

The Changing Environment of International Financial Markets

Issues and Analysis

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15 Risk Management and Corporate Governance in Imperfect Capital Markets

Klaus P. Fischer, Edgar Ortiz and
A. P. Palasvirta

15.1 INTRODUCTION

Successful business in the developing countries has often evolved into complex industrial 'groups' - a sort of conglomerates. Although their accomplishments are often impressive, these firms have rarely become fully publicly owned corporations. Little or no common stock is sold, and ownership and control remains tightly held in a circle of family members and friends. We contend that such behavior is a rational response to risk bearing by investors in the absence of arms length financial markets. It is an efficient market solution to uncertainty and political risk when efficient markets do not exist.

We built this alternative theory about 'groups' and risk management in Less Developed Countries (LDCs) on modern financial thought, mainly efficient markets theory, portfolio theory and agency theory. We assume the LDC native entrepreneur to be a wealth maximizing and risk-minimizing individual. The differences in outcome, in relation to entrepreneurs from industrialized Countries (ICs), result from differences in the market environment. We present a thorough analysis of the alternatives that owner-managers (O-M) in the developing countries use to diversify portfolio holdings and improve the risk-return relationship in the absence of arm's length financial markets. Within this framework the persistence of this form of corporate governance, i.e. the developing country family owned industrial group, is a logical result of the subsistence of imperfect capital markets. We also argue that certain forms of risk, namely political risk - government economic intervention - plays a particularly strong role in the decision making process of private investors of LDCs.

This conceptual framework on industrial groups in LDCs leads us to identify four important alternatives that entrepreneurs from LDCs have to diversify risk and to make three important propositions concerning corporate control and risk management under imperfect financial markets.¹ Freer market conditions are now being promoted around the world, in this respect, our model underlines the importance and nature of the changes that must be promoted in the developing countries to assert their modernization processes and further their economic growth.

15.2 THE ORGANIZATION AND MANIFESTATION OF THE GROUP

Successful family enterprises grow into many products and markets. In Latin America these conglomerates are known as *grupo industrial*, or simply **grupo*, which is common usage among researchers in the field. Operationally, we define a group as a 'relatively strong group of firms linked by capital and a global strategy designed by the decision making power of common majority equity owners and managers'. Further, we identify its existence with LDCs. In these countries most of the private sector manufacturing, trading and retailing activities, specially where large capital investments are required, is under the control of groups, where their owners also participate as managers, with a small proportion of stock traded in local markets. From the organizational point of view, Groups are conglomerates of companies in a variety of product markets. A Group may have a monopoly position in one product market, but competes with other Groups or foreign-firms in some of the other markets. Although examples of vertical integration exist, Groups typically diversify horizontally into weakly related industries by creating frequently several independent enterprises in each sector. One common and very important industry in which Groups diversify horizontally is the financial services industry: finance companies, private development banks and commercial banks. These types of institutions contribute to the diversification of the Group's portfolio of activities. But more importantly, they provide a mechanism by which to channel social savings to finance the Group's activities. For example, commercial banks under Group control attract funds (deposits and savings) from individual investors, at regulated rates, which are then used to lever up Group firms at very favorable terms. Moreover, their credit needs receive priority treatment in relation to other firms, irrespective of higher expected returns in the investments from other clients. Group development banks can also divert for Group use State originated or guaranteed foreign funds. Finally, industrial groups also get preferred loans from public development banks, which mobilize domestic savings and foreign loans. As a result of these institutional arrangements, both the debt holder and the debtor are controlled by the same interest, the Group, and the effective cost of borrowing, even if the borrowing firms are charged market rates, is very low. In sum, group-owned financial intermediaries and private or public development banks, provide the bulk of the non-equity financing that supplements the Groups' internal savings,

15.3 RISK AND FINANCIAL MARKETS: TWO ALTERNATIVE PARADIGMS

15.3.1 The competitive markets paradigm

According to the efficient markets paradigm, an arm's length financial market is one in which participants create financial claims against real assets. They issue these claims in efficient primary markets and trade them in efficient secondary markets. By creating specialized financial commodities, financial markets bundle risk. These financial commodities are then sold separately, as different types of claims against the firm's assets, e.g., debt and equity. All the participants in the market are fully informed about the risk-return characteristics of the claims and markets are competitive, i.e. there are no price-setting participants. This is the paradigm or 'base case' of modern financial theory. Financial markets from the United States are fairly representative of this situation.²

In an economy characterized by efficient financial markets, firms grow in size and market concentration is a natural product of being able to take advantage of economies of scale or scope that, due to increased demand, arise from the production, marketing, or distribution of their goods. As a corollary to this, growth of the firm ultimately contributes to the separation of ownership and control. The entrepreneur in the US economy generally holds ownership and control of the new start-up firm in his own hands.³ For the mature corporate entity, ownership and control held in the same hands is the exception not the rule.

In an evolutionary context a firm begins as an entrepreneurial experiment. If the idea is good, competent management relying on the findings of solid R&D and careful cash and capital budgeting results naturally in growth of the firm. However, growth leads to two types of problems which ultimately lead to the separation of ownership and control. First, the need for funds to finance the growth opportunities of the firm may outpace the entrepreneurs' ability to self-finance. That is, to materialize the growth potential of the firm, the owner manager must relinquish control. In fact, the greater the potential for growth, the greater the potential for loss of control.⁴

Second, even if the entrepreneur is able to supply enough internal financing to maintain growth, he may no longer wish to do so. Absolute risk aversion on the part of the entrepreneur will lead him to not increase the absolute size of the bet (the stake in the firm) as wealth increases with the size of the firm. He has more to lose than in the good old days. Relative risk aversion on the part of the entrepreneur will persuade him to attempt to lower the size of the bet as a proportion of his total wealth. That is, there will be a natural economic motivation on the entrepreneur to diversify risk relative to the holdings in his asset portfolio. Thus, separation of ownership and control arises when the capital needs of the firm outpace either the ability or the desire of the entrepreneur to secure sufficient capital on his account to fund all the positive net present value projects available, or both.

Separation of ownership and control requires an environment of efficient financial markets. In such efficient markets, most firms find it easy to communicate information and, consequently, financial claims are then priced correctly relative to their risk characteristics. Provided that a 'critical mass' of well informed investors ('smart money') operate in the market, prices reflect reasonably accurately the true value of financial assets as a function of the expected value and risk characteristics of the underlying cash flows. These prices, in turn, become a signaling instrument to uninformed investors who are also active in the market ('noise traders'). For the mature firm that has a large set of information already in the market place, it is easy to attract additional capital at prices that are well known. For entrepreneurial firms with a relatively small set of information about their opportunities already available in the market place, it is more difficult to attract capital. The owner-manager must offer a higher expected return to compensate the venture capitalist for the risk involved in investment, e.g., penny stocks, and surrender some control over the firm.

In a well-developed, arm's length financial market, the entrepreneur seeking to give up control and diversify his portfolio, finds it relatively easy to accomplish this. A well developed market for corporate control and risk bearing financial commodities, where information asymmetries are minimal and pricing is efficient, allows the entrepreneur to sell some part of his stake in the firm at a fair market price. Simultaneously, he can acquire a preferred portfolio of risk-bearing securities, also efficiently priced and protected by a network of minority-investors protection laws. Risk bundling is done automatically in the market place, intermediaries such as insurance firms, securities markets, commercial banks, and investment banks are the primary creators of instruments which bundle subsets of the total variation of the cash flows generated by the real assets of the firm. The price at which these instruments are eventually traded in the market is a function of the investors' evaluation-of the risk return trade-off inherent in the subset of cash flows upon which each instrument holder has a claim. That is, the value of the firm is ultimately established in the market. As Thomadakis (1992) correctly pointed out,

It is clear that this theory of optimal firm behavior is grounded much more on what goes on outside the firm than what goes on inside it. It is the capital market environment which determines the process of valuation, and which gives rise to the benchmark of optimal investment choice and competitive performance.

Conditions in financial markets of industrialized countries provide for opportunities for risk dispersion by giving up control in favor of diversification into many firms. The common stock of open corporations allows residual risk to be spread across many residual claimants. Each claimant, in turn, chooses the extent to which he is willing to bear risk by diversifying through equity positions in the open capital markets. Portfolio theory asserts that by

spreading the risk across corporations the cost of bearing risk can be reduced down to the cost of bearing the risk inherent in the economy as a whole. Given markets with reasonable information symmetry, investors expect to earn a return adjusted to compensate for exposure to the (systematic) risk inherent in the securities held, since all information about the value of the risky assets is already embodied in the market price of the security.

15.3.2 The alternative paradigm: Proposition 1

Corporate growth under imperfect financial markets

The contrast between the 'base' case example, described above, and the environment facing the investor in a developing country is sharp. In these economies arm's length primary or secondary markets in financial claims are either absent or underdeveloped. There are many reasons for this, but certainly there are two fundamental reasons: first, the institutional mechanisms to produce information about the stochastic characteristics of individual firms' cash flows are poorly developed; second, there is an absence of a large pool of risk-taking investors who seek reducing their risk exposure through a well diversified portfolio of securities. Instead, equity is held by a small group of large investors who may even have the power to influence price formation. The first fact contributes to large information asymmetries in the market place. The second contributes to a relatively thin and perhaps manipulated market for financial claims. Therefore, market prices routinely do not reflect the true value of the asset to the entrepreneur and risk diversification alternatives are scant. This leads us to our first proposition.

PROPOSITION 1. In the absence of arm's-length real and financial markets and the existence of limited growth opportunities, entrepreneurs have no incentive to relinquish control and diversify risk through financial markets.

Discussion. In the absence of well developed arm's length financial markets, diversification possibilities through the acquisition of a financial portfolio are limited or altogether non-existent. If they do exist, the minority position is often unprotected and information asymmetries are substantial. The relatively common availability of monopoly profits, strong information asymmetries and the absence of a large pool of risk-taking investors are factors that discourage the entrepreneur from unloading his stakes in the firm and diversify through financial markets. Also, in a developing economy limited growth possibilities associated with relatively small markets, limits the growth potential of any one firm and therefore limits the demand for funds to finance investment projects in that firm, as well as the supply of funds financial intermediaries are willing to pass on to those firms.

To put our arguments into context, we must explain the role that *political risk* plays in any economy. Political risk exists in any economy. The degree to which it affects the variability of the cash flows of a portfolio of assets in any one economy is obviously different. We submit that the primary risk encountered by the domestic investor in an LDC is political risk, namely excessive State intervention, and discontinuities and sharp changes in economic policy making; political risk also involves excessive regulation and bureaucratism. All these facts reflect in high, undiversifiable, systematic risk.

This is our paradigm, our alternative to the 'base case'¹ conventionally used to derive most optimal decision rules in modern finance. Not surprisingly, we should also expect that the optimal decision rules derived under this alternative paradigm are also different, including strategies for risk management.

The nature of the market

Decisions by entrepreneurs in developing countries are 'bounded' by market imperfections. Dominant among those that influence entrepreneur behavior are:

(1) *In the goods markets*

(a) Monopoly profits exist and are not transient in nature. Either an actual monopoly position exists, because markets for goods are small, government protects domestic industries and domestic business in general, or monopoly profits are maintained through either explicit or implicit collusion by the producers.

(b) The firm depending on only domestic demand for goods, is not likely to experience sufficient demand to exploit any scale or scope economies. This thinness of markets changes the growth dynamics for the firm. Since growth opportunities are low, so is the demand for funds to finance it. This situation changes when the firm faces export opportunities which require rapid and large capacity expansions.⁵

(2) *In the labour markets*

(a) Strong union organizations, often supported by the state. A strong clientelist relationship between unions and the State has led to the establishment of very protective and inflexible labour laws. In turn this leads to unstable labour activity, overvalued labour costs, redundant employment, superfluous labour rights, excess privileges to labour leaders, detrimental allocation of resources, and low labour productivity.⁶

(b) inadequate labour training and recurrent insufficiency of skilled labour for the existing technology and its changes. This induces corporations to hold on innovation.

(3) In the financial markets

- (a) Large information asymmetries,⁷ total absence of, or thin markets for equity and debt instruments, makes the entrepreneur's rational choice to diversify difficult to implement. The true value of the entrepreneur's assets cannot be reliably priced in the market.
- (b) In the absence of a large pool of risk-taking investors, potentially available equity capital is concentrated in the few hands of the major entrepreneurs in the economy. This has two implications: first, these major equity investors become 'price makers' with ability to manipulate securities prices; and second, these investors most probably are 'rival' entrepreneurs, thus giving up control of the firms means giving it up to a competitor.

The above are powerful disincentives contributing to the discouragement of corporate growth and promote the continuation of a structure where ownership and control remain in the same hands. Optimally, the firm should not grow much beyond medium size in the LDC. The entrepreneur of a large firm would be exposed to much more risk because it would limit his diversification possibilities. Alternatively, the entrepreneur would face loss of control due to dilution of his equity share. Moreover, in the developing countries, the minority position is often unprotected.

The nature and role of political risk: Proposition 2

Our model could be conceived in the presence of zero or negligible political risk. However, political risk has been a pervasive form of uncertainty in most modern economies without well-developed arms-length markets. Policy makers have relied on market controls, promotional instruments, trade restrictions and outright production to spur industrial development. Many of the market distortions facing entrepreneurs have been the result of government controls. Although modernization policies have been recently undertaken by most LDC, many distortions still persist and need to be eliminated. This leads us to make a second proposition:

PROPOSITION 2. Under the conditions found in most LDCs economies, the political risk premium charged by domestic investors on domestic projects is relatively high and commensurate to the level of intervention of the state in the economy, even if this intervention is intended to "'protect' the domestic industry.

Discussion. State intervention occurs in both real and financial markets, In the real markets some of the most frequent forms of intervention are: capacity and investment licensing; investment incentives; public procurement; import controls; barriers to exit; and rules of origin and national content. Concrete manifestations of incoherent and excessive state intervention in the financial markets in LDCs are: financial repression,[®] institutional

rigidities, outdated laws, excessive and inefficient, often corrupt, government financial intermediation, and lagged and unstable policy making. These constraints take the form of regulated interest rates; regulated, often multiple, exchange rates; institution of 'priority sectors' for bank lending; excessive control of assets and liabilities of banking institutions; creation of excessive financial, many marginal, intermediation institutions; promotion of financial intermediation concentration and monopoly institutions; and creation of excessive development banking institutions, as a political response to particular pressure groups.⁹ The high level of control of financial markets is frequently accompanied by a network of laws and regulations that guarantee the viability of financial institutions, in addition to deposit insurance, tight barriers to exit for financial institutions shift the business risk assumed by these institutions to the state, and ultimately to the tax-payers.

State intervention in real and financial markets a source of rent-generating opportunities for business entrepreneurs and are barriers to competition from either foreign producers or domestic new entrants. More importantly, projects undertaken by the entrepreneur may be viable only under the protected market conditions created by the state. In the extreme case entrepreneurs undertake projects at the prodding of the authorities who explicitly commit to guarantee their profitability through manipulation of both the markets and inputs and outputs. Even ignoring these special cases, under competitive conditions many of these projects would have been rejected by the entrepreneur or would not have financing. Thus, the value of these projects to the Group is highly sensitive to small variations on economic policy. Slight changes in the market control mechanisms or the financing conditions facing entrepreneurs can be catastrophic for the profitability of the project. For the same reason that these opportunities exist in the first place as a function of current state intervention, their continued existence is dependent in the retention of the political status-quo. However, management of status-quo under the social and political conditions found in many LDCs is quite difficult. In order to obtain legitimacy and consensus the state responds to many pressure groups and is frequently unable to sustain consistent economic policies.

The idea that a high level of protection to industries *implies a high level of political risk to the beneficiaries of the control, a priori*, might not be obvious. However, upon reflection it makes sense that the level of political risk exposure is a positive function of the involvement of the government in the economy. Unlike economic processes such as savings and investments, which are largely dependent in fundamental factors which change only slowly over the long run, political processes can be swift and dramatic. Also, the higher the level of confrontation in society the higher is the chance that changes in the political leadership of the country may result in turns in economic policy.

When the level of intervention of the government in the economy is low, the ability of the state for affecting the economic environment in which business operate is limited. In contrast, when this level of intervention is high, small changes in economic policy can deeply affect market conditions and future cash flows to a firm, a group of firms, or the whole business sector of a country. Similarly, when cash flows are highly dependent upon politically generated market segmentation such as import restriction, capacity licensing, national sourcing and state purchases, etc. cash flows are extremely sensitive to a small fluctuation in economic policy. *Ceteris paribus* political risk is also a negative function of the size of the markets. Smaller markets are typically more susceptible to government action than large markets or economies.

Summarizing, the risk involved in the allocation and/or reallocation of rents resulting from the structure of government regulations and controls will have three important characteristics;

- (1) the magnitude of political risk is positively related to the level of intervention of the state in the economy;
- (2) in *the* absence of appropriate models to assess the exact nature of political risk, it is difficult to price; this added uncertainty will result in higher market premiums;
- (3) political events which introduce discontinuities in the system tend to affect the economy as a whole; thus hedging opportunities through domestic portfolio diversification - through real or financial assets — are limited;

The third characteristic of political risk leads to the conclusion that the level, of systematic risk - non-diversifiable by the means available to an investor in the economy - is high. Another important connotation is that the nature of this risk will necessarily influence the mechanisms of assessing projects. More specifically, it will reflect in the premium charged by entrepreneurs on the required rate of return of the investment opportunities. Furthermore, *the political risk premium charged by a domestic investor for any domestic project can be expected to be higher than that charged by foreign investors*. The reason is that for any particular country and any foreign investor (to that country), the political exposure to which the foreign investors is exposed as a result of investing in the project, is diversified by project/investments in other economies. Further, foreign investors are better informed, on a global basis, than local investors.³⁰

15.4 A THEORY OF RATIONAL INVESTMENT IN THE ABSENCE OF ARM'S LENGTH FINANCIAL MARKETS: PROPOSITION 3

Assuming our alternative paradigm - including the nature of political risk - it is possible to determine the reasons for groups as a particular form of governance in LDCs, as well as to discern the strategies available to the investor/entrepreneur to rationally hedge his portfolio of assets. Under the market conditions and diversification possibilities described above, what are the options available for risk bundling to the LDC entrepreneur, from the point of view of strict economic rationality? This leads us to our third, and we believe, more interesting proposition.

PROPOSITION 3. The rational investor, operating in an environment of absence of arm's length financial markets utilizes four interrelated mechanisms to modify the risk return attributes of his opportunity set, namely:

- (a) export capital (international diversification)
- (b) diversify in the real sector through atomized projects, leading to the formation of 'industrial Groups'.
- (c) leverage up through group-based financial intermediaries
- (d) generate rent through monopoly profits.

Discussion. To discuss this proposition we will present and justify the validity of each of our four mechanisms suggested for risk management in the absence of perfect capital markets, *I&A.t* Capital exports

The first form of risk management available to LDC entrepreneurs is capital exports, more specifically:

PROPOSITION 3.1. investors in developing countries export capital to achieve: (i) international portfolio diversification in the conventional sense, and (ii) diversification of the high level of (domestically) non-diversifiable political risk to which they are exposed in the domestic market. *Ceteris paribus*, the proportion of assets an LDC investor invests abroad can be expected to be higher than that of an IC investor.

Discussion. International diversification hardly needs any explanation given the ample literature explaining its benefits to investors. In the developed countries adjustments in portfolio holdings lead to relatively symmetrical capital movements among them, movements taking place according to international interest rates. However, in the context of the environment found in most LDCs the importance of international portfolio alternatives as an instrument of rational risk management is enhanced. Due to the (relative) low level of State intervention in well developed financial markets, investors from LDCs associate them with

low levels of political exposure. Thus, diversification into markets with lower political risks than the domestic one is one of the key reasons for export of capital by owner-managers based in LDC economies. It is an exercise in political risk diversification, a matter rarely considered in international portfolio research.

If the entrepreneur has the ability to export capital to economies with accessible and liquid financial markets, he will do so. If the LDC entrepreneur were able to duplicate risk/return

opportunities available in international markets, he would simply invest (at least higher proportions) in the more familiar environment with presumably lower exchange rate risk and easier access to funds. Thus, the more developed capital markets provide crucial diversification opportunities for the LDC entrepreneur. But more importantly, they also provide a risk/return continuum which serves as the base level against which all risk of investing in the domestic LDC economy are compared. Thus, the risk-return trade-off opportunities available in world financial markets, become the benchmark of evaluation of every domestic (and foreign) investment opportunities available to the entrepreneur.¹¹

15.4.2 Diversification in the res sector or the theory of the group

*Bundling risk in the real assets market*¹²

As pointed out earlier, in the presence of arm's-length financial markets and growth opportunities, owner-managers have an incentive to forego control of the firm. This is done either, to realize the firm's growth potential or to diversify the entrepreneur's portfolio of assets through financial markets to the point where the only risk borne by him is the undiversifiable risk of the economy as a whole. However, these opportunities are not available to the LDC entrepreneur. Thus, we state the following proposition:

PROPOSITION 3.2. The Model of corporate organization and control described as the *Grups⁵ is an efficient risk diversification

strategy in the absence of arm's length real and financial markets.

Discussion. Entrepreneurs facing the limited growth opportunities and the real and financial markets typical of LDCs, lack the incentives to give up control of the firm and diversify risk through financial markets. Limited growth opportunities reduce the need to seek external financing. Market conditions lead to discrepancies between the market price of assets and the true value of the same to the entrepreneur. Consequently, the entrepreneur in the LDC economy must bundle risk on his own account, so that risk diversification is internalized. In other words, the entrepreneur facing these markets cannot efficiently diversify by holding a portfolio of financial assets, but he must diversify by holding diversified real assets, or, as

previously explained, holding titles outside its own markets; he must also seek greater coverage for his local investments.

Investment specific risk is diversified by holding many firms in one's portfolio of assets. However, portfolios of real assets are not perfect substitutes of portfolios of financial assets. Foremost among the imperfections associated with real assets as portfolio constituents are: (i) higher political risk exposure; (ii) they are lumpy, (iii) relatively illiquid, and (iv) transaction costs associated with portfolio rebalancing are high. Real assets in the specific LDC environment are more difficult to shield against political risk than portfolios of financial assets. Lumpiness implies that they lack the divisibility characteristic of financial assets. Hence, adjustments in portfolio composition are coarse and fine-tuning along the risk/return frontier is nearly impossible. Although risk is reduced, the process is inefficient and residual systematic risk remains high, illiquidity implies that shallow or no secondary markets exist to dispose of unwanted assets, again, making portfolio adjustments onerous or altogether impossible. The transaction costs associated with disposing/acquiring real assets are usually much higher than those of financial assets. In addition, adjustments of lumpy assets implies major restructuring of portfolio weights and capital transfers which are costly.

Thomadakis (1992) provides convincing arguments explaining the specific mode in which this diversification by O-M into the product markets takes place. Limited liability creates for the entrepreneur a bundle of default options against debt and non-debt claimholders.¹³ As a result of these default options and a set of claims resulting from contracts of explicit or implicit nature, three main behavioral consequences can be drawn:

- (1) given an available set of investment opportunities, entrepreneurs will choose the riskier projects and investment policies;¹⁴
- (2) given any particular investment opportunity, entrepreneurs will choose the combination of factor inputs tending to maximize the value of the default options;
- (3) most importantly in terms of implications for the organizational strategy of the Group, given a set of projects among which to allocate the entrepreneur's own capital, he will have an incentive to constitute his projects as limited liability entities, i.e. as separate firms rather than as extensions (i.e. divisions) of an existing firm.

As firms grow larger implementing projects; risk and failure of one project is increasingly coinsured by other projects within the firm. Such coinsurance can affect the cash flows of the firm. Thus, to compartmentalize risk in the LDC economy, the entrepreneur creates as many firms as there are projects. Because of this he is not able to exploit economies of Scale or scope either through vertical or horizontal merger, but he does minimize the cost of coinsurance of these projects (Thomadakis, 1992). As long as the costs saved are greater than

the lost value of economies unexploited, this is an efficient market response to economic conditions within the LDC economy.

An extension of this argument is that, given finite sources, the O-M is able to hold more firms in his portfolio, if those firms are small to medium size. The rational investor in a LDC will keep his firm size within those bounds so as to keep down the cost of coinsurance between firms since individual firms will be able to maximize the return to the investor from limited liability. Thus, *ceteris paribus*, the value of limited liability in a risky environment is maximized by mimicking the value of the individual firm.

In markets with arm's-length financial transactions, when firms grow in size, or when market concentration develops, as a result of investment, mergers and acquisitions are a natural product of economies of scale or scope.¹⁵ As firms become large, we argue that in the presence of efficient financial markets, there are economic incentives for a rather smooth process of separation between ownership and control. *Conglomerates* are largely the result of agency conflicts between management and equity holders, in the presence of an efficient market for financial claims it is cheaper for the investor to diversify equity risk by holding a diversified portfolio of equity claims (shares) than by holding shares in a firm with a diversified portfolio of projects. Diversification at the firm level, while perhaps advantageous to the incumbent management, is more costly and less effective than diversification via financial markets. A financial portfolio is much more liquid with lower transactions costs for portfolio management and rebalancing.¹⁶

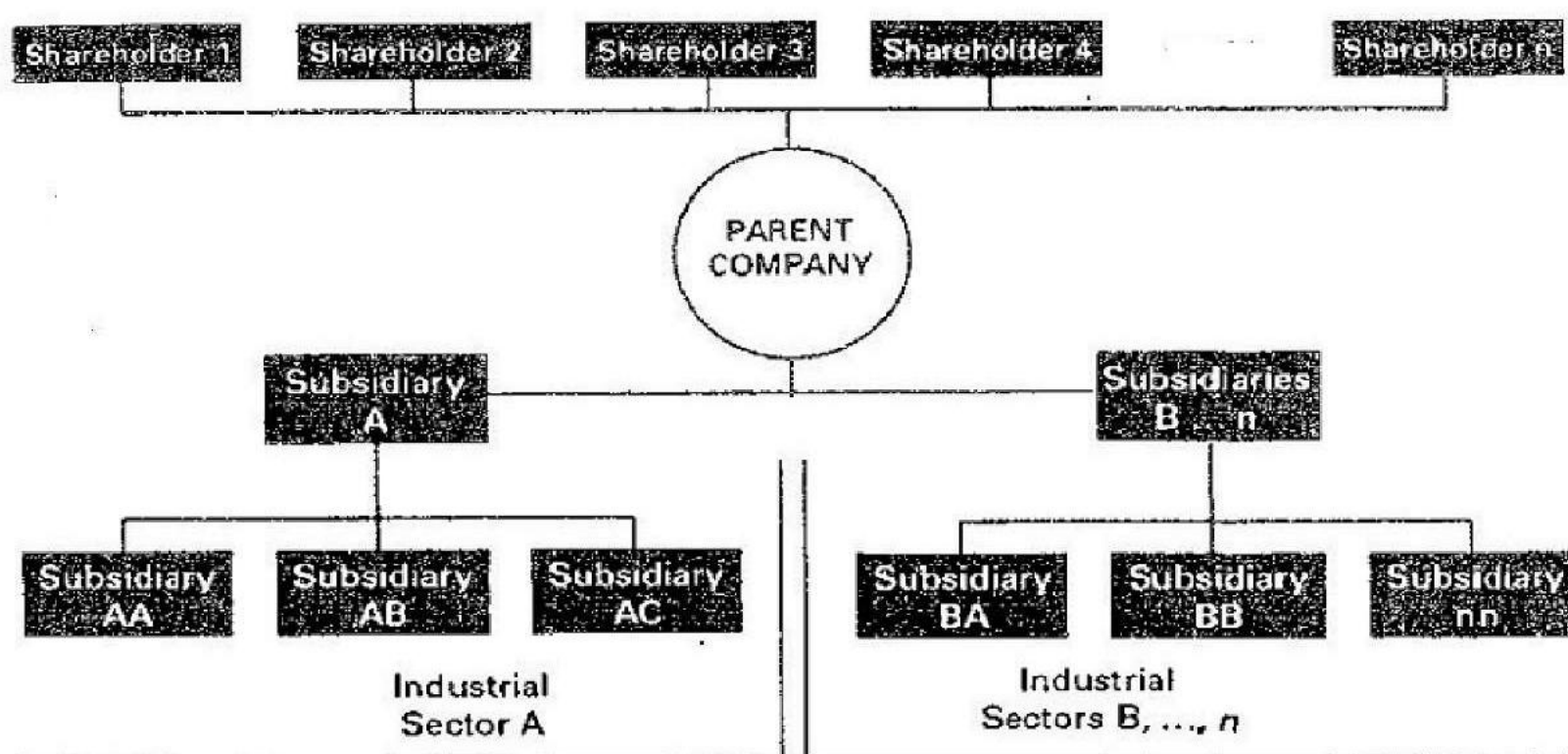
Thinness of capital markets in LDCs increases the importance of dividends and retained earnings as a source of investments. The entrepreneur must therefore generate high levels of profits to cover for reinvestment needs and high dividend payments, which are the main stem of valuation of the firm, as correctly pointed out by Errunza and Rosenberg (1982). Similarly, due to the absence of well developed financial markets, short-term loans are the largest share of corporate liabilities. They are used to finance even fixed assets. Since these loans are spread in a number of smaller firms, their cost is higher than those that could be charged to larger loans. Moreover, they are riskier due to the recurrent refinancing that is required, and due to the pressures on the liquidity of the firm (Ortiz, 1979; Ortiz and Bucno, 1992). Consequently, firms must hedge against risk seeking higher returns and self-financing alternatives, i.e. monopoly profits. This practice also hedges against political risk because banking and credit variables are the most commonly affected by financial repression and the shifting policies of LDC governments.

Organization of the 'group' and the solution of the owner-manager agency conflict

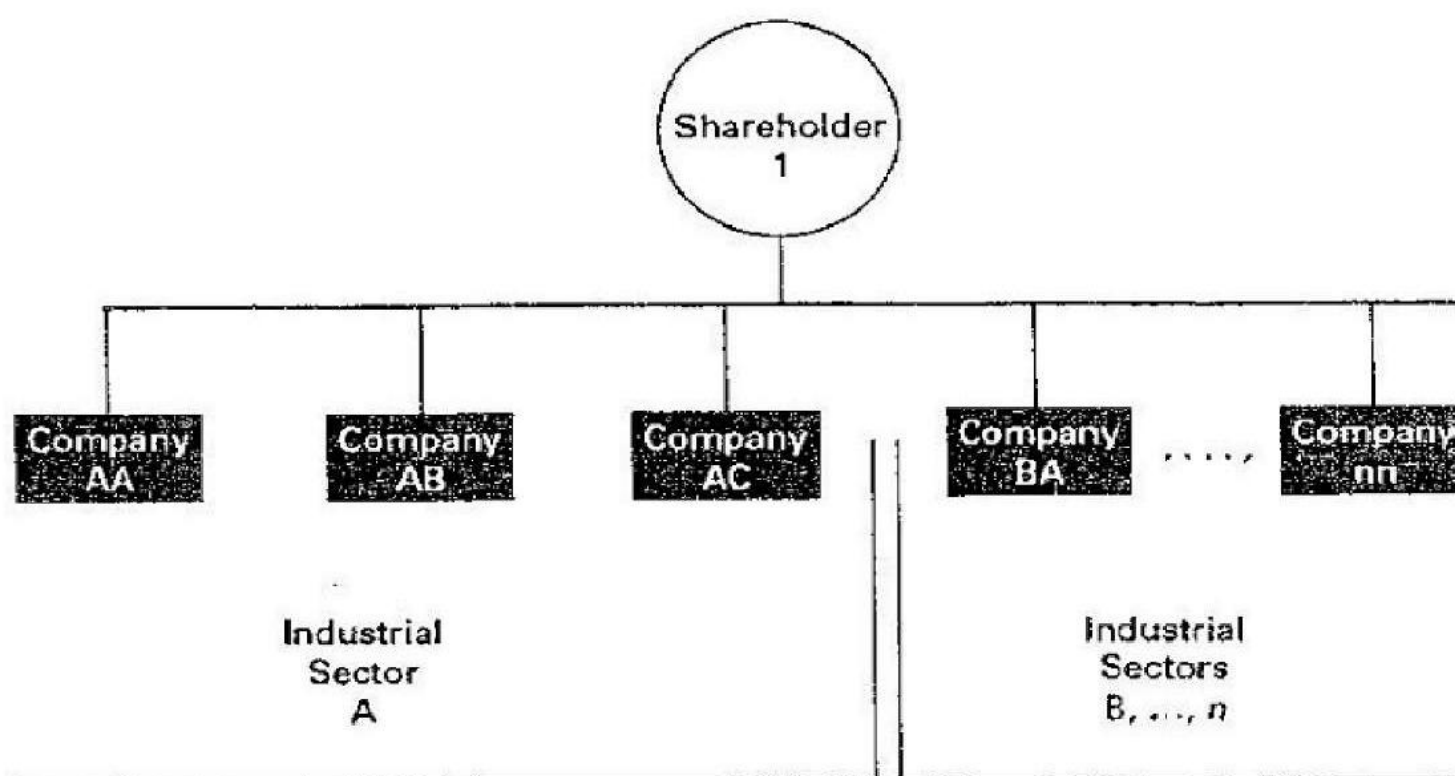
Industrial groups from LDCs have been compared to industrial conglomerates of industrial economies. Both structures consist of bundles of firms over several industries. The similarity is more apparent than real. A closer look reveals two important differences: first, the set of incentives that lead to the formation of conglomerates are different from those that lead to the formation of the Group; second, the structure of control and legal linkages between holding firms is also different.

One standard assumption in modern corporate finance is that managers make decisions which maximize the market value of the firm. Only recently, with the development of modern agency and contingent contract theory, has the theory of finance taken an 'inside look' to the structure of incentives which influence the decision of the various parties involved in the institutional structure of business activity. This inside look has revealed that many times, contracting parties, as principal or agents, can undertake wealth maximizing decisions which do not necessarily translate into 'market maximizing' actions. One of its manifestations is the formation of conglomerates. The presence of agency problems between managers and stockholders raises incentives for their formation. Specifically, the agency problems arises in the presence of *ex-antic* fixed compensation packages, where managers, agents in the decision process, have an incentive to reduce cash-flow risk and the probability of default (Jensen and Meckling, 1976; Jensen and Smith, 1986). Corporate diversification through conglomerates is one of the mechanisms most frequently used by managers to reduce this risk. Cash flows originated by firms in different industries co-insure each other. The resulting effect is that the conglomerate results in a safe environment for managers. However, from the point of view of the shareholder, the cost of coinsurance and conglomerate control reflects in loss of share value. At any rate, the organizational strategy is one in which the parent company is held by a large number of relatively small investors or equity holders. The diversification into different projects and economic sectors is implemented by the agents by creating subsidiaries of the parent company, This in turn may control other subsidiaries, typically within a sector. Figure 15.1 (a) shows the structure of a conglomerate as they are commonly found in the most industrialized countries.

Groups result from a different set of incentives. Group-member



(a) Conglomerate



(b) Group

Figure 15.1

firms are frequently managed by the owners themselves or by relatives and associates with very close social links. Hence conflicts between managers and shareholders are either absent or checked very closely by the controlling interest. Even when the management is not tied to the owner by a strong implicit contract – a feature common in the management of Group firms – managers are tightly controlled by the owners who control a very high proportion – if not the totality – of the stock outstanding. Thus, the controlling interest is

able to rapidly neutralize or reverse management (the agent) decisions that are in conflict with the interests of the owner (principal). Yet, an entrepreneur, in the process of diversifying through projects in the real sector, as previously explained, creates a network of project firms over several industries. To avoid bearing the costs of cross-default insurance, the linkage between firms is designed to minimize cross-default liability. Typically, the only linkage between firms is the controlling position of the entrepreneur leading the group. The resulting structure is one in which the entrepreneur holds a bundle of project-firms over several industrial sector. Figure 15.1(b) depicts the typical structure of the group.

The Group's entrepreneur, as an IC invtstof, holds a bundle of assets with minimal cross-default liabilities. The first holding a bundle of independent real projects, the second holding a bundle of limited liability financial assets in which cross-default liability is absent. Thus in the LDC economy a set of small firms maximizes O-M's wealth were one large firm cannot. This is a rational O-M's investment strategy in the face of the lack of opportunity to diversify through the holding of financial claims priced in the environment of efficient markets. Maintaining control of a well diversified group of project- firms provides the opportunity for risk dispersion otherwise not available in open capital markets.¹⁷ This is, of course, the fundamental force driving the evolution of the so-called 'industrial Groups' in Latin America and elsewhere in the developing world.

15.4.3 Leverage up through group based financial intermediaries

The opportunity to lever up takes different characteristics in LDCs than it does in the presence of well developed arm's length securities markets. Often there is a large disparity between the need for funds arising from investment opportunities and the availability of internally generated funds. Given the precarious development of securities markets and the heavy reliance on intermediaries for financing, availability of bank-based debt becomes critical. However, LDC entrepreneurs also face a set of incentives which encourage high leverage and control by the Group of the financial intermediary.

PROPOSITION 3.3 Given the model of diversification available to entrepreneurs and the level of political risk exposure, Groups have an incentive to lever up project/firms through Group controlled

Discussion. Incentives that encourage high leverage are: (i) the need to raise the rate of return of projects given the high systematic risk exposure of domestic products; (vi) the non-control nature of debt as opposed to equity; (iii) the incentive to dilute the relative size of equity commitment to individual projects and to spread it over a larger set of projects for portfolio management purposes; (iv) the unavailability of alternative sources of equity financing.

Among the incentives that encourage the Group's control of financial institutions, we point to: (a) the availability of low interest rates through controls of borrowing and lending rates and priority financing for government specified industrial projects; (b) the opportunity to socialize project risk through government insurance of banks; and (c) virtual elimination of the agency conflicts between debt and equity holder and the associated monitoring costs. In countries with well developed arm's length financial markets many of these incentives simply do not exist or are priced away in the financial market's clearing process. However, this is not the case of most developing countries.

Access to securitized debt markets is either non-existent or, if available, subject to the same limitations as securitized equities markets. Moreover, while stocks retain their long-term investment characteristics, bonds in the developing countries are issued at most with short- and medium-term maturities. Since generally the firm cannot obtain funding by issuing bonds in the primary markets, an alternative source of funding is needed. However, in order to generate a higher required rate of return, it is helpful if the entrepreneur can lower his cost of borrowing such that it is lower than is commensurate with the risks of the cash flows involved. Also because of the atomization of firms by projects the average-firm size is small. As a consequence, in order to leverage any one firm, the size of the loan needed is relatively small. The perfect institutional arrangement to carry out this type of strategy is a financial intermediary of some sort. It can borrow funds at low cost so that it can provide low cost loans to the Group members.¹ One would expect that some of the types of firms that the Group would covet as Group firms are therefore commercial banks, finance companies, and development banks.

Thomadakis (1992) also identifies incentives that encourage the O-M to control a bank. He affirms that this need stems from the potential disparity between the need for funds arising from investment opportunities and the availability of internally generated funds. The bank guarantees the availability of funds when needed without any claim on control over the project being financed. This is indeed a powerful argument and we fully agree with the motivation as well as the implications of this argumentation. However, we feel that there are some additional important incentives to attain control of a financial intermediary. These incentives arise from the mode of the diversification available to the O-M. The price of risk charged on individual projects/assets is a function of the systematic risk to which the investor is exposed. *Ceteris paribus* the lower the systematic risk the lower is the risk premium charged on the individual asset. Since the diversification mode available to the O-M in the absence of arm's length financial markets leads to a portfolio of lumpy real assets (firms), the residual systematic risk remains high. Thus, the premium charged on individual projects will be high. Leveraging projects through loans from a financial intermediary controlled by the O-M

guarantees access to capital at the lowest possible cost (at the controlled deposit rate). Thus leveraging up projects with a loan from a Group-bank, not only reduces the equity stake (making the portfolio less lumpy) but also increases the rate of return on the investment. The implication is that many *investment opportunities could not be acceptable to the O-M should this mechanism of capturing low cost capital not be available.*

Other important reasons for groups for controlling financial intermediaries is capturing domestic and foreign savings¹⁹ and socializing risk bearing. Low income among large sectors of the population in LDCs leads to a low propensity to save. The monetization of some sectors is also low. Their high liquidity needs are satisfied without the support of sight deposits in commercial banks. Thus, a large amount of deposits and savings in LDCs are institutional, mainly from the government. Those resources can be readily captured and channelled as credits and loans to firms from the group through a financial intermediary akin to them. This situation is also valid for the case of foreign loans, for which the government is its main mediator. However, as the group's financial intermediaries grow in size and importance, they will seek foreign resources in their own initiative.

Finally, socializing risk is another incentive to control a financial intermediary. In the absence of arm's length financial markets, the O-M finds limited demand for its securities. He himself finds restricted alternatives to hold a diversified portfolio. Thus he bears all the risk for his investments in real assets, unless he is able to find another alternative for risk bundling. Owning and controlling a bank offers him such alternative. First, he can obtain funds to hold more diversified portfolios in real assets. Second, risk is bundled among the clients of the bank from the private sector and with the government, who now have claims on the corporation. Furthermore, government banking insurance programmes and corporate incentives and rescue programmes establish an accepted and well known form of coinsurance among all participants.

15.4.4 Generate rents through monopoly profits

In the previous section we presented a string of actions entrepreneurs in LDCs take in financial markets to enhance their portfolio risk/ trade-off function. In this section we will introduce actions by entrepreneurs in the real markets with the same purpose. Thus our proposition:

PROPOSITION 3.4. In the absence of efficient markets and due to high political exposure, entrepreneurs will seek to introduce segmentation in the real markets which favour the entrepreneur or Group and offer the opportunity of permanent or transitory rent generation and enhance the return of projects.

Discussion. Industrial enterprises in every economy seek rent generating opportunities. Without them investors and firms would not have an incentive to invest. It is generally accepted that as a reward for innovation firms experience monopoly profits. However, these tend to be transient as a result of competitiveness among firms. Overall, this argument does not hold for LDCs. Groups obtain high and lasting returns because they hold a monopoly or oligopoly power both in innovation and in the market. Due to the small size of their enterprises research and development is unviable. Thus, they import foreign technology and can exploit it even beyond its useful life. Moreover, since imported capital goods are relatively labour intensive and since labour costs are low, really extraordinary monopoly profits can be obtained. A semiformal collusion with other groups generally exists because groups are suppliers among each other. In the absence of arm's length financial markets, the O-M seeks monopoly profits, colluding or seeking protectionism, in response to imperfections in the real market. However, this practice is also a rational response to financing needs and hedging for risk. Thinness of capital markets in LDCs, increases the importance of dividends and retained earnings as a source of investments. The O-M must therefore generate high levels of profits to cover for both reinvestment needs and pay high dividends payments.²⁰

Incentives and protectionism from the state must also be mentioned. As we pointed out earlier, profitability of projects in LDCs is significantly dependent on controls introduced by the state. In fact, in many economies it is the predominant form of rent generation available to entrepreneurs in certain industries. Moreover, short of opportunities for rent generation, entrepreneurs have a strong incentive to make use of the political system to create these opportunities. Influencing government economic policy by any means available becomes an overriding objective. In this environment, often, the success of an entrepreneur depends less on his managerial skills to conduct successfully an efficient operation, than on his political skills to influence government economic policy to his benefit.

We must also refer to a quite common form of Group business activity: joint ventures with multinational corporations. These foreign ventures give local entrepreneurs access to fresh capital, unavailable at the local capital markets, and the opportunity to coinsure his business with proved lines of business and with continuous access to new technologies. This decision is also a rational response to risk bearing in the absence of arm's length financial markets, for it contributes to buffer business and political risks.²¹ The local investor not only shares risks with another partner, but also improves his standing with the local government, for his joint venture has made possible new investments sought by local authorities. Thus, a joint venture is an association seeking mutual benefits in returns and risk bundling in the absence of well developed financial markets. However, it is worth noting that the local

investor increases his risks in other ways, seldom considered in international finance studies. First, the local investor faces sharp criticisms from local opposition pressure groups for his 'irrational' and 'antinationalistic' decision. This could lead to further political risk. Second, he faces the risk of a take-over. A joint venture is basically a contractual relationship. Incompatibilities between multinationals and their local partners usually occur concerning strategic decisions, particularly in new startups. Thus, to avoid local interferences, multinationals resort to takeovers. This is not new, according to Vernon (1977) over a third of foreign subsidiaries in the developing countries were established through the acquisition of ongoing business. In the absence of developed financial markets and because the local investor holds an important number of shares, this take-over is made only through negotiation among the interested parties. Since the dispute is among two owner-managers the solution might be socially unsatisfactory.

Finally, we could not conclude this section without referring to corporate research and development. An important function of modern corporations is to develop new products and technologies to satisfy social needs, and then produce and market those goods or services to the final consumer. Groups have had a limited role in the innovative processes. Although their origin can be traced back to traditional industries, Groups have diversified into a great variety of products. However, their participation in product and technology development is limited. They concentrate in consumer goods and services. Technology and most intermediate and capital goods are imported.

To a great extent, this is the result of import substitution development models adopted by most developing countries after World War II, particularly in the case of the Latin American countries. Governments promoted import substitution, regardless of market size and emphasizing only local consumption. The government also undertook the development of some key industries, among them some in the capital goods sector (heavy metals) by creating state enterprises. Little promotion was made of technological development. Traditionally, investment in science and technology in these nations has been under 1 per cent of GNP per year *vis-à-vis* the 2-4 per cent prevailing among the developed countries (White, 1989). In the long run, this hindered the development of these nations, for in addition to the original ills that this strategy was meant to cure, other maladies appeared or the original ones manifested themselves in other forms. For instance, the original deficits in the balance of payments due to imports of consumer goods reappeared, but this time they were due to heavy imports of intermediate and capital goods. Similarly, local creativity was repressed. New products introduced in the local markets were follow ups of products derived abroad - a supply-led 'demonstration' effect. No serious marketing research and product development took place to satisfy local needs, and perhaps even exporting those goods to other countries. Similarly, new

technologies were simply bought from foreign sources. Thus, a conservative, uncreative business environment has prevailed in LDCs.

However, this conservativeness and neglect should not be attributed entirely to cultural factors. It is also a strategy to manage risk in the absence of well developed capital markets. First, existing tax laws in most developing countries do not treat favourably corporate investments in science and technology. Thus, its costs and the uncertainty of future cash flows of such investments limit the feasibility of product and technological development projects. The premia of discounted expected cash flows is insufficient to cover risks undertaken by this type of innovative project. Moreover, uncertainty due to unsteady and unpredictable government actions increases the required rate of return. Consequently, considering capital constraints, the O-M selects to invest in products and technology already tested and successful in other countries. Risk bearing for innovative entrepreneurs is therefore 'deferred' until a more favourable business and political environment exists - until capital markets become larger and efficient. Second, the lack of diversification alternatives in the financial markets leads to the creation of project oriented firms within the group, as already explained. Product and technology development are unviable owing to the lack of economies of scale and scope, even though the group as a whole might be large. Finally, thinness of capital markets limits the possibilities that O-Ms find venture capitalists ready and capable of associating with them in highly innovative enterprises. Indeed, that is a powerful reason why domestic groups associate themselves in joint ventures with the government or with multinational corporations.

15.5 CONCLUSIONS

Our work presents a financial theory of corporate governance and organization, and about risk management by owner-managers from LDCs, in the absence of well developed arm's length financial markets. Two fundamental characteristics of these markets are poor institutional mechanisms to produce and disseminate information about the stochastic characteristics of individual firms' cash flows, and there is an absence of a large pool of risk-taking investors who are reducing their risk exposure through a well diversified portfolio of securities. Furthermore, in these markets political risk - state intervention and unsteady policy making - constitutes a large proportion of the total systematic risk to which the entrepreneur is exposed. These premises lead us to develop and examine three fundamental propositions in terms of corporate structure and diversification strategies undertaken by investors in these markets.

This analysis has important implications for capital markets development and economic development as well.²² The primary implication is that underdeveloped capital markets

restrain corporate growth and limit social decision making concerning resource allocation for investments. To promote economic development governments from LDCs must promote the rise of publicly owned corporations through capital markets. This calls for creating significant incentives to entrepreneurs and investors, as well as implementing major reforms in the financial system. [Markets should become an attractive alternative for raising funds for corporate growth and diversifying risk. New forms of securitization should be created and backed with innovative financial intermediation, so that entrepreneurs find relinquishing control attractive in pursuit of enhanced risk-returns in more efficient capital markets, and from increased operations from corporations that take advantage of domestic and international market opportunities and achieve economies of scale. Additionally, information mechanisms and information availability must be improved. Growth with equity should also be pursued, to ensure the existence of large pool of investors. Finally, financial repression must be reassessed. The scope of those programmes must be well determined and then the policies developed to carry new ones must be sustained, for the Latin American experience shows bitter results with financial liberalization as well as failures in policy making due to shifts from the original plans. This also implies that strategic planning should be stressed.

Under current globalization trends all this means that LDCs should foster their capital markets to be able to sustain their growth plans and participation in international trade and finance. This is a challenge that must be completed during this decade, for otherwise LDCs will enter the twenty-first century with greater impediments to achieve their goals.

Notes

1. Our conceptual framework is based both on the rich empirical research on industrial groups in LDCs carried out by other authors, and in innumerable studies, including our own, on Latin American economics and finance. For ample references on these topics see: Fischer *et al.* (1991).
2. The diffusion of ownership and control and its social implications was first studied by Berle and Means (1933). More recent studies are those by Jensen and Meckling (1976), Fama and Jensen (1983), and Williamson (1988). They examine the separation between ownership and control as it operates under conditions of arm's length markets.
3. The entrepreneur can be a man or a woman. We acknowledge the historic and ever-increasing role of women in business. The gender used throughout this chapter only seeks to simplify the style.
4. The proposition that growth opportunities are a factor in the diffusion of ownership is empirically corroborated by Demsetz and Lehn (1988). They find a significant negative relationship between firm size and insider ownership in the US, if we make the reasonable assumption that firm size is a proxy of realized growth opportunities, the implication is quite straightforward.
5. Market imperfections impact not only in the industrial sector, but all sectors of the economy. For instance, protectionism also promotes monopoly profits in distribution and retailing; similarly thinness of the market prevents such type of business to take advantage of economies of scale.
6. On the other hand, workers are also victims of market imperfections. Monopolies often undervalue their wages and attempt against their rightful historical gains.
7. In societies where monopoly and rent profits are highly dependent on political factors such as allocation of import quotas, preferential taxation and financing, allocation of development construction projects, etc., corporate secrecy and even intentional misinformation becomes a *need* for corporate survival. Secrecy is, of course, one of the idiosyncrasies attributed to LDC managers. Lack and unreliability of information has also been one of the factors which has hampered research on business finance in these markets.
8. Financial repression has been studied by Gurley and Shaw (1960), McKinnon (1973), Shaw (1973), and extended among others by Basant (1976; 1986), Mathieson (1979), Keller (1980), Courakis (1984) and Khan (1985); and Bruno (1979); Taylor (1983); van Wijnbergen (1983) and Buffie (1984). Kitchen (1986) also presents a full study of finance and development under financial repression.
- 9- The application of these types of policies have been extensively analysed for the Latin American case. See: Diaz-Alejandro (1985); Dornbusch and Reynoso (1989), Galbis (1979); Ibarra Puig (1989); Mathieson (1983); McKinnon (1986). 10. However, it must be stressed that multinational investors get higher returns than local investors because they invest in leading industrial sectors, where extraordinary (temporary) profits can be obtained. In addition multinational

investors make better project evaluations, aided by sophisticated tools and a highly professional management, etc. In a world of increasingly integrated financial markets, assets are priced according to their contribution to systematic risk of the world market portfolio. Errunza and Losq (1985) provide the theoretical framework and ample empirical evidence that, from the perspective of the investor in a LDC with barriers to capital flows, financial markets are unidirectionally integrated. That is, although investors in the 'core' may be restricted in their ability to overcome barriers to capital flows, these barriers are ineffective from the perspective of investors in the 'periphery' seeking opportunities in the international markets. 12. This section benefits from some ideas presented by Thomadakis (1992).

Our extension, in affinity with Thomadakis, is at the heart of the propositions. We have also benefited from our own earlier works and empirical evidence on Latin American Groups, cited in our previous work, Fischer *et al.* (1991).

13. Thomadakis (1992) makes the point that, although the conventional agency theory focuses its attention on debt claimholders, firms controlled by owner-entrepreneurs face a multiplicity of contingent claims based on explicit and implicit contracts with private and public agents.

14. This is a standard result of modern agency theory presented among others by Barnea, Haugen and Senbet (1985). See also Haugen and Seribei (1988) and Thakor (1989).

15. Mergers that make economic sense in this context are vertical and horizontal mergers. Conglomerate mergers in an efficient market environment are an aberration which point to the fact that US markets for corporate control are not as perfect as they should be, since they allow such an agency problem to exist. One would expect that as efficient capital markets evolve, only economic reasons would lead to large firms.

16. See Amihud and Lev (1981) for some empirical evidence.

17. As an example, Virmani (1985) notes how large private Korean corporations, with their diversified portfolio of product markets, 'provide a partial substitute' for equity markets found in developed countries.

18. This is particularly true in LDCs where financial repression is common and takes the form of a strict control of interest rates, both deposit and lending rates. Furthermore, regulation usually includes measures such as forcing banks to lend at subsidized rates a certain proportion of a bank's portfolio to primary and industrial sectors considered 'priorities'.

19. The works of Leff (1975; 1978) and Aubey (1979) stress the relationship between financial intermediation and business ownership and control in Latin America.

20. For the case agency issues and dividends in developed countries refer to Crutchley and Hansen (1989).

21. Joint ventures also take place between firms from developed countries. Managers might have similar motivations to those presented here. However, those ventures are carried out between managers of fully publicly owned corporations. We are stressing joint ventures as a portfolio alternative for O-Ms from LDCs to hedge political risk.

22. For important sets of capital markets development policies see: Fischer *et al.* (1991) and Ortiz (1992).

REFERENCES

- AMIHUD, Y. and LEV, B. (1981) 'Risk Reduction as a Managerial Motive for Conglomerate Mergers', *Bell Journal of Economics*, vol. 12, no. 2 (Autumn), 605-17.
- AUBEY, R. T. (1979) 'Capital Mobilization and the Patterns of Business Ownership and Control in Latin America: The Case of Mexico', in S. Garfield *et al.* (eds), *Entrepreneurship in Cultural Context* (Albuquerque: University of New Mexico Press).
- BARNEA, A., HAUGEN, R. and SENDET, L. (1985) *Agency Problems and Financial Contracting* (Englewood Cliffs, NJ: Prentice-Hall).
- BASANT, K. K. (1976) 'Alternative Stabilization Policies for Less Developed Economies', *Journal of Political Economy*, vol. 84, no. 4 (Aug.).
- BASANT, K. K. (1986) *Studies in Inflationary Dynamics: Financial Repression and Financial Liberalization in Less Developed Countries* (Singapore: Singapore University Press).
- BERLE, A. and MEANS, G. C. (1933) *The Modern Corporation and Private Property* (New York: Macmillan).
- BRUNO, M. (1979) 'Stabilization and Stagflation in a Semi-Industrialized Economy', in R. Dornbusch and J. A. Frenke (eds), *International Economic Policy*, (Baltimore: Johns Hopkins University).
- BUFFIE, E. F. (1984) 'Financial Repression, the New Structuralist, and Stabilization Policy in Semi-Industrialized Economies', *Journal of Development Studies* (Netherlands), vol. x, no. 14 (Apr.) 305-322.
- COURAKIS, A. S. (1984) 'Constraints on Bank Choices and Financial Repression in Less Developed Countries', *Oxford Bulletin of Economics and Statistics*, vol. 46, no. 4 (Nov.) 341-70.
- CRUTCHLEY, C. E. and HANSEN, R. (1989) 'A Test of the Agency Theory of Managerial Ownership, Corporate Leverage and Corporate Dividends', *Financial Management* (Winter) 36-46.
- DEMSETZ, H. and LEHN, K. (1988) 'The Structure of Corporate Ownership: Causes and Consequences', *Journal of Political Economy*, vol. 93, 1155-77.
- DIAZ-ALEJANDRO, C. (1985) 'Good-Bye Financial Repression, Hello Financial Crash', *Journal of Development Studies*, vol. 19 no 1/2 (Sept / Oct.) 1-24.
- DORNBUSCH, R. and REYNOSO, A. (1989) 'Financial Factors in Economic Development', *American Economic Review*, vol. 79 no 2 (May) 204-9.
- ERRUNZA, V. R. and LOSQ, E. (1985) 'The Behavior of Stock Prices on LDC Markets', *Journal of Banking and Finance*, vol. 9 no 4 (Dec.) 561-75.
- ERRUNZA, V. R. and ROSENBERG, B. (1982) 'Investment in Developed and Less Developed Countries', *Journal of Financial and Quantitative Analysis*, vol. xvii, no. 5 (Dec.), 741-62.
- FAMA, E. and JENSEN, M. C. (1983) 'Separation of Ownership and Control', *Journal of Law and Economics*, 26 (June), 19-37.
- FISCHER, K. P., ORTIZ, E. and PALASVIRTA, A. P. (1991) 'The Industrial Group and Risk Management in Imperfect Capital Markets' in D. Dimon (ed.), *Proceedings, BALAS 1991* (San Diego: USD).
- GALBIS, V. (1979) 'Inflation and Interest Rate Policies in Latin America 1967-1976', *IMF Staff Papers*, vol. 26, no. 2 (Sept.) 334-66.
- GURLEY, J. G. and SHAW, E. S. (1960) *Money in a Theory of Finance* (Washington, DC: Brookings Institution).
- HAUGEN, R. A. and SENBET, L. W. (1988) 'Bankruptcy and Agency Costs: Their Significance to the theory of Optimal Capital Structure', *Journal of Financial and Quantitative Analysis*, vol. 23, no. 1 (Mar.) 27-38.
- IBARRA PUIG, V. I. (1989) 'Represión y Liberación de las Actividades Financieras en los Países en Desarrollo: El Caso de América Latina', *Comercio Exterior* (Mexico), vol. 39, no. 12 (Dec.), 1045-9.

- JENSEN, M. C. and SMITH, C. W. (1985) 'Stockholder, Manager, and Creditor interests: Applications of Agency Theory', in E. I. Altshann and M. G. Subrahmanyan (eds), *Recent Advances in Corporate Finance*, (Homewood, 111.: Richard D. Irwin) 93-131.
- JENSEN, M. C. and MECKLING, W. H. (1976) 'Theory of the Firm: Managerial Behavior, Agency Cost and Ownership Structure', *The Journal of Financial Economics*, vol. 3, no. 4 (Oct.) 306-60.
- KELLER, P. M. (1980) 'Implications of Credit Policies for Output and Balance of Payments', *International Monetary Fund Staff Papers*, vol. 27, no. 3 (Sept.). 171-78.
- KHAN, M. S. (1985) 'Analytical Approach to Interest Rate Determination in Developing Countries', *Pakistan Development Review*, vol. 24 (Autumn/Winter), 494-5.
- KITCHEN, E. L. (1986) *Finance for the Developing Countries*. (New York: John Wiley & Sons).
- LEFF, N. H. (1975) 'Capital Markets in Less Developed Countries: The Group Principle', in R. L. McKinnon (ed.) *Economic Growth and Development* (New York: Marcel Dekker) 97—122.
- LEFF, N. H. (1978) 'Industrial Organization and Entrepreneurship in the Developing Countries: The Economic Group', *Economic Development and Cultural Change*, vol. 26 (July) 661-75.
- MATHIESON, D. J. (1979) 'Financial Reforms and Capital Flows in a Developing Economy', *International Monetary Fund Staff Papers*, vol. 26, no. 3 (Sept.) 450-59.
- MATHIESON, D. J. (1983) 'Estimating Models of Financial Behavior During Periods of Extensive Structural Reform: The Experience of Chile', *IMF Staff Papers*, vol. 30, no. 2 (June), 350-93.
- MCKINNON, R. L. (1973) *Money and Capital in Economic Development* (Washington: Brookings Institute).
- MCKINNON, R. L. (1986) 'Financial Liberalization in Retrospect: Interest Rate Policies in LDCs', *Center for Economic Policy Research* (Stanford University), no. 74.
- ORTIZ, E. (1979) 'Inflación y Estructura Financiera de las Empresas Registradas en la Bolsa Mexicana de Valores', *Prospectivas de la Administración en México Hacia 1990* (Mexico: FCA/UNAM).
- ORTIZ, E. (1992) 'Capital Market Reforms and Development in Latin America', in Khosrow Fatemi (ed.) *International Trade and Finance Association, 1992 Proceedings* (Laredo: LSU).
- ORTIZ, E. and BUENO, G. (1992) 'Business Finance and Goal Programming in Imperfect Capital Markets', in K. P. Fischer and G. J. Pappaioanou (eds). *Business Finance in Less Developed Capital Markets* (Westport, CT: Greenwood Press).
- SHAW, E. S. (1973) *Financial Deepening in Economic Development* (New York/London: Oxford University Press).
- (1980) *Structuralist Macroeconomics: Applicable Models for the Third World* (New York: Basic Books).
- WAKORO, V. (1989) 'Strategic Issues in Financial Contracting and Financial Management', *Journal of Financial Management* (Summer) 39-58.
- THOMADAKIS, S. (1992) 'Enterprise Governance and Growth- Notes on the Theory of the Firm in Less-Developed Countries', in K. P. Fischer and G. J. Pappaioanou (eds). *Business Finance in Less Developed Capital Markets* (Westport, CT: Greenwood Press) 51-73.
- VAN WIMBERGEN, S. (1983) 'Interest Rate Management in LDCs', *Journal of Monetary Economics*, vol. 11, no. 3, 31-41.
- VERNON, R. (1977) *Storm Over Multinational Corporations* (Cambridge, Mass.: Harvard University Press).
- VIRMANLA, J. (1985) *Government Policy and the Development of Financial Markets in Latin America* (New York: Oxford University Press).
- WHITE, E. (1989) 'Políticas e Instrumentos para el Desarrollo de las Nuevas Tecnologías en América Latina', *Comercio Exterior*, vol. 39, no. 1, 1-11.
- WILLIAMSON, O. E. (1988) 'Corporate Finance and Corporate Governance', *The Journal of Finance*, vol. 43, no. 3 (July), 567-91.