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A final flowering of the developmental state : the IT policy experiment of the Korean information infrastructure, 1995-2005

Kwang-Suk Lee
University of Wollongong, kslee@uow.edu.au

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A Final Flowering of the Developmental State: The IT Policy Experiment of the Korean Information Infrastructure, 1995–2005

Abstract

In contrast to the private-led initiative typified by the US Information Superhighway project in the early 90s, the Korean government was in the forefront of directing the Korean Information Infrastructure (KII) project (1995–2005), which was aimed at building a nationwide broadband backbone network. This study first looks at how the developmental mechanism of Korea during the KII project signifies the weaker status of the civilian government of the 90s. This study then shows how in the KII project, the government served primarily as a moderator mediating conflicts between the private sector and the relevant public agencies. To describe the close state-capital linkages in the KII project, this study focuses on the government's financial investment system for enticing the private sector to install the IT infrastructure, the neatly coordinated policy networks between the public and private entities, and the policy discourses by which the government achieved a national consensus on IT-driven economic development.

KEYWORDS: Korean Information Infrastructure, broadband network, *Chaebol*, telecom company, developmental state

1. Introduction

Since the late 80s, the Korean government had to rapidly transform its developmental mechanisms in response to external pressures such as the World Trade Organization (WTO) Agreements and the US–Korea bilateral trade negotiations and internal ones such as the mass protest against the authoritarian state since 1987, the growth in power of the elite *Chaebols*, — the Korean form of crony capitalism[i] — and the decline of the foreign market due to the Korea's export-oriented manufacturing industry. Driven by the global-local dynamics, the "strong state" model in Korea has gradually withered and been replaced by the "flexible state" or "market-driven state."

The Korean Information Infrastructure (KII) project was designed during this decline in the power of the state. Imitating the US National Information Initiative (NII), the KII's main goal was to interconnect the public agencies through a high-speed broadband network, and eventually to promote IT productivity in the private sector and to create a larger job market through this network. In contrast to American NII initiative, which was led by the private sector, in Korea the government took the leading role in guiding the KII from start to finish. Through the KII project, the three major stakeholders — the state, the national telecom duopoly (KT and Dacom), and the *Chaebols* — have become deeply interpenetrated, by means of state financial support, organizational collaboration, and a hegemonic consensus manufactured by the government's IT-related rhetoric. The KII project represents a mixture of the old and the new developmental state model, which is characterized more by the collaborative ties between the state and the private sector rather than by the state's dominance over the private sector. Inheriting the legacy of the old developmental state,[ii] the KII project was a final example of the state's ability to launch, guide, and complete a major national IT policy initiative.

This paper is a policy analysis of the KII project as an example of an evolving phase of the developmental state model. This policy analysis aims to detail the deep structure of the relationships between the state and large capital directly involved in implementing the KII project, investigating how they enter into alliances with each other and how they articulate their own interests as they relate to implementing the project.

Within political elites in Korea, the KII project is seen as a very recent successful story of state interventionism since the Korean economic crisis of 1997. Many scholars view the IT project in Korea as the "second" phase of the Asian economic miracle: the first phase involved Asia catching up to the West in the industrial economy, while the second phase

involves Asia becoming the leader in IT fields. The objective of the paper is to challenge the optimistic view of the ostensibly successful IT project in Korea, and instead to focus on the hidden mechanisms for implementing the KII project. In so doing, this paper seeks to observe the state–business linkages and the sacrifice of other stakeholders in order to create or maintain those links.

2. Research method

Confronting East Asia's economic "miracle" during 1970s and 1980s, a group of social scientists in the West turned away from neoclassical or market-centered view and dependency theories and developed alternative interpretations for the new phenomenon. The academic field known as "developmental state theories" rapidly grew to explain how the interventionist role of the state in the four "Asian Tigers" — Hong Kong, Singapore, South Korea, and Taiwan — allowed these countries to successfully catch up with the industrialization of the West. Although the Asian financial crisis of the late 1990s, which represented a harbinger of global instability, diminished scholarly interest in "developmental state theories," it is obvious that, even after this economic turmoil, a rigid tendency toward state interventionism in the economy has survived in East Asian states, and the interventionist state has partly succeeded in promoting the national information economy — while simultaneously creating massive new labor market insecurities, the intensification of inequality, and exploitation (Burkett & Hart-Landsberg, 1998; Pirie, 2006). At the theoretical level, this paper rereads the old developmental arguments anew, and rethinks those arguments in the light of the state-led KII project in Korea.

The purpose of this paper is to describe and analyze the contextual factors that conditioned the Korean Information Infrastructure (KII) project implemented by the Korean government from 1995 to 2005. The primary research question of this paper is to observe what kinds of symbiotic relationships between governmental and business entities have developed through the KII project. Concretely, this paper examines how the state has constructed a new relationship with the *Chaebols* through the KII project, far from the authoritarian and interventionist state in the past military regimes directing over the *Chaebols*. In other words, the paper shows how the state, the rapidly growing telecom duopolies, and the *Chaebols* in Korea have become deeply interpenetrated, by means of state financial support, the organizational collaboration between these entities, and a hegemonic

consensus. This paper limits the observed scope of the linkages to the government-led investment in the private sector and the organizational network of collaboration.

To investigate the symbiotic relationship between the state and the private sector in the KII project, this paper has the following structure: it first explores the scholarly literature based on the developmental state theories that has described the patterns of such collaborative ties. The analysis then focuses on the prior-investment system led by the government, the policy consultation bodies created for the project between the state and the telecom incumbents, and the government's IT policy rhetoric for creating a hegemonic consensus. This paper concludes that the denser the network of state–business alliances or linkages becomes the more citizens are excluded from the decision-making processes.

This paper uses data from in-depth interviews with government officials from the Ministry of Information and Communication (MIC), the National Computerization Agency (NCA — now the National Information Society Agency), and the telecom companies KT and Dacom, as well as official documents relating to the project published by the MIC and the NCA that contain organizational charts and describe the major stakeholders' relationships and the changes in their policy network based on the shifts in specific policy goals.

3. The Transformative Phases of the Developmental State in Korea

In modern Korea, the concept of the developmental state arose under the first military regime (1963–79), that of Cheong-hee Park, who came to power by coup d'état. Park achieved rapid economic growth by upgrading the import-substitution economies[iii] of the Syngman Rhee (1948–60) and Po Sun Yun (1960–62) administrations, which were largely dependent on US aid, to export-oriented economies through the state-bank-*Chaebol* nexus. Park's regime is commonly described as *kaebal-dokjae*, which means "economic growth through dictatorship." During the Park regime, government–business relationships were formed under the "overall guidance of a pilot planning agency" (Johnson, 1987: 145), such as the Economic Planning Board (EPB), which set forth a socialist-style national plan for industrialization. There were, in fact, five successive five-year macro-economic plans between 1963 and 1986. The Park administration thus became an archetype of the developmental state which successfully accomplished industrial modernization in the shortest time. The Park regime was based on a strong repressive state, the state's dominance over the private sector, and growth-oriented interventionism involving labor exploitation and suppression.[iv]

Even after Park's assassination in 1979 by his intelligence chief, the military-backed

interventionism in the market by the administration of General Doo-hwan Chun (1980–88), who once again came to power in a military coup, was extensive until the 1987 pro-democracy movement forced him to introduce a direct presidential voting system. After taking power, Chun appointed technocrats who had earned doctoral degrees in Economics in the US and were known as followers of the neoliberal Milton Friedman (Kim, 1999). This hardly means, however, that the Chun administration whole-heartedly embraced *laissez-faire* economics. Greatly influenced by the global trend of neoconservatism promoted from the early 1980s onwards by Reagan in the US (Reaganism) and Thatcher in Britain (Thatcherism), Chun intervened strongly and directly in the market under neoconservatism.

Chun always saw Cheong-hee Park as his role model, and his regime was the embodiment of the strong, repressive state. For instance, in 1980, to silence voices critical to his regime, Chun enacted the Basic Press Law and forcefully conducted the *eonron-tongpaehap*, the "compulsory reform of the media." Chun commanded KBS, the state-owned broadcaster, to absorb the TBC television network, which was owned by Samsung Corp. He also ordered the pro-government newspaper, *Kyonghyang Shinmun*, to absorb *Shin-A Ilbo*, a daily newspaper, and forced at least six local newspapers to close their business permanently. Over 700 journalists were dismissed from their jobs and the remaining newspapers were subjected to a high degree of government control (Billet, 1990). As another example of his use of state power against the *Chaebols*, in 1985 Chun dismantled the seventh largest conglomerate in the nation, the Kookjae group, which had around 200 subsidiaries at that time, merely because it refused to donate "political funds" (protection money, in essence). This example shows that regime had the power to punish the *Chaebols* for the slightest disobedience, and also illustrates the rent-seeking relations between the ruling junta and the business elites.

Since the changing political climate brought about by the democratization movement of 1987, the public began to critique the symbiosis between the government and the *Chaebols*. The domestic capital itself began to demand a market economy free from the government's direct intervention. Due to the rapid growth of the *Chaebols* and the rising political pressure from below, the government could not wield absolute power over the private sector any more. During the presidency of Tae-Woo Noh (1988–93), Chun's designated successor, the technocrats chose a *via media* in which the *Chaebols* were supported by being granted lucrative business licenses, special loans and other financial benefits from government agencies, and contracts to build the national infrastructure to promote market efficiencies. For instance, in 1992 the Noh administration licensed

Sunkyong, the seventh largest *Chaebol* in the nation, as the cellular phone provider over the other more competitive bidders because the son of Sunkyong's owner was married to President Noh's daughter. Although the license was ultimately withdrawn due to the public's growing antipathy, the case was a typical example of Korea's crony capitalism.

Under the administration of Young-Sam Kim (1993–1998), the first democratically elected president, the government endorsed the Federation of Korean Industries (FKI), an organization largely representing the *Chaebols*' interests, to select the assignees for the telecom licenses during the telecom reform of 1993. In 1995 the government allowed the *Chaebols* to enter the media industry by granting them profitable new licenses for cable television services (Shim, 2002). The *Chaebols* became the largest recipients of the lucrative profits stemming from the state's permission to launch new business in the telecom and media sector. During this time, the domestic *Chaebols* have also expanded their scope into the global market through building subsidiaries and investing the capital. Further, the *Chaebols* also borrowed low-interest foreign loans — as of 1996, the average debt ratio of the 30 top conglomerates reached 450% — without screening by the government. The *Chaebols*' dependence on foreign financial capital accelerated the 1997 economic crisis due to volatile foreign hedge funds, speculative capital, and international lending. Under the pressure of the WTO Agreement on Basic Telecommunications and the IMF bailout program — in which Korea obtained $US58 billion of emergency loans — the Dae-Jung Kim administration (1998–2003) privatized KT, the state-owned telecom incumbent, and fully opened the domestic banking, media, and telecom market, among others, to foreign investors.[v] The government's dominance over the *Chaebols* has gradually waned, while the larger *Chaebols* have accumulated even more power as the medium-sized ones have declined or been absorbed.[vi] President Moo-hyun Roh (2003–08) confessed the state was losing its power to regulate the *Chaebols* when he commented, "We have already entered into the age of big capital having the upper hand over the state." The Samsung bribery scandal provides an illustration of how widespread the *Chaebols* power may be: in January of 2008, at the insistence of civil rights groups, the Roh administration launched an investigation of Samsung centered on whether it had amassed slush funds, peddled influence by routinely bribing government officials, the media, and members of the judiciary, and engaged in shady stock deals to pass control of the group from its chairman, Kun-hee Lee, to his only son. Courageous whistle-blower Yong-cheol Kim, the former head of Samsung's legal affairs team, joined by members of the Catholic Priests Association for Justice, told a radio station that "the list of bribe-takers includes not just top prosecutors and ministers in the Roh

administration, but also people recently nominated or mentioned as possible members of the cabinet or high-ranking staff members of the Blue House [the Korean White House]" (*Korea Times*, 10 January 2008). The public, therefore, is skeptical that the "Republic of Samsung" can truly be brought to justice considering the extent of Samsung's power in Korean society.[vii] This scandal reveals that the parasitic bond between corrupt state bureaucrats and monopoly capitalists is still very much alive even under a politically progressive administration and that the balance of power has rapidly shifted towards the latter since 1997 financial crisis.

In sum, Korea's democratic turmoil in 1987 began the momentum to weaken the absolute power the state had enjoyed since 1963, while the 1997 financial crisis under the civilian government remarkably enhanced the *Chaebols*' power, through their alliance with foreign capital; once dominated by the state, it is the *Chaebols* that now dominate it. In responding to shifting external and internal factors, the evolving relationship between the state and the conglomerates has transformed the developmental state model from that of the strong and repressive state through that of a limited or flexible state to that of the market-driven state.

4. The KII Project as a Legacy of The Developmental State Model

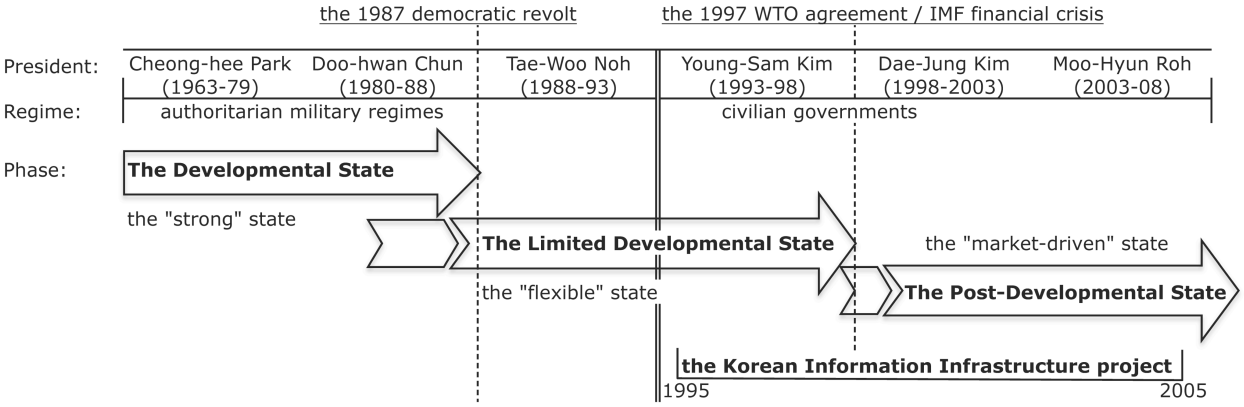
The close relationship between the state and economic conglomerates in Korea has often been termed *jeongkyong yuchak* ("the symbiosis of two entities"), which has a negative connotation.[viii] In this symbiosis, the government granted moneymaking licenses to, and invested public funds in, the largest conglomerates, and in return the *Chaebols* donated large sums to political slush funds. A unique mechanism of the developmental state is to transcend simple rent-seeking links between the two dominant elites and to transform their symbiosis into a mechanism for economic growth. Although developmentalism, promoted under the slogan of national modernization, conceals such chronic problems as an unethical business culture, power elitism, cronyism, corruption, corporate suppression of labor, deep class divisions, and the public's exclusion from the decision-making process, nevertheless, the unethical mechanisms of *jeongkyong yuchak* have been a driving force for economic growth, curbing the excessive penetration of foreign capital and enhancing the market competitiveness of domestic conglomerates.

Many scholars have explored the transformations of state–business relationships in Korea, focusing on cross-regime variations in economic development, specifically, the shifting the balance of power between the two. Analyses of Korean state–business relations

include a shift "from dominance to symbiosis" (Kim, 1988); "governed interdependence" (Weiss, 1988); a "pragmatic mix of government guidance with private initiative" (Jeon, 1994); the "patron-client relation" (Nam, 1994); a shift from "the stern but stable state-directed symbiotic partnership to a more unruly and erratic partnership" (Moon, 1994); "embedded autonomy" (Evans, 1995); "public-private reciprocity" (Fields, 1997); the shift from the developmental state to the "post-developmental" or "market-driven state" (Kim, 1999; 2005); "path dependency" (Jang, 2000); an "eclecticism beyond orthodoxies" (Clark, 2002; Clark & Jung, 2004); a "state–*Chaebol* alliance based on a more populist social contract" (Hundt, 2005); a "transformative state in which the state acted as senior partner rather than commander-in-chief" (Cherry, 2005); and the demise of "Korea, Inc." (the state–banks–*Chaebols* complex) and the rise of "neoliberal consensus" (the coalition of *Chaebols*, technocrats, politicians, economic experts, and NGOs) (Lim & Jang, 2006; Lee & Han, 2006).

Despite their slightly different foci and analyses, most studies note the major contextual factors weakening the state's power, such as the growing *Chaebol*-dominated economy, increasing democratization, and global pressures for liberalization. They also agree that the Korean state's *modus operandi* has changed considerably from the military regimes to the civilian governments. Some of the studies further subdivide their analyses by into periods marked by such historical events as the citizen's uprising of 1987 and the IMF financial crisis of 1997. Some scholars describe the shifts in the state–*Chaebol* relationship as if the older relationship has been completely annulled by the new. The present analysis, in contrast, sees the state-business linkages as transformative and continuously evolving, while retaining embedded traces of the past. As shown in Figure 1, the KII project, which extended from 1995 to 2005, was accomplished during Korea's evolution from a limited or flexible development state to a market-driven or post-development state. These phases of evolution are quite distant from the strong state model exemplified by the first two military regimes (those of Park and Chun). Initiated during the flexible state phase, the KII project involved coordinative state–business relationships which were maintained through continuous negotiation processes carried out by a series of intermediary committees. Nevertheless, the entire project was initiated, developed, and guided by the state — a situation which would be difficult, if not impossible, to replicate in Korea's present post-developmental state phase of evolution.

Figure 1. The evolving phases of the developmental state and the KII project



Source: compiled by the author

5. The Close State–Business Linkages Throughout the KII Project

The major goal of Young-Sam Kim's administration was to shift Korea away from its export-centered economy, which had been the major mechanism of market productivity under the military regimes, and search out a new source of profits for the domestic conglomerates. Kim favored the affiliation of Korea into the global economy and regarded the KII as a powerful engine to drive the nation's economic structure towards the knowledge-based economy. By interconnecting government agencies and public institutions with high-speed broadband networks, he sought to upgrade the nation's infrastructure and expand its capacities to create a new IT-driven market. In 1994, the Kim administration announced the broad master plan for the KII and launched the Ministry of Information and Communication (MIC), which absorbed the major IT-related administrative functions from other ministries. In 1995, the government also issued the "Framework Act on Informatization Promotion" (FAIP, Act No. 4969) which included the legal provisions for conducting the KII policy plan which set forth the R&D goals to be met, provided the funding for the long-term IT project, and established the top decision-making committee and its subsidiary bodies.

The KII project has been highly praised as a successful policy experiment by government officials, policymakers, scholars, and journalists from foreign countries, who focus on Korea's attainment of "broadband heaven" through vigorous state leadership and corporate cooperation. Few, however, have examined the inner mechanisms of the KII project's success such as the state-led funding structure, the special steering and intermediate

committees, and the consensual dynamics of IT discourse. This section investigates the mechanisms that made the eleven-year state-led project viable, and examines how the state-business linkages have became more flexible and less consistent since the demise of the strong, repressive state.

5.1. Taming the Telecom Incumbents with the Carrot, Not the Stick

Information infrastructure projects such as the KII are typically burdensome to the private sector, and corporations are therefore usually less than enthusiastic about such plans, which involve massive, long-term investment, high risk, and uncertain returns (for this reason, the Clinton–Gore NII initiative failed to attract the necessary private sector involvement). To involve Korean Telecom (KT) and Dacom in the KII project, the Kim administration offered a variety of enticements: preferential tax treatment, the granting of new licenses, and investment loans underwritten by the government. KT, the domestic telecom incumbent, was relatively favorable to the government, which was its dominant stockholder until KT was completely privatized in 2002 (Kim, 5 June 2007). The government had also allowed Dacom to acquire licenses for international and long-distance telephony services during the national telecom restructurings of 1990 and 1994, respectively, which were initiated for the purpose of curbing the international pressure for telecom market liberalization, and Dacom had rapidly emerged as the second largest telecom company in Korea. As a result, the government was able to gain the cooperation of the two telecom incumbents without any great conflict. A deputy director of LG Dacom described the situation this way:

> The KII project was very supportive for the private partners in that the government minimized our business risk by its public investment. At that time nobody dared to invest the enormous funds for it; through the public funding, Dacom was able to leapfrog ahead by facilitating the nationwide optical networks. The contribution from public investment was highly significant. (Song, 29 May 2007)

A manager of KT's Network Investment Planning Department also agreed on the effect of the state-sponsored investment:

> It is obvious that the state-led "investment first, construction next" policy plan gave KT and Dacom the incentive to participate in the KII project without a great business risk, and also minimized the potential friction between the government and us throughout the project. In those days, KT, as the first partner in the government project, benefited from the immense state-led investment that allowed us to expand the optical networks. (Kim, 1 June 2007)

The "investment first, construction next" principle was the telecom companies' major incentive to join in the KII project, allowing them to minimize their investment risk and cost at the earlier stage of the project. KT and Dacom also regarded the huge project as a chance to upgrade their copper lines to high-speed fiber optic networks.

In the building of the backbone networks connecting the public agencies and institutions — the so-called KII-G — KT was allotted a 70% share and Dacom a 30% share. The KII-public (KII-P) was independently built as a commercial network through the budget of the telecom companies themselves, and the KII-testbed (KII-T), the optimal high speed R&D network, was built by the public-private partnership. For the KII-G, its most important backbone network, the government invested a total of $US6.2 billion over the three phases. At the beginning, the government as the major stakeholder aimed to own the backbone network directly and grant the telecom companies a 25-year lease to it. The government — specifically, the MIC as funding distributor and the National Computerization Agency (NCA, now the National Information Society Agency) as funding manager and coordinator — also pressured the telecom operators to apply an 80% or 90% discount to the proposed online service charges for public agencies that would become subscribers in September of 1997. As Che-Hyun Jo, the Deputy Director of Dacom and one of the key actors in the KII-G project, noted in his official interview with the NCA (2005), the discount rate requested by the government was burdensome, and the mood became very dark within the telecom companies. The sensitive issues of the KII-G network ownership and service charges triggered critical conflicts between the government and the private sector. In addition, the Board of Audit and Inspection (BAI)'s questioning of the MIC's funding method for installing the optical lines in 1996 jeopardized the completion of the project itself (NCA, 2005, p. 130–131).

This crisis at the early stages of the project (1995–1997) finally caused the MIC to change the subscriber costs and ownership structure: It decided to transfer ownership of the fiber-optic backbone lines to KT and Dacom and to establish a joint public-private sector KII fund (a so-called "bilateral netting account") out of which the KII-G would be built and out of which the government would subsidize 40% of the subscriber service charge. In return, the two telecom companies agreed to reimburse the joint fund a portion of their profits year by year until their government loans were paid off, and to offer a 40% discount rate to KII-G subscribers. As an interviewee who was an official at the NCA, which managed the cost system between two entities, commented, the new cost mechanisms for the KII-G enabled by the government subsidies led to a breakthrough in the conflicts between the government and the private sector (Rha, 28 May 2007). Further, since a 40% discount and a 40% government

subsidy was applied to the service charges, government agencies and public institutions were able to receive broadband Internet for 20% of the actual cost, and institutional users grew rapidly — from 2,184 subscriber lines in 1996 to 30,137 lines in 1998 (Lee et al., 2007). Once a critical mass of subscribers had been reached, the government was able to complete the KII-G phase of the project without further difficulty.

The increase in subscribers from public institutions and agencies brought a more stable flow of profits to the telecom companies, and this, in turn, furthered the development of the KII-P, the commercial network. At this point, the government could not overtly intervene in guiding the KII-P because of external pressures[ix] brought to bear on the government. As an official of the NCA (now the NIA) describes it,

> In the mid-90s, the government had no choice but to leave the KII-P's development in the hands of the private sector. Under strong global pressure to liberalize the telecom market, the government could not intervene in the market or lead the KII-P directly, but could only recommend the government's roadmap to the private sector. Otherwise, it might cause serious friction in US–Korea trade relations. (Jeong, 5 June 2007)

Despite this, since 1997 the government has successfully stimulated private investment in the local loop and facility-based competition by introducing the so-called "cyber-building certificate program" into the KII-P. Through this certificate program, apartments and buildings were ranked according to their capacity to handle high-speed Internet.[x] As a public official who worked for the KII project pointed out, because South Korea's population is largely located in a few large urban areas and because most residents live in large apartment buildings, the MIC's facility-based Internet promotion policy was effective in expanding the penetration of high-speed Internet service into the general public. He added that, in the early stages of this program, the certificate system also allowed construction companies to raise the mortgage price on new government-certified "Internet-ready" apartments (Moon, 7 June 2007). The demand created through the indirect promotion of broadband Internet assured the telecom companies and the construction companies — the latter of which were mostly owned by the *Chaebols* — a steady stream of new customers. Further, since 2001 the Ministry of Construction and Transportation (MCT) has required that all new apartments or multi-dwelling units have broadband Internet connections (Falch, 2007; Lee & Chan-Olmsted, 2004).

In sum, the domestic telecom companies were fully supported by the state both through the immense financial underwriting of the KII-G and the assurance of fixed

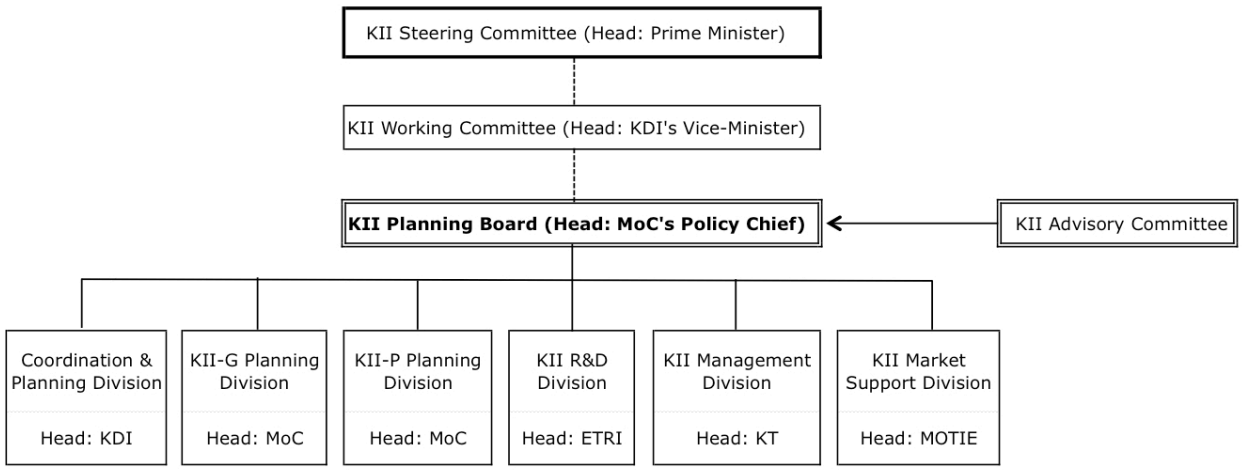
subscribers and then the MCT's promotion of the KII-P through the certificate system together. Rather than the state dominating the private sector by top-town command, as in an earlier period, disagreements between the two were settled by a series of bilateral negotiations between the state and the telecom companies. As a principal researcher at the NIA notes, "These close public-private relationships reflect the specific political system of Korea" (Jeong, June 5 2007). The KII project, thus, is a prime example of the limited or flexible state model — of the shift in state–capital relations "from dominance to symbiosis" (Kim, 1988).

5.2. Intermediary Organizations for the KII Project

In the early 90s, before the launch of the KII project, the Economic Planning Board (EPB) — which then regulated the national budget office — was hesitant to allocate the immense public funds necessary for the project because its cost–benefit justification was weak. Further, the Ministry of Trade, Industry, and Energy (MOTIE) argued that most equipment for the networks fell under its jurisdiction and thus that the MOTIE was responsible for the KII project, whereas the MIC's focus was on the regulatory aspects of the network-based telecom market (Jeong & King, 1997). The KII project, however, was seen as the engine in a plan for national economic growth, and neither bureaucratic gridlock nor budgetary concerns could long be sustained in the face of such a vision.

Just after the Basic Plan for the KII project was announced in 1993, the government organized the KII Taskforce to draw up a more concrete roadmap for the project. The Taskforce was made up of officials from the MIC and the NCA, from the telecom provider KT, and from the Electronics and Telecommunications Research Institute (ETRI), which is the government-sponsored R&D institute. Based on the Taskforce's preliminary investigation into the viability of the KII project, in May 1994 the government created the KII Steering Committee (Presidential Order No.14275), which was composed of the Prime Minister, as the chair, and twelve relevant cabinet ministers. Under the KII Steering Committee, the government appointed the KII Working Committee, chaired by the Vice-Minister of the Korea Development Institute (KDI, a semi-governmental think tank), and high-ranking officials of the relevant government agencies. Under this KII Working Committee, the government organized the KII Planning Board to carry out such concrete tasks as designing the master plan, gathering the public funds, and developing the technologies to be employed in the backbone network.

Figure 2. Organizational Chart of the KII Planning Board



Source: author and mostly MIC & NCA (2005, p. 61)

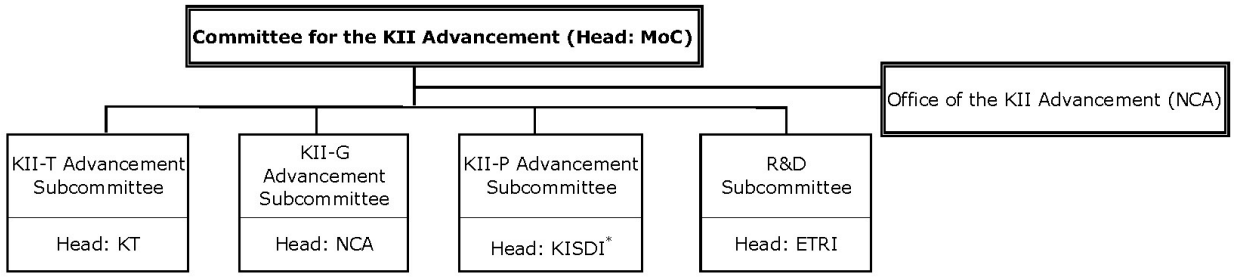
As shown in Figure 2, the IT Policy Chief at the MoC (now MIC) is the head of the Planning Board, which made up of six divisions, each related to some aspect of the project's scope: the KII Coordination & Planning Division, the KII-G Planning Division, the KII-P Planning Division, the KII R&D Division, the KII Management Division, and the KII Market Support Division. The members of these six divisions were selected from the following: the public officials of the MIC, the MOTIE, the KDI, and the Ministry of Finance and Economy; experts and researchers from the ETRI and the NCA; and officials from the telecom companies of KT, Dacom, and Korean Mobile Telecom (now SK Telecom). With the help of the KII Advisory Committee, set up for the purpose of policy advice, the Planning Board directed the KII project from its inception until 1995, when its affairs were transferred to the Informatization and Planning Office at the MIC (NCA, 2006; MIC & NCA, 2005). From early in the national IT project, therefore, the government ensured the interconnection of the private sector and the relevant public agencies through this Planning Board.

The KII was developed in three phases, based on the shifting of specific policy goals. During the first phase of building a backbone network (1995–1997) and the second phase of backbone network completion (1998–2000), the KII-G Steering Council and the KII-G Service Council — which succeeded the KII Planning Board in 1995 — were assigned to monitor the ongoing probable issues and discuss the service cost, quality, and upgrade, with the private sector representatives. These Councils mediated a series of conflicts between the state and the private sector in the earlier phase of the project. In contrast to the KII-P, which

was mostly left to the self-ruling mechanisms of market, the government steadily steered the KII-G project to completion by means of these intermediary organizations. By the beginning of the second phase of the KII project, President Dae-Jung Kim was politically overburdened with managing the IMF financial crisis and the WTO agreements, both of which occurred in 1997. The government considered requesting the National Assembly to reduce the budget allotted to the KII project but decided to maintain the pre-assigned quotas of the KII infrastructure investment. On the threshold of the third and final phase of the KII project (2001–2005), the Kim administration began to focus on the backbone network as a significant catalyst for market development.

To comply with Kim's ambitious vision, in 2001 the government organized the Committee for the KII Advancement, which included the major private actors and public institutions involved in building the three backbone networks — the KII-G, the KII-P, and the KII-T. Figure 3 shows the organizational chart of the Committee for the KII Advancement. The Office of the KII Advancement — a new entity created by the NCA — coordinated the whole organization by mediating between the four Subcommittees: the KII-T Advancement Subcommittee, the KII-G Advancement Subcommittee, the KII-P Advancement Subcommittee, and the R&D Subcommittee.

Figure 3 Organizational chart of the Committee for the KII Advancement



* Korea Information Society Development Institute

Source: NCA (2003, January)

Each Subcommittee was composed of high-ranking officials from the government agencies, the mobile and landline telecom service providers, the government-sponsored R&D research centers, the IT policy research institutes, the major *Chaebols* as the telecom equipment manufacturers, the IT-related business associations, and the universities (NCA, January 2003). By embracing new entrants into the project such as the mobile telecom service

providers, the commercial Internet service providers, and the *Chaebols* as telecom equipment manufacturers in addition to the established participants, the government desired to maximize the economic effects of the KII project.

The main issues discussed by the Committee were promoting the domestic telecom equipment market, nurturing the software and media contents market, and creating commercial values from the KII (NCA, 2003, p. 10–11). The Committee for the KII Advancement promoted upgrading the national information infrastructure in order to reposition it for the new economy. The telecom equipment market, however, was getting worse, because, after 2001, the national telecom vendors ceased to produce and install the domestically-made asynchronous transfer mode (ATM) switch, which was a critical component of the high-speed information network, due to its outmodedness by the IP-based router, and replaced many of the ATM switches with foreign IP-based router equipment. The ATM was a core technology, developed by a coalition of the state, the R&D institute (ETRI), and the *Chaebols*, by which the government had created a new domestic demand for telecom manufacture and thus had shielded the national telecom market from the dominant market power of the multinational telecom companies. Due to the change of the technological paradigm created by the emergence of the Internet, however, the government was forced to shift its R&D support from a growth policy centered on the old ATM switch to one centered on the new IP-based router. They had waited too late, however, and the state–private sector attempt to develop a core IP network technology and redirect the technology's developmental path failed.

According to a principal researcher of the NCA (Jeong, 5 June 2007), the government spent KR 4–5 billion won (approximately $US500 million) for operating the intermediary organizations described above. This expenditure signifies the government's bid to enhance the bureaucratic efficiencies. In fact, the IT-related inter-ministerial structures such as the KII Planning Board were a legacy of old National Basic Information System (NBIS), a national computerization project launched under the Chun administration. Chun first conceived of information and technology as a new engine of economic growth, as well as a bureaucratic tool to rationalize the organizational structures of the public sector through the use of a backbone network. Just as the civilian government established the KII Steering Committee in 1994, the military regime organized the NBIS Steering Committee, an inter-ministerial agency, in 1989, to resolve potentially problematic issues affecting several different government departments. Since the period of the military regimes, then, intermediary

organizations have served as the policy mechanisms to minimize internal conflict and enhance the speed of decision-making processes through efficient consensual mechanisms.

The series of intermediary organizations for the KII project reflects the Korean government's inability to enact the national infrastructure plans through a top-down command structure over the private sector, and its anxious desire to attract them into the policy planning process. The intermediary organizations were quite efficient at least in lessening the friction with the private sector, while at the same time they intentionally excluded the voices of civil society from the decision-making process. Figure 2 and 3 show graphically the lack of any conduit to transmit the citizens' concerns into the special committees. From the start of the KII project, the government simply considered the supply side for enhancing the broadband networks through a strategic partnership with the private sector, ignoring the possibility of the citizens' participation. The government could defend itself by arguing that it through the KII project served the public interest by enabling more high-speed Internet access and at lower prices. The national IT policy initiative, however, manifested such undemocratic characteristics as uncritical technocratic IT promotion, preferential treatment for a few private sector incumbents, and profit-driven strategy plans. The logic of exclusion relying on the top-down policy-making process enabled the government to exhibit its cause rather than to hear the real voices of the citizens.

5.3. The Exhibitionist IT Policy Initiatives and Discourses

The government's nationwide IT policy was greatly mobilized by the technocrats' "exhibitionist" policy discourses aimed at accomplishing the goal of "internationalization," a term that dominated the rhetoric of the Young-sam Kim administration (1993–98). The KII project would not have been possible without the active propagation of IT policy plans, and each successive administration has proliferated a series of IT policy initiatives and their accompanying rhetoric. To evoke the national goal of building a backbone network, in 1996 the Kim administration announced the Basic Plan on Informatization Promotion (BPIP), the first IT policy initiative at the national level. The first goal of this initiative was to popularize the slogan of IT-based development throughout Korea, among government officials at the national and the provincial level, as well as in the private sector. The second goal was to develop a roadmap to the KII under government guidance and to adopt it to the rapidly changing environment of electronic backbone networks being built in the advanced countries. The third, more concrete, goal was to enhance transmission capacity and geographic coverage of the broadband network through the KII project. By improving the penetration rate of the

high-speed Internet, the government believed that Korean society would become "a world-class strong IT country" (MIC, 1996).

The Kim administration used the BPIP as a public relations tool for promoting the KII project. Under President Dae-Jung Kim, IT policy was promoted by even more colorful rhetoric about the dreams of a flourishing IT-driven Korean society. Kim, once a prominent political activist, was focused on alleviating the economic recession that had taken hold of Korea since the 1997 IMF crisis. The financial crisis meant that the Kim administration, which took office in March of 1998, inherited the heavy political burden of attempting to restructure the domestic market so as to open it to competition from global conglomerates. While Dae-Jung Kim had advocated a democratic reform of the old authoritarian regime, under the conditions of increasing globalization his policy shifted to the radical adoption of neoliberal economic policies and to promoting the information and culture industries over the labor-intensive heavy industries. Because of Kim's success in enacting political reform, opposition to his administration's economic drive toward privatization and commercialization was muted (Cho, 2000, p. 422). Kim emphasized the value-added economic effects of the cultural industry and began to consider that the development of software and media contents be prioritized over other strategies to nurture the national economy. In March of 1999 the government announced a second IT policy initiative, CyberKorea 21 (CK21). Since that time, both culture and IT have been widely regarded as key elements necessary for earning foreign dollars and creating a new job market.

The policy goal of CK21 under the Kim administration is to create a "knowledge-based society," improving "national competitiveness" and "the quality of life to the level of the more advanced nations" (NCA, 2002, p. 79). CK21 highlights policy support for IT businesses and encouraged policy goals for advanced information and communication economies by setting forth planned guidelines for IT growth. CK21 also stressed the state-driven IT education program, the so-called Informatization Education Plan for 10 Million Citizens, and used this slogan to create 300,000 new IT-related jobs and to increase the digital literacy of citizens (MIC & NCA, 2005). During this period, the government sought to encourage the demand side of the KII, striving for the creation of a critical mass of consumers through public IT education. Impelled by Kim's call for the rapid completion of the KII in his New Year's message in 2001, the MIC announced the Basic Plan for the KII Advancement to accelerate the KII's construction. In September of that year the government organized the Committee for the KII Advancement, which was aimed at the market adoption of the nationwide information infrastructure, and in April of 2002 the government announced

its market-driven policy initiative, named "e-Korea Vision 2006" (eKV06).

The MIC's eKV06 states that its goal is both to promote the "information society" at the national level and to gain "strong ties of international cooperation with the global information society" (NCA, 2003, p. 10). To do this, eKV06 declares that the government itself must "create a smart government structure with high transparency and productivity" (e-government) and should encourage private corporations "to strengthen global competitiveness by promoting the informatization of all industries" (e-business) and enable citizens "to enhance their ability to utilize information and technologies" (e-education). Through implementing these goals, the government hopes to persuade Korean society to become "a global leader e-Korea" (MIC & NCA, 2005, p. 100–104). Once the KII project entered its final phase, the government's IT policy agenda targeted three areas: bureaucratic efficiencies through "smart government," e-commerce through the development of media contents, and mass digital literacy through the public and private educational institutions. While the policy visions set forth in the e-government and e-business areas can be read as expanded and concretized provisions of the previous market-oriented IT policies, eKV06's addition of e-education for citizens seems to be a distinct advance on the policies of CK21 or the BPIP. It is notable as the first instance of the Korean government considering at a national policy level such public issues as the "information gap" between individuals and between regions. As is typical of the bureaucratic approach to the citizenry, the government restricted its role to inconspicuous tasks, such as supplying computers or promoting commercial Internet access, as well as the routinizing and rationalizing of electronic services for citizen requests for official documents. The focus is on a quantitative approach that emphasizes outward appearance and growth, as seen in the dramatic growth of the IT industry, rather than on the "soft" aims of improving the cultural ability of citizens to access, use, and recreate information without restraints. The government promoted the cultivation of digital technology as a necessity for increasing the efficiency of government bureaucracy, to improve national productivity, and to become an active part of the global society.

President Moo-hyun Roh, who took office in March of 2003, was even more focused on the promotion of IT-based development of Korean society.[xi] In December of the same year, his administration issued the "Broadband IT Korea Vision 2007" (BK07), which sets forth IT as the real engine for national wealth in Korea that would finally raise the yearly salary in Korea to $US20,000 per capita. BK07 emphasizes the geopolitical position of Korean economy as "the electronic hub for the East Asian countries." To accomplish this, with the KII plan nearing its end, the government began to design the next generation of

infrastructure plans for advancing the private sector networks. For instance, BK07 sets forth the goal of building the total broadband multimedia networks of convergence; the details were set forth in the "Basic Plan for the Broadband convergence Network (BcN)" and "U-Sensor Network" (USN), issued in February of 2004; the "Distribution and Promotion Plan of the next Internet protocol IPv6," issued in April of 2004; and the "Master Plan for IT839 Strategies,"[xii] issued in July of 2005 (NIA, 2007). In BK07, the Roh administration also emphasized that the quality of life in Korea would be improved by the rapidly increasing opportunities arising from e-commerce with the completion of the KII-P. While Roh succeeded in promoting the development of an Internet-based society in Korea, it is apparent that his IT initiatives have overemphasized business-oriented growth policies based on values such as "efficiencies," "competitiveness," and "productivities," to the detriment of public welfare values such as "sustainability," "public commons," and "equal opportunities."

Table 1 shows the major IT policy initiatives implemented by each civilian government. Interestingly, each president promoted a new IT-related discourse with its own IT policy initiative, especially at the beginning of his term.

Table 1 IT Policy Initiatives under the Civilian Governments

President	Young-sam Kim (1993–1998)	Dae-Jung Kim (1998–2003)		Moo-hyun Roh (2003–2008)
Government rhetoric	Globalization, dog-eat-dog competition	Liberalization, knowledge-based society		Global IT leader, participatory society
IT policy initiative	**Basic Plan on Informatization Promotion (1996–2000)**	**CyberKorea 21 (1999–2002)**	**e-Korea Vision 2006 (2002–2006)**	**Broadband IT Korea Vision 2007 (2003–2007)**
Goal	Construction of basic electronic backbone network	Creating new IT-related job market	Upgrading the IT infrastructure	E-government, East Asian hub of the IT industry
Phase	1st Phase (1995–1997)	2nd Phase (1998–2000)	3rd Phase (2001–2005)	BcN (2006– present)

Source: author and NCA (2006) data

Throughout the three presidencies, the discourses are centered on Korea's active affiliation to the global society and the advancement of domestic IT economies. The goals centre on the creation of a new IT job market, a large demand for broadband Internet initiated by IT education, e-governance, and e-commerce. Through the IT policy initiatives, each government gave the private sector — specifically, the *Chaebols* — its blessing, and persuaded its citizens to be a member of a Korean-style "information society." The state's

promotion of IT to its citizens boomeranged on itself by increasing the consumption expenses per household: the rate of IT-related consumption (5.4%) per household in Korea is burdensome, almost double that in Japan (3.1%) and triple that in the US (1.6%) (Bank of Korea, 2005).

Further, due to the bureaucratic desire of all three presidents, who hoped to bequeath a monumental policy inheritance to the citizens within their term, the completion year of the KII project was repeatedly moved forward, first to 2015, then to 2010, and finally to 2005, when it was actually completed. A principal researcher at the NIA observed,

> The reason the KII project was completed by 2005 rather than by 2015 is directly related to the presidential pledges of each administration, which aimed to accomplish its political outcomes by "exhibitionist" policy initiatives. It is obvious that the three phases of the KII project were greatly curtailed or condensed in response to the inauguration of a new president. (Jeong, 5 June 2007)

In fact, the four IT initiatives over three presidencies were often used to exaggerate the real conditions of Korean IT development, wrapping these up in exhibitionist PR. Consequently, the rhetoric of these initiatives — such as that of surviving global competition and of regenerating the national economy — successfully played upon the citizens' anxieties, such that there is now one broadband Internet per household, and allowed the state-led project to be completed with ease and even ahead of schedule.

5.4. Lessons learned from the KII project

The present analysis confirms the facts that, in contrast to the old military regimes, the civilian governments since 1993 have articulated various mechanisms, such as intermediary organizations and hegemonic strategies, in order to successfully guide the state-led infrastructure plan to completion. This paper also assesses the KII project as a prototypical IT policy reflecting an evolving phase of the developmental state model (the "flexible" state), an IT policy which was enacted in the midst of the shift from the "strong" state to the present "market-driven" state. As regards the *Chaebols*, the KII project has created the material conditions enabling them to become "*e-Chaebols*," incumbents in new IT sector, as well as in the traditional manufacturing sector.

Theoretically, this paper contributes to a critical reading of the developmental state theories through disclosing the negative effects caused by the symbiosis between the state and the *Chaebols* during the KII project and by relating the evolutionary phases of the state power

to the *Chaebols*' economic growth. The present paper had its origins in questioning the popular belief among policymakers that the KII project has improved the quality of Korean society and culture and further upgraded the country's IT status in the global community. It is obvious that policy rhetoric that ignores the real conditions behind the successful KII policy plan creates a barrier to an accurate evaluation of the KII project by telecom policymakers, politicians, and communication scholars. In fact, Korea's developmentalism — its continuing efforts to catch up to the economic power of the advanced nations — has been founded on close linkages between the state and powerful corporate interests, which resulted in neglecting the participation of the citizenry.

The underdeveloped political culture of Korea led the KII project to be a half-ripe policy: it serves as the material foundation which has made Korea an IT powerhouse but also, as policy, it represents the already entrenched corporate interests. The present analysis has confirmed that the past legacies of authoritarian interventionism and developmentalism under the military regimes still haunt such projects as the KII. Although it was planned and implemented under civilian governments, the KII could not escape the authoritarian and undemocratic character of the politico-social structure inherited from the military regimes.

6. Conclusion

The Korean government's attempt to stimulate the private sector and to create new IT demand was extremely successful over the three phases of the KII project. Nevertheless, the process by which the KII success story was carried out raises at least one serious issue, that of the entire exclusion of the citizens, as previously mentioned, from the decision-making process of domestic telecom policies. In the same way, they have been excluded from the series of multilateral and bilateral negotiations such as the WTO basic telecom agreement and the recent US–Korea Free Trade Agreement (FTA) negotiations. In the 2007 FTA negotiations with US trade representatives, for instance, the Korean government exerted monopolistic power on the decision-making process, ignored minority voices from civil society groups.

Ignoring the citizens in favor of the elites has been rationalized by the state logic that nurtures Korea's large *Chaebols* at the expense of her middle- and small-sized companies. What is needed is a democratic force from below that can exert itself against such interests and assert instead the public's interest. It is an undeniable fact that even in today's Korea, "those with a connection to a few leading political figures have precedence over others who might be better qualified" to participate in policymaking (Hyun & Lent, 1999). The backward

political conditions in Korea — in essence, conditions of crony capitalism — combined with the dominant trends of contemporary global capitalism make it all the more difficult, and yet all the more necessary, to construct a democratic forum at the national policy level which is sustained from below to work on behalf of the public welfare against the proprietary interests of the *Chaebols*. Understanding the history of the KII project can provide insights into how to formulate future telecom policies along much more socially-interventionist lines while restraining the overwhelming power of the telecom oligopolies and *Chaebols* and soliciting the input of citizens and citizens' groups.

Notes

[i] A *Chaebol* in Korea means a family-owned business group with large subsidiaries occupying an oligopolistic position, despite a relatively low concentration of ownership and the absence of pure holding companies.

[ii] Whereas the earlier statists looked at the East Asian "miracle" by focusing on the disjuncture between the state and society and the dominance of the state over society (the old developmental state model), the neo-statists explore this economic success by focusing on the dense linkages between the state and the private sector (the new developmental state model). Even the neo-statists, however, point to the "state-induced deliberate shifting of the industrial structure towards higher technology, higher value-added products" (Weiss & Hobson, 1995, p. 150). In fact, despite the varying emphases on the state–industry linkages, it is clear that both the old and new statists agree about the state's guiding role in the East Asian economic miracle.

[iii] Under Rhee's administration, the state granted the monopoly of the "three white industries" — the processing of cotton, flour, and sugar from the US — to the burgeoning domestic businesses that later grew to be the family-owned *Chaebols* such as Samsung and Hyundai.

[iv] As an example of how Korea's political-bureaucratic elites maintained their dominant power over the interests of big business, Johnson (1987, p. 157) describes the establishment of the Korean Central Intelligence Agency (KCIA), which was founded as an independent political support apparatus, originally built around a 3,000-man cadre from the existing Army Counter-Intelligence Corps, which had expanded to some 370,000 employees by 1964. The KCIA's original mission focused on counter-communist activities and fighting military corruption. Under the military regimes, the KCIA was used as a domestic surveillance and spying agency to collect, analyze, and monitor intelligence data on businesses and the citizenry. The intelligence agency enabled the development of an extreme disciplinary society which controlled not only any citizen critical of the government but also overall business activities.

[v] In the aftermath of 1997, a discourse about *oeja yuchi* ("the enticement of foreign capital") has dominated Korean society as it seeks to recover from the recession (Lim & Jang, 2006). This discourse was used to legitimize the full-fledged opening of the domestic market to foreign investors.

[vi] Since the 1997 financial crisis, the concentration of power in the hands of the larger *Chaebols* was accelerated by such events as the collapse of the Daewoo Group, the divestiture of the Hyundai Group, the change of the LG Group into a holding company, and foreign investors' takeover attempt of SK and KT&G (Lee, 2006).

[vii] In the financial crisis of 1997, when the IMF forced the Korean market to follow its structural adjustment program, many Korean mega-conglomerates collapsed in the re-structuring of the domestic economy that ensued, but Samsung seized its opportunity and jumped into first place in the domestic market. The different divisions of Samsung are now a set of huge monopolies, and the corporation as a whole ranks as number one among Korea's ruling conglomerates, accounting for one-fifth of the country's exports. Samsung Corporation encompasses almost every profitable industry under its business logo: Samsung Electronics, Samsung SDI, and Renault Samsung Motors, as well as Samsung Securities, Life Insurance, Credit Card, Heavy Industries, Engineering, Everland Theme Park, Advertising, Petrochemicals, Shopping, Cable Channels, and so forth. Samsung's rapid capital accumulation has been made possible by its omnipresent power in the Korean economy and society — described by such common terms as "Samsung's way" or "the Republic of Samsung" — and by its collaboration with the state in controlling the labor market. While Samsung contributed significantly to

promoting Korea's national economy in the global market, its dominant market power, with a total of 62 subsidiaries and a sales record of $US1.39 trillion (as of April 2005), makes it a pervasive and overwhelming force in both the Korean economy and Korean society.

[viii] In addition to *jeongkyong yuchak*, under Park's junta, the term *gwanchi gyeongjae*, or "state-controlled economy," was a commonly used to denounce the military elites' intervention in the market.

[ix] The external pressures include the Korea–US bilateral negotiations, the trade sanctions imposed by the US Trade Representative (USTR), and the WTO regulatory system.

[x] Under the "cyber-building certificate system," the government set standards on domestic and business premises with three levels according to their capacity to handle high-speed Internet traffic capacity, and granted the certificates to qualified buildings. This certification gave builders a motivation to enhance the broadband access platform of apartments and buildings. (Yun, Lee & Lim, September 2002; Lee & Chan-Olmsted, 2004).

[xi] President Roh has been described as "the world's first president to be elected with the broad support of the online generation" (Watts, 24 February 2003, p. 16). His image at the time of his inauguration was one of being technically flexible and open to the Internet. Midway in his term of office, Roh held an unprecedented "Internet conversation with the nation" on 23 March, 2006, which had the largest audience in the history of online broadcasting in Korea. Moreover, the president himself uploaded five letters per a month onto the presidential website, named the Office of the President Briefing, in order to promote direct communication with the nation without the intervention of the press. His nickname "the night-owl president" is derived from his staying at the keyboard until late at night for decision-making and electronic approval of e-documents through the electronic record management system that he himself invented (Lee & Lee, 2009, in press).

[xii] IT "839" was dubbed from three pillars (services, infrastructure, new growth engines): eight telecom services (Wi-Bro, DMB, home networking, telematics, RFID, W-CDMA, Terrestrial D-TV, and Internet telephony); three infrastructures (broadband convergence network, U-sensor network, and IPv6); and nine new growth engines (mobile telephony, digital televisions and broadcast devices, home network equipment, system-on-chip products, next-generation personal computer, embedded software, digital content and solutions, vehicle-based information equipment, and intelligent robot products) (Shin, 2007).

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