	1.79	12.50	41.00
BBV	43.33	10.00	29.41	40.30
Bital	19.51	6.10	19.05	4.19
Confia	25.93	3.70	8.33	38.31
Inbursa	79.17	33.33	13.04	88.12
Industrial	13.64	4.55	13.33	57.25
Interacc.	100.0	15.00	10.53	100.00
Invex	34.78	8.70	10.00	30.87
IXE	20.83	4.17	7.14	14.08
Promex	23.40	8.51	25.00	54.90
Quadrum	48.39	0.00	0.00	0.00

Source: Castañeda (1998) with data from the Mexican Stock Exchange

[21] Related credit was calculated with information from the financial reports of the third quarter of 1997. The sample size is 134 firms. It is said that there is an indirect link where it was possible to detect a brother or a close relative involved with the credit. Atlántico stands for Grupo Financiero GBM Atlántico and Banco del Atlántico; Banamex (Grupo Financiero Banamex-Accival); Bancomer (Grupo Financiero Bancomer and Bancomer); Bancrecer (Grupo Financiero Bancrecer, Bancrecer and Banoro); BBV (Grupo Financiero BBV-Probursa and Multibanco Mercantil Probursa); Bital (Grupo Financiero Bital and Banco Internacional); Confía (Abaco Grupo Financiero and Confia); Inbursa (Grupo Financiero Inbursa); Industrial (Banco Industrial); Interacciones (Grupo Financiero Interacciones); Invex (Banco Invex); Ixe (Ixe Grupo Financiero); Promex (Banca Promex); Quadrum (Banca Quadrum).

4.2.- Banking crisis and bank-firm relationships

The Mexican banking crisis that started in 1995 is an excellent laboratory to examine banking ties from a different perspective. A regression model is estimated using the ratio of profits to assets in the year immediately after the crisis began as the dependent variable. In the model it is considered that there is an inertia in firms' profits. It is expected that returns in 1996 are related to firms' past performance; however, such dynamic will be differentiated depending if there is or not a close relationship between the firms and their financial institutions. Theoretically, the effect of the banking relationship during the crisis can run in two directions. On the one hand, the linkage affects negatively the non-financial firms of a MBG when the crisis of the group's bank, and the need of being capitalized, contributes to reduce their profitability. Perhaps due to the application of a transfer-price policy favorable to banks. On the other hand, the financial nexus is favorable when the bank protects the groups' non-financial firms by offering them subsidized interests. In order to face the drastic hike in the funding rates for the banks, as a consequence of the currency crisis, a likely strategy is to soften the financial impact on the firms' group, despite the fact that by doing so, the performance of the bank can be damaged.

The model is estimated with a sample of 48 public firms, where the banking ties are specified through the use of a dummy variable, which is included alone and interacting with the ratio of profits-to-asset in the crisis year. The dummy variable measures the impact that banking ties have on profitability, independent of the crisis dynamic and the sector in which the firms operate. On the other hand, when comparing lagged profitability and the interaction variable, one can estimate the relevance and direction followed by the banking nexus after the crisis started. Likewise, the model also incorporates variables to control for the nature of the economic activity, size and export capacity of the firms.

The regression results show –see Table V- that, indeed, size and firms' activity influences average performance. In particular, the export capacity of firms is positively associated with their profits in the year after the crisis started. Moreover, the banking nexus exerts a negative influence on the firms' profit ratio, perhaps because the groups with a financial branch are more diversified or more interested in the profitability of their financial activities.

But without a doubt the most striking result of this exercise is the empirical difference found in the inertia of profitability, depending on the existence or not of a banking nexus. The estimation shows that there is a total inertia for linked firms; in other words, those firms with a banking link tend to keep their profits closely related to past performance as the financial crisis deepened in 1996. This outcome is compatible with the fact that several business groups preferred to accept outside capital and the influence of a foreign bank, than to put the health of the non-financial firms of the group at risk. As a side effect of the cross-subsidies, the banks' financial situation was clearly worsened.

Table V
Regression results

Dependent variable: ROA_{1996} = return on assets for 1996

Variable	Model 1 OLS	Model 2 GLS	Model 3 GLS	Model 4 GLS
Constant	0.0430 (1.9039)	0.0414 (2.3096)	0.0752 (6.9660)	0.0723 (6.4065)
D	-0.0564 (-2.1473)	-0.0557 (-3.0514)	-0.0663 (-6.1157)	-0.0707 (-6.3138)
ROA_{1995}	0.1647 (2.3729)	0.1496 (4.4500)	0.1333 (4.9491)	0.1287 (4.5714)
$DROA_{1995}$	0.8905 (6.3380)	0.9200 (22.2770)	0.8548 (21.8066)	0.8589 (19.5293)
EXP/S	0.0333 (0.9352)	0.0262 (5.9916)		
A				1.49E-10 (2.7379)
D1			-.0126 (-5.4690)	-.0066 (-1.6300)
D2			-0.0055 (-1.8409)	-5.53E-05 (-0.0116)
D3			0.0037 (0.4612)	0.0061 (0.6448)
D4			-0.0185 (-2.4182)	-0.01287 (-1.5168)
D5			-0.0220 (-2.2960)	-.0270 (-5.5809)
D6			-0.1188 (-3.3940)	-0.1153 (-3.1416)
	0.66	0.999	0.997	0.995

Notes: Number of observations =48; t-statistic in parenthesis; OLS = ordinary least squares; GLS = generalized least squares; R^2 for GLS corresponds to weighted statistics

D = dummy that takes the value of 1 when the firm is linked to a bank, 0 otherwise

ROA_{1995} = return on assets for 1995 (crisis year)

$DROA_{1995}$ = interaction variable: dummy times ROA_{1995}

EXP/S = ratio of exports to total sales in 1996

A = total assets in 1996

Di = dummy variable for i^{th} sector

Total inertia means that the sum of coefficients associated to ROA_{1995} and $DROA_{1995}$ is close to one

5.- Corporate governance in large Mexican firms

The corporate governance of a firm determines the way benefits and business risks is distributed with the intention of reducing conflicting goals and motivating the best effort of the different stakeholders. Thus, a good corporate governance should be capable of increasing the size of the pie to be divided, taking into consideration the motivation to pursue individual interests. Different tasks are involved in the corporate governance of a firm, as can be seen from the following list. (i) The formation of the board of directors and the specification of its functions. (ii) The rules of the game for large investors. (iii) The implementation of a payment system for workers and managers. (iv) The degree of integration with suppliers. (v) The mechanisms to control management. (vi) The selection of a financial structure, among others.

From the previous definition, it is clear that all forms of corporate governance are suboptimal. Firstly, because the legal framework where the firms are inserted does not give enough room for the development of efficient organizations. Secondly, because the social, political and economic pressures lead to the creation of firms structured according to the objectives of dominant actors. Thirdly, because the theory for the creation of wealth is still incipient. In particular, the assumption that the stockholders are the only actors that put their contribution to the firm at risk -in this case financial capital- has produced corporate systems where control rights are exclusive for the stockholders. As it is known from the German and Japanese experience and new theoretical developments, other actors like workers,

suppliers, and banks are truly stakeholders, that is, these actors also face risks by their participation in the firm.

Different analysts consider that corporate governance should not be designed to maximize stock value. Firstly, the stockholders are not the only "owners" of the firm. When there is a separation between those who control resources and those who receive residual gains -i.e. net benefits-, it is more complex to define the true owners of the firm. Besides the stockholder, other actors involved with the firm have a commitment and exert an effort, making success possible. Hence there is a need to determine an adequate structure of retributions. Secondly, any actor that bears residual risk -i.e. when there is a possibility that gains are not sufficiently high to cover costs- should have control rights, then not only the stockholder, but other stakeholders as well, deserve to own these rights.[22] Therefore, as the stockholder that contributes with capital risk, bankers, workers and any other stakeholder with specific investments should exert certain control on the resources and management of the firm. When the corporate governance design does not contemplate the presence of specific investments, it will have difficulties in fostering long-term relationships, productivity, and social wealth.

5.1.- The corporate structure of the MBGs

From the description presented in previous sections, large Mexican firms are classified as network-oriented organizations. That is "allocation principles" are frequently non-market oriented and the prevailing market institutions are immature -e.g. financial markets are neither very sophisticated nor well-functioning.- Furthermore, these networks are cemented in family structures and closed blocks of investors. This corporate system was profitable from the perspective of its designers, who took into consideration the framework of post-revolutionary Mexico, characterized by a closed and heavily regulated economy with anti-democratic institutions. However, it was not very successful in generating social wealth, in particular it did not help to overcome the extreme inequality in income distribution. The

[22] If a firm could write complete contracts with suppliers -labor, specialized knowledge, credit, materials- then the stockholders would be the only actors with residual rights. However, in reality this is an impossible task, given the difficulty to foresee all possible contingencies.

scanty productivity and the almost nil export capacity observed by most Mexican firms over the course of the 20th century, were up to certain extent a consequence of the erroneous incentives of their corporate governance.

A model for the MBG is developed in this section, which is sketched with the aim of understanding the mechanisms used by large investors to control resources. As a first step to analyzing the productivity implications of the postrevolutionary MBGs, the main features of these Groups and the role played by the actors involved are as follows:

(a) Controlling stockholders. Large capital investors of the firm, usually members of a family (or clan), individuals close to the family or member of other firms or banks with whom there are important trade or financial links.
(b) Productive branch. It refers to the productive structure where the different non-financial activities of the Business Group are intertwined. This branch is formed by a series of firms or divisions integrated along the productive chain and by businesses with horizontal links. The reason for the latter is to take advantage of economies of scale and scope, to earn monopoly profits or to diversify by producing in non-related activities.
(c) Financial branch. It encompasses different kinds of financial institutions: banks, brokerage houses, mutual funds companies, insurance companies, and others which mobilize resources toward the internal capital market of the Group. These institutions are generally integrated in a holding or financial group, where the majority stockholders of the MBG control decision-making.
(d) Fragmented stockholders. Group of investors buying stock on the open market, and whose share in the total capitalization of the firm is very low. Moreover for these investors it is impossible to have a controlling share since the dominant stockholder own usually more than 50% of the voting rights. The purchase of the stock is realized directly or through the acquisition of stocks in mutual funds managed usually by the same Business Group, which in turn invests in stocks of firms linked to the conglomerate.
(e) Depositors. Small, middle, and large investors dealing with money market accounts issued by banks and/or investing in IOUs or other traditionally liquid instruments. These investors do not have an active role in the portfolio decisions of the bank because the existence of an insurance in the deposit accounts, backed implicitly by fiscal resources.
(f) Board of directors. These boards, where strategic planning is made, are mainly composed by large stockholders of the firm, large stockholder of other firms with whom there are important trade links, and by some executive managers.
(h) Executive management. It is formed by the main managers of the company, usually members of the same family and shareholders participating in the Board of Directors. Generally, they are also professional managers but their position in the hierarchy is more due to family connections and stockholding rather than managerial abilities.
(i) Labor. Personnel working in the firms of the consortium: specialized and non-specialized workers, administrative employees, technicians and middle-level management. Workers are usually affiliated with industrial unions, which in turn form part of a labor confederation. These organizations have strong political inclinations and

their bargaining positions obey to class interests, hence they are rarely involved with the firm's logistic and strategic concerns.
(j) Political government. This term is used to refer to different concepts: state-run-firms, political elites, and local, state and federal agencies whose activities have an impact on the firm through taxes, inputs provided by state-run-firms, or by the granting of government projects to the firms.
(k) Clients. Consumers or independent corporate clients that lack monopsony power, to whom the MBGs sell a large part of their products in the domestic market.
(l) External suppliers. Firms lacking monopoly power that sell part of their production to MBGs, without being linked by cross-shareholding and without keeping long-term relationships.

Figure III depicts a stylized diagram of the Mexican corporate governance that illustrates how the different actors participate. The board of directors (or corporate offices) and the executive management are included in only one entity called council of directors, since there is an extensive overlapping, the hierarchy is very steep and there are many linkages between the two entities. The large stockholders constitute an important block within the board of directors “Consejo de administración”, however the former group is kept in the diagram as an independent entity to emphasize that only the large stockholders in the MBG, and not the fragmented shareholders, have representation on the board. Control by the family, or majority group, on the executive managers is in practice very extended, yet managers are highly professional and modern administrative techniques are used in general. The problem in the corporate structure of the USA that worries analysts the most is the separation between control and ownership. However, this agency problem is not a very relevant feature in the Mexican context, instead it has a different connotation since small shareholders have very few control rights.

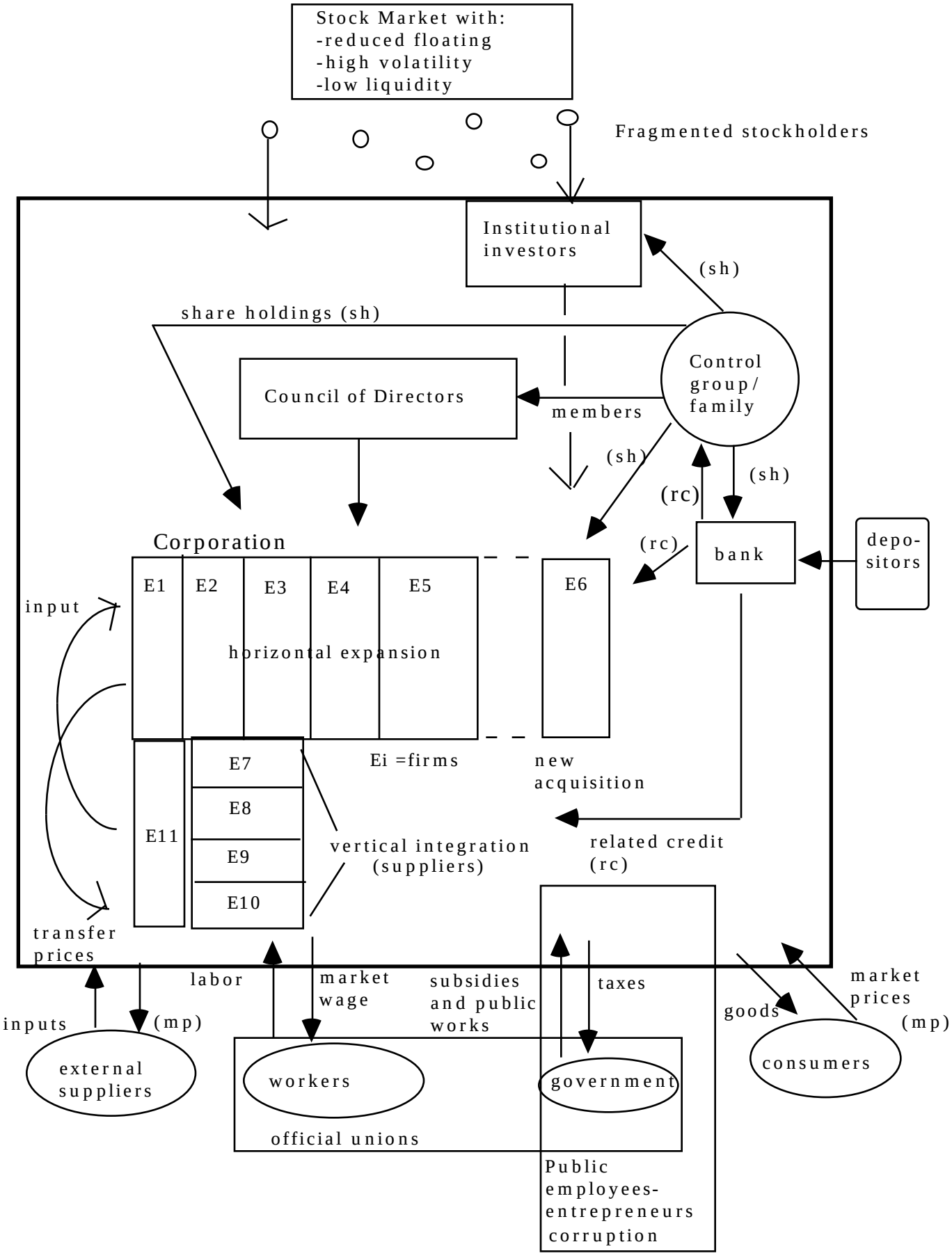
The thick square in the diagram highlights that MBGs are a corporate structure protected from external competition and whose internal cohesion is kept in line with family relationships, stock cross-holdings and exchanges of positions on the different boards. The fact that firms (or divisions) are not drawn with isolated circles -as would be the case in a Japanese keiretsu- means that there is a multidivisional hierarchy instead of a network of independent and decentralized firms. Those actors outside the square are unprotected by the legal system and the incentive schemes of the MBG do not work in their favor. The rectangle framing together government and workers points out the official status of unions and the prevailing clientele

relationship, while the rectangle joining the MBG and the political government emphasizes the protection and privileges received by these firms.

The diagram also shows that fragmented shareholders have the option to participate in the conglomerate by acquiring shares directly or through mutual funds. A common practice is that the MBG's mutual funds promote the acquisition of stocks of affiliated firms. The arrow that joins the large stockholders with the mutual funds, the banks, and the firms in the productive branch signal that the controlling group dominates the different entities of the network. The productive branch includes different firms integrated vertically and horizontally; the latter are represented with a succession of vertical rectangles. For exposition motives, to be clear later on, one firm producing non-related goods is drawn separately. On the other hand, workers generally receive a predetermined salary and do not perform any monitoring role in the firm. Hence, they are considered distant actors of the consortium, with whom belligerent relationships are held through the unions. Since there is not a compensation scheme that pays for the risk caused by the accumulation of human capital, workers are not moved to invest in specific abilities needed by the consortium -as opposed to the German and Japanese case- with the consequent negative effects on the creation of wealth.

Figure III

Corporate Governance of MBGs


Stock Market with:
-reduced floating
-high volatility
-low liquidity
Fragmented stockholders
Institutional investors
(sh)
share holdings (sh)
Control group/ family
Council of Directors
members
(sh)
(sh)
(rc)
Corporation
(rc)
bank
depo-sitors
E1
E2
E3
E4
E5
E6
input
horizontal expansion
E7
E8
E9
E10
E11
Ei =firms
new acquisition
vertical integration (suppliers)
related credit (rc)
transfer prices
labor
market wage
subsidies and public works
taxes
market prices
goods
(mp)
inputs
(mp)
external suppliers
workers
government
consumers
official unions
Public employees-entrepreneurs corruption

5.2.- Unequal distribution of control rights.

The overlapping between the majority group of stockholders, the board of directors, and executive managers diminishes certain agency problems, yet the lack of representation of fragmented shareholders and workers on the board, or any other monitoring council (in or outside the firm), is very disadvantageous for these actors. The unequal division of control rights, and the consequent conflict between large stockholders and other stakeholders, has considerable negative effects on the generation of value. As an example, assume that the control group decides that an affiliated supplier (E_{11}) charges a high transfer price. This mechanism allows majority owners to redistribute part of the rents generated in the consortium without having to share them with fragmented shareholders. This operation is very appealing to the control group when they own the supplier, whose profits are increased as a consequence of an artificial reduction in the profits of the nuclear firm, where external investors are also participating. Another form of producing this sort of transfer is by promoting horizontal expansions in non-related businesses. Instead of distributing profits, the control group can opt for using part of the generated rents for the acquisition of a new firm (E_6). The main objective of this acquisition is to dilute the share of the small stockholders, thus, the acquisition price would be much higher than the value of the asset. Obviously, the seller would be the same control group -or a third party with whom a convenient agreement has been reached-.[23]

The fact that fragmented stockholders do not have a representation in the control entities simplifies the process of rent extraction and, hence, worsens their welfare. Without an exhausting monitoring, these types of internal transactions are extremely difficult to identify and overcome. The reduction in profits for fragmented shareholders could produce certain disenchantment. But even if rational stockholders are assumed, rent extraction on part of the controlling group does not necessarily lead to a drastic sale of stock. The return obtained by these investors, regardless of the rent extraction, could be higher than their opportunity cost, which is

[23] Another alternative could be to buy the new firm at a fair price but with a credit of an affiliated bank, which complements the diverted resources generated in the operation of the MBG. If this credit is assigned to the corporation at high interest rates, then the majority block would be extracting rents once the debt is serviced.

relatively reduced, if the financial market does not provide attractive alternatives.

On the other hand, with these policies, the control group limits the desire of small shareholders to invest more capital. The risk of a larger investment is only justified when the firm's benefits are fairly distributed. Therefore, the control group, when doing strategic planning, has to weigh the advantage of a larger rent extraction with the disadvantage of losing external resources for growth. Moreover, high external financing implies a loss of control, given the pressure exerted by small shareholders attempting to achieve representation.[24] Likewise, in their inter-temporal analysis, the control group compares the current benefits provided by the extraction with the future costs of having less productive firms (as expected in a system that does not induce the commitment of other stakeholders).[25] In an environment of scarce competition and undefined property rights, where business' profits depend more on 'connections' than on productivity, the future loss caused by the policy of extraction is presumably marginal.

Control exerted by a compact block of individuals investing relatively small amounts of capital in large firms is possible, up to a certain extent, by the practice of issuing stocks without voting rights -as seen above-, but mainly by the use of a pyramidal scheme of firms' ownership. This expansion formula allows a family or a closed block of investors to control a business of large dimensions without the need to own the majority of the stocks. By means of a holding company, where the family has a controlling interest, the MBG keeps stocks in other firms -or other holding companies-, which in turn own more firms. The pyramidal scheme does not involve additional transaction costs if the flow of dividends is not taxed, or if the transfer prices are used to redistribute rents along the production chain. This structure allows the family to diversify, by investing in non-related businesses, without losing the administrative control and investing extraordinarily large amounts of money.

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[24] Obviously, the fact that most of the MBGs have floated few stocks on the market indicates that they opted for the path of control and rent extraction

[25] Mechanisms of rent extraction do not only harm small shareholders, but workers and other stakeholders are also affected.

6.- Conclusions

Despite the fact that business groups are the most common form of industrial organization in developing countries, such as in Mexico, there are very few studies attempting to explain their origin, their operations, and their capabilities to generate value. One of the main concerns of the paper consists of analyzing if the MBGs, which are clearly ideal for their majority stockholders, are capable of generating social wealth in an environment of scarce social capital (and inefficient legal and judiciary systems). By referring to theories of the firm and corporate finance, it is suggested that the efficiency to generate social wealth depends on the compensation of the residual risks borne by the actors involved with the firm, compensation that is reached when the different stakeholders hold control rights. According to the stylized fact of the post-revolutionary MBGs, it is asserted that this corporate form does not guarantee equilibrium among different stakeholders. Consequently, the possibility of rent extraction, on the part of the controlling group, produces perverse incentives in the firm, since workers, outside suppliers, and fragmented investors, are not willing to establish long-term relationships and to make specific investments, with the corresponding adverse effects on productivity.

Although stronger competition in international markets will undoubtedly contribute to the reduction of rent extraction by large stockholders, the use of non-independent business networks and the persistence of conflictive relationships between workers and manager/owners inhibit the capabilities of MBGs to encourage the best effort among the different actors. Likewise, it is affirmed that the bank-industry links are damaging for an economy when resources are allocated according to stockholdings, instead of being channeled according to productivity. Nonetheless, in the view of the MBGs, and their controlling family, the corporate structure is helpful to solve problems caused by the presence of asymmetric information and immature institutions.

Appendix I: Integration and Diversification

First row:

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(NL-LD) : AW Troy Grupo Industrial (82.86%); Berol (1.37%); Cablesa (21.22%); Calidata (0%); Controladora de Farmacias (0%); Coppel (0%); Corporación Azucarera de Tala (0%); Dixon Ticonderoga de México (16.93%); Editorial Diana (14.66%); Fabricación y

Mantenimiento Industrial (0.07%); Fondo Opción (0%); Grupo Nacional Provincial (0%); Grupo Profesional Planeación y Proyectos (3.64%); Grupo Prove-Quim (1.73%); Industrias Bago (0%); Maquinaria Diesel (4.65%); Patrones para Información (0%); Real Turismo (0%); Reaseguros Alianza (0%); Seguros Comercial América (0%); Válvulas Urrea (3.52%); Zaragoza de Guadalajara (0%).

(NL-RD) : AC Mexicana (22.93%); Formex-Ybarra (0.55%); Grupo Corvi (2.6%); Lapicera Mexicana (11.03%)

(NL-ND): Grupo Tribasa (35.83%); Industrias Oxy (4.96%)

(NL-CD) : Procorp (0%); Unión de Capitales (0%)

Second Row:

(SL-LD) : Agro Industrial Exportadora (94.97%); Consorcio Aristos (0%); Corporativo Fragua (100%); El Puerto de Liverpool (0%); Far-Ben (0%); Ferrioni (3.71%); Fotoluz Corporación (0%); Fraccionadora Industrial del Norte (0%); Grupo Casa Autrey (0.23%); Grupo Herdez (4.65%); Grupo Radio Centro (0.14%); Jugos del Valle (6.61%); Medica Sur (0%); Novel del Centro (100%); Organización Soriana (0%); Sears Roebuck de México (0%); Sociedad Electromecánica (0.31%); Tubacero (17.96%).

(SL-RD) : Cifra (0%); Controladora Comercial Mexicana (0%); Ekco (2.39%); Fernández Editores (2.83%); Gigante (0%); Grupo Comercial Chedraui (0%); Grupo Iconsa (22.10%); Industrias Nacesa (0%)

(SL-ND) : Accel (95.04%); Conductores Latincasa (60.19%); Grupo Martí (0%).

(SL-CD) : Bufete Industrial (13.68%); Grupo Elektra (4.26%)

Third Row:

(IL-LD) : Aceros Nacionales (0.83%); Constructora e Inmobiliaria Perinorte (0%); Corporación Geo (0.%); Eaton Manufacturera (49.91%); Embotelladores del Valle de Anáhuac (0%); Fábricas de Calzado Canadá (0.67%); Grupo Embotellador de México (0%); Grupo Embotelladoras Unidas (0%); Grupo Nutrisa (0%); Grupo Palacio de Hierro (0%); Grupo Video (0%) Grupo Videovisa (10.6%); Hilasal Mexicana (30.44%); Industrias CH (38.43%); Internacional de Cerámica (56.97%); Protexa Construcciones (0%); Química Pennwalt (6%); Química y Farmacia (3.83%); Regio Empresas (2.08%).

(IL-RD) : Grupo Costamex (79.75%); Grupo Industrial Camesa (62.42%); Singer Mexicana (5.19%); Tubos de Acero de México (61.75%).

(IL-ND) : Corporación San Luis (78.76%); Grupo Imsa (26.45%); Grupo Industrial Saltillo (46.86%); Grupo Mexicano de Desarrollo (0%).

(IL-CD): Grupo Syr (0%)

Fourth row:

(ML-LD) : Aerovías de México (38.81%); Cemex (68.06%); Cía. Industrial de Parras (21.55%); Cía. Minera Autlán (37.07%); Consorcio G Grupo Dina (85.88%); Gruma (45.94%); Grupo El Asturiano (16.07%); Grupo Industrial Bimbo (16.22%); Grupo Iusacell (1.01%); Grupo México (52.38%); Grupo Modelo (20.90%); Grupo Posadas (13.75%); Industrias

Martín (12.89%); QB Industrias (11.87%); Tablex (7.11%); Texel (44.28%); Transportación Marítima Mexicana (43.34%)

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(ML-RD) : Apasco (7.52%); Grupo Continental (0.33%); Grupo Forestal Industrial (72.10%); Grupo Industrial Durango (7.16%); Grupo Lamosa Revestimientos (25.24%); Grupo Macma (2.47%); Grupo Simec (23.19%); Industrias Nacobre (21.37%); Kimberly Clark de México (7.01%); Teléfonos de México (13.17%)

_____

(ML-ND) : Campus (0%); Empresa ICA Soc. Controladora (21.46%); Empresas La Moderna (47.06%); Grupo Celanese (40.74%); Grupo Situr (0%); Grupo Televisa (22.93%); Industrias Peñoles (58.61%); Sistema Argos (11.62%)

_____

(ML-CD) : Alfa (26.85%); Cydsa (32.26%); Desc (34.27%); Grupo Carso (18.19%); Grupo Cementos de Chihuahua (50.46%); Grupo Sidek (11.71%); Valores Industriales (20.59%); Vitro (25.60%).

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13.- References.

Babatz, Guillermo (1997); "Agency Problems, Ownership Structure, and Voting Structure under Lax Corporate Governance Rules: The Case of Mexico"; Ph.D. thesis; Harvard University.

Castañeda, Gonzalo (1998); "La Empresa Mexicana y su Gobierno Corporativo. Antecedentes y Desafíos para el Siglo XIX"; Universidad de las Américas-Puebla y Alter Ego Editores; Cholula, Puebla, Mexico.

Flores, Juan Carlos and G. Jiménez (1998); "Los Grupos Económicos Mexicanos y su Vínculos Bancarios"; Undergraduate thesis; Universidad de las Américas-Puebla; México.

Fukuyama, Francis (1995); "Trust. the Social Virtues and the Creation of Prosperity"; The Free Press; United States.

Kali, Raja (1999); "Endogenous Business Networks"; Journal of Law, Economics and Organizations; forthcoming

Khanna, Tarun and K. Palepu (1997); "Corporate Strategies for Business Groups in Emerging Markets"; Harvard Business Review; July-August.

La Porta, Rafael, F. López-de-Silanes, A. Shleifer and R. Vishny (1997); "Trust in Large Organizations"; AER Paper and Proceedings, 87 (2); 333-338.

La Porta, Rafael, F. López-de-Silanes, and A. Shleifer(1998a); "Corporate Ownership around the World"; NBER, working paper 6625

La Porta, Rafael, F. López-de-Silanes, A. Shleifer and R. Vishny (1998b); "Law and Finance"; Journal of Political Economy; December.

Leff, Nathaniel (1978); “Industrial Organization and Entrepreneurship in the Developing Countries; the Economic Groups”; Economic Development and Cultural Change, 26, 661-675