Family-Based Business Groups: Degeneration of Quasi-Internal Organizations and Internal Markets in Korea

Sang-Woo Nam

December 2001

At the early stages of development, a close government-business partnership (here a QIO) and internal markets within a business group can often be advantageous.

But as economies mature and are exposed to more complex and uncontrollable factors, including globalization, governments and businesses need to grow out of these limiting QIOs and internal markets.

Otherwise, as the author shows, they run the risk of being stuck with a worn-out, inefficient, and potentially corrupting system.
Family-Based Business Groups: Degeneration of Quasi-Internal Organizations and Internal Markets in Korea

Sang-Woo Nam
ABOUT THE AUTHOR

Sang-Woo Nam is a Senior Research Fellow at the ADB Institute, on leave from the School of Public Policy and Management, Korea Development Institute (KDI). Since graduating from Sloan School of Management, M.I.T. with a doctorate in 1978, he has mainly been associated with KDI working in the fields of money and banking, finance, macroeconomic analysis and development economics. Dr. Nam has also served as a Counselor to the Deputy Prime Minister and Minister of Economic Planning, as the Vice President and Director of the International Development Exchange Program at KDI, and an Economist at the World Bank.
PREFACE

The ADB Institute aims to explore the most appropriate development paradigms for Asia composed of well-balanced combinations of the roles of markets, institutions, and governments in the post-crisis period.

Under this broad research project on development paradigms, the ADB Institute Research Paper Series will contribute to disseminating works-in-progress as a building block of the project and will invite comments and questions.

I trust that this series will provoke constructive discussions among policymakers as well as researchers about where Asian economies should go from the last crisis and recovery.

Masaru Yoshitomi
Dean
ADB Institute
ABSTRACT

East Asia offers a story of both a miracle and a crisis. Behind both the miracle and crisis are family-owned and controlled business groups as the main players. They led the industrialization of their economies as a powerful engine of growth in the early phase of development. Bankruptcies of business groups or the distress of financial institutions that lent heavily to these groups partly triggered the crisis in late 1997. This paper attempts to give a consistent account of both the success and failure, focusing on two important aspects of large businesses in the region. One is the relationship with the government that intervened rather extensively in private resource allocation, and the other is their organizational structure and the operation of internal markets among their subsidiaries. It is argued that both of these factors served well to facilitate rapid and diversified expansion of investments in the early stages of development. In the later stage, however, they became causes of inefficiency and vulnerability and led to poor governance in large family-based enterprises.

The relationship between the government and big businesses in the early phase of development is characterized by a quasi-internal organization (or QIO). As development partners, both parties are engaged in extensive information exchange and coordination of development projects. With capable government and the right policies, decision-making in a QIO could better address information imperfection and business uncertainty. However, with more sophisticated industrial structure, changing development agenda and better functioning markets, the QIO should have given way to policy implementation through the market. Korea, in particular, failed in making this transition and kept the QIO as a vehicle for a corrupt symbiosis between the government and big businesses.

Internal capital or labor markets within a business group are a device to cope with imperfections in external markets through group-wide resource reallocation. Group headquarters have played a key role in the operation of the internal markets by making strategic decisions and monitoring their subsidiaries. With underdeveloped external markets and a largely unrelated diversification strategy, internal markets seem to have served fairly well. However, family-controlled groups tended to resort to using internal markets well beyond their rational justification. This was mainly because the internal markets were a convenient means of serving the wealth-maximization interests and concerns of controlling families (see the author’s ADBI companion paper No.27). Consequently, intra-group resource allocation turned inefficient and group headquarters was increasingly strained with the tasks of monitoring and coordination as the groups kept diversifying into related businesses.

Degenerated QIO and group-wide internal markets left such risky corporate strategies as high-leveraged expansion and poor governance largely untackled. These weaknesses turned out to be major contributors to the financial crisis. To avoid another crisis, it is imperative to reform the corporate governance system with a focus on protecting outside shareholders. Also important are reforms to Korea’s election system to eliminate incentives for corrupting tie-ups with big businesses, strengthening tax enforcement to mitigate intergenerational transfer of wealth, and further promoting competition to force business groups towards professional management and modern governance.
# TABLE OF CONTENTS

About the Author II
Preface III
Abstract IV
Table of Contents V

1. Introduction 1

2. Quasi-Internal Organization: Government-Business Relationship 3
   2.2. Increasing Inefficiency of the QIO with Industrial Development 10
      2.2.1. Degeneration of the QIO 11
      2.2.2. Policy Responses in the Degenerated QIO 13
      2.2.3. Consequences of the Degenerated QIO 17

3. Internal Markets within Business Groups 18
   3.1. The Relative Efficiency of Internal Markets and the M-Form Organization 19
      3.1.1. Underdeveloped Factor Market and Creation of Internal Market 20
      3.1.2. Advantages of Multidivisional Organizational Structure 24
   3.2. Growing Inefficiency in the Course of Corporate Expansion 27
      3.2.1. Development of External Markets Since the 1980s 28
      3.2.2. Growing Inefficiencies in Internal Markets 29
      3.3.3. Are Internal Capital Markets Generally Inefficient? 32

4. Conclusions 35

Table and Figures (in body of text)
   Table 1. The QIO and Group-Wide Internal Markets Compared 36
   Figure 1. Mode of Policy Implementation 5
   Figure 2. Internal and External Factor Markets 19

References 39
Family-Based Business Groups:
Degeneration of Quasi-Internal Organizations and Internal Markets in Korea

Sang-Woo Nam

1. Introduction

The Asian financial crisis of 1997-98 clearly exposed many problems associated with business groups in the region. The way the region’s economies have grown and operated is often described as “crony capitalism” by Western observers. Various favors have mainly been given to business groups controlled by powerful families in return for political or other support. What made this symbiotic relationship problematic for the sustained growth of the businesses were distortions in resource allocation and the drain of corporate resources. There were no corporate governance mechanisms that could check inefficient investments or unfair intra-group transactions for the benefits of controlling owners. The consequences were precarious corporate financial structures and the poor profitability of major businesses, which made these businesses very vulnerable to external shocks resulting in their chain bankruptcies and a crisis in their economies and throughout the region.

East Asian governments have historically played a significant role in economic development by constant interaction with the private sector. The implicit partnership between the government and big businesses has been effective in pushing export-oriented industrialization and other development efforts. The group structure of big businesses had helped them to diversify their businesses and to share available resources within the group. For instance, Japanese zaibatsu grew rapidly from the 1910s until they were broken up right after World War II. This period coincides with Japan’s rapid industrial growth and sophistication that was partly attributable to the war efforts. The growth of Korean chaebols was clearly the product of government industrial policy and was accelerated with the heavy and chemical industry drive of the 1970s. Business groups in other East Asian economies have also grown rapidly with the accelerated industrial development of the past several decades.

While both zaibatsu and chaebols are mostly family-based, business groups in other East Asian countries include those owned and controlled by families of ethnic Chinese, families linked to political power, and political parties or the government. Family-based business groups, which have been the target of public criticism, are the major subject of this paper. Given that these business groups in East Asian countries...
grew rapidly, expanding their scope of businesses into new and more sophisticated industries at the height of industrial transformation, they indeed seem to have been the engine of growth and industrialization in their respective economies. While Asian business groups are widely criticized, the question of how these economies could sustain rapid economic growth over the last three decades or so with such weaknesses in their corporate sector has not been satisfactorily answered. Without elements of efficiency associated with these business groups, it might not have been possible for them to play such a significant role.

If they were indeed efficient in carrying out major development projects and other businesses in the early phase of development, a logical question is what factors have been responsible for making them no longer so in the process of development. The primary purpose of this paper is to answer this question. Since Korea stands out in the development partnership between the government and big businesses, references will extensively be made to Korean chaebols. For comparative perspective, however, examples from other Asian countries will also be reviewed, including pre-war Japanese zaibatsu, which is supposed to be the archetype of Korean chaebols.

An established institution is usually the product of culture and the interplay of socially influential actors and the political process, which is kept in mind in our analysis of family-based business groups. This paper, therefore, will aim to address the following questions:

- The story of East Asian economic take-off typically starts with government’s development vision and initiatives and inducing, with a set of implicit and explicit incentives, large private businesses to actively participate in these endeavors. Was this partnership efficient? How should this government-business relationship have changed in the course of economic development? What have been the consequences of failing to reorient the relationship?

- Business groups have unique structural and operational features that might have allowed them to effectively organize and finance their diverse investment activities contributing greatly to industrializing their economies. Were they efficient in coping with underdeveloped external markets in the early phase of development? Are there any convincing reasons why these characteristics of family-based business groups might be no longer advantageous and undermine the sustainability of economic growth?

Each of these two broad topics is discussed in the following two sections, respectively. Section 2 basically deals with the partnership relation between the government and big businesses described as “quasi-internal organization (QIO).” It is argued that the QIO was actually an effective mode of policy implementation in the early stage of development for the Korean government with a capable bureaucracy and a strongly committed leader in the face of informational and other imperfections in the market. As the economy continued to develop to have a more sophisticated industrial structure, diverse policy agenda, and reduced information imperfections in the market, the QIO should have given way to a more market mode of policy implementation. In Korea, however, the QIO has been kept to serve a corrupting, symbiotic relationship
between the government and big businesses, rendering this degenerated QIO a major source of inefficiency and vulnerability for the economy.

Section 3 discusses the nature of internal markets for capital and other productive factors among subsidiaries of a group as well as the efficiency of their organizational structure. It is argued that group-wide internal markets might have been a solution to the inefficiencies in the external factor markets, and that their organizational structure was efficient in information processing and coordination required for carrying out diversified business activities. However, with the continued growth and diversification of business groups, inefficiencies have lurked in group-wide internal markets. As the founding owners get old and many of their extended family members share the management, family interests and concerns have increasingly distorted decision-making in the internal markets and agency problems have also arisen. At the same time, the group headquarters have come under increasing pressure with the tasks of coordination and monitoring as business groups, after diversifying into several unrelated fields, have generally pursued diversification into areas related to existing businesses.

Briefly discussed in the concluding section are lessons for other developing countries, policy priorities for crisis-hit economies, and evaluation of some of the policy responses toward business groups in response to the financial crisis and apparent corporate governance problems in family-based business groups.

2. Quasi-Internal Organization: Government-Business Relationship

It is well known and accepted that the Japanese and Korean governments played an important role in the early phase of industrial development. In pushing preferred development projects, there were extensive information exchanges and coordination between the government and big businesses. Often, huge incentives have been given to the private participants cooperating with the government. However, this seemingly successful government interaction with the private sector, or intervention in resource allocation, is interpreted differently by scholars with alternative views.1

- **Market-friendly view:** Extending the neoclassical view, it sees the appropriate role of government to include ensuring adequate investment in people, providing a competitive climate for private enterprise, keeping the economy open to international trade, and maintaining a stable macro economy. It is argued that attempts to guide resource allocation with nonmarket mechanisms would generally fail to improve economic performance. Even though governments of Japan, Korea and Taipei, China sometimes intervened extensively in markets to guide private-sector resource allocation, the market-friendly approach is seen to capture important aspects of East Asian success (World Bank, 1991 and 1993).

- **Revisionist or developmental-state view:** This view finds the secrets of East Asian miracle in “states leading the markets” with industrial policy and interventions in financial and other markets. Market failures are believed to be

---

1 For a discussion of different views concerning the rapid development of the East Asian economies, see World Bank (1993) and Aoki, Kim and Okuno-Fujiwara (1996).
pervasive in developing countries. Thus, state intervention is justified to correct market signals and direct investment to the sectors and industries that would generate the highest economic performance (Amsden, 1989; Wade, 1990).

- **Market-enhancing view:** Rather than seeing the roles of state and the market competing in resolving market failures, this view emphasizes the role of government in facilitating or complementing private-sector coordination through the development of relevant institutions. This role might be found in various policy instruments such as deliberation councils, strategy of staggered entry, and contingent rents, which have been utilized most noticeably in Japan (Aoki, Murdock and Okuno-Fujiwara, 1996).

Regardless of their views, observers notice that these governments, despite their intervention in markets, often closely cooperated with private enterprises. The Japanese (pre-war) and Korean (the 1960s and 1970s) governments and family-based large business groups entered into implicit development partnerships. As such, they might be viewed as constituting a quasi-internal organizations (QIO) resembling the modern multi-unit enterprises. Given the informational imperfections in the market and limited number of potential participants, it might have been more efficient for the government to implement policies within the QIO rather than relying on the market. For instance, with complementary development projects to be funded with limited financial resources, the task of coordinating the timing, sequence and scale of the projects that is essential for the efficiency of the whole, might have been better performed in the QIO. The mode of cooperation between the government and large businesses in post-war Japan, however, was more open and consensus-based than a QIO (see Figure 1 and Box 1).

---

2 In the Korean QIO, government-controlled banks served as an important policy tool supporting the private business participants, rather than independently evaluating the creditworthiness of the borrowers.

3 The idea that the government and large enterprises over which it exercises control or influence be looked at as a type of ‘internal organization’ was proposed by Lee and Naya (1988). Their insight is derived from the discussion of Williamson (1975) on the advantages of hierarchy vis-à-vis markets in his transactional approach.
Figure 1. Mode of Policy Implementation

Quasi-Internal Organizational Mode

Market Mode of Policy Implementation

Japanese business groups, zaibatsu, regarded as the model for Korean chaebol, also had a close link with the government before the war in their push for industrial and military power. Though zaibatsu was broken up after the war, the close link survived in a different form, although not as close and exclusive as before. In this new format, the main players were the Ministry of International Trade and Industry (MITI) and keiretsu, a group of corporations loosely linked around a bank rather than a family. MITI used various instruments to secure the support of the private corporations as well as to assist those who were cooperative in carrying out government policies. They included industrial deliberation councils, administrative guidance, and other more informal organizations for information exchange.

This approach is certainly an improvement compared with a typical QIO practice, which is a more exclusive, less transparent, and more of a hierarchical contest. Pooling of information and knowledge and exchange of views among bureaucrats, representatives of the business and financial circles, and other experts should go a long way towards mitigating the information problem facing the government in industry policy formulation. In this more institutionalized forum, any incentives for unproductive rent-seeking behaviors should also be minimized.

**Deliberation councils for industry rationalization.** By the end of the 1940s, the Japanese government, with the task of promoting internationally competitive industries, recognized the need for effective coordination among industries with forward and backward linkages. As an advisory organization of the MITI, the Council for Industrial Rationalization (CIR) was established consisting of overall branches and many industrial branches, each of which was supported by expert staff. The CIR and its expert staff were predominantly represented by relevant industrial associations and large business enterprises (and financial institutions in case of overall branches) with a view to pooling information and knowledge of the private sector. Their task was to help MITI by identifying the main areas of rationalization with some targets of technical efficiency, locating major bottlenecks in achieving these targets, and suggesting changes in intersectoral arrangements for maximum overall industrial efficiency. Necessary consultation, coordination and concerted efforts among related industries were mediated by MITI and other relevant ministries. Financial support was informally coordinated as financial authorities and institutions usually took MITI’s opinion about a project seriously in their lending decisions.

**Market-enhancing government role in coordination.** The Japanese government is known to have been a successful coordinator. People with a market-enhancing view, however, differ slightly in their account of the role of government in this regard. They have stronger faith (than those with market-friendly view) in the capacity of the private sector to coordinate various economic activity in diverse forms. Government coordination might lead to an inferior solution by restricting diverse, autonomous coordination efforts in the private sector. Therefore, government should better limit its role to facilitating or complementing coordination efforts of the private parties, rather than itself trying to be the coordinator. Unlike the market-friendly view, which still sees government acts as a substitute for the market mechanism, this view emphasizes government’s role of complementing private institutions, say, by facilitating the development of private-sector institutions for better coordination. They regard such policy instruments as deliberation councils, industry associations, contingent rents, and staggered-entry strategies as useful in inducing coordination and cooperation in the private sector. In spite of the attendant risk of abuses, administrative guidance seems to have played an important facilitating role when such guidance was based on the interactions between the government and the private sector. Without the cumbersome process of going through the legislative process, it could get things done in an expedient and flexible manner (Aoki, Murdock and Okuno-Fujiwara, 1996; and Okazaki, 1996).
2.1. How Could a QIO be Efficient in the Early Phase of Development?

A QIO may achieve superior economic performance, as the government (headquarters) is strongly committed to the goal of economic development and effectively monitors and coordinates the activities of business groups. In a QIO, opportunism and diversion of allocated resources to socially unproductive uses may be minimized under certain conditions. A QIO, with contest-based competition as the rule of the game, also tends to create a group-oriented atmosphere and keen competition among business groups. Furthermore, informational imperfections prevalent in developing countries might be better handled in a QIO rather than through a market particularly in the presence of only a limited number of potential participants: the centralized/specialized decision-making on the basis of shared information economizes communication costs; and business uncertainty is reduced through the coordination of decisions among interdependent units trying to adapt to unforeseen contingencies.4

Major business groups were natural counterparts of the government in the QIO. They certainly were in a relatively good position in their financial and human resources and technological capabilities. Given that the industries pushed strenuously by the government were typically very capital-intensive (most heavy and chemical industries), none other than major business groups could actually undertake these projects. For the success of a QIO, any major casualty (business failure) in the early phase may be very fatal. This could be avoided only by business groups with their diversified portfolio and cross-subsidization among the subsidiaries, unless the government is ready to come to the rescue. And, from early on, the founding owners of Korean business groups proved themselves to be very dynamic and forward-looking in their business undertakings.

The problem is that the existence of market failure is not the sufficient condition for a successful government intervention, because the attendant government failure may be worse than the market failure. In this connection, we can think of a few conditions, which might help reduce government failure in operating the QIO and raise the efficiency of the QIO. They include (i) effective monitoring by the strongly motivated leadership and high-quality civil service, (ii) strong incentives given to potential participants in the QIO, (iii) sound performance criteria conducive to economic efficiency, and (iv) small number of participants still representing a substantial share of the economy.

Effective monitoring. Political leadership with vision and commitment to economic development and a strong bureaucracy capable of carrying out the mission should be essential. Without firm commitment of the top leadership as well as political stability, it would be difficult to push a coherent, long-range development plan through in the face of the potential resistance of interest groups. For bureaucrats, how immune they are from corruption and interest group pressures may be more important than their technical capabilities.

Korea stands out among other countries where the top political leadership played a critical role in enhancing the economic status of the nation. President Park who came to power through a military coup in the early 1960s aimed at securing the legitimacy of

4 For the role of government in the early stage of development in Korea, see Kim (1994), SaKong (1993), Nam (1997), and Lim (2001).
his regime through rapid economic advancement. He was also a man of vision. In order to accelerate the process of industrial catch-up, large enterprises were urged, with both carrots and sticks, to undertake investment projects the government regarded as strategic. With the keen interest of the top leadership in the success of these projects, they actually performed an effective monitoring role. It was unthinkable for the enterprises to divert financial resources, largely subsidized bank loans, to other uses (with higher expected private return). Any difficulties encountered in the course of project undertakings received the president’s immediate attention for solutions. It also discouraged red tape and major corruption involving government bureaucrats in carrying out these projects.

Loyalty to authority is one of the most important virtues of Confucianism. In traditional China, Japan and Korea, the positive role of government as well as the role of intellectuals in policymaking has been taken for granted. Following the time-honored Chinese tradition, both in Japan and Korea, elite bureaucrats are recruited through early career competitive examination. To the extent that entering, working and lifetime tenure in the civil service gives great prestige and pride, bureaucrats are likely to be less susceptible to corruption. The merit-based hiring and step promotion systems with relatively low incidences of hiring and advancement based on political motivation, patronage and nepotism seem to have contributed to maintaining the quality of the bureaucracy relatively high in these economies. Another factor that might have deterred widespread corruption in the bureaucracy in these countries is example by the leadership. A case in point is President Park in Korea. He was believed to be clean and thrifty without any motivation for personal wealth accumulation (although he is also known to have received political donations for ‘political expenses’) and not known to condone corrupt acts by high-level civil servants or his relatives.

**Strong incentives.** Operating in a QIO are both hierarchy and price incentives. Without adequate incentives expected from the government, private enterprises would not fully cooperate as development partners. The minimum level of incentives required might depend, to a degree, on how readily the society accepts the initiating role of the government.

Incentives given to the member corporations in the QIO are considered to be very strong. The most important incentives must have been exclusive undertaking of investment projects with all the necessary financial support. The government-backed projects were usually financed with policy loans from banks at preferential rates, much lower than general bank loan rates (which were also regulated below market rates).

---

5 His vision was best demonstrated in carrying out two development projects with profound symbolic and economic significance in the latter half of the 1960s: building an integrated steel mill (Pohang) and construction of the Seoul-Pusan and other expressways. Evaluating these projects as economically infeasible because of poor international competitiveness and inadequate utilization, respectively, international organizations including the World Bank refused to provide financial support. Still, he did not give up. The steel mill soon grew as one of the most efficient mills in the world, and it did not take many years before the expressways started to become congested (Kim, 1994).

6 Rauch and Evans (1997), for instance, found out that the more recruitment and promotion are based on merit, the lower is the extent of corruption on the basis of 35 developing country data.

7 In Korea, commercial banks were obliged to provide policy loans (the share of these loans reaching about 50% by the end of the 1970s) in addition to development banks or other specialized banks. A
Foreign capital was also badly needed due to limited domestic saving and foreign exchange earning. In earlier years of development in Korea, the government, through state-owned banks, even guaranteed the repayment of foreign loans incurred by private enterprises. In an effort to keep down the effective cost of overseas borrowing, the exchange rate was fixed to the dollar during the second half of 1970s. These industries were also protected from external competition through restrictive imports of competing goods. Finally, tax exemptions/reductions extended to strategic industries were an important part of the incentive package. Similar incentives were given to corporations in Japan when the Ministry of International Trade and Industry (MITI) strongly promoted heavy and chemical industries in the 1950s and 1960s.

*Sensible performance criteria.* Provision of strong incentives and effective monitoring are not useful without sound and clear performance criteria. These criteria should, of course, be those of enhancing economic efficiency and growth potential of the economy. They should also be clear and easy to administer in order to minimize any confusion, discretion and administrative costs. However, given the exclusive and closed nature of a QIO, the link between the performance and rewards may not be very transparent and fairness may not be guaranteed.

The major performance criterion used in the QIO was success in exports. Export competitiveness has been regarded as the ultimate test of efficiency and success of any manufacturing project. The heavy and chemical industry drive in Korea in the 1970s aimed at promoting these industries into major export sectors beyond the more immediate goal of import substitution. Sometimes, a timetable for attaining international competitiveness was presented. Nevertheless, since competition was limited for major industrial projects and the business environment was different across projects and industries, it was practically impossible to work out rewards or penalties project by project. Large businesses still had strong incentives to do their best, because future government favors (in the form of exclusive entry into any promising industries and others) would depend on their performance with the projects at hand, however inaccurate the performance measurement might be. In Japan, more specific performance criteria were often presented in connection with the industry rationalization programs. They included quality improvement up to international standards, numerical targets for reducing production costs, and shift of investment mix in an industry.

---

special fund, called the National Investment Fund contributed by commercial banks and various public funds, was also set up in the mid-1970s to supplement credit supply to heavy and chemical industries. During the second half of the 1970s, average interest rates on export-related loans and equipment investment loans in key industries were 8% and 13% per annum, respectively, while that on general bank loans was 17%.

8 Korea’s Tax Exemption and Reduction Control Law of 1974 provided three optional tax incentives to these industries: five-year tax holidays, 8% investment tax credit (for machinery and equipment investment), or 100% special depreciation. Utilizing these incentives, the effective corporate tax rate was estimated at less than 20% compared with almost 50% for non-strategic industries (Kwack, 1985).

9 Of course, subsidized export credit was the most powerful and direct tool for rewarding exports, which lasted from the early 1960s until the late 1980s in Korea. As long as one obtained export orders and submitted the evidences to banks, short-term credit was given rather automatically regardless of the export items or other considerations (banks, in turn, got refinancing at even lower rates by presenting these documents to the central bank).
Small number of participants. A QIO should have a small number of participants to economize the coordination and other costs of managing the QIO. Beyond a certain level, the costs of coordination, fair distribution of quasi-rents, and performance monitoring get prohibitively high, particularly because the coordination and performance evaluation in a QIO are made in a multi-period setting. For a significant impact on the economy, though, the participants must represent a substantial share of the productive sector including the most dynamic and promising segments of the economy.

Big businesses are more prominent in Korea and Japan relative to the average size of enterprises in the respective countries than in other East Asian economies. One explanation is the difference in traditional system of inheritance of family wealth. The primogeniture in Japan, together with its relatively long and stable environment for wealth accumulation, may explain the emergence of wealthy families before the war. In contrast, major business enterprises in Southeast Asia dominated by ethnic Chinese tend to be relatively small and more closed. This feature seems to be attributable to the tradition of equal sharing of inheritance among sons in Chinese families and the expatriate’s self-protection instinct in a potentially hostile environment (in countries other than Taipei, China). Big businesses in Korea may largely be the result of the government’s industrialization strategy as well as the cohesion of the extended family in its Confucian tradition. With a dozen or so (or even fewer) prominent business powers, a QIO certainly had higher potential in Korea and Japan than in other East Asian countries.10

2.2. Increasing Inefficiency of the QIO with Industrial Development

Justification for government intervention in private resource allocation becomes weaker with continued economic development and, particularly, sophistication of industries. With accumulated knowledge and information, the private sector must have a reasonably good idea about potential industries and markets they might successfully enter into and the associated technological challenges they have to cope with. In the early phase of development, the task of picking the winners, that is, choosing strategic industries to promote, is relatively easy, given the general and predictable pattern of industrial development and the widely known technological characteristics of basic industries. Coordination among enterprises undertaking these industries may also be relatively easy, since the technological linkages among the projects are likely to be widely known. Beyond this initial stage of industrialization, however, government capacity to “lead the market, and properly correct market signals” should be greatly

---

10 It is difficult, if not impossible, to provide any numerical evidence for the efficiency of the QIO and to discern when the efficiency declined noticeably. The same is true for the efficiency of internal markets for business groups that are discussed later. Macroeconomic performance, like economic growth rate, was certainly affected by the efficiency of the QIO and the internal markets, but by many other factors as well. The trend of non-performing bank loans might be a better indicator for our purpose. Actually, the share of non-performing loans at the seven major nationwide commercial banks showed a steep rise from 2.4% during 1976-80 to 10.5% during 1984-86 before it came down to below 6% at the end of the 1980s after huge financial assistance was provided.
weakening. All the more so, if the market imperfections have been reduced significantly in step with economic success.

With this introduction, what can we say about the efficiency of the QIO and government responses in Korea and Japan? In addition to the increasingly limited government capability to intervene in the markets just noted, there seem to be at least four other reasons to believe that the QIO would be weakened in the process of economic development.

- The development agenda keeps changing as the economy grows. Governments cannot continue to single-mindedly pursue industrialization after initial success. Given that the major task of a QIO is effective industrialization, the attention and commitment of the political leadership to the QIO should be weakened.\footnote{The Korean government, for instance, began to be serious about reducing the widening income gap between urban and rural households (for fear of losing political support from the rural constituency) toward the end of the 1960s, and this prompted the introduction of a high grain price policy. Furthermore, by the early 1970s, it became obvious that the financial structure of large businesses were very fragile: as evidenced by the corporate financial distress that led to the drastic policy measures of freezing the informal credit market, known as the August 3rd Measure. After this, the Korean government started to pressure large business groups to improve their financial structure, though these efforts have been largely unsuccessful.}

- Incentives given to the participants in the QIO may also be weakening. The potential factors that might bring about this result include a changing development agenda, an increasing burden on the health of the banking sector or government budget, market pressures for deregulation and fair competition, and external pressures for reducing subsidies geared to promoting specific industries.

- The number of significant players in industries or potential participants in the QIO increases with industrial success. Furthermore, not all the QIO participants are successful, or rather not all the non-participants are unsuccessful. This will raise a question about the membership in the QIO. If the government keeps patronizing only a few, it will face growing political risk, while a substantial increase in the membership will result in very high costs of managing the QIO.

- Bureaucrats may become increasingly susceptible to corruption, which will undermine their role as an impartial referee for the contests in the QIO. The rising vulnerability to corruption might be a natural consequence of repeated contacts between bureaucrats and business elite. It may also be attributable to looser monitoring of industrial projects by the political leadership, rising costs of maintaining political parties or regime, and widening wage gap between bureaucrats and business elite.

2.2.1. Degeneration of the QIO

**Heavy and chemical industrialization drive.** In spite of the environmental changes that would tend to weaken the QIO, the Korean government actually relied more heavily on it throughout the 1970s. Probably, the government was too excited with the initial success to redefine its role in line with the changing environment. In addition, there were other developments—preoccupation of the Korean government with building
heavy and chemical industries—which worked to consolidate the QIO. This preoccupation was a response to the changing economic and security environment of the nation.

First, Korea faced sharply increased threats to national security in the early 1970s. While North Korea provoked frequent armed attacks, the reaction of the United States was disappointingly lukewarm. And according to the newly adopted Nixon Doctrine, the United States pulled out one-third of its troops stationed in Korea, leading Koreans to believe that they would eventually withdraw altogether. Second, following the first oil price shock, Korean light manufacturing industries faced increasing protectionist barriers in industrialized countries. The emergence of the People’s Republic of China (PRC) and other second-tier newly industrializing economies was also seen as a serious potential threat to Korea’s continued export-led growth. Since heavy and chemical industries are very capital-intensive and also need some accumulation of technology and skilled manpower, existing big businesses were natural candidates for undertaking these industries.

**Dual goals of the QIO.** However, these environmental changes should not be sufficient explanations for the continued reliance on the QIO, because industrial upgrading might have been better attempted by relying more on the market. The major reason seems that the government, and the large businesses themselves for that matter, had found another role for the QIO, thereby degenerating or even corrupting the QIO. In the new role, the QIO was a vehicle of symbiosis or a collusive coalition for mutual support exchanging various government favors for political support mainly in the form of political donations. The business circle might always welcome such a relationship. The incentive for the coalition on the part of the political leadership might have arisen in the 1970s, as the authoritarian regime realized the need for costly political maneuvers in order to prolong its power.

In spite of the apparent success in economic development, the authoritarian nature of the Park regime met with increasing antipathy of the people. Even in the economic sphere, discontent grew with a widening income gap between urban and rural areas and among different regions, as well as poor working conditions and the repression of basic labor rights. Politically, President Park engineered a revision of the constitution so that he could run for the presidency for the third term. Though he won the election in 1971, it was a close race. Obviously for fear of losing power sooner or later, he pushed another constitutional amendment in 1972 abolishing direct presidential elections. Realizing weakening popular support, he seemed to have felt a strong need to take on big businesses not only as the government’s development partner but also as the “political partner” of his regime. He obviously wanted to have his position more secure by making stronger efforts to establish his personal supporters in both the ruling and opposition parties, the military and other segments of society. In return for

---

12 The North Korean provocations included an attack on the Presidential Office by commandos, kidnapping the American reconnaissance ship Pueblo, a large group of commandos sneaking into the eastern mountains and attacking nearby villages for more than a month, shooting down an American aircraft, and several occasions of landings on the east coast by armed spies and vessels.
accommodating the interests of big businesses, the leadership could rely on them for financing his political activities essential for the stability of the regime.13

There is little evidence to assess the extent to which major resource allocation decisions were distorted by political donations. In some cases, the donations were known to have been delivered with specific requests such as favors in selecting the firms to carry out certain public investment projects, in giving licenses for specific businesses, and in tax investigations. In other cases, the donations were made simply as a quasi-tax or insurance to avoid any discrimination against them vis-à-vis other enterprises. It is also highly probable that large businesses, as a group, tried to secure political favors for their interests. Now, the QIO had dual objectives: continued industrial upgrading for sustained economic growth, and mobilization of political donations and other support. As the two goals often collided with each other and neither could be given up, it must have been a difficult task to reconcile them. The evolution of chaebol polices, or more broadly, the government-business relation since the mid-1970s may be viewed as the result of this maximization with occasional compromises under changing economic and political situations.

With the dual goals at hand, the operation of the QIO could not be any more transparent than before. It remained based on arbitrary discretion rather than predictable rules, and was largely ad hoc. A multitude of rules and regulations that are complicated, confusing and inconsistent with each other leave much room for different interpretations and bureaucratic discretion, which provides a fertile ground for corruption and soliciting of political donations. Ad hoc, inconsistent and zigzag pattern of chaebol policy may also be understandable, because the optimal solution should keep adapting as the economic and political environment changes. This is so because the task of optimization was actually a bounded maximization problem. The government had to maximize economic achievements and the receipt of political contributions, subject to safeguarding the economy and the regime, that is, avoiding both an economic crisis and the collapse of the regime.14

2.2.2. Policy Responses in the Degenerated QIO

Measures to avoid crises through improved corporate financial health. Concern of the Korean government about the over-leveraged financial structure of large enterprises and their reckless investments started in the early 1970s, particularly in connection with the

---

13 According to charges brought against two former presidents, Chun and Roh, the slush funds they mobilized amounted to 700 billion won and 500 billion won, respectively (Chosun Ilbo, March 12, 1996).

14 Mathematically, the optimization task may be expressed as follows: Maximize \( Z = a \cdot E + (1-a) \cdot D \) subject to \( E = e(\epsilon, \rho, D, B) > E^* \), \( P = p(\epsilon, \rho, D, B) > P^* \), and \( D = d(E, P, B) \), where \( E \) and \( P \) are, respectively, measures of economic achievement and political support; \( E^* \) and \( P^* \) are the minimum levels of \( E \) and \( P \) that would avoid an economic and political crisis, respectively; \( \epsilon \) and \( \rho \) denote a set of exogenous variables (environment) determining \( E \) and \( P \), respectively; \( D \) is political donations, while \( B \) is the degree of policy distortion due to \( D \). We can say \( E \) and \( P \) are mutually supportive, that is, \( e'(\rho)>0 \) and \( p'(\epsilon)>0 \). Economic efficiency or achievements will be negatively affected by both the amount of political donation and the degree of policy distortions thereof: \( e'(D)<0 \), and \( e'(B)<0 \). Finally, political support may be increased utilizing more political donations, while it would be undermined (by inciting anti-chaebol sentiment of the people) as policy distortions become more apparent: \( p'(D)>0 \), and \( p'(B)<0 \).
so-called August 3rd Measure of 1972 (see Box 2). The government seems to have been well aware that the economy would suffer from recurrent crises without addressing the problem. This prompted the government to adopt policies to drive large firms to go public, to limit their bank borrowings and unproductive investments, and to subject them to fair trade rules. In 1973, the Law on Facilitating the Opening of Closed Corporations was enacted. With tax incentives, threat of limiting bank loans and other ‘jawboning and arm-twisting’, many large firms did go public. In the next year, a system of credit control and principal transactions bank (PTB) was introduced for large business groups. The PTBs were in charge of overseeing the financial health of client business groups, limiting their total bank borrowings, and preventing unproductive investments. Another regulatory initiative was the enactment of the Monopoly Regulation and Fair Trade Act of 1980 with a view to preventing abuse of market power and mitigating the concentration of economic power around large groups.

Still, it would be too naïve to believe that these policies would fundamentally change the behavior of large businesses biased toward over-paced, debt-financed expansion. This was so because what they tried to cure was not the root cause but the symptom. Though many firms were forced to go public, there was little improvement in their financial structure. The control of bank credit had limited effect since business groups turned more to nonbank financial institutions for financing. Also, the enactment and enforcement of the Fair Trade Act fell far short of being an instrument of phasing out the QIO. With the government unwilling to subject their own anti-competitive regulations to the Act, there was a serious limit to its effectiveness, even though later amendments gave some teeth to the Act (Yoo, 1997).

**Failure to impose corporate governance and exit rules.** While the government attempted to address the symptom of imprudent debt-financed investment behavior of large businesses, it neglected to take appropriate actions to deal with the root cause. One such area would be reforming corporate governance, and another is putting workable exit mechanisms in place for large businesses and financial institutions. Of course, this can be seen as the result of negotiation and optimization in the QIO. Policies on corporate governance and exits have a direct bearing on the wealth accumulation of controlling owners. Chaebols must have been willing to provide political donations and

---

15 Between 1973 and 1979, when President Park was assassinated, more than 300 firms newly went public, while only 66 firms went public between 1956, the year the stock exchange opened, and 1972. General reluctance for firms, even large subsidiaries of business groups, to issue equity ownership shares to the public seems to indicate that the controlling owners can better hold on and maximize their wealth by remaining closed.

16 Korea’s PTBs are different from the Japanese main banks in several respects: they are more like a substructure of the bank supervisory authorities rather than maintaining an autonomous long-term relationship with client firms; they are not necessarily the largest lenders, do not usually hold equity shares of the client firms, rarely play the role of a delegated monitor for other creditors, and do not necessarily take a larger share of loss when the firm goes bankrupt (for detailed discussion, see Nam, 1996).

17 For instance, the 1986 amendment included restrictions on cross-shareholdings among the subsidiaries of a group (and total equity investment as well, a maximum of 40% of net assets) and prohibition of pure holding companies. The 1992 amendment introduced a ceiling on debt repayment guarantees for chaebol subsidiaries (200% of equity capital), which was further tightened (to 100% of equity capital) in the 1996 amendment.
Box 2. Earlier Near-Miss Financial Crises in Korea

President’s emergency decree freezing informal loans to business firms, 1972

Economic recession in the early 1970s put many enterprises with highly-leveraged financial structures in serious financial distress. Rumors about financial trouble led the informal credit market (curb market) lenders to call their loans to these firms on short notice, driving them to bankruptcy. It was feared that a chain reaction of bankruptcies would give rise to a banking crisis. The emergency measure froze the existing curb market loans to business firms and converted them into long-term loans with a lowered interest rate of 1.35% per month (compared with the prevailing rate of 3.5% per month) to be repaid in installments in five years following a three-year grace period. Part of the short-term borrowings from banks were also replaced with long-term loans, which was soon followed by substantial reductions in interest rates at financial institutions.

Being alerted about the weak corporate financial structure, the government enacted the Law on Facilitating the Opening of Closed Corporations that went effect in 1973. Many candidate firms dragged their feet but had to comply, because the Law could order them to go public with non-compliance being disciplined by unfavorable treatments in corporate tax rate and bank loan allocation. However, the positive results such as new stock issues and improved corporate financial structure were largely short-lived, and the expected separation of ownership and management did not follow.

Government-facilitated investment adjustment and industrial restructuring in the 1980s

Investment adjustment in 1980: Ambitious investments and the worldwide recession following the second oil price shock led to financial distress in many Korean enterprises at around the end of the 1970s. In order to improve the situation, the government imposed its investment adjustment programs in such industries as heavy power-generation equipment, heavy construction equipment, motor vehicles, vessel diesel engines, electronic exchangers, heavy electrical equipment, and copper smelting. Depending on industry-specific situations, different adjustment packages were worked out, which included mergers, division of labor by product line, blanket orders, conversion of Korea Development Bank loans into equity, and fresh bank loans.

Restructuring of ailing industries during 1984-85: Two services industries, shipping and overseas construction, promoted by individual industry laws to maximize foreign exchange earning were in serious trouble by the mid-1980s due to recessions in these industries. The shipping rationalization program included merging 63 firms to 17, cutting shipping capacity, fresh bank loans and debt rescheduling. Restructuring of overseas construction industry was not very successful in spite of substantial financial support with many smaller firms going bankrupt and a few either merged or entered into management consignment with financially healthier firms.

Industry rationalization under the new Industrial Development Law, 1986-88: Some infant (automobiles, diesel engines, heavy electrical equipment, and heavy construction equipment) and declining industries (textiles, ferro-alloys, dyeing, and fertilizer) were chosen and given various supports through the review of the Industrial Development Deliberation Council. Most common rationalization measures included entry restrictions, intra-industry specialization, long-term supply contracts, upgrading old equipment, and promotion of technology development. In the restructuring efforts, a critical role was played by financial support, which included subsidized long-term (up to 30 years) loans, loans for loss compensation (seed money) and writeoff of principal.

These restructuring efforts, however, left much to be desired. They failed to clearly define the extent of government commitment, and to impose market discipline. The policies were often inconsistent across cases and largely firm-specific rather than industry-specific. Financial institutions were almost excluded in designing bail-out programs, sending the signal that the government would keep playing its role of implicit risk partner and encouraging large businesses to engage in moral by hazardous behavior. These earlier failures were very costly and were, to a large extent, responsible for the crisis of 1997.
other support in exchange for keeping the old *modus operandi* of operating the businesses and turning to the government for help in the event of financial distress. In this sense, the degenerated QIO was very much a contributing cause of the financial crisis of 1997.

In the area of corporate governance, one of the most distinct institutional features in Korea was the protection of management control by controlling shareholders. With the internal ownership ratio at about 50% (due mainly to cross-shareholding among subsidiaries), there was no effective tool to check and supervise the controlling owners. Moreover, until relevant rules were revised in 1996, corporate takeovers were practically impossible.\(^{18}\) Despite some regulatory changes which were made belatedly to improve audits and disclosure and to strengthen the rights of minority shareholders, such changes were rather insignificant in comparison with the changes made after the 1997 crisis.

As for the exit discipline, public purse bailing out of large enterprises in financial distress was a rule rather than an exception. It was particularly so when the troubles arrived *en masse* or in the midst of an economic recession. If the government wanted to give a clear signal of market discipline, efficient exit mechanisms should have been put in place rather than *ad hoc* decisions of bailout/bankruptcy with little consistency across cases or casual remarks emphasizing market principles. For more than a decade, since the bankruptcy of Kukje group (which many people believe was politically motivated) in 1985, no *chaebols* within the largest 30 failed, making people believe that they were ‘too big to fail’. Indeed, the government had every incentive to try to forestall a financial crisis, since it would put the regime in jeopardy (as actually happened in Korea).

Financial liberalization could have been effective in imposing discipline on corporate financing and investment behavior. However, as the process of financial liberalization was tantalizingly slow and indecisive to expect such effect, it is understandable that financial control was one of the key operating tools for the QIO.\(^{19}\) For instance, in spite of many measures of deregulation, policy loans (together with informally ‘directed loans’) remained a substantial share of commercial bank assets; serious deregulation of interest rates started as late as 1991; and the government *de facto* nominated presidents and other executives of nationwide private banks. In short, the allocation and price of bank loans continued to be controlled by the government to a large extent. As such, any problems arising from major corporate defaults or the deterioration of bank asset portfolio had to be dealt with by the government. Although

---

18 For anyone except the controlling shareholders, a purchase of voting shares of a listed company in excess of 10% was flatly prohibited! Any tender offer for over 25% of the shares, to be effective, needed tendering of more than 50%. The shadow voting rule for shares in custody of institutional investors also restricted their monitoring role, as these shares were required to vote proportionate to other votes so as not to affect the results.

19 Korea pursued financial liberalization since the early 1980s following the previous decade of severe financial repression in support of the heavy and chemical industry drive. Much progress was made toward privatization of commercial banks, lowering entry barriers, reducing compartmentalization among different types of financial institutions, and introducing many new financial instruments.
moral hazard was prevalent and caused non-performing loans to snowball, there were few bank failures or serious efforts to strengthen prudential regulation.\textsuperscript{20}

2.2.3. Consequences of the Degenerated QIO

By and large, government intervention in resource allocation was very costly. It might have been expected, since efficiency of a QIO depends critically on the impartiality of the referee abiding by clear performance criteria. Even for an impartial and honest referee, the coordination and management of a QIO must have been very challenging by sometime in the 1970s in Korea. Enterprises that had access to preferential policy loans or tax incentives tended to expand their businesses rapidly without careful appraisal of the investment projects. Since lending decisions were largely made by the government, creditor banks had little incentive for credit evaluation or \textit{ex post} monitoring. These firms were heavily leveraged and borrowed even from informal (short-term) credit market, as they were usually pressed for working capital. This structural weakness put the economy on the verge of a financial crisis in the early 1970s and again in the middle of the 1980s. The former financial distress was dealt with by freezing the informal credit market (together with the replacement of short-term bank loans with long-term loans), while the latter was tackled with massive industrial restructuring backed by government-arranged financing (see Box 2).\textsuperscript{21}

Was it inevitable for the QIO to break down in a crash? In Korea, it could break as early as the 1970s or the mid-1980s without massive financial assistance. In 1997, when several large \textit{chaebols} were in trouble in the midst of the recession, the government let financial institutions come up with a ‘bankruptcy prevention agreement’ to give the troubled firms temporary relief. This time, the government failed to avert the crisis, because the magnitude of the problem got larger and, unlike the previous periods, short-term external capital transactions were very much freer. In retrospect, of course, there was the possibility of successfully managing the phase-out of the QIO, or restructuring it to a more open and looser organization with a single goal of enhancing industrial competitiveness. More specifically, Korea could have gone a long way to avoiding the recent crisis by accelerating domestic financial liberalization and giving a credible threat of market discipline towards the failures of large corporations.

\textsuperscript{20} Inadequate prudential regulation was believed to be one of the major problems leading to financial crisis in Korea and other East Asian countries. Adequate prudential regulation, though, can usually be expected only when domestic financial liberalization has progressed well. Serious efforts to build the required institutional safeguards—such as prudential regulation, deposit insurance, and dealing with distressed financial institutions—are likely to be made only as a response to increased instability in the financial markets following earnest deregulation. In Korea, where no bank failure (even a small provincial bank) was allowed, moral hazard was obviously serious in prudential regulation as well.

\textsuperscript{21} It can easily be seen that the fundamental problems in the Korean financial and corporate sectors remained basically the same between the early 1970s when the first banking crisis might have happened, and the late 1990s when the country was actually hit by a full-blown crisis. Those who activated the process that could lead to a crisis were informal credit market lenders in the earlier period, and were international investors and creditors in the latter period. However, in both cases, what caused them to panic was the fear of corporate defaults, which, in turn, were attributable to imprudent investments predominantly financed by short-term capital.
But this would have been easier said than done, given the symbiotic relations with big businesses and the associated political risks.22

3. Internal Markets within Business Groups

Many of the large business groups in Korea had their businesses started by the 1950s, and had grown rapidly through the period of heavy and chemical industry drive in the 1970s. Whenever they entered into a new industry, they faced the challenge of financing, recruiting capable managers to command the project, and securing the needed technologies and skilled labor. In the case of government-promoted projects, foreign capital or longer-term bank loans had been arranged by the government for capital equipment, but much of the working capital had to be mobilized on their own. Financing a new project without government help was a very difficult task. Banks were not interested in financing, nor had any capacity to evaluate, unfamiliar projects of high risk, and the capital market was not developed to facilitate the financing of startup businesses. More often than not, it was practically impossible to find and recruit, domestically, any managers, technicians or skilled labor who had relevant experiences in the new industry they planned to enter. In this situation, a business group had no other choice than relying on their own resources to the extent possible, however inadequate they might be. They pooled any funds available to the subsidiaries to supplement outside funding for the new project. For necessary human capital, they relied mainly on recruiting from the pool of new school graduates and training them in house.

All the strategic decisions were made by the controlling shareholders including those related to the operation of the internal markets within the group and other coordination among the subsidiaries. However, with the increasing number of subsidiaries with vertically and horizontally related and unrelated industries, the coordination task of the chairman started to become very burdensome. This led larger-size groups to set up the group-wide headquarters—the planning & coordination office (PCO) or the chairman’s office—by the late 1970s. The headquarters of a group went a long way to overcoming the problem of weakening control over, and coordination among, their subsidiaries. As the control tower of the group, the planning & coordination office was in charge of assisting the chairman in making group-wide strategic decisions or major operating decisions related to any particular subsidiaries as well as monitoring the performance of the subsidiaries (see Figure 2).

In this section, it will be argued that there are reasons to believe that internal markets within a business group might have sometimes been more efficient for the group than relying on the external markets in the early phase of development. As the financial and other factor markets develop with continued economic growth, the advantage of internal markets vis-à-vis external markets will dwindle and may disappear ultimately.

22 Shortly before the outbreak of the crisis, some high-level policymakers openly remarked “even financial institutions can go bankrupt” and “no cheabols are too big to fail”. Unfortunately, such remarks came too late and at a time that was far from being opportune. The threat became suddenly all too real for overseas creditors and investors, particularly when they saw Korea lacked efficient, orderly, workable and fair mechanisms of exit they were used to back home.
If business groups continued to utilize their internal markets for some reason, even though external markets have become more efficient in evaluating projects and allocating resources, the profitability of the groups might be compromised. This might have been what actually happened for Korean chaebols. The operation of internal markets was not necessarily based on efficiency in resource allocation, but was often interfered with by the interests and concerns of the controlling families (see Nam, 2001). It will also be argued that the organizational structure of Korean chaebols was relatively efficient until their diversification strategy was pursued mainly into unrelated industries. Their management style, particularly the way they control and coordinate among member subsidiaries, started to become problematic as they switched to a related (intra-industry) diversification strategy since the early 1980s.

3.1. The Relative Efficiency of Internal Markets and the M-Form Organization

Williamson (1975 and 1985) sees a conglomerate as a natural extension of a multidivisional firm, which has an important merit in organizing complex economic affairs by distinguishing, and separating the responsibilities of making strategic and operating decisions. Conglomerates with this character, he argues, are usefully thought of as an internal capital market whereby cash flows from diverse sources are concentrated to high-yield uses. One question arising then is whether business groups, say, Korean chaebols, have an efficient organizational structure, or whether it is the kind of multidivisional form (M-form) Williamson has in mind or not? Another question is whether this internal capital market is necessarily more efficient than an
external capital market, or whether the internal market works efficiently to complement the imperfect external capital market, and, if not, under what circumstances we can expect it would? The second question will be discussed first.

3.1.1. Underdeveloped Factor Market and Creation of Internal Market

Imperfections in the financial markets in developing countries are well known. Investment capital for projects with a long gestation period is usually not available in the private financial market. The capital market is underdeveloped and banks have little interest (often because of high risk and regulated interest rates) and capacity to evaluate investment projects. The market imperfection is primarily due to limited and asymmetric information between credit suppliers and borrowers, which results in adverse selection (that is, the tendency of biased credit supply towards those with risky projects bidding high interest rates) and moral hazard on the part of borrowers. Another significant source of imperfection is costly contract enforcement (due mainly to inadequate legal procedures for loan collection and investment protection), which contribute to high transactions costs. As a result, external financing is available only at a premium over internal financing (to compensate for the expected costs of resolving the conflicts of interests between lenders and borrowers).

Gertner, Scharfstein and Stein (1994) ask what exactly makes the internal market do better in mitigating the problem of limited and asymmetric information. They note that the headquarters in the internal market owns (in the sense that it has a residual claim on the assets of entities it deals with) the business units to which it allocates capital, while in an external market, say, a bank, does not own the borrowing firms. This makes the headquarters have stronger incentives to monitor the subsidiary units, generating more and accurate information on which it would base its decisions of resource allocation among the units. Another advantage for the headquarters in the internal market is its superior capacity of asset redeployment. When reallocation of assets to other uses is desired because of low efficiency in using these assets in a business unit or firm, it can be done relatively easily without incurring high transactions cost within the internal market, while, for a creditor bank, it can be done only through the sale of these assets to outsiders at a substantial transaction cost.

Internal capital market. Korea’s organized financial market was far from adequate in financing rapidly growing corporate activities. Until the mid-1960s, its primary role was to channel aid or government funds to rehabilitation projects and farmers. Two government-funded specialized banks, the Korea Development Bank and the Korea Agricultural Bank, accounted for over 70% of total bank lending. The 1960s saw the establishment of new financial institutions: mainly special-purpose banks and provincial banks. However, it was only after the 1965 interest rate reform that banks began to play the role of savings mobilization. With the drastic increase of interest rates, bank

---

23 More specifically, lenders want the ‘lemons’ premium concerning the quality of borrowers (that is, the premium charged on the assumption that, with difficulty in telling good borrowers from bad, all borrowers are of the average quality) as well as the compensation for any expected costs of evaluation, monitoring and contract enforcement.
deposits and loanable fund increased substantially until the early 1970s. The progress in financial deepening, however, was interrupted throughout the 1970s when the promotion of heavy and chemical industries was the overriding policy objective of the Korean government. Interest rates of all organized financial markets were tightly controlled with a view to providing cheap credit to those firms undertaking the strategic investments.

As the largest shareholder of nationwide city banks, the government not only intervened in credit allocation but also heavily regulated all aspects of banking operation such as organization, budgets, branching, and other business practices. Moral hazard was serious in banking management, as competition was limited and bank management was held little responsible for their performance. The Korean capital market was little more than a secondary market for the stocks of a handful of state-owned enterprise and government bonds issues during and after the Korean War until the early 1970s. Before 1972, there was no corporate bond issue in the market. It is true that the major development projects in the strategic industries were always given a preferential treatment in rates and availability of bank loans. However, it does not mean that they did not have any financing problem. Since the policy loans were often limited to financing fixed investment and Korean chaebols kept expanding whenever they saw significant profit opportunities, they were always pressed for funds. Even large-scale chaebols had to rely on the informal money market for working capital most of the time.

The natural response of chaebols to this inadequate and uncertain financing environment was to create their own group-wide internal capital market. Since the subsidiaries of a group are legally independent firms, the capital flows among the subsidiaries are not as easy as they are among different divisions of the same firm. Nevertheless, it did not pose any great difficulties. Any internal transactions involving transfer pricing or tax transfers can be used as tools of the internal capital market. Other instruments of redeploying capital within a group included cross-shareholding or cross-guarantees of debt repayment among the subsidiaries and credit supply or other financial arrangements by group-owned financial institutions. Through these means, they could redeploy funds from one subsidiary to another or help some subsidiaries have better access to credit in the external market (for the workings of internal markets within Japanese zaibatsu, see Box 3).

- **Cross-shareholding:** Whenever a firm was newly established or purchased by a chaebol, the headquarters distributed the required equity capital of this firm among its subsidiaries for investment. Although the rules for allocating the amount of equity investment on the new firms (or existing firms when they issue additional stocks) are not well known, various factors seem to be taken into consideration: cash flows and future investment requirement of each subsidiary, the degree of ‘relatedness’ with the new firm, and varying personal interest of the controlling shareholders in the subsidiaries.

---

24 With the 1965 reform, the bank deposit interest rate for the longest maturity was doubled from 15% per annum to 30%, ensuring substantial positive real rates. The M2/GNP ratio remained below 10% on the eve of interest rate reform in 1965 but rose steadily to over 30% by the early 1970s. For a detailed description of Korea’s financial market, see Nam (1995).
Box 3. The Internal Capital Market of Japanese *Zaibatsu*

According to Asajima (1984), the financing of *zaibatsu* Sumitomo, for instance, was basically a reallocation of internally accumulated funds by its head office in group-wide strategic perspectives. By the early 1920s, Sumitomo was composed of *goshigaisha* (holding company) and several ‘independent’ companies. Belonging to the *goshigaisha*, were the head office and directly managed enterprises, most of which later became corporatized subsidiaries. Regardless of their status, all the enterprises or business units of the group had to submit their investment and financing plans to the head office, which were approved after serious evaluation and often with adjustments and coordination from the group-wide strategic point of view.

Any surplus funds of directly-managed enterprises or subsidiaries were absorbed by the head office in the form of deposits. The financing needs of member enterprises or subsidiaries were first met by the withdrawing of the deposits and loans from the head office. In other words, the head office played the role of financial intermediary for the group, channeling surplus funds of some members to others that need financing. Another important source of funds for the constituent firms was new paid-in capital. However, the public offerings of equity stocks were very few, and most of the capital augmentation came from its *goshigaisha* or Sumitomo family owner out of their dividends from profitable companies in the group. That is, the internal capital market was operating mainly through group-wide channeling of the funds mobilized from the deposits of member firms and the reinvestment of their profits (out of dividends paid out), all centrally coordinated and controlled by the head office. When the internal funds were not enough to finance new investment, the individual firms relied on outside capital including borrowings from financial institutions and issuance of bonds and notes payable, and the head office itself often borrowed from the bank and other financial institutions of the group. Nevertheless, the reliance on (external) borrowing was rather limited until the late 1930s (in the case of Sumitomo) when internal capital was far from being sufficient to finance booming investments related to military needs.

Of course, there were some differences among *zaibatsu* in the scope and tightness of the internal capital market operating within a group, as well as the roles played by the head office vis-à-vis the group bank. Sumitomo Bank played only a supporting role carrying out the group-wide financing decisions made by the head office. While the situation is known to have been similar for Mitsubishi as well, Mitsui Bank seems to have played a much more important role in making strategic financing decisions of the group. Also, it was noted that Mitsubishi was less reluctant in opening its ownership through the public offerings of equity stocks (resulting in the reduction of its holding company’s ownership share to 69% by 1928). Consequently, the head office’s function of capital reallocation was somewhat weaker in Mitsubishi, as the core member companies had increasingly autonomous control over their own capital reserves (Mishima, 1984).

- **Cross-guarantees of debt repayment:** When a new or financially weak subsidiary of a group wants to borrow beyond certain limit, it was customary for Korean banks to ask a repayment guarantee by financially healthier subsidiaries. Since debt guarantees are contingent liabilities, they are not accompanied by an immediate drain of fund from the guaranteeing firms. As long as the financial health of a group is not very bad (so as not to generate any serious concern of a chain reaction of defaults), debt guarantee was an effective way of securing external financing for new and weak subsidiaries and enhancing the debt capacity of the whole group.
Utilization of own financial institutions: Unlike Japanese counterparts, Korean chaebols were not allowed to control nationwide commercial banks (through the restriction of voting rights or ownership). Still, they could own and control provincial banks and nonbank financial institutions, such as insurance companies, short-term finance companies and securities investment trust companies. These institutions served as an expedient channel for reallocating internal capital as well as for allocating externally mobilized funds. Prudential regulations concerning concentration of risk and lending to insiders or connected parties were often circumvented or violated outright.

Imperfection of the external capital market, however, is not a proof for the superiority of the internal capital market in resource allocation. As we will discuss later, there are actually many evidences that the internal capital market is not doing a good job. Still, there is a strong possibility that the internal capital market of chaebols in Korea might have worked efficiently to complement the external market in the early phase of development, say until around the end of the 1970s, when the government intervention in the resource allocation was most prevalent. Extensive government intervention in the banking sector could lead to inefficiency not only because of picking wrong industries for support but because of the lack of incentives for banks to develop their capabilities of project evaluation and credit evaluation. The weak incentives for banks can make the problem of information asymmetry so serious that even the highly promising projects of chaebols could not be adequately financed, which called for the internal capital market. Furthermore, in the earlier phase of chaebol growth, the internal capital market must have been less plagued by problems that constrain the headquarters’ task of efficient asset redeployment. Disputes among family managers and the difficulty of effective coordination among subsidiaries in related businesses without overly impairing their managerial autonomy were challenges the groups usually faced only after the initial period of growth.

Internal labor market. The internal market of a chaebol, particularly the larger ones, was not restricted to financial resources. External markets for managerial and technical manpower were also imperfect in many senses. For instance, Khanna and Palepu (1999) view business groups as a substitute for labor market institutions. For

---

25 An indirect evidence was provided by Yoo (1990), who measured capital efficiency in terms of non-labor value added per unit of capital. The average capital efficiency of government-favored heavy and chemical industries (excluding petroleum refinery which was highly oligopolistic) during 1971-78 was estimated at 23% compared with 28% for other manufacturing (excluding tobacco which is a government monopoly). This gap was estimated to have reversed and narrowed during the ensuing 1979-85 period.

26 Financial flows in some of the Japanese zaibatsu were probably a clearer case of internal capital market. The three largest zaibatsu (Mitsui, Sumitomo, and Mitsubishi) relied mainly on internal funds of dividends (received by the family or other subsidiaries) and retained earnings for business financing before they started to borrow in large scales in connection with their heavy investment for the production of munitions in the 1930s. As such, one of the key rationales of zaibatsu seems to have been the operation of the internal capital market, centralizing surplus funds group-wide for their reallocation to priority projects undertaken by different member firms. There were some differences, however, among zaibatsu in the degree of tightness in financial controls within a group as well as the extent of reliance on external capital (see Box 3).
managerial talent, business firms could not rely on the external market because of the limited supply of good-quality managers. The main suppliers of managerial talent comprise business schools and the corporate sector itself. In developing countries including Korea, business schools emphasize mainly undergraduate education and their MBA programs are incapable of producing qualified intermediate-level managers. Potential supply from other companies is also very limited. The response to this situation is the practice of recruiting fresh college graduates and training them in house. This practice, of course, tends to perpetuate the limited role of the external market for managerial labor. It has not been uncommon to let managers move from one subsidiary to another as a way of training. Movements of labor workers within a group have been frequent when the group continually diversified into new industries. Basically the similar pattern was observed in other external markets for higher-quality technical manpower and skilled labor.

The key characteristic of the external market for these talents is that, even though business groups are the main demander and supplier, the mobility of this manpower outside the groups is extremely low. The observed low mobility of managerial labor may be explainable by several factors. Given the rapid expansion of business groups, the in-house supply of managers (through on-the-job training or specially designed learning programs) might have barely met their own demand, without creating any room to discharge some of them to the market. Moreover, managers trained in a group might have invested a lot in the group-specific assets, whose value might be lost significantly if they left the group. Work-related human relationship, familiarity with particular corporate culture, work experiences, management training, and other expertise developed in their career with a group would be most valuable when they remain and be promoted in the group. Finally, more direct pecuniary incentives have also discouraged the job mobility of experienced workers and managers outside the group because of the general practices of seniority-based compensation and the progressive severance payment in Korean business firms.27

3.1.2. Advantages of Multidivisional Organizational Structure

With many independent subsidiaries and the central planning & coordination office (PCO or the chairman’s office), a typical business group had a multidivisional organizational structure. Williamson (1975 and 1985) argues that this structure has advantages for large-scale organizations, particularly for managing diverse business activities. First, the CEOs of the subsidiaries (like a divisional manager in a firm) are

---
27 In Japan, the supply of skilled labor was characterized by an apprentice system, where foremen called oyakata trained a group of workers and entered into services contracts with client companies for specific tasks. The internalization of the labor market for skilled workers occurred around the turn of the 20th century. With accelerated technological advancement, reduced demand for manual skills and more complicated production procedures, industrial firms needed a more stable supply of skilled labor and started to recruit these workers in house and train them to the specific needs of the firms. Since on-the-job training in firm-specific skills was costly for investing firms (and the workers as well), they started to provide workers jobs with security as well as seniority-based wages in order to reduce workers’ turnover rate. At the end of the 1930s when demand for engineers and skilled workers rose substantially in the munitions boom, the inter-firm movement of workers was regulated by law, which contributed to the establishment of an internal labor market within zaibatsu (Okazaki and Okuno-Fujiwara, 1997).
authorized to make operating decisions in their firms on the basis of relevant local information, allowing the headquarters to be mainly concerned about strategic planning, resource allocation, coordination and monitoring. They are held accountable for their decisions and performance of their subsidiaries, and give their inputs in formulating group-level strategic planning and coordination. Information processing is fairly cost effective in this organizational structure. Second, the PCO, usually staffed with the most capable elite members, might be an effective device for monitoring and controlling any opportunistic behavior of the managers of the subsidiaries. It is true that agency cost is not very high in family-based business groups in Asia, since the CEOs of the subsidiaries are either family members or their loyal and obedient ‘agents.’ Nevertheless, the functions of the PCO enable a group to expand the boundary of its businesses, which can be undertaken without facing serious difficulties associated with additions of new businesses.28

Without a powerful PCO, the typical organizational structure of business groups may be the same as that of a typical holding company. This office, with several teams in charge of its key functions, has played at least two important roles. First, it sets basic rules of management including those on personnel, compensation, financing, accounting, reporting and the extent of decentralization, which are the basis of effective corporate control as well as essential ingredients in the formation of common corporate culture among the subsidiaries. The other function, more directly related to the efficient operation of internal markets, includes strategic planning and monitoring for enhancing the long-run growth and competitive positions of the group and, by the way of realizing this goal, coordination for the maximum utilization of available resources and competencies within the group. For this purpose, necessary financial and human resources and technical capabilities are pooled from the subsidiaries and redeployed for new projects or other tasks with the highest expected earning, effectively curbing any partisan interest to maximize rents at the individual corporate level. Of course, the critical factor for the role of the PCO is that the chairman (controlling shareholder) exercises his control usually through this office, minimizing any incentives for non-cooperation or opportunistic behavior by the managers of member subsidiaries.29

---

28 The headquarters of a group is typically composed of operational committee (GOC) and planning & coordination office (PCO) for Korean chaebols. The GOC is the top decision-making body of a business group, typically composed of the chairmen and several key executives such as the chairmen of sub-groups and CEOs of major subsidiary firms. It was supported by the PCO, with the executive in charge of the PCO usually serving as the secretariat of the GOC. The topics discussed at the GOC included: major corporate strategies including M&As, liquidation/transfer of businesses, annual and longer-term business plans, key policies on personnel affairs and wages, and other issues requiring coordination among group affiliates.

29 The holding company (HC, or head office) of Japanese zaibatsu played almost the same role as that of the PCO of Korean chaebols. Okazaki and Okuno-Fujiwara (1997) observes that zaibatsu can be interpreted as an organizational device of corporate governance in response to the problem of corporate monitoring in the 1910s and 1920s when equity ownership was increasingly dispersed. The HCs of some Japanese zaibatsu had very extensive control over their subsidiaries, centralizing cash flows, financing (through their own affiliated banks), and recruitment of staff members, intervening in other personnel affairs, and approving the budgets and decisions made by the board of directors. However, zaibatsu HCs generally limited their control only to the core affiliated firms (without directly controlling the firms owned/controlled by the core affiliates). Thus, Japanese zaibatsu may be seen as the mix of the Williamson’s (1975) ‘hierarchical (H)-form’ and ‘contaminated’ M-form, while Korean chaebols may be more close to ‘contaminated’ M-form.
However, in reality, the sharp separation of strategic decisions (to be made by the PCO) and operational decisions (to be made by the CEOs of subsidiary firms) may not be easy or necessarily desirable. As argued by Hill and Hoskisson (1987), the desirable organizational structure within the broad M-form can be different depending on the strategy of a multiproduct firm or business group. If a group has a strong character of vertical integration or is otherwise composed of operationally related firms, strong coordination among the related activities and subsidiaries is essential in order to maximize the potential gains from this relatedness. For vertically integrated groups, for instance, coordination and feedback among the production of raw materials, intermediate and final products as well as marketing activity is critical for the efficiency of the whole group. The coordination would typically involve the scale, timing, product mix and other modes of linking the related activities. For horizontally related groups, potential benefits may largely be derived from economies of scope and various joint efforts: sharing managerial, technical and physical assets, and making joint efforts in procurement of input materials, improvements in production processes, technology development, distribution and marketing. The problem with strong coordination among the related subsidiaries is that it restricts their operational autonomy, and makes it difficult to evaluate the performance of individual subsidiaries (profits accruing to their own efforts).

On the other hand, if a business group is mainly composed of firms with virtually no vertical or horizontal linkage among them, there is little need for operational coordination. In this case, the main strategic emphasis may be placed on managing the internal capital market complementing the imperfections in the external financial market. It involves accurate evaluation of performance as well as future prospects and investment requirement of individual subsidiaries. To make the management of a subsidiary responsible for the realized performance, it is necessary to allow operational autonomy without interference of the headquarters. This is the clear case where the M-form structure Williamson (1975, 1985) suggested works the best. Of course, on the basis of the evaluation of each subsidiary’s performance and future prospects, the headquarters should be able to reallocate their cash flows to the most strategic or profitable uses.

To see what kind of organizational structure might have been most efficient for Korean chaebols, we have to know their diversification pattern. In general, large chaebols have a combination of different diversification patterns including vertical integration and a cluster of horizontally related or unrelated businesses.

- By 1987, the largest 30 chaebols had 16 subsidiaries on average, which increased to 27 in 1997 when the country was hit by the crisis. For the largest five groups, the average number of subsidiaries increased from 35 to 52 between 1987 and 1997. We cannot track the trend in terms of the number of industries in which chaebols were operating because of the change in the Korean Standard Industrial Classification (KSIC) in 1992.

- According to another source of data based on the old KSIC, the average number of subsidiaries for the largest 30 chaebols remained at 4.2 in 1970 (year-end), which rose sharply to 13.7 in 1979 but declined slightly to 13.5 in 1985 due to
In 1993, the largest 30 chaebols operated in 19.1 industries (based on the two-digit KSIC) on the average, but have moved towards specialization since 1995. It strongly indicates that chaebols diversified to many broadly unrelated industries rather early, say by around the end of 1970s, and, since the mid-1980s, their diversification was mainly directed towards related (intra-industry) diversification around some of industries in which they were already operating.

This diversification pattern can also be confirmed by the trend of the index of related diversification. According to Hwang (1999), the average Berry-Herfindahl diversification index for the largest 30 chaebols (1985-97) was estimated at 0.771 (weighted average by sales), rising from 0.736 in 1985 to 0.790 in 1994. On the other hand, their average Entrophy index of related diversification rose from 18.6% in 1985 to 21.0% in 1997 (22.3% in 1994, before the crisis; and 20.6% for the 1985-97 period). This trend clearly shows that chaebols tended to have related diversification since the mid-1980s (until the mid-1990s).

From this diversification pattern of Korean chaebols, we can infer how their strategy (of maximizing the benefits of diversification) might have changed over time. During the early phase of their growth (say, until around the end of the 1970s), diversification was proceeded mainly into unrelated industries, and need for coordination among subsidiaries must have been low. In this situation, the strategic emphasis of the headquarters is likely to have been placed on the efficient operation of the internal capital market. Given the prevalence of imperfections in the external financial market (particularly before the 1980s when financial liberalization started) as discussed above, the potential gains from the internal capital market were high. Thus, we would expect that this early period in Korea was characterized by the situation where the Williamson’s M-form structure was working fine without much conflict between the strategy (derived from the organizational structure) and the efficient operation of group-wide internal capital market. Later on, when diversification proceeded mainly into related rather than unrelated industries, the coordination requirement among subsidiaries increased substantially, which seems to have constrained the managerial autonomy of the involved subsidiaries and reduced the efficiency of the internal markets.

3.2. Growing Inefficiency in the Course of Corporate Expansion

The argument of relative efficiency of internal markets in the earlier phase of chaebol growth discussed above rests, basically, on two facts: first, the external financial market suffered from gross imperfections; and second, the pattern of their diversification was compatible with the efficient operation of the internal market. In the later period, however, both of these factors, as well as the increasing interference of family interests and concerns, worked against the relative efficiency of the internal capital market.
3.2.1. Development of External Markets Since the 1980s

As the economy keeps growing in scale and complexity, external factor markets also tend to deepen and gain efficiency unless government regulations impede such development. In the case of finance, financial liberalization, embarked in the early 1980s, must have contributed significantly to the overall efficiency of the financial sector. It started with the lifting of many restrictions on bank management and the complete privatization of nationwide city banks. Entry barriers were lowered with the opening of new commercial banks, short-term finance companies and mutual savings and finance companies; and competition was further encouraged by relaxing restrictions on financial services offered by different types of financial intermediaries. Even though interest rates remained controlled, they were much less suppressed, particularly for nonbank financial institutions, so as to give substantial positive rates to depositors in real terms. Financial deepening, measured as the ratio of financial assets to GDP, advanced rapidly after the interruption during most of the 1970s. By 1982, preferential interests given to policy loans were largely abolished, which was soon followed by the introduction of flexible (within a range) lending rates.

As a larger number of financial institutions operate in a less compartmentalized market with fewer restrictions in loan portfolio management, we can expect the market would be more efficient. Particularly, while banks were still subject to a host of restrictions, the nonbank financial institutions, such as short-term finance companies, were much less constrained by government regulations and grew much faster than the banking sector throughout the 1980s. Their practices of circumventing interest rate and other regulations were often left unchecked until they posed a serious problem. Since the 1980s, chaebols faced limited access to bank credit due to the reduction of policy loans for industrial development and the credit control system geared to improving their financial structure and making more bank loans available to small and medium-sized corporations. This was largely compensated by their increasing reliance on nonbank financial institutions and the capital market. The Korean stock market grew impressively in the latter half of the 1980s, thanks to the booming economy, and improved institutional infrastructure. Entering the 1990s, with the stock market in depression, the corporate bond market emerged as an important source of mobilizing long-term capital for many large and profitable corporations.

Cho and Cole (1992) argue that Korea’s financial market saw a fair degree of liberalization and integration in the 1980s mainly through the faster growth of the nonbank sector that enjoyed relatively larger freedom. As an evidence of improved efficiency in resource allocation in the 1980s, they note a substantial reduction in the spread of borrowing costs across 68 different manufacturing industries in the 1980s as well as more equal access to bank loans and narrower disparities in rates of return across different sectors.

30 This more generous treatment of nonbank financial institutions in government regulation reflected the desire of the government to maximize the mobilization of financial saving and let financial liberalization progress to the extent possible, while still keeping the banking sector as the tool of its industrial policy. This approach was hardly a sustainable solution since the banking sector got increasingly dwarfed both in their relative share in the financial market and in their expertise.
As for managerial and skilled labor, also, the external market grew gradually to play an increasing role. The pool of skilled labor and managerial workers got larger and started to come out to the market, which occurred in a relatively large scale with a series of corporate restructurings in the 1980s. With the tendency of Korean *chaebols* to follow the leaders in diversifying their businesses, recruitment from other *chaebols* also became common for people with accumulated experience and know-how. The market for scientists and engineers actually has grown rapidly since the 1980s with a much larger potential pool of these resources available for private corporations. They include high-caliber Korean scientists and engineers trained and working abroad or returning to work at many government-supported research institutions, engineers with experience in state enterprises, better-educated graduates from the KAIST (a state-financed graduate school of applied science and engineering established in the mid-1970s) and other tertiary educational institutions. In-house creation of technical manpower had a clear limit, as *chaebols* required increasingly sophisticated technologies and often tried to ‘leapfrog’ into state-of-the-art technologies to secure core competence within a short period of time. Though the need for systematic in-house human resource development remained, the room for relying on the external labor market became larger.

3.2.2. Growing Inefficiencies in Internal Markets

These developments in external markets have been contrasted with evidence of growing inefficiencies in internal markets. There seem to be several distinct sources of inefficiency. One is related to the abuse of internal markets for the interests of controlling families most probably at the sacrifice of outside shareholders or other stakeholders. Another source of inefficiency is problems arising from human interactions and concerns inevitable in family-based groups in the process of their growth, including those associated with the succession of management control. Finally, as business groups keep growing and diversifying into related businesses, the organizational structure and the coordination task of the headquarters can become increasingly incompatible with the efficient working of internal markets.

*Abusive use of internal markets for family interests.* An internal capital market eases the credit constraint of the group by increasing its debt capacity. Given that subsidiaries can cross-subsidize each other with cross-guarantees of debt repayment and other arrangements, they can more easily overcome any temporary financial distress and the risk of bankruptcies. Since costs of financial distress and bankruptcies can be enormous (high cost of borrowing emergency funds, high transaction costs associated with bankruptcy procedures, etc.), banks would be willing to lend more to the group than they would to the constituent firms as a whole if they were stand-alone companies. The problem, however, gets serious if appropriate discipline is not exercised in cross-subsidization among subsidiaries, and becomes even worse if moral hazard comes into play in the behavior of business groups or creditor banks, or the business objectives of the groups deviates from the maximization of group values.

Korean *chaebols* are observed to make every effort to avoid the bankruptcy of any of their subsidiaries even in cases of obvious insolvency, believing that this would damage their reputation. The result is inefficiency in resource allocation: profitable firms
subsidizing weak firms with questionable viability, which is just the opposite of what we expect in an efficiently operating internal market. Tendency for overinvestment is another problem, which is attributable to such factors as abusive use of the internal capital market (particularly borrowing from nonbank financial intermediaries of their own) for the purpose of maximizing the interests of controlling families, and moral hazard of creditor banks (lending on the basis of cross-guarantees of debt, presumably believing that the whole group is ‘too big to fail’). Finally, it may also be argued that, with the degeneration of the QIO that led to a collusive/symbiotic state-business relationship, Korean chaebols were no longer within the purview of close government supervision. This might have led them to divert more of their resources mobilized through the internal capital market to real estate speculation or other socially unproductive activities or to more aggressively advance the interests of controlling families.

**Complications with human factors and family concerns.** Family-based groups face a set of unique problems as they grow to have many subsidiaries with members of the extended family of the controlling shareholder in their CEO and other key executive positions, and as the founding chairmen become old enough to hand over the steering helm to their successors. First, rent-seeking behavior usually gets serious as the involvement of the controlling family goes beyond a few of his children to include the chairman’s brothers, nephews and sons-in-law. Second, the situation would be worse if the chairman has a strong prejudice among the members holding key positions in the group or there is deep-rooted distrust and feuding among them. These factors will also play a role in distorting important decisions of resource allocation within the group. Third, a form of ‘socialism’ (cross-subsidization) is highly likely to surface in the allocation of resources among subsidiaries, which constrains the efficient redeployment of resources in the internal capital market. This seems to be closely related to the tendency of giving corporate ownership and management control to the children of the chairman as a means of inheritance in Korean chaebols. When this kind of family consideration has to be entertained in the operation of the internal market, efficiency is inevitably compromised.

The final problem is the weakness of leadership in the headquarters, which a business group usually faces in the process of the succession of management control. In many respects, management of a business group by the founding father is not the same as that by his sons or other relatives. A large portion of Korean chaebols that experienced serious financial distress or bankruptcies even before the crisis, had their management in the hands of the ‘second-generation chairmen’. They have come to the

---

31 From the group’s point of view, it might be argued that the cost of resource misallocation across the member subsidiaries may be compensated by maintained group reputation (that their subsidiaries do not go bankrupt) with its positive effect on borrowing cost and recruiting people. From the point of view of the whole economy, this solution, working as an important exit barrier, is not desirable.

32 One may argue why the allocation of bequest (corporate ownership) should be ‘settled’ or adjusted in the internal capital market or by other internal transactions, while the equity shares of subsidiaries can be directly divided or sold in the market to distribute the proceeds to the children. One constraint is the ‘indivisibility’ of ownership if one is to keep the management control. Another consideration is the burden of associated transactions costs including taxes, which may be minimized or evaded through internal transactions among subsidiaries.
position not necessarily because of their proven entrepreneurial capabilities but simply because of their family background. Unlike the founding chairmen, they often do not have a thorough grasp of their business operations and all the histories, even though they usually have many years of experience in their groups. Due to this limited knowledge, information and leadership, agency conflicts can sometimes arise between the young chairman and the executive officers of individual subsidiaries in spite of the role of the PCO in mitigating this problem. This is no small problem, given the extensive diversification and large number of subsidiaries for a major group. Sometimes, the succession process itself is not smooth, as has been witnessed in Hyundai. Disputes surrounding the succession of the chairmanship among the sons and other family members lower the morale of the workers in the group and constrains the efficient operation of the internal market.

Growing strain on organizational structure and management. As we saw above, Korean chaebols entered into many unrelated industries through till the 1970s as opportunities arose, which was followed by intra-industry or related diversification. This vertical and otherwise related diversification made the task of coordination among the related subsidiaries increasingly burdensome. Information processing requirements rose geometrically with an increase in the number of related subsidiaries as well as higher uncertainty generally associated with more sophisticated industries into which chaebols newly diversified. The increased central coordination at the headquarters inevitably weakened the autonomy of individual subsidiaries and accountability for their performance. This problem together with the considerable information processing requirement led to weakening of the internal capital market as well as ineffective control over subsidiaries. It is clear that efficiency of internal capital markets in Williamson’s M-form organizations, depending critically on divisional autonomy and accountability, can be realized only in diversified firms with limited interactions among divisions. Hill (1988), based on his findings for U.K. firms, actually argues that M-form is best suited to firms with unrelated diversification, while ‘contaminated’ multidivisional (CM)-form is best suited to diversified firms with related businesses.33

There could be several responses to this problem. One is to deemphasize the linkages and relatedness and not to be overly ambitious about coordination among the related subsidiaries.34 However, this option was probably out of the question for Korean chaebols usually operating in protected markets and under the objective of maximizing controlling family’s wealth through internal transactions among their subsidiaries. Controlling the resource flows among subsidiaries might have been at the center of the motivation for forming business groups and the preoccupation with management control

---

33 Based on survey data from 156 large firms in the United Kingdom, Hill has confirmed the right matches between corporate strategies and organizational forms in multidivisional firms. For unrelated firms, the M-form structure was associated with superior performance; while for related firms, CM-form structure performed better. CM-form is different from M-form in that the headquarters is involved in operational decisions, while they are left to individual subsidiaries in M-form, for which they are held accountable.

34 As suggested by Harrigan (1985), this may actually be a sound approach under conditions of high technological and other uncertainty, which can turn the advantage of relatedness to a burden because of its tendency of inflexibility and poor response to changing environment (like a subsidiary that is a captive customer of another subsidiary, whose technology is now outdated).
by the family members of the controlling shareholders. Another option was expanding
the headquarters enough to cope with the increasing information processing requirement
for effective coordination. Similarly, they could also divide the group into several
subgroups of related subsidiaries and appoint a (deputy) chairman for each subgroup.
These are actually models that have been tried by Korean chaebols in varying degrees.
These were not perfect solutions, though, each with its own set of constraints.

First of all, the strongly family-based nature of chaebols combined with the
frankly self-conceited character often found among founding chairmen made any
meaningful decentralization of decision-making always difficult. Increasing the staff
size of the PCO to assist information channeling and decision-making of the chairman
might have helped to some extent. This could not, however, solve the problems of
difficulty in performance appraisal and communication overload on chairman. The
benefits of fast decision-making and effective monitoring by the chairman in the early
phase of growth gave way to delays, bureaucracies, risk of making wrong decisions and
inadequate monitoring. Without objective tools for assessing the performance of
subsidiaries, wasteful bargaining and rent-seeking, sometimes complicated by deep-
rooted family enmity and favoritism, are likely to play a large role, hardly promising an
efficient internal capital market.

3.3.3. Are Internal Capital Markets Generally Inefficient?

In recent years, some economists have shown keen interest in formally investigating the
efficiency of internal markets in diversified corporations. Due to abundant data
availability required by the Securities and Exchange Commission for publicly-listed
companies in the United States, the researchers have mainly relied on these data. These
investigations, almost without exception, have shown that internal capital markets
within diversified firms are inefficient (see Box 4). However, these results have been
obtained for large U.S. firms, which are least likely to need any internal capital market.
As indicated by Stein (1997), internal capital markets are expected to be most effective
where external markets are underdeveloped with pronounced information and agency
problems, which tend to generate severe credit constraints and high premium for
external financing. As external financial markets develop over time in step with
improved legal and financial infrastructure, the comparative advantage of internal
markets is eroded.36

35 Decentralization to subgroups is not without its own problem. It may create higher agency cost and
conflicts between the headquarters and subgroups, weakening the group-wide operation of the internal
capital market. It may also work to overly restrict the autonomy of individual subsidiaries.
36 Hubbard and Palia (1995) view this as the primary reason why U.S. firms generally have moved away
from extensive diversification to more focus since the heydays of the diversified conglomerates in the
1970s, noting that the drive for conglomerate mergers in the United States probably made sense in the
1960s.
Empirical tests on internal capital markets have two major variants. One looks into the investment behavior of multi-divisional firms or groups with diversified subsidiaries (Scharfstein, 1988; Shin and Stulz, 1998; Lamont, 1997) with a view to checking the existence of internal capital markets and also their efficiency. More specifically, major attention is focused on how investment is affected by their own cash flows vis-à-vis that of other divisions or subsidiaries. These studies generally find evidences of an active internal market: investment of a division or a group was not solely dependent on their own cash flows but also on those available in other parts of the firm or group. Still, they also find that the internal market is not necessarily efficient: a business segment with better investment opportunities was not given any better access to financial resources of other segments; the positive correlation between oil cash flow with non-oil investments of large oil companies (presumably not subject to credit constraint) was seen as an evidence of overinvestment or subsidization of underperforming subsidiaries; and a tendency of ‘socialism’ was noticed in capital budgeting—overinvestment in divisions with poorer investment opportunities and underinvestment in divisions with better opportunities, which was particularly pronounced in smaller divisions and in firms where management had small equity stakes.

As for the other variant, many studies take the existence of an internal capital market for granted in diversified multidivisional firms or business groups and try to see whether or not the internal capital market (that is, their diversified nature) brings about better business performance. Lang and Stulz (1994) and Berger and Ofek (1995) find that diversified firms were valued less in the market compared with specialized firms in terms of the Tobin’s q or stock prices. Morck, Shleifer and Vishny (1990) also provide evidence that diversifying acquisition reduced shareholder wealth. Noting that diversification is an endogenous behavior of firms, Lamont and Polk (2000) concentrate their attention on exogenous changes in diversity (due to industry shocks) to evaluate the causal effect of diversification. All these recent studies point to inefficiency of the internal capital markets. Why should this be the case? Scharfstein and Stein (1997) provide one explanation of why there would be the tendency of ‘socialistic’ cross-subsidization among different divisions (that is, strong divisions subsidizing weak ones) in an internal capital market. They view the ‘socialism’ in capital allocation as a form of bribe by the headquarters to the managers of weak divisions not to engage in wasteful rent-seeking activities but to concentrate on productive work.

One thing to note is that the above empirical studies are all based on U.S. data—Standard and Poor’s Compustat database beginning in 1978. It may be no surprise that they have found no evidence of efficient internal capital markets in large diversified firms in the U.S. It is also understandable that managerial agency problems were given as the major reason for the inefficiency in these firms. The U.S. has the most developed financial market and diversified American firms (and other global corporations listed in the U.S. stock markets) are the last ones to face any serious credit constraints in their normal business operation. We see little reason why they should rely on their internal capital markets. If they do, this internal market soon degrades to a vehicle of unproductive rent-seeking by division or subsidiary managers.

If the development level of external financial markets is, indeed, the major determinant of the relative efficacy of the internal capital market, we can expect to find their highest usefulness in developing economies. This view seems to be largely supported by various empirical studies on the effects of group affiliation on corporate performance in developing countries. They include Khanna and Palepu (2000a) for India, Khanna and Palepu (2000b) for Chile, Keister (1998) for People’s Republic of China, Chang and Choi (1998) for Korea, Perotti and Gelfer (1999) for Russia, and
Khanna and Rivkin (1999) for 14 emerging markets in Asia, Latin America and South Africa. The main focus of these studies is typically on whether a group affiliation of firms has any advantage over stand-alone companies in terms of such performance variables of operating return on assets, Tobin’s q, or return on equity. As such, what they have tested may not exactly be the evaluation of internal capital markets. For instance, one may argue that business groups in developing countries tend to share some common characteristics, such as various forms of preferential treatment by the governments, which exert significant positive effects on group performance. To the extent that these characteristics are not explicitly considered in the specification of empirical analyses, it may be difficult to claim that the superior performance for group-affiliated firms is due to the efficiency of their internal capital markets. In sum, the performance effects of group affiliation seem to have been generally significant in developing countries. However, convincing evidence is yet to be given as to whether the gains have actually been due to the efficient group-wide internal capital markets.

Chang and Choi (1988) provide empirical evidence that group-affiliated firms in Korea showed superior economic performance. However, the sample period their study covers is from 1975 to 1984, overlapping much of the period of ambitious heavy and chemical industry drive. Given that chaebols were the major recipients of preferential policy loans and generous tax incentives, as well as protection from domestic competition or foreign imports, it would be hardly surprising to find chaebol subsidiaries performing better than other publicly-listed companies under normal circumstances.

For Japan, there have been several studies on the relative performance of keiretsu-affiliated firms: Caves and Uekusa (1976), Nakatani (1984), Cable and Yasuki (1985), Yafeh (1995), and Weinstein and Yafeh (1998). They are generally in agreement with each other, finding that keiretsu firms have been unfavorably compared with other firms in their earnings performance. This fact has mainly been explained by the relationship between keiretsu banks and other affiliates: non-financial affiliates of a keiretsu are said to have paid higher interest rates to their keiretsu banks either because of the ‘insurance’ of ready credit in situations of temporary financial distress or simply because of the stronger bargaining power enjoyed by the banks. Plausible though they may be, other views should not be excluded altogether. For instance, it may simply reflect the inefficiency of ‘quasi-internal’ capital markets in Japanese keiretsu as has been the case for large diversified firms in the United States. Of course, it is controversial whether or not a Japanese keiretsu has any internal capital market. It does not have any formal headquarters in charge of coordination or monitoring. Still, keiretsu banks are known to

37 For a review of studies on the performance effects of group affiliation, see Khanna (2000), which tentatively concludes, in spite of some issues with the econometric work, that firms do benefit from group affiliation for the most part.

38 They included several control variables in their performance equations such as 3-firm concentration ratio (degree of competition in market structure), advertising intensity (product differentiation and entry barrier), total assets (scale), growth rate of sales (shift in demand), and diversification index (entry barrier, economies of scope, and reduced risk). Although these control variables might have mitigated the problem to some extent, it still seems difficult to argue that the estimated result—moderately superior earnings performance for group-affiliated firms—is due to their organizational efficiency. For one thing, it might be recalled that the effective corporate tax rate for firms operating in government-promoted heavy and chemical industries with the full utilization of tax incentives available in the latter half of the 1970s would have been about 20%, less than a half of the normal rate.
have often played such a role in an informal way, which seems to have been facilitated by other institutions or arrangements such as presidents’ club, affiliated trading company, and cross-shareholding among the affiliates.\textsuperscript{39}

What about evidence for the pre-war zaibatsu? As already discussed above, the organizational form of zaibatsu can be viewed as a mixture of ‘hierarchical (H)-form’ and ‘contaminated’ M-form using Williamson’s (1975) definition. As such, zaibatsu are not expected to have operated very efficient internal markets due to either the limited role of internal markets (for the H-form) or the lack of operational autonomy and the consequent difficulty in performance evaluation (for the CM-form). This, of course, does not mean that zaibatsu performance should not be any better than that of other firms. Actually, Okazaki (1999) finds that zaibatsu-affiliated firms clearly outperformed the other firms in terms of return on equity (using panel data of 135 firms from 1922 and 1936, and controlling scale of firms, industry-specific shocks, and macroeconomic shocks). Okazaki attributes this superior performance to the efficacy of zaibatsu holding companies in monitoring affiliated firms (one of the several functions expected for group headquarters). In this connection, Miwa and Ramseyer (2000) observe that there is little evidence of zaibatsu manipulating their own banks to favor affiliated firms, and that Japan in the first half of the 20\textsuperscript{th} century was not a bank-centered economy with firms raising funds in decentralized, competitive capital markets. The internal capital markets of zaibatsu until the 1930s were largely operated on the basis of the internal capital of the owner families. Thus, unlike Korean chaebols, the abusive use of internal markets for family interests seems to have been absent.

4. Conclusions

East Asia offers a story of a miracle followed by a crisis. This paper has been concerned with the explanation of the apparent success of the East Asian model until a few years ago as well as the collapse of the model in the late 1990s. Family-based business groups were the major engine of growth in the earlier period, but they were also held responsible for the crisis. In accounting for this sharp turnaround, we pay attention to the two important aspects of these business groups. One is their relationship with the government, and the other is their organizational structure and the operation of internal markets within business groups. In an effort to accelerate industrial development to catch up with industrialized nations, developmental states initiated entering into a partnership with large businesses forming a quasi-internal organization (QIO). At the same time, business groups have operated group-wide internal markets for capital and other productive factors. Imperfections in external markets have been the common rationale for both the QIO and internal markets, and coping with these imperfections has been the main tasks for the headquarters. They included the exchange and centralization of relevant information, performance monitoring, and coordination of investment or channeling of productive resources to best uses among the members.

\textsuperscript{39} While managerial agency problems might have been the principal source of the inefficiency in internal capital markets in the United States (where credit constraint has usually not been a problem), it might have been due mainly to the lack of discipline in credit supply to keiretsu affiliates resulting in poor investment or overinvestment.
There was a set of conditions, which tended to make the QIO and internal markets efficient, contributing to rapid growth and industrialization in the early phase of industrial development. In the later phase, however, with continued economic advance and more developed factor markets, these conditions were not met as tightly as before, making the QIO and internal markets no longer very efficient. For the QIO, strong leadership commitment to economic development played a key role in keeping the bureaucrats impartial and less corrupt, and there was no lack of incentives to be given to a handful of prominent business groups. With economic success, most of these favorable conditions as well as the informational advantages of the QIO disappeared. Nevertheless, the QIO still remained with the attendant risk of a corrupt symbiosis between the government and big businesses. Efficiency of group-wide internal markets had to be compromised as well with the continued growth of business groups. Family interests increasingly interfered in the management of the groups causing it to deviate from profit or firm-value maximization, and the group headquarters were overburdened with their tasks of information processing, strategic planning, coordination and monitoring (see Table 1).

**Table 1. The QIO and Group-Wide Internal Markets Compared**

<table>
<thead>
<tr>
<th></th>
<th>Quasi-Internal Organization</th>
<th>Internal Market</th>
</tr>
</thead>
<tbody>
<tr>
<td>Headquarters</td>
<td>• Government</td>
<td>• Chairman &amp; PCO</td>
</tr>
<tr>
<td>Members</td>
<td>• Large business groups</td>
<td>• Group subsidiaries</td>
</tr>
<tr>
<td>Rationale</td>
<td>• Mitigation of information imperfection</td>
<td>• Failures of external markets</td>
</tr>
<tr>
<td></td>
<td>• Reduction of business uncertainty</td>
<td></td>
</tr>
<tr>
<td>Main Tasks:</td>
<td>• Information exchanged/centralized</td>
<td>• Information exchanged/centralized</td>
</tr>
<tr>
<td>Sources of</td>
<td>• Coordination of major investment projects</td>
<td>• Productive factors deployed within a group for best uses</td>
</tr>
<tr>
<td>Efficiency</td>
<td>• Performance monitoring (exports, etc.)</td>
<td>• Performance monitoring (profits, market share, etc.)</td>
</tr>
<tr>
<td>Conditions of</td>
<td>• Government/leadership strongly committed to economic development</td>
<td>• Non-interference of family interests</td>
</tr>
<tr>
<td>Success</td>
<td>• Low corruption and high quality civil service</td>
<td>• Adequate corporate governance mechanisms</td>
</tr>
<tr>
<td></td>
<td>• Small number of participants</td>
<td>• Manageable group size or diversification and compatible organizational structure</td>
</tr>
<tr>
<td></td>
<td>• Strong incentives</td>
<td></td>
</tr>
<tr>
<td>Causes of</td>
<td>• Corrupt symbiosis → Discretionary/non-transparent regulations</td>
<td>• Family interests first → Expropriation of minority shareholders, 'socialism', etc.,</td>
</tr>
<tr>
<td>Organizational</td>
<td>→ Zigzag chaebol policies: poor corporate governance legislation, bailouts of troubled firms, etc.</td>
<td>• Growing strain on organizational structure and management</td>
</tr>
<tr>
<td>Degeneration</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
In a symbiotic relationship, large business groups, in return for their support of the ruling political regime, tried to maximize their family interests, resulting in fragile financial structures and poor corporate governance. Government policies towards the business groups have been zigzag and confusing with mixed incentives to protect, discipline, or rescue them depending on the changing economic and socio-political situations. The continued reliance of the groups on the internal markets even when it was no longer economically justifiable, has also been largely attributable to inadequate corporate governance and other regulatory neglect.

The Korean experience clearly shows that the sources contributing to the initial economic success could easily degenerate to be dysfunctional if their roles are not properly readjusted to the changing environment. Efficient workings of the QIO require a set of preconditions that are challenging for most governments of the developing world. Among other things, the effective monitoring of contests in the QIO might require strongly motivated political leadership with a clean and capable bureaucracy, and even the most successful QIO should be carefully phased out at the right time. Likewise, the internal market of a business group needs a high-level discipline in resource allocation without interference of family concerns, and should give way to external markets as soon as they get over their gross imperfections.

What are policy priorities for these economies to get out of the crisis and avoid another? The immediate task for the survival of business groups in crisis-affected economies is to reduce their vulnerability by improving financial structure that may also require streamlining of business portfolios. Family-based corporations and groups would remain to play a substantial role in the crisis-hit countries, and their role is likely to be even expanding in other developing economies in East Asia. The next task is to reorient the objective of these groups towards maximization of interests of all shareholders rather than just those of the controlling owners. The ongoing corporate governance reform, with its emphasis on the protection of minority shareholders, will go a long way towards this goal. However, to put these efforts on a steady basis, a decisive political reform is also called for to eliminate any incentives for corrupting tie-ups with big businesses. Furthermore, it is observed that the corporate governance reform measures put forward largely along the Anglo-American model have not been taking root in these economies with only cosmetic changes introduced. Institutional or cultural factors responsible for this have to be identified and addressed, while other models should be seriously considered as well in search of the most effective corporate governance system. Finally, government policies should foster such an environment that would induce the groups to get over the limits of families both in ownership and management control. They include further promotion of competition and stronger tax enforcement geared to limiting intergenerational succession of wealth through tax evasion.

Certain government policies in response to the financial crisis have more direct impacts on the operation and organizational structure of business groups. For example, Korean chaebols were pressured to close down their planning and coordination offices that served as the headquarters for the operation of internal markets. This amounts to the negation of any positive roles for internal markets. In addition, chaebols are now prohibited from providing cross-guarantees of debt repayment and many types of internal transactions among member subsidiaries. One might argue that perhaps these
rules should be better left to corporate governance mechanisms of individual firms rather than being imposed by law. Another matter of interest is how the organizational structure of family-based business groups would evolve in the future: split into smaller groups, holding companies, *keiretsu* model, etc. Some simply believe that family-based groups should be broken up since they are the major obstacle to corporate governance reform and a more competitive corporate sector. However, the organizational structure of business groups should be the result of optimization under a given policy environment. The incentives of business groups to remain family-based and their sustainability are likely to become much weaker in an environment where adequate corporate governance mechanisms are put in place, firms are exposed to stronger competitive pressures, and controlling shareholders have little room for tax evasion.

Another form of business group frequently found in East Asia—particularly Indonesia, Malaysia, Korea, Singapore, and Thailand—is the one controlled by states. PRC, Viet Nam and some other transitional economies also seem to be interested in fostering state-controlled business groups as a way of promoting strategic industries. Although the rationale for QIO and internal markets should be stronger in transitional economies given the prevalence of market failures, there are many risks as well. The QIO in these economies may degenerate even more easily, since the relationship between state and state-controlled groups is likely to be too close to impose clear performance criteria, to promote contest-based competition, or to administer incentives or penalties in a transparent manner. Internal markets within a group in these economies might also suffer from the lack of capable entrepreneurs, limiting the rent-seeking behavior of managers and enforcing sound rules for sharing resources among subsidiaries. Incentives to monitor and corporate governance mechanisms are also likely to be weak. Nevertheless, the Singaporean experience with government-linked companies seems to suggest that state-controlled groups may be efficient with adequate governance mechanisms instituted and other risks minimized.
References

Amsden, Alice [1989], *Asia’s Next Giant: South Korea and Late Industrialization*, Oxford University Press


Hwang, Inhak [1999], *Chaebols’ Diversification, Market Structure, and Aggregate Concentration* (in Korean), Korea Economic Research Institute, Seoul


Kwack, Taewon [1985], *Depreciation and Taxation of Income from Capital* (in Korean), Korea Development Institute, Seoul


Morck, R., A. Shleifer, and R. Vishny [1990], “Do Managerial Objectives Drive Bad Acquisitions?” *Journal of Finance*, 45, 31-48


Nam, Sang-Woo [2001], “Business Groups Looted by Controlling Families, and the Asian Crisis,” ADB Institute Research Paper No.27, ADBI


SaKong, Il [1993], Korea in the World Economy, Institute of International Economies, Washington, D.C.


Williamson, O.E. [1985], The Economic Institutions of Capitalism, New York, Free Press


World Bank [1993], The East Asian Miracle: Economic Growth and Public Policy, Oxford University Press


Yoo, Seong Min [1997], “Evolution of Government-Business Interface in Korea: Progress to Date and Reform Agenda Ahead,” KDI Working Paper No. 9711, Korea Development Institute
RESEARCH PAPER SERIES

- **How Do Global Credit Rating Agencies Rate Firms from Developing Countries?**
  September 2001  Code: 26-2001  by Li-Gang Liu and Giovanni Ferri
- **Business Groups Looted by Controlling Families, and the Asian Crisis**
  November 2001  Code: 27-2001  by Sang-Woo Nam
- **Family-Based Business Groups: Degeneration of Quasi-Internal Organizations and Internal Markets in Korea**
  December 2001  Code: 28-2001  by Sang-Woo Nam

EXECUTIVE SUMMARY SERIES

- **Public Expenditure Management: Training-of-Trainees Program**
  (No. S45/01)
- **Trade Policy Emerging Issues**
  (No. S46/01)
- **Urban Poverty Reduction Issues**
  (No. S47/01)
- **Tokyo Round Table on Capital Market Reform in Asia**
  (No. S48/01)
- **Tokyo Seminar on Securities Market Regulation**
  (No. S49/01)
- **Pacific Public Management Executive Program (PPMEP) Module 4: Leadership and the Management of Change**
  (No. S50/01)
- **Partnership Issues in the Social Sector**
  (No. S51/01)

HOW TO CONTACT US?

Asian Development Bank Institute
Kasumigaseki Building 8F
3-2-5 Kasumigaseki, Chiyoda-ku,
Tokyo 100-6008 Japan

Tel: +81 (03) 3593-5500
Fax: +81 (03) 3593-5571
E-mail: info@adbi.org
www.adbi.org

Papers are also available online at the ADBI Internet site:
http://www.adbi.org/publications/