Agency Problems and Overinvestment in the Korean *Chaebol* Firms

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This article provides an alternative interpretation of the cause of the 1997 economic crisis in Korea, based on principal-agency relations in the capital and labor markets. It shows that the state should have intervened in the Korean economy not only to make markets but also to complement market failure. In this article the authors argue that the retreat of state intervention implied the retreat of state regulation of the market as well. We suggest that this retreat rather than moral hazard or rent-seeking activities of the *chaebol* is the main cause of the crisis. More concretely, the retreat of state regulation of the market since the late 1980s has worsened and revealed the latent principal-agency problems of the capital and labor markets in the economy. Therefore the deregulation of the capital and labor markets transformed the possibility of overinvestment into actuality. Our interpretation suggests that neither the restoration of the developmental state nor the full implementation of market mechanism will solve the structural problems of the Korean economy. Instead a new kind of "democratic regulation of the market" should be the immediate agenda for the economy.

Keywords: Agency problem, Overinvestment, *Chaebol*, Asian financial crisis, East Asian development model

JEL Classification: O23, O53, D82

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I. Introduction

Following the outbreak of the 1997 Asian financial crisis, the debate on the causes of rapid economic growth in East Asian countries was transformed to a debate on the effectiveness of the East Asian development model. On the one hand, the market-oriented approach argues that government intervention in capital markets and the moral hazard arising from the government guarantees for bank loans were responsible for the Asian financial crisis (Krugman 1998; and Mckinnon and Pill 1998). On the other hand, however, the state-oriented approach argues that financial deregulation and retreat of government intervention in the 1990s were the main causes of the financial crisis in Asian countries (Wade and Veneroso 1998; and Chang, Park and Yoo 1998). In this new phase of debate, the same dichotomy still exists as in the past: market versus state.

This article tries to provide an alternative interpretation, different from both the market- and the state-oriented view, thereby overcoming the dichotomy between the market and the state. We examine and investigate the various institutional frameworks that can be subsumed to neither market nor state. In our analysis of rapid growth and the 1997 financial crisis in late industrialization, we focus on state regulation of the market. In terms of the causes of the financial crisis, we focus on the retreat of state regulation rather than the moral hazard or rent-seeking activities of the *chaebol*. Our interpretation is similar to that of the developmental-state approach, focusing on the close relationship between the deregulation process in the 1990s and the outbreak of the 1997 financial crisis in Korea. However our interpretation is different, for we regard the retreat of the developmental state as an inevitable process due to the success of the developmental state itself. Therefore we suggest not the restoration of a developmental state but that a new kind of "democratic regulation of the market" be the immediate agenda for the Korean economy.[1]

The main argument of this article stems from an understanding of the role of the state in East Asian late industrialization.

[1]As a recent trial to overcome this dichotomy between the market-friendly view and the developmental-state view, there is a "market-enhancing view" suggested by Aoki, Murdock and Okuno-Fujiwara (1997).

Conventional understanding regards the strong state intervention of East Asian countries as either a market conforming process (in the market-oriented view) or a process of making and managing markets (in the state-oriented view). However we need to investigate the role of the state in complementing market failure. It is true that in the early stages of economic development, the market was so underdeveloped that creating it was an important agenda of the state. As soon as markets are established, however, the state has to solve the problems of market failure. The role of the state in late industrialization should therefore not be confined to creating the market. The state must regulate the market, too. However, this aspect has not been dealt with sufficiently in the economic development literature. This article investigates the market failure in the Korean *chaebol* system, focusing on the principal-agent relationship and how the state regulated the market thereby lessening the costs of market failure.

This article is organized as follows. In Section II, we find the nature of the Korean developmental state model in terms of the role of state to solve the failure in the capital and labor market. Section III deals with the mechanisms causing overinvestment in the capital and labor markets due to the agency problems in the *chaebol* system since the liberalization period of the late 1980s in Korean economy. In Section IV, we apply this framework to the understanding of the 1997 Korean financial crisis, analyzing the retreat of the state in the 1990s. Finally in Section V we suggest the necessity for democratic regulation of markets and a new role for non-market organizations to overcome the financial crisis.

II. Agency Problems and Regulation by the State

Korea's rapid economic development has been credited as one of the most successful cases among developing countries, despite that markets were underdeveloped and social trust was low. The country was in need of 'social capital', which was supposed to facilitate coordination and cooperation among economic agents in the society (Putman 1993).[2] According to Fukuyama (1995) who stressed the

[2]'Social capital' is the social organization facilitating coordination and cooperation to enhance common interests such as networks, norms and trusts. This plays an important role in improving the performance of

role of trust in economic development, 'state-induced trust' can be a substitute for 'institutionally-based trust'. This was the main function of state intervention during the rapid industrialization of Korea.

The state has played a decisive role in making up for the market, as well as the social trust and norms necessary for economic development. The state itself provided incentives for private economic agents to form markets (Johnson 1994). In this sense, the rationale of state involvement in developing countries is different from that of Anglo-Saxon countries. In the Anglo-Saxon model, the state regulates markets in order to prevent firms from using unfair business practices such as monopolies and rent-seeking activities, while in the developmental-state model, the state intervenes in order to enhance competitiveness (Amsden 1994).

However, even in developing countries the state must regulate the market in order to solve market failure that can take place when the market begins to work. As a result, state intervention in the developmental-state model can be interpreted in two dimensions: creating and regulating markets. This latter aspect will be examined here.

A. Agency Problems and Market Failure

We shall consider market failure related to principal-agent relationships in the capital market and the labor market. In the capital market, a risk-taking issue will take place between the capital borrower and the capital lender. In the labor market, to determine the level of effort is important between the labor supplier and demander.

There are two different kinds of capital suppliers such as shareholders and lenders in the capital market, and the agency problems may appear in both of these two cases. The first type of principal-agent relationship appears between managers and shareholders. As long as the managers do not have 100% residual rights, the managers have an incentive to use the firm's surplus resources for their own purposes and this can be detrimental to the interests of the shareholders (Jensen and Meckling 1976).

Another well-known agency problem appears between the share-

material and human capital (Putman 1993; and Fukuyama 1995).

holders and the debtors. When a project is successful, shareholders get the rights to control all residuals. But when a project fails, shareholders have no other responsibilities except for their stocks. On the other hand, the lenders can benefit from interests only when the project proves to be successful. If the project fails, then the lenders bear the entire burden of the failure. Owing to the asymmetric structure of incentives between borrowers and lenders, borrowers tend to force the firm to take on risky projects at the expense of lenders (Jensen and Meckling 1976; and Shleifer and Vishny 1997).

In the labor market, the principal-agent relationship between managers and employees may lead to another type of market failure. In the classical capitalist firm, labor and ownership are separated. Usually laborers are risk-avert and the capitalists bear the risk of the investment decision. In return, however, laborers are excluded from the decision process and the products of labor. As a result, the labor process is alienated. This reflects the efficiencies of capitalist firms in risk taking, as well as the inefficiencies in the incentive structure for the workers (Putterman 1996; and Bowles and Gintis 1993).

Solving these agency problems is a crucial issue in development economics. The developmental-state in Korea has faced these agency problems, and government intervention in the market was required to solve these problems.

B. Market Regulation in the Developmental-State

a) Capital Market

The financial system in advanced capitalist countries is divided into two categories. The first is the Anglo-Saxon type arm's length system in which the stock market plays an important role in corporate financing and corporate governance. The other is called a relationship-based financial system in which financial intermediaries such as banks play an important role in corporate financing and corporate governance.

In the Anglo-Saxon type financial system, financial transactions are done through contracts at market prices. On the other hand, in the European and Japanese systems, where banks have monopoly power due to the entry barriers, withdrawal of principal is guaranteed by the monopoly power over borrowing firms and government guarantee. The capital market-based system focuses on short-term profitability, while in the relationship-based financial system potential for long-term growth is regarded as more important. Therefore non-intermediary finance is dominant in the capital market-based system, while intermediary finance is more important in the economy where the stock market has not been sufficiently developed.

The Korean financial system can be classified in the latter category. The Korean system has much in common with a bank-based, relationship-based system. The system is effective to concentrate investment funds on specific industries necessary that are selected for rapid development.

In this aspect the Korean financial system is similar to that of European countries and Japan. In terms of corporate governance, however, Korea differs from these countries. Early in the 1960s, the Korean government nationalized all of commercial banks and directly controlled them until the early 1980s. With a national banking system, the Korean government allocated huge amounts of capital to the heavy and chemical industries in the 1970s. In this sense, Korean commercial banks were just tools of government policy, and they did not have any incentives to monitor the activities of corporations.[3] The Korean financial system is neither a bank-based nor a capital market-based system. It is a government-led financial system, based on state discipline.

The Korean financial system is a bank-based 'high debt model' as well (Wade 1998; and Wade and Veneroso 1998). This kind of high debt model can have advantages in developing countries, because under this model it is possible to concentrate long-term capital investment on specific leading industries. However this model also has certain drawbacks.

First, the agency problem between managers and shareholders becomes serious. Managerial agency cost decreases according to the increase of management shareholdings (Jensen and Meckling 1976; and Jensen 1986). In this literature, it is widely accepted that an

[3]Aoki, Patrick and Sheard (1994, pp. 37-41) divide banking systems into the arm's length banking of the U.S., the main bank system of post-war Japan, the universal banking system of Germany, and finally the exclusive group banking system of pre-war Japan. According to this classification, the Korean banking system can be regarded as one type of an exclusive group banking system in the sense that banks are merely agents of the state and do not have independent monitoring power or incentives.

owner-manager system such as the Korean *chaebol* can solve agency problems easier than a professional-manager system. However, the owner-manager system is subject to agency problems, unless the owner-managers own 100% of the shares. That is, the agency problem between controlling shareholders and minority shareholders may arise.

In almost all Korean *chaebol* firms, the owner's family members occupy the CEO positions and have control power over management. Without an effective monitoring mechanism, the wealth of the minority shareholders can be expropriated. Given the concentrated ownership in Korea, the principal-agency conflict in large corporations means the expropriation of minority shareholders by the controlling shareholders, rather than managerial opportunism.

Secondly, in the high debt model, the agency problem between lenders and borrowers is serious as well. Since the portion of borrowing is larger than equity financing in a project, borrowers tend to invest in riskier projects expecting to gain high returns for the shareholders in the case of success which, however, poses a large burden for lenders in the case of failure (Milgrom and Roberts 1992). Therefore in this model, a crucial issue for the lenders is how to reduce the agency cost of debt.

Thirdly, in the macroeconomic perspective, the high debt model relying on bank loans is vulnerable to outside shocks such as decrease of capital inflow or increase of fixed cost payments (Wade 1998). These processes may easily cause liquidity risk or default risk. Under this financial structure, cooperation among government, banks and firms is very important and regulation on foreign borrowings of banks and firms is also necessary (Wade and Veneroso 1998).

These issues in the high debt model demand state intervention on investment decisions and coordination. The state selects strategic industries and finances them directly. The corporate governance executed by the market such as M&As (in the case of a capital market-based system) or banks (in the case of a bank-based system) can be performed by the government. Government discipline in this manner can reduce the agency costs both in the lenders-borrowers and managers-shareholders relationships.

b) Labor Market

Due to the separation of labor and ownership, capitalist firms have to give up superior labor incentives. The agency problem in the labor market incurs some costs: the monitoring and supervisory costs for work. This cost is a social waste and can be regarded as one example of market failure in the labor market (Bowles and Gintis 1993).

On the other hand, laborer-owned firms, where the laborer holds the residual rights, can reduce agency costs. Laborer-owned firms generate self-monitoring incentives and a mutual supervision mechanism among the peer group. As a result, it can reduce the cost of supervision. In addition to this cost reduction, it can provide for socially optimal incentives through the workers' involvement in the decision making process (Bowles and Gintis 1987, 1993).

Capitalist firms can also introduce a system with the workers' participation in the decision making. This can result in enhanced efficiency and reduced supervisory costs. Democratic capitalist firms, where workers' participation procedures are institutionalized, can save supervisory costs (Weitzman and Kruse 1990). These firms can use several methods such as decision involvement, profit sharing and Employee Stock Ownership Plans (ESOPs) to induce work incentives (Doucouliagos 1996).

The developmental-state model controls these agency problems by state intervention. In the early stages of economic development, where surplus labor is abundant in the labor market, threats of dismissal were enough to discipline workers. But as industrialization continues and surplus labor decreases, the voices of labor unions and the cost of supervision increases as well. In this case, the authoritarian state resorted to direct suppressive intervention. This coercive approach, in fact, socialized the activities of supervision in the work place and reduced the supervisory cost in individual firms. This was one of the essential features of the labor market during the rapid industrialization in Korea.

III. Agency Problems in the *Chaebol* Firms and Overinvestment

The *chaebol* in Korea have expanded in size and business very rapidly. However the shareholdings of firms has not diversified as much. This is closely related to the nature of bank loan-based financing. Owing to the centralized financing mechanism supported by the state, the *chaebol* firms could finance their funds with borrowing. This enabled the *chaebol* families to maintain their control power with a relatively small amount of investment. Since the 1970s, aggressive development plans in heavy and chemical industries poured huge amounts of funds, but the *chaebol* kept their control rights with a relatively small amount of money by borrowing and cross-shareholdings.

The state protected the owner's control rights and did not try to change them. This created the unique nature of Korean *chaebol*: family businesses based on the non-separation of ownership and management. This nature, at the same time, increased the gap between control power and the portion of shares in the firms through the 1970s and the 1980s. In this case, the extra resources in the firms or borrowed money can be invested in projects which are not expected to generate positive net present value; this is the definition of overinvestment adopted in this article. When it occurs, the agency problem may be actualized. This section will explain how the agency problems in the labor and capital markets may arise and how overinvestment in the *chaebol* firms can occur.

A. Agency Problems in the Capital Market

a) Private Benefits of Control and Overinvestment

According to Grossman and Hart (1988), benefits of control can be defined as the residual control rights of, say, the undecided and unclear items in the contract.[4] The private benefits of control are composed of both pecuniary benefits and non-pecuniary benefits. As for the pecuniary benefit, controlling shareholders can use inside information for their own purposes. As for the non-pecuniary benefit, they can enjoy power and authority from their dominant position. Therefore, they try to keep their control rights at almost any cost. Without the benefit of control, dominant shareholders will not maintain their majority position, because they can still enjoy the benefits as shareholders, even though they lose the position of controlling shareholders.[5]

[4]In the paradigm of the property rights approach such as Grossman and Hart (1986), and Hart and Moore (1990), property rights are synonymous with control rights, since property rights are defined as residual control rights, that is the control rights on undecided and unclear items in contracts.

Controlling shareholders pursuing the benefit of control use primarily cross-shareholdings and pyramid structures. By using the pyramid structure and cross-shareholding, controlling shareholders can have control power over firms in excess of their cash flow rights (La Porta *et al.* 1999). These practices allow owners to gain effective control of firms with a minimum amount of investment. When control rights are high and cash-flow rights are low, the controlling owner gains in private benefits but bears little of the consequences of a reduction in the firms' value.

This larger divergence implies an increase of opportunities and incentives for expropriation, because of the weaker link between the firms' performance and the owner's wealth.[6] Controlling shareholders prefer to use firms to generate their private benefits of control at the expense of other firm-specific investors such as minority shareholders and other employees (Shleifer and Vishny 1997; and La Porta *et al.* 1999).

In Korea, the family owners of the *chaebol* firms have used cross-shareholding to maintain their control power on affiliated firms. Table 1 shows the insider shareholdings in the 30 largest conglomerates in Korea was 50.5% in 1999, while the ratio of effective shareholding in these *chaebol* was just 9.9%. Therefore the family owners of the *chaebol* were able to completely control both inside and outside capital with small amounts of investment.

Cross-shareholding in the *chaebol* seems to be similar to that of Japan and Germany in that it enables to protect managerial control rights from hostile M&As. But there is a big difference. In Germany and Japan, cross-shareholding does not prevent mutual monitoring between firms, but in Korea it has been used for the purpose of gaining the benefit of control of the *chaebol* family by protecting their control rights.

Jensen (1986) explains the value-reducing diversification with the agency cost theory.[7] His model was designed to explain the tendency

[5]In countries where the rights of minority shareholders are well protected, ownership tends to be diversified. While in countries where the rights of minority shareholders are not protected and controlling shareholders enjoy benefit of control, the ownership tends to be concentrated (La Porta *et al.* 1999).

[6]Claessens *et al.* (1999a, b) find that larger divergence between control rights and cash flow rights is associated with increased diversification in East Asian corporations.

TABLE 1

OWNERSHIP STRUCTURE OF THE 30 LARGEST *CHAEBOL* IN KOREA

	Family shareholding ratio (A)	Subsidiaries' shareholding ratio (B)	A+B	Effective shareholding ratio (A/(1−B))
1993	10.3	33.1	43.4	15.4
1994	9.6	33.1	42.7	14.4
1995	10.6	32.7	43.3	15.8
1996	10.3	33.8	44.1	15.6
1997	8.5	34.5	43.0	13.0
1998	7.9	36.6	44.5	12.5
1999	5.4	45.2	50.5	9.9

Source: Korean Fair Trade Committee

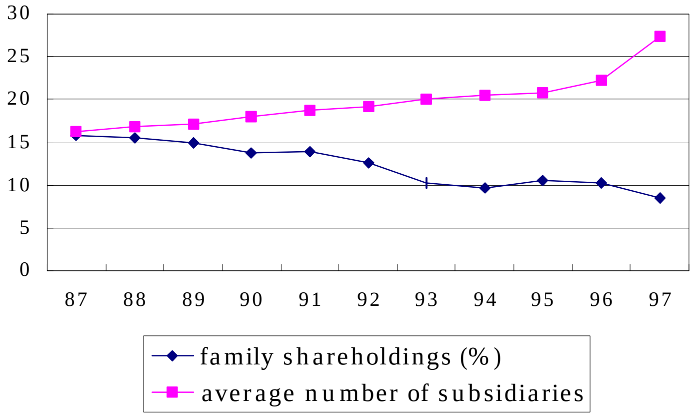
of overinvestment by the manager at the expense of shareholders who want the highest dividend or stock price. According to his analysis, the growth of firms can raise the resources of managers to control and managerial power and as such, they tend to reinvest continuously rather than distribute the profit to shareholders. In this respect the managers maximize not the value of the firm but corporate wealth.

This model can be applied to the *chaebol* firms in Korea. As the controlling shareholders are in fact the top managers of the *chaebol* firms, the *chaebol* family fits into the position of managers in Jensen's model. This occurs when family shareholdings are not much, and may even be decreasing, as shown in Table 1.

By using cross-shareholding and pyramid structures, they can become controlling shareholders with a small amount of investment with separate claims on the residual profits from the control rights of shareholders (La Porta *et al.* 1999). In this case, the legal and illegal benefits of control for *chaebol* family can be larger than the benefit of the dividend as shareholders.[8] If then, the *chaebol* family has an incentive to reserve the cash flow and reinvest it for empire-building and diversification of business lines.

[7]Myers and Majluf (1984) argue that information and incentive problems under asymmetric information lead firms to underinvest. In contrast, Jensen (1986) argues that if managers prefer growth over profitability, they may invest free cash flow in negative net present value projects.

[8]Chung and Kim (1999) estimate the size of the benefit of control as 10% of the total value of stock which is larger than that of the U.S., Canada and Sweden, while smaller than that of Italy.



Source: Korean Fair Trade Committee

FIGURE 1

FAMILY SHAREHOLDINGS AND NUMBER OF SUBSIDIARIES IN 30 LARGEST *CHAEBOL* FIRMS

It is noticeable that the incentive for business diversification is closely related with the changes in the ownership structure. Since the 1990s, as shown in Figure 1, the gap between cash flow rights and the residual control rights of owner-managers has increased continuously. With the increase of direct financing, family shareholdings and their claims on profits have fallen from 15.8% in 1987 to 8.5% in 1997. However, subsidiaries' shareholdings have not fallen as much during that period due to the increase of cross-shareholdings and pyramids. As a result, the gap between the two rights had widened, offering a stronger incentive for value-reducing diversification.

b) Internal Capital Market and Overinvestment

The way the *chaebol* mobilize and allocate the funds for investment among diversified and affiliated firms is similar to the way that multi-divisions form (M-form) organizations allocate funds among divisions. Since the *chaebol* control the allocation of funds among legally independent affiliates, this financing can be regarded as an internal capital market as well as a relationship-based financial system.

Internal capital markets are said to be more efficient than external capital markets in terms of information cost and monitoring incentives (Williamson 1975). The headquarters of M-form organizations can control the assets of division, while the banks cannot control debtors. Banks can control those firms only when they have defaulted. In the internal market, on the other hand, the headquarters have incentives to exercise their monitoring capability, since they own and control the assets of the division (Gertner, Scharfstein and Stein 1994).

However, the efficiency of capital markets are still controversial. When the stock market is well developed and the size of financial institutions is large enough, information costs are low and the incentive for monitoring firms can increase. In addition, the costs of internal market should not be ignored. Bureaucratic decision-making in the internal market may be substituted for the profit-based investment decisions in the external market. Bureaucracy in the decision-making can weaken creativity and innovation in each division (Bolton and Scharfstein 1998).

Considering these contradictory effects, the efficiency of the capital market is contingent. In developing countries where the external capital market has not been developed enough, an internal capital market can be more efficient. But as the capital market grows, adverse effects can arise. If the free cash flow is large enough, the tendency to overinvest might be realized.

In the case of the Korean *chaebol* firms, such phenomena actually happened. First of all, when an affiliate of a *chaebol* firm is in marginal condition, the *chaebol* continued to allocate funds to this firm so as to make the marginal firm survive. Secondly, since the late 1980s due to the deregulation policy, the cash flow of the *chaebol* has increased and enabled managers to invest more aggressively. Moreover, the most serious problem of the internal capital market is that the power of firm-insiders tends to increase without any constraints. Because of the increasing power of *chaebol* firms, the monitoring mechanism of banks on the *chaebol* was difficult to carry out properly.

B. Agency Problem in the Labor Market

The labor management system in a firm can be divided into two categories. First, there is a "cooperative system" of labor management as in Germany and Sweden, where corporations rely much more on incentives rather than threats of job dismissal to solve the agency problem. In these countries, corporations share productivity dividends with workers based on the institutionalized incentive system, and workers tend to monitor each other. The cost of supervising labor is not very high in this system.

Secondly, there is a "conflict system" of labor management that depends on supervision and coercion rather than incentives to solve the agency problem. This system resorts to the combination of intensive supervision and threat of dismissal. In this system, conflict often leads to an increase in the number of supervisory staff, and as such, supervisory costs increase continuously and this results in social waste.[9] Moreover intensified supervision and bureaucratic burden, in turn, lead to wage squeeze (Gordon 1996).

The labor management system in Korean *chaebol* firms seems similar to the "conflict system" of labor management. Several features of the Korean labor management can be summarized as follows.

First, worker's participation in the management had been prohibited in *chaebol* firms. The patrimonial authoritarian management system in *chaebol* firms denied industrial democracy. In such a patriarchal capital-labor relation, a conflict system of labor management can be established easily. Second, in the *chaebol* firms, the inside information of corporation is not open and collective bargaining is inefficient. The conflicting nature of capital-labor relations in Korea is closely related to the *chaebol* system, while the cooperative nature in Japanese labor relations is closely related to the professional management system based on inside promotion.

How has this conflict system of labor management caused overinvestment? All of the conflict systems of labor management cannot be said to have caused overinvestment. The conflict system can work efficiently, when labor unions are unorganized and the bargaining power of the labor class is weak. Or, it could also work well when the supervisory cost are socialized by state intervention. Finally, it could also work when labor is abundant in the labor

[9]According to Gordon (1996), the percentage of employees working in managerial and administrative occupations is only 2-3% in Germany and Sweden, while it is over 10% in the U.S. and U.K., where the conflict system of labor management is more dominant.

market and the threat of dismissal is persuasive.

The capital-labor relations during the late 1980s and 1990s were very unique, in the sense that neither state discipline nor market discipline worked effectively in the face of the increasing power of the labor class. Facing these problems, the *chaebol* firms did not develop a cooperative system. Instead, based on the previous conflict system of labor management, they pursued excess automation to exclude labor from the work place. Hence we can conclude that without state intervention, the *chaebol* system has a tendency toward overinvestment in the labor market as well.

IV. Retreat of State Intervention and the Financial Crisis

During the rapid industrialization period of the 1960s and 1970s, the agency problems mentioned above had been regulated by state intervention. The authoritarian state regulated the *chaebols* and workers to avoid serious problems originating from market failure.

In the capital market, the tendency of overinvestment by the *chaebol* firms was regulated since the state could control the allocation of funds in both the *ex-ante* and the *ex-post* levels. In the labor market, the state used both the market and state discipline. As for market discipline, the threat of dismissal based on the abundant industrial reserve army was persuasive. As for government discipline, the authoritarian state intervened in the capital-labor relation by banning the workers' political participation and the national organization of trade unions. Between the two disciplines, the latter became more useful due to the increasing demand for labor since the 1970s.

During the period of rapid industrialization, one of the main features of economic growth was the combination of mass production and a mass export system. But in the Korean mass production system, unlike that of Western countries, the compromise between capital and labor was limited. Since production was not articulated with domestic consumption, the Korean mass production system was not accompanied by mass consumption in the same country. The articulation of high productivity and low wages was the second feature of the Korean economy: for example, 'industrialization by learning' (Amsden 1989). Weakness in innovation due to late industrialization caused a clear distinction between technique and skill, conception and execution. Workshop organization without the worker's participation originated from this.

Under these circumstances, the state retreated with the political democratization in the late 1980s and deregulation in the 1990s. As a matter of fact, the retreat of the state was the direct background of the 1997 financial crisis. In short, the crisis was closely related to the retreat of state intervention—strictly speaking, state regulation.

However the retreat of state intervention itself is not a sufficient but is only a necessary condition for the realization of overinvestment. Unless the *chaebol* firms have enough cash flow, the overinvestment tendency would not have been realized. The capital liberalization policy including financial deregulation provided sufficient conditions for the realization of overinvestment. This section will examine the overinvestment of *chaebol* firms and the causes of the 1997 financial crisis in both the capital and labor markets.

A. Deregulation in the Capital Market

In the 1960s and 1970s, the tripartite network between government-*chaebol*-financial institutions was established under the hegemony of the government. This network provided the government effective monitoring power on the *chaebol*'s investment decisions. But since the late 1980s, the effectiveness of state regulation and state discipline deteriorated with the increased power of the *chaebol*. In a sense, this is ironic, because the rapid growth of *chaebol* firms and their increasing power were the direct result of the successful strategies of the developmental-state. Since the 1980s, when the government launched the financial liberalization policy, many *chaebols* had expanded their activities into financial businesses such as insurance and stock brokerage services. Table 2 shows the results of this evolution.

On the other hand, the privatized commercial banks, which the *chaebol* were not permitted to own at the time, could not monitor the *chaebol* firms effectively. Banks did not have any knowledge or incentives to monitor the *chaebol* firms, because they were under the control of the government for a long time.

We observe the change in the alliance of the *chaebol* and the state since the late 1980s: from alliance under the hegemony of the state to alliance under the hegemony of the *chaebol* (Kim 1997). All

TABLE 2

DIVERSIFICATION OF THE FOUR LARGEST *CHAEBOLS*, 1971-94

(%, Share of Assets)

		Light	Heavy	Financial	Other
Hyundai	1971		45.5	3.6	50.8
	1994	1.1	55.6	12.9	30.4
Samsung	1971	62.8	10.8	20.1	6.3
	1994	6.3	39.1	42.1	12.5
Daewoo	1971	7.6		13.3	79.1
	1994		60.2	9.0	30.8
LG	1971		95.6		4.4
	1994		64.2	17.3	18.5

Source: Kim (1997, pp. 70-6)

these changes, such as the retreat of state regulation, liberalization and deregulation of the *chaebol*'s investment decisions, are structural causes of the overinvestment of the *chaebol* firms.

The decision to join OECD in the 1990s became the threshold for the realization of overinvestment. Since a precondition to join OECD was the rapid capital liberalization and opening of financial markets, the government started rapid deregulation in the financial sector since 1993.[10] This violated the macroeconomic stabilization conditions of the high-debt development model. Table 3 shows that from 1993 to 1997, there was an inflow of about 99 billion dollars in foreign capital of which 54.6% (54 billion dollars) was used by firms as funds for fixed capital investment and foreign capital investment.

It is often argued that the governments implicit guarantee and the 'moral hazard' of Asian banks and firms were responsible for the 1997 financial crisis (Krugman 1998; Mckinnon and Pill 1988; and Ozawa 1999). This market-oriented view suggests that overborrowing and overinvestment in the *chaebol* firms were the direct result of excessive government intervention.

We agree that the overinvestment of *chaebol* firms was one of the structural causes of the financial crisis. But it is hardly agreeable

[10]In regard to the financial liberalization program started in the 1980s, the speed of liberalization was in fact regulated, in order that the economy did not open too rapidly until 1993. Therefore, deregulation at that time is referred to as the 'regulated deregulation of the financial system'.

TABLE 3

TRENDS OF FOREIGN LIABILITIES IN KOREA (1993-97)

(Unit: Billion dollar, %)

		Increase in the foreign liabilities in 1993-97	Sum of foreign liabilities in 1997
Firms	Domestic equipment investment	40.7(41.2)	65.3(40.4)
	Foreign investment	13.3(13.4)	23.3(14.4)
	Credit to export activities	17.4(17.6)	25.3(15.6)
	Credit to import activities	14.6(14.8)	23.0(14.2)
	Others	-3.5(3.6)	2.5(1.6)
Financial Institution	Investment on foreign securities	12.8(13.0)	17.7(10.9)
	Others	3.5(3.5)	4.7(2.9)
Total		98.9(100.0)	161.8(100.0)

Source: Board of Audit and Inspection of Korea, *Analysis on the Causes of the 1997 Financial Crisis*, 1998.

that the overinvestment tendency of *chaebol* firms originated from the government guarantee and intervention.[11]

Since the Korean government intervened in the capital market through banks, as is widely known, commercial banks have been under strong government control. On the other hand, non-bank financial institutions, such as merchant banking corporations and investment trust companies were not subject to the same controls as banks. But as shown in Table 4, the ratio of bad loans of commercial banks was 7.4% of total loans, which is lower than that of any other non-bank financial institutions. The less regulated and more liberalized financial sector loaned their money much more badly. This is quite the opposite of what the 'moral hazard' theory

[11]Chang, Park and Yoo (1998) argue that the Korean financial crisis was not the result of government intervention, but from uncoordinated and excessive investments by the private sector, which had been made possible by the financial liberalization policy and weakening of government coordination mechanism.

TABLE 4

BAD LOANS RATIO IN KOREAN FINANCIAL INSTITUTIONS

(Unit: Billion won, %)

	Total loans (A)	Bad loans (B)	Ratio (B/A)	Year
Commercial banks	2,885.0	212.1	7.4	1998.12
Merchant banking corporations	222.4	28.8	13.0	1999.03
Investment trust companies	529.7	93.9	17.7	1998.12
Mutual saving & finance corporations	250.3	46.9	18.7	1998.06
Credit Unions	111.7	17.3	15.5	1998.12

Source: Korean Financial Supervisory Commission

predicts, arguing that government intervention encouraged over-borrowing and excess investment. Instead, as explained in the previous section, the overinvestment tendency is intrinsic to *chaebol* firms, in which owner-managers may derive benefits from control through value-reducing diversification.

The corporate governance of the *chaebol* firms after the retreat of the state can be well described using the concept "insider-control". Insider-control implies the phenomenon that firms are controlled only by the insiders—such as managers and employees. The transition periods of socialist economies toward market economies in Russian and East-European countries show examples of the insider-control problems (Aoki and Kim 1995).

The Korean situation since the 1990s can be explained with the insider control problem. In the capital market, owing to the dissolution of the state monitoring and coordination system (Chang, Park and Yoo 1998), there was no outside monitoring mechanism on the *chaebol*'s investment decisions and family dictatorship in those firms. Family owners of the *chaebol* firms substituted for state regulation. The internal capital market in the *chaebol* was almost completed in the 1990s. Owing to the establishment of the internal market, the power was shifted to the family owners rapidly and caused overinvestment without any restraint.[12]

[12]One difference to East-European countries is that in Korea insider

B. Collapse of State Discipline and Increase of Labor Control Cost

In the labor market we observe the same phenomenon as well. Due to the grand struggle of labor and democratization in 1987, the direct state intervention system in the labor market collapsed. Instead, the state retreated as an indirect mediator in the labor market and industrial relations. Confrontation and collision between the *chaebol* and the workers compelled the *chaebol* to establish a new 'conflict system in labor management'. Without the workers' participation, however, the conflict system increased the wasteful expenditures on labor control in both the individual firm and national economy levels.

Since 1987, with the retreat of state intervention in capital-labor relations and due to the increase of the power of labor unions in the work place, relatively high wages in *chaebol* firms and relatively low wages in small firms were observed. Obviously the increase of wages and improvement of working conditions in the *chaebol* firms show the increasing power of the working class, even though the high wage in the *chaebol* firms was not the same as the 'social wage' in advanced countries.

The differences in wages and working conditions between the *chaebol* and the small businesses stem from the differential strategies of the *chaebol*. On the other hand, however, wage differentials are closely related to the uncontrollable power of the labor class after the retreat of the state. Owing to the absence of a social contract between labor and capital as a whole, the bargaining power of labor unions was actualized only in the individual firm. There was no labor organization that could bring the workers in the same industry together into a unified organization. Therefore workers' demands were limited only to the working conditions in the individual workplace. Confronting these challenges, the *chaebol* spent large sums of money to restore the bargaining power.

First, the *chaebol* firms increased their expenditures on direct supervisory activities. Mass production in Korea's leading industries, such as the automobile and electronic industries, depends on the combination of massive fixed capital investment and simple and

control caused overinvestment, while in socialist countries insider control caused underinvestment.

repetitive work. In this Fordist type work place, supervisory activities and labor discipline become very important. Productivity improvements depend more on labor discipline than on the improvement of labor skill. For this reason, the restoration of the bargaining power of capital increases the supervisory costs immensely.

Secondly, *chaebol* firms had economic incentives to avoid workers' participation in management, often even in the workplace. The *chaebol*, during these periods, provided higher wages and better welfare benefits for the purpose of labor control. Interestingly, the increased cost of labor control was based on a "conflict system" of labor management and not on a "cooperative system" of labor management. The structure of labor management in the *chaebol* firms has been more authoritarian and patriarchal, even though the political system has changed to becoming more democratic.

Under this type of *chaebol* governance structure and the declining influence of the state on the labor market, the *chaebol* firms increased fixed capital expenditure to substitute labor. Some of the increased automation expenditures since the late 1980s were labor control costs. The automation after the 1987 grand struggle, led by *chaebol* firms under the name of 'rationalization', excluded labor participation and focused mainly on quantitative flexibility and not on qualitative flexibility. The nature of automation during that period was 'the exclusion of labor by the machine' rather than 'the articulation of labor and the machine'. According to Jang (1998), since the 1980s, the process of increasing the labor-equipment ratio continued without any improvement in productivity.

All of these costs, related to labor control under the conflict system of labor management, are fundamentally the agent costs in the labor market. These agent costs are related to the overinvestment of the *chaebol* in the late 1980s and 1990s through the excessive 'rationalization' of the production process. Our interpretation of the change of labor-capital relations since the late 1980s focuses on the agency problem in labor market. This interpretation also stresses the problem of 'strong capital' of the *chaebol* that tried to solve the agency problems with the control and exclusion of labor, rather than cooperation and incentive. This implies the *chaebol*'s pre-modern governance system was one of the factors that caused overinvestment.

V. Concluding Remarks: Democratic Regulation of Markets

By now, we have seen the changes in state regulation on the capital and labor markets within the Korean developmental-state. We have argued that the retreat of the state in the 1990s due to the deregulation policy of capital and labor markets caused over-investment which was one of the structural causes of the 1997 financial crisis.

It is certain that the 1997 financial crisis was triggered by outside factors such as the instability of the global financial market and the influence of the Southeast Asian crisis. It is also true that excessive business diversification and overinvestment of *chaebol* firms were responsible for the crisis. Excessive diversification and overinvestment were the internal cause of the 1997 financial crisis. The internal cause of the crisis was neither 'the exploitative character of the developmental state' nor 'the rent-seeking behavior of the *chaebol*', but the increase of agent costs both in the capital and labor markets after the retreat of state.

Our interpretation on the crisis implies that democratic regulation of the capital and labor markets will play an important role in solving the agency problems in *chaebol* firms.

Industrial democracy and the workers' participation have often been interpreted only in the contexts of work organization, production system and industrial relations. But in Korea, the *chaebol* system is a big obstacle to industrial democracy. Since the *chaebol* became the most influencing force in the economy, the obstacle to industrial democracy spreads not only in the work place but also in the financial market. With the unchanged *chaebol* system, a democracy cannot be completed in the economic sense. Democratic regulation of the labor market is closely related to reform of the *chaebol* system and, in turn, it is closely related to the democratic reform of the financial system.

For democratic regulation of the capital market, a social monitoring mechanism is necessary for reforming the *chaebol* system. Under the bank-based financial system, banks as lenders can work as effective monitors, because they have enough incentives to reduce the agent cost of debt.[13] However monitoring by banks is not enough for industrial democracy. Social representatives such as grass-root movements and national labor union leaders need to take part in the committees of the financial institutions.

Secondly, for democratic regulation of the labor market, the worker's participation in management is important. In reforming the governance structure of the *chaebol* system, laborers can join the board members based on the labor's ownership. Worker's participation on the boards can alleviate the agency problem in the labor market, mitigate information asymmetries and reduce wasteful supervisory costs in the working place.[14]

During the rapid industrialization of the 1960s and 1970s, the state undertook to solve market failures. These days, however, since the strong state cannot exist any more with political democratization, state discipline cannot be a solution. New alternatives should be found. Since the market itself cannot solve it, social participation of various stakeholders is needed in reforming the corporate governance structure. This agenda is therefore reduced to neither a market solution nor a state solution.

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[13]For example, the Hausbank system in Germany can be a useful example when solving the free-rider issue and monitoring in capital markets (Grossman and Hart 1980).

[14]One issue related to this is the limitation of the present firm-based labor union organization. The present labor union organization may solve the dictatorship of family owners in the *chaebol* firms, but still cannot solve the insider control problems. Therefore to monitor the *chaebol* firms in the social level, labor union need to be reorganized on the industrial level and national level. This national organization of labor union can represent the interests of workers as a whole.

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