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The Transformation of Korean Business Groups after the Asian Crisis[1]

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ABSTRACT *This study examines the evolution of Korean business groups after the economic crisis. In particular, we investigate the post-crisis changes in their business structure and corporate governance system, which are argued to be major precipitating factors leading to the economic crisis. Our analysis suggests that the divestment intensity of non-core, highly indebted and low intra-group trade firms was higher for groups which survived the economic crisis, compared to the bankrupt groups. Besides, most surviving groups did not pursue diversification as actively as before the crisis, and their financial conditions remained favourable in the post-crisis period. The corporate governance of the groups has also improved in terms of corporate transparency, implementation of monitoring mechanisms and their accountability to shareholders. Therefore, it seems that Korean business groups have successfully implemented radical corporate transformation to adapt to the changed business environment after the crisis. But, the dominance of family management still remains as an important feature of Korean business groups.*

KEY WORDS: Corporate restructuring, Asian Crisis, transparency, corporate governance, Korea, business groups, chaebol

Large business groups – known as *chaebols* – played a crucial role in Korea's rapid economic development over the last four decades. However, in the wake of Korean economic crisis in 1997, the efficacy of these business groups was called into question. Soon after the crisis erupted, most *chaebols* faltered badly, and it became evident that some of them could not survive the crisis. Indeed, 13 out of top 30 *chaebols* were declared bankrupt within two years. Thus, each of the *chaebol* groups had to undertake massive restructuring to restore their viability (Smith, 1998; Park, 2003). To facilitate the transformation, the Korean government implemented a series of corporate reform programmes (Nam, 2001; Sohn, 2002). The *chaebols* have undergone significant change since the crisis.

In this study, we investigate the evolution of Korean *chaebols* after the Asian crisis, focusing on two major issues. First, before the crisis most *chaebol* groups had aggressively diversified into new business areas, developing an inefficient over-diversified business structure (Kim, 1997; Lee, 1998). To understand their attempt to rectify this problem through business restructuring, we examine the changes in their

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business structure. Second, the weak corporate governance structure of the *chaebol* enabled the owner-managers to run their groups as personal fiefdoms without being subject to adequate monitoring by the external shareholders and government regulatory authority (La Porta et al., 1999; Chang, 2003). One of the major objectives of government-led *chaebol* reform programmes was to improve their corporate governance (Sohn, 2002; Cho, 2003). We examine important changes in corporate governance that may affect the management of *chaebols* in the post-crisis period.

Our primary interest is whether and how effectively the *chaebol*'s business restructuring strategies and the government's reform policies have addressed two major issues of the *chaebol* management – excessive diversification and weak corporate governance – which were identified as major reasons behind the economic crisis (Lee, 1998; Nam, 2001; Singh, 1998).

The article proceeds as follows: the next section briefly discusses the historical context in which *chaebols* had to undertake massive restructuring. Then, we analyse the business restructuring undertaken by *chaebols* after the economic crisis. Next, we describe changes in the corporate governance system of *chaebols*. Finally, we summarise and discuss our major findings and offer conclusions from the study.

***Chaebols* and the Korean Economic Crisis**

A Korean *chaebol* is defined as a large business group that consists of formally independent firms, operating in diverse industries and controlled by the family members of the founder (Yoo and Lee, 1987). These groups dominate most key industries in Korea, and some large groups such as Samsung, LG, Hyundai, and Daewoo were involved in a wide range of industries including consumer electronics, semiconductors, automobiles, shipbuilding, constructions, trading and financial services. In 1996, the year just before the crisis, the 30 largest *chaebols* accounted for approximately 40% of the nation's total output (Chang and Hong, 2000).

This form of organisation was an efficient mode for organising economic activities in developing countries like Korea, where the markets for critical resources – such as capital, skilled labour, competent managers, and product quality information – tend to be imperfect. According to Khanna and Palepu (1997), diversified business groups can overcome market imperfections by creating internal capital and labour markets and by building a credible group brand for customers. Thus, *chaebols* found it necessary to diversify into different industries. The growth of *chaebols* was further facilitated by the Korean government's export-driven economic development policies (Kim, 1997); these policies offered huge rewards to successful exporters in the form of low-interest loans, export subsidies, and sometimes permissions to enter into other promising industries.

For decades, the groups had achieved high growth and established themselves in newly emerging industries in the unique political economic situation in Korea. Toward the 1990s, however, markets had developed substantially and the business environment had become more competitive (Chang, 2003). For instance, the financial market was deregulated and opened to foreign investors. The Korean government also accelerated the market liberalisation in the 1990s by lowering protective tariffs and customs rates in many industries. The result was that *chaebols* could not easily enjoy profitable growth in the protected domestic industries. Moreover, with the end of the development planning period in the late of 1980s, the *chaebol* groups could not receive government's preferential treatment anymore. These important shifts in the business environment made the *chaebol*'s expansion strategy less effective.

Despite the changed business environment, these groups pursued their diversification strategy more aggressively in the 1990s, significantly increasing the number of affiliated firms, as shown in Figure 1. They set up many of the new firms in industries that were not related to their major businesses, and relied heavily on external debt to finance their investments (Hwang, 1999). As a result, the financial performance of *chaebols* had deteriorated for several years prior to the crisis, due to many unproductive affiliated firms and huge financing costs (Lee, 1998; Choi and Cowing, 1999).

They could undertake such rapid diversification in this period, because corporate governance mechanisms allowed *chaebol* owners to pursue their expansion plans at the expense of external lenders and minority shareholders. First, *chaebol* groups had enjoyed superior access to bank credits for a long time, due to the government's special treatment (Sakong, 1993) and their large size. Korean financial institutions had long based their lending decisions mainly on the size of collateral, not on the merit of investment proposals. Thus, large *chaebols* had long been favoured customers. Furthermore, *chaebol* owners strongly preferred debt financing over equity financing, so as not to dilute their ownership by adding new shareholders (Kollner, 2000). Taking advantage of their superior position, the *chaebols* borrowed huge amounts from financial institutions, often squandering the money in order either to expand into uncompetitive sectors or support unprofitable member firms.

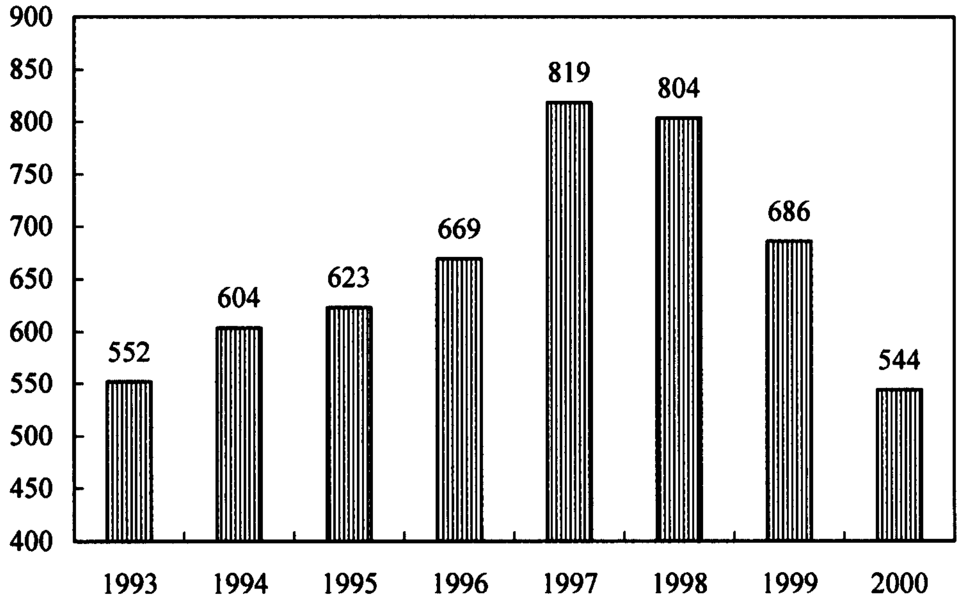


Figure 1. Changes in the number of *Chaebol* affiliated firms (1993-2001)

Besides, individual firms widely used cross-loan guarantees to facilitate easy access to loans (Smith, 1998). Such guarantees left the *chaebols* exposed to the danger of chain bankruptcies involving subsidiaries within the same group.

Second, *chaebol* owners controlled group firms through a pyramidal ownership structure in which they possessed a controlling equity in one or a few firms, and controlled the other group firms by cross-holding or circular shareholding of shares among affiliated firms. For example, the average number of affiliates in the top 30 *chaebols* increased from 16 in 1983 to 27 in 1997, while the mean percentage of the equity possessed by the controlling owners and their family reduced from 15.8% to 8.5% during the same period (Kwang and Wang, 2001). This circular chain of ownership structure significantly relieved the financial constraints of group owners in pursuing their reckless expansion strategies. Before the crisis, the legal protection of minority shareholders' rights was weak, and the fair trade law was poorly enforced. Consequently, owner-managers could utilise minority shareholders' funds to finance investment plans and support uncompetitive firms, virtually without being subject to any restrictions (Nam, 2001).

The result was that *chaebols* had grown into highly-leveraged diversified conglomerates whose growth and survival could be ensured only in favourable business environments (Krugman, 2002). The economic crisis that struck Korea in late 1997 revealed the weakness of the Korean business model. As the economic crisis swept the Korean economy, many *chaebol*s faltered badly and some groups such as Ssangyong, Halla, Dongah went bankrupt at once. In this crisis environment, the *chaebols* hurriedly undertook a massive restructuring to restore their viability. The adjustments were most intense during the two years after the crisis. The total number of firms affiliated with the top 30 *chaebol* groups was reduced from 819 in 1997 to 544 in 2000 as shown in Figure 1. Before the crisis, Korean *chaebols* rarely divested affiliates. Thus, the massive restructuring of affiliate firms well illustrated their efforts to achieve radical transformation in order to survive after the crisis.

The Korean government also designed a comprehensive reform package that included important measures to rectify the various problems that were often found in group management (Sohn, 2002). In particular the government aimed to improve the governance system of *chaebols* by increasing transparency, establishing monitoring mechanisms, and making group owners more accountable. These measures have had a profound impact on the management of the *chaebol* in the post-crisis period.

To understand contemporary Korean business groups, therefore, it is essential to investigate *chaebol* groups' business restructuring strategies and government-led *chaebol* reform programmes. We present the detailed analyses of these efforts in the following two sections.

Business Restructuring and Strategic Reorientation

A critical question that arises from the observation of *chaebols*' massive restructuring activities is whether the crisis really enabled them to amend their strategies and systems, to avoid the occurrence of the problems of the past and to adapt to the new institutional environment emerging in Korea. To shed light on the issue, we first investigate their business restructuring strategies during the 1998-99 period.[2]

Then, we examine a series of indicators that reflect the business groups' diversification activities and financial conditions before and after the crisis.

Business Restructuring Strategies

Central to the *chaebol* restructuring strategy after the crisis was deciding which units to retain, divest or consolidate (Graham, 2000). In order to understand the nature of the corporate transformation, we compared the characteristics of divested or consolidated firms with those of sustained firms. We define "divested firms" as firms that were sold out or dissolved, whereas consolidated firms are those merged with other member firms of the group. On the other hand, "sustained firms" are those that maintained their presence in the group throughout the post-crisis period.

The comparison was made for manufacturing firms controlled by the 26 largest business groups which continued to maintain their presence in the lists of top 30 largest groups in 1997, 1998 and 1999. The Fair Trade Commission (FTC) in Korea announced the list of 30 largest business groups and their affiliates every year.[3] The analysis was confined to those groups, as the FTC did not report the information on groups' affiliates once a group was excluded from the list. Besides, the main focus of *chaebol* restructuring was in their respective manufacturing operations, and thus we chose to exclude non-manufacturing firms in the analysis.

Based on the above criteria, 742 affiliated companies were identified belonging to 26 business groups as of 1997: 305 manufacturing and 437 non-manufacturing firms from the FTC data (Table 1). During the 1998-99 observation period, these groups actively restructured their manufacturing firms: of their 305 units, 46 (15.1%) were sold to independent firms, 52 (17.0%) were merged with affiliates, 12 (3.9%) were dissolved, and 171 (56.1%) were maintained in the group.

For comparison, the firms were classified into three categories: (i) sustained firms; (ii) divested firms; and (iii) consolidated firms. Then, we first calculated the ratio of "non-core" firms out of total firms in each category, to understand how *chaebols* responded to the over-diversification problem. A non-core firm is defined as a member firm that does not operate in the group's major industries.[4] The result is presented in Figure 2. We first compared the ratios across different sub-category firms for all the groups, and then further divided them, according to whether or not their groups were placed in "workout programmes" supervised by the court or lending banks.[5] Among the 26 *chaebols* chosen for this study, nine groups (Daewoo, Ssangyong, Halla, Dongah, Gohap, Jinro, Haitai, Anam, Sinho) went bankrupt, and were required to implement such workout programmes during the observation period.

Figure 2 shows that the ratio of non-core firms was higher among divested or consolidated firms than among sustained firms. In case of all groups, the ratio was 32.7% for sustained firms, but the ratios were much higher: 50.0% and 41.0% for divested firms and consolidated firms respectively. Such differences in the ratio of non-core firms among each of the sub-categories are more salient in case of surviving groups. Intriguingly, however, in case of bankrupt groups the ratio was much lower among consolidated firms (25%), whereas no significant difference was observed between sustained and divested firms (33.3% and 34.1% respectively). These findings

Table 1. Number of companies, by industrial sector, of *Chaebol*-affiliated firms, 1997

		Industry			
Group	Rank	Manufacturing	Finance	Services & others	Total
Hyundai	1	24	7	25	56
Samsung	2	34	13	33	80
LG	3	21	9	19	49
Daewoo	4	14	5	11	30
SK	5	16	3	27	46
Ssangyong	6	10	5	10	25
Hanjin	7	2	4	18	24
Hanhwa	9	13	4	14	31
Lotte	10	9	1	19	29
Kumho	11	8	3	15	26
Halla	12	8	1	9	18
Dongah	13	1	3	15	19
Doosan	14	12	0	13	25
Daerim	15	5	2	14	21
Hansol	16	9	4	10	23
Hyosung	17	12	0	6	18
Dongkuk	18	11	2	4	17
Jinro	19	8	2	14	24
Kolon	20	10	3	11	24
Gohap	21	8	2	3	13
Dongbu	22	11	8	15	34
Dongyang	23	7	10	7	24
Haitai	24	9	0	6	15
Anam	26	11	1	9	21
Daesang	29	16	1	8	25
Shinho	30	16	4	5	25
Total		305	97	340	742

Source: Korea Fair Trade Commission (1997).

suggest that: (i) *chaebol* groups actively restructured their non-core business units to streamline their business scope; and (ii) surviving groups relied more on divestitures than consolidations in achieving the objective.

In addition, Figure 3 suggests that *chaebol* groups divested many debt-ridden affiliates during the observation period. The debt ratio in the figure is the average of individual firms' debt ratios. Each firm's ratio is calculated as the total liabilities divided by the total assets in its balance sheet in 1997. For all groups, the debt ratio was highest for divested firms at 93.1%; but the ratios were relatively low for consolidated and sustained firms at 85.4% and 83.0% respectively. Similarly, the figure shows that the average debt ratio of divested firms was much higher than those of divested or consolidated firms in case of surviving groups. Based on these findings, we reason that the surviving groups more actively eliminated indebted firms through divestitures. In the case of bankrupt groups, however, the debt ratio was highest for sustained firms. These differences imply that either bankrupt groups were reluctant to restructure, or they were forced to divest financially healthy firms early to repay their debts.

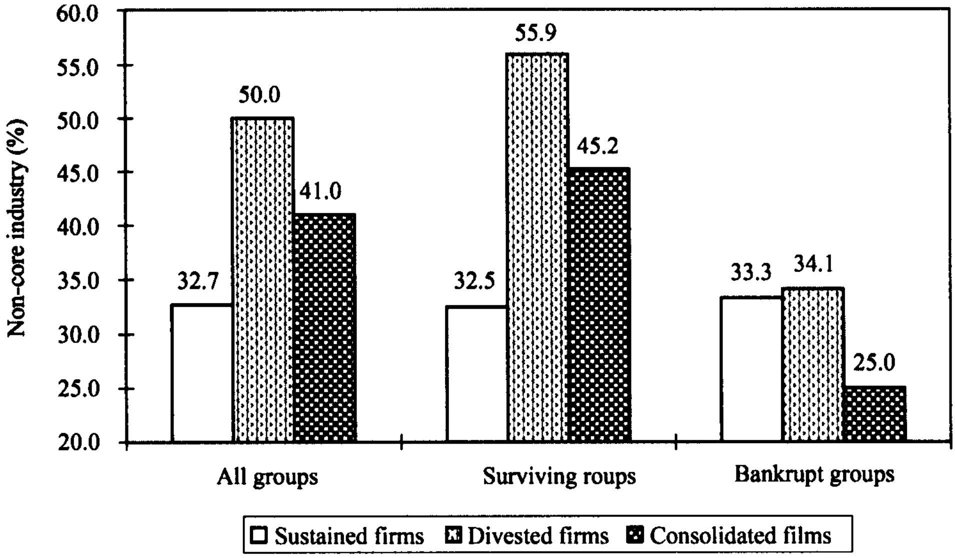


Figure 2. Average ratios of *Chaebol* firms operating in non-core industry

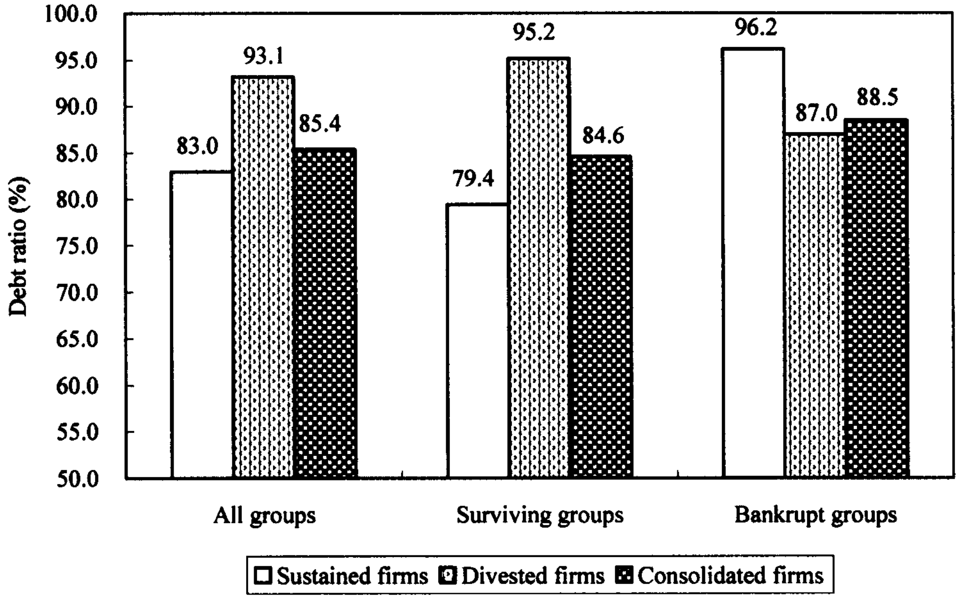


Figure 3. Average debt ratios of sustained, divested, and consolidated firms

Our last point of investigation was how the business relations between affiliated firms affected groups' decisions on individual units. To seek an answer to the question, we calculated the internal trade ratio; the amount of a firm's inter-affiliate sales and purchase as a percentage of its total sales in 1997, and compared the ratios across three sub-category firms, as shown in Figure 4. It is clear that the groups had a strong tendency to sell or close the firms that did not have close business relationships with other group firms. For all groups, the average internal trade ratio was very low at 21.7% for divested firms, but the ratios were much higher for sustained and consolidated firms at 35.1% and 33.9% respectively. Almost the same pattern was observed for surviving groups, and bankrupt groups, too, tended to keep affiliated firms with higher internal trade ratios. Thus, it seems that most groups attempted to tighten the business relationships between affiliated firms by eliminating loosely coupled firms through divestitures.[6]

Diversification and Financial Condition in the Post-Crisis Period

A well-known measure for a firm's diversification is the "entropy-diversification index." This indicator reflects how widely a firm's business portfolio is dispersed across different industries, and is calculated by the following formulas (Jacquemin and Berry, 1979):

DT or DU $= \sum_{i=1}^{N} Pi \ln(1/Pi)$, where Pi is the portion of the firm's sales in i-th industry (which is defined at the two-digit or four-digit SIC code level)[7] out of the total sale, and N is the number of industries in which the firm operates.

If the industry is defined at the four-digit SIC level, the index is called "total entropy" (hereafter, DT), since it reflects the degree of a firm's diversification across numerous narrowly defined industries. On the other hand, if the index is calculated at the two-digit SIC level, it is called "unrelated entropy" (hereafter, DU), which

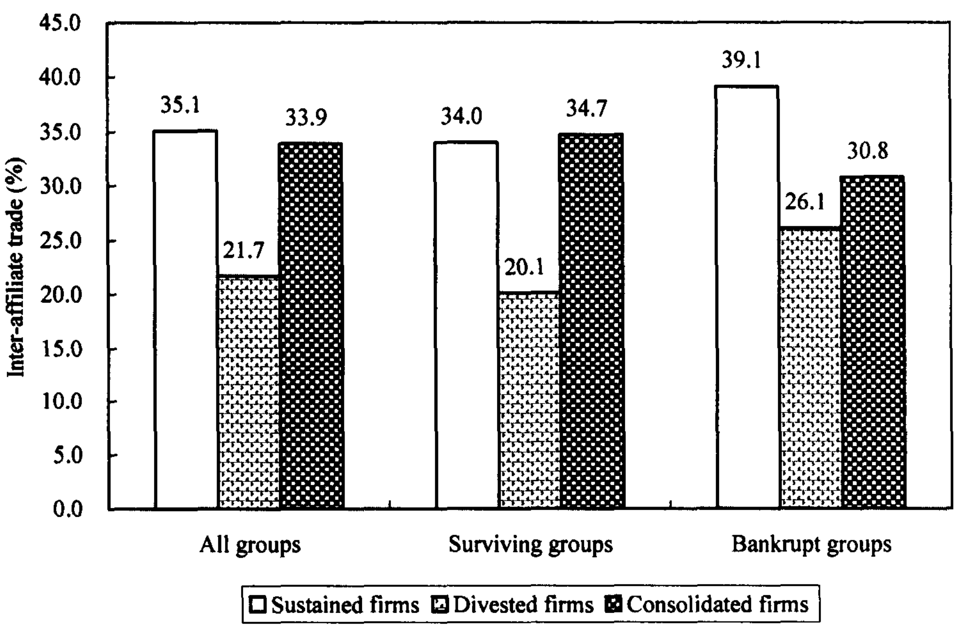


Figure 4. Average internal trade ratios of sustained, divested, and consolidated firms

captures how many unrelated industries the firm operates in. These indices have a smaller value, when the firm has a more concentrated business structure. If the firm operates only in one industry, they will have the value of zero. Thus, their larger values indicate that the firm has a more diversified business portfolio.

Table 2 presents entropy diversification indices of *chaebol* groups during the 1995-2004 period.[8] These groups are those included in Table 1, and continued to be regulated as large business groups by the FTC as of 2004. However, for Hyundai and Dongyang the table shows the indices only up to 2000, because both the groups split in 2000.[9] This made their indices incomparable after that.

By comparing the indicators over the last ten years, we found that most *chaebol* groups significantly curtailed their business scope immediately following the crisis. Among the largest five groups, this tendency is pronounced for Samsung, Hyundai,

Table 2. Entropy diversification indices of Korean *Chaebol* groups

Group	Index	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Samsung	DT	2.019	1.985	1.947	1.943	1.778	1.709	1.922	1.880	1.863	1.827
	DU	1.716	1.687	1.639	1.619	1.458	1.393	1.554	1.509	1.501	1.462
LG	DT	2.489	2.541	2.550	2.511	2.423	2.354	2.487	2.489	2.511	2.285
	DU	2.018	2.053	2.018	2.081	1.957	2.068	2.119	2.087	2.040	1.812
Hyundai	DT	2.437	2.470	2.549	2.567	2.194	1.955				
	DU	2.199	2.222	2.281	2.348	1.986	1.831				
SK	DT	1.688	1.655	1.954	1.963	1.901	1.788	1.770	1.861	1.966	1.947
	DU	1.397	1.365	1.557	1.503	1.564	1.606	1.613	1.692	1.754	1.739
Lotte	DT	2.388	2.335	2.422	2.361	2.237	2.219	2.181	2.468	2.439	2.261
	DU	1.931	1.897	1.956	1.946	1.883	1.842	1.794	1.978	1.983	1.822
Hanjin	DT	1.564	1.561	1.568	1.494	1.302	1.317	1.318	1.295	1.277	1.282
	DU	1.518	1.539	1.544	1.478	1.294	1.310	1.311	1.289	1.273	1.278
Hanwha	DT	1.793	1.909	1.892	1.838	1.595	1.591	1.529	1.537	1.984	1.930
	DU	1.424	1.605	1.567	1.485	1.254	1.159	1.091	1.062	1.573	1.522
Kumho	DT	1.715	1.707	1.741	1.834	1.463	1.426	1.282	1.259	1.546	1.641
	DU	1.523	1.533	1.552	1.529	1.255	1.251	1.227	1.206	1.490	1.578
Doosan	DT	2.461	2.437	2.250	1.492	1.420	1.523	1.643	1.478	1.547	1.533
	DU	1.789	1.840	1.906	0.871	0.990	1.061	1.288	1.350	1.406	1.389
Dongbu	DT	0.861	1.146	1.470	1.439	1.519	1.208	1.224	1.302	1.430	1.407
	DU	0.861	1.118	1.385	1.379	1.444	1.199	1.182	1.249	1.417	1.361
Dongkuk	DT	0.706	0.711	0.704	0.621	0.619	0.587	0.507	0.451	0.383	0.403
	DU	0.706	0.711	0.704	0.621	0.619	0.587	0.507	0.451	0.383	0.351
Daerim	DT	1.312	1.366	1.373	1.292	0.922	1.043	1.140	1.300	1.216	1.027
	DU	1.191	1.238	1.251	1.171	0.821	0.930	1.015	1.199	1.133	0.939
Dongyang	DT	1.384	1.528	1.545	1.549	1.178	1.190				
	DU	1.384	1.528	1.542	1.545	1.178	1.184				
Hyosung	DT	1.437	1.458	1.444	0.761	0.507	0.431	0.412	0.572	0.648	0.672
	DU	1.287	1.309	1.297	0.604	0.414	0.431	0.410	0.561	0.638	0.658
Kolon	DT	1.810	1.851	1.940	1.736	1.593	1.813	1.913	2.042	2.038	2.135
	DU	1.652	1.709	1.793	1.564	1.407	1.592	1.682	1.663	1.689	1.767
Hansol	DT	1.557	1.689	1.873	1.737	2.020	1.818	1.924	1.543	1.644	1.619
	DU	1.424	1.689	1.677	1.737	1.771	1.800	1.901	1.431	1.565	1.140

Note: The indices of the Hyundai and Dongyang group are not reported after 2000, as both the groups were split in 2000 making their indices incomparable with the indices of previous years.

and Lotte group. Beginning in 1999, these three groups' DTs and DUs decreased substantially. On the other hand, LG and SK groups had a slight drop in diversification indices temporarily, indicating that their business structures did not change much after the crisis. The table also shows that the degree of diversification was significantly reduced for most remaining smaller groups. For instance, as two extreme cases, Doosan's and Hyosung's DUs dropped more than 50% in 1998. But, there were some exceptional groups, such as Dongbu and Hansol, whose diversification indices did not fall after the crisis.[10]

The diversification indices of many groups rebounded several years after the crisis. Samsung's and Lotte's DTs and DUs increased considerably in 2001 and 2002. Among smaller groups, Hanwha, Kumho, Doosan, Dongbu, Daerim, Hyosung, and Kolon followed the above pattern, although some of them resumed diversification activities as late as 2003. The increase in the diversification level did not continue in case of Samsung, Lotte, and Daerim: their level of diversification began to decrease towards 2004. Besides, LG's DT and DU also gradually declined. The table in fact shows that only four groups, SK, Hanwha, Kumho, Kolon, reached a level of diversification in 2004 that was similar to, or greater than, their previous maximum levels. The remaining groups' levels of diversification were lower than before, increasing moderately, remaining stable or declining gradually during the last several years. Thus, it appears that in the post-crisis period, most *chaebol* groups did not undertake diversification as actively as before.

To further explore the issue, we counted the number of industries the group participated in during the observation period. The results are presented in Table 3. For each group, the first and second rows show the numbers of industries at the four-digit and two-digit SIC levels respectively. Consistent with the previous findings, those numbers significantly decreased for most groups after the crisis, indicating considerable reduction in their business scope. After a period of repose, however, many groups again increased the number of participating industries.

Among the largest groups, Samsung's and Lotte's number of industries at the SIC4 level became larger than those in 1997. But, the numbers of their industries at the SIC2 level did not increase as much as that. Thus, it seems that in the post-crisis period these groups preferred to enter new, but related areas within their SIC2 industries, rather than to expand into different SIC2 industries. This pattern is also followed by LG: the number of its SIC4 industries increased fast between 2000 and 2002, whereas the number of its SIC2 industries remained stable after 1999. But, SK was an exception, as the numbers of its SIC2 and SIC4 industries simultaneously increased in 2001.[11] After that year, however, its numbers remained at a standstill. The table also shows that most of remaining groups operated in the smaller numbers of industries after the crisis, except Daerim and Hyonsung. Besides, none of the groups in the table constantly diversified their industries throughout the post-crisis period.

Taken together, our analysis reveals that although most Korean *chaebols* expanded the scope of their businesses again after the crisis was overcome, this tendency did not last throughout "the post-crisis period." Thus, we judge that the pursuit of diversified growth has become a much less salient feature of Korean business groups following the crisis.

Table 4 provides more information about the changes in the business structures of *chaebol* groups. For each group, this table shows annual ratios of sales that were

Table 3. Numbers of the *Chaebol* industries

Group		1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Samsung	SIC4	27	29	34	31	25	24	30	31	31	31
	SIC2	17	17	18	18	14	14	16	16	16	16
LG	SIC4	26	26	28	27	23	25	28	29	27	24
	SIC2	17	17	18	18	14	14	14	15	15	13
Hyundai	SIC4	27	28	34	28	21	18				
	SIC2	18	19	22	21	14	14				
SK	SIC4	18	18	20	21	18	18	27	26	27	26
	SIC2	10	10	11	13	12	10	16	15	15	14
Lotte	SIC4	19	19	22	20	19	20	20	22	23	25
	SIC2	14	14	15	15	14	13	13	14	14	14
Hanjin	SIC4	15	13	15	12	10	10	10	10	11	11
	SIC2	13	11	13	10	9	9	9	9	10	10
Hanwha	SIC4	15	16	18	15	10	10	13	12	16	12
	SIC2	13	14	15	12	8	8	10	9	12	11
Kumho	SIC4	17	16	17	16	12	10	9	8	10	11
	SIC2	10	10	11	10	8	7	8	7	9	10
Doosan	SIC4	19	18	17	12	11	12	13	12	12	11
	SIC2	12	11	12	9	8	8	9	9	9	9
Dongbu	SIC4	4	11	15	13	14	8	8	10	8	8
	SIC2	4	7	8	8	9	6	5	7	7	7
Dongkuk	SIC4	7	7	8	8	8	7	3	3	3	4
	SIC2	7	7	8	8	8	7	3	3	3	3
Daerim	SIC4	10	12	12	12	8	8	10	10	11	8
	SIC2	8	9	9	8	6	7	8	9	9	7
Dongyang	SIC4	8	9	10	9	6	7				
	SIC2	8	9	9	8	6	6				
Hyosung	SIC4	10	11	11	9	9	8	10	10	10	11
	SIC2	8	9	9	8	8	8	9	9	9	9
Kolon	SIC4	15	14	15	15	9	10	13	14	14	15
	SIC2	11	11	12	12	7	8	10	8	9	10
Hansol	SIC4	9	12	13	13	13	13	11	7	8	8
	SIC2	8	11	12	13	12	12	10	7	7	7

made in its major industries, out of total sales. We find that the ratios increased for most groups immediately following the crisis, due to their restructuring activities. In many cases, however, the ratios declined several years after the crisis. As mentioned previously, this reflects the fact that *chaebols* started to expand beyond their major areas after a break period. Even so, for most groups these ratios remained high throughout the observation period.

But, there are some exceptions to this overall pattern. First, Hanjin and Dongkuk, continued to increase the ratios throughout the observation period. Both groups carried out clearly defined specialised businesses: Hanjin had air and marine transportation businesses and Dongkuk had steel products businesses. They seemed to be determined to concentrate on these core industries. Second, the ratios were significantly lowered for three groups, Lotte, Doosan, and Hansol, towards 2004. In the case of Lotte, several non-core businesses, such as construction, chemicals, and information technology, have grown steadily since 2000, whilst the markets for its

Table 4. Percentage of core industry sales in total sales of *Chaebols*

Group	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Samsung	77.1	80.2	82.9	82.3	85.9	85.4	81.3	81.1	81.8	81.0
LG	76.6	75.1	77.9	76.2	78.7	77.0	72.4	72.6	75.0	80.2
Hyundai	70.8	70.7	68.4	61.5	67.3	69.1				
SK	75.1	76.7	81.1	81.5	85.0	85.3	87.0	85.4	82.6	82.3
Lotte	68.1	69.8	67.5	67.5	70.3	71.9	72.9	63.5	62.0	57.5
Hanjin	75.1	75.0	76.6	77.6	85.2	83.9	84.7	86.4	88.0	87.0
Hanwha	77.5	82.3	84.4	87.0	85.0	76.0	78.3	85.9	66.9	69.8
Kumho	69.9	69.9	70.7	75.9	95.8	95.6	97.4	98.2	70.4	79.8
Doosan	29.7	31.5	42.6	61.2	73.4	65.8	42.7	30.7	32.5	29.8
Dongbu	91.5	91.8	88.9	89.8	88.4	97.8	97.6	95.7	88.7	92.1
Dongkuk	83.2	83.0	83.2	85.9	85.8	85.8	85.7	88.0	90.3	91.4
Daerim	85.4	87.0	89.0	90.1	89.3	87.6	87.0	81.0	82.2	89.9
Dongyang	82.8	81.8	83.3	85.2	82.7	81.7				
Hyosung	98.9	98.3	98.3	93.4	95.4	94.8	94.6	90.4	88.0	88.1
Kolon	85.6	82.9	79.8	89.2	94.7	86.5	82.8	78.7	74.8	72.9
Hansol	54.4	52.4	51.8	68.0	51.7	46.0	52.9	48.3	47.3	47.7

core businesses, food and beverages, are saturated. This made the group's core business sales ratio decline gradually. In addition, Doosan attempted fundamentally to change its core businesses from liquor to heavy machinery and construction. For this, the group acquired several large firms that were formerly owned by the Daewoo and Hyundai groups in the early 2000s. As a result, in 2004 traditional industry accounted for only 29.8% of its total sales. Besides, the decline of Hansol's ratio between 1999 and 2001 was caused mainly by the sale of its mobile-phone service firm launched in 1998.[12]

In summary, we find that most *chaebol* groups maintained a business structure that was centred on their traditional core business areas in the post-crisis period. Yet, there were some signs that they also expanded into new areas, especially when their core businesses did not provide enough growth opportunities. Thus, it seems that some groups dynamically reconfigured their business structure after the crisis was over, in order to sustain and grow in the new business environment in Korea.

Lastly, Figure 5 shows the changes in *chaebol* groups' sales volumes and debt ratios over time. For simplicity, we combined the financial data into two types of groups, excluding Hyundai and Dongyang: the top four groups (Samsung, LG, SK, and Lotte) and the remaining groups. This figure reveals that the top four groups' combined sales increased steadily after the crisis, but the remaining groups' combined sales have grown rather slowly: the annual growth rate between 1998 and 2004 was 11.3% for the top four groups and 4.4% for the remaining groups. Thus, the gap between the large groups and smaller groups in terms of sales volumes has grown wider following the crisis.[13]

On the other hand, the debt ratios have declined rapidly following the crisis. As shown in the figure, the average debt ratios of *chaebol* groups were high in 1995 and 1996, and skyrocketed in 1997. But, the ratios dropped between 1998 and 1999 and remained low after 2000. For example, in 2004, the debt ratios of Samsung, LG, SK,

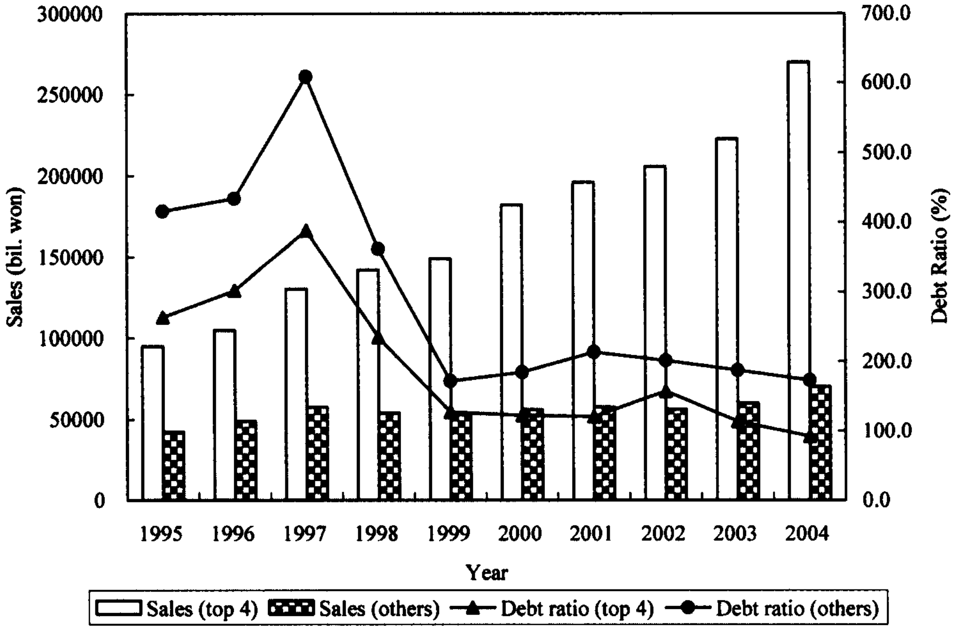


Figure 5. Sales and debt ratios of *Chaebol* groups

and Lotte were 51.8%, 107.1%, 140.3%, and 68.4% respectively. Based on this observation, we can judge that most *chaebol* groups have maintained quite healthy financial condition in the post-crisis period.

Corporate Governance Reforms

One of the most prominent aspects of decline in the performance of *chaebols* was the lack of legal and institutional framework for an effective corporate governance mechanism. The controlling owners managed their groups for their private benefit without being responsible to shareholders and creditors (Lee, 1998; La Porta et al., 1999; Chang, 2003). Realising the need for an efficient corporate governance system, the government enacted several regulations to improve corporate transparency, establish monitoring mechanisms for owner-managers, and make them accountable for their actions especially in large firms and business groups (Sohn, 2002; Cho, 2003). We review the major aspects of these measures and discuss consequent adoption of these reforms by *chaebols* in this section.

Improvements in Corporate Transparency

An important condition for the development of an efficient governance system is corporate transparency and disclosure as important elements of corporate governance (OECD, 2004). According to the OECD (2004: 22), corporate transparency is defined as the extent to which "timely and accurate disclosure is made on all material matters regarding the corporation, including the financial

Table 5. Major changes in the governance system of *Chaebols*

Improvement in corporate transparency	1. Strengthened accounting rules in line with international standards 2. Reinforcement of the independence of external auditors – Establishment of an auditor selection committee consisting of outside directors, major creditors, and shareholders – Stronger responsibilities imposed on auditors for their audit performance 3. Requirements for the disclosure of information on important matters within the firm – Timely disclosure of important information on the firm – Electronic public disclosure system 4. Introduction of consolidated financial statements for business groups with total assets higher than 2 trillion Won – Internal transactions among affiliated firms are cancelled out – Information on internal transactions is footnoted 5. Introduction of the holding company structure
Establishment of proper monitoring mechanisms	1. Introduction of the external (outside) director system – For listed firms, a quarter of the board of directors should comprise outside directors (for large listed firms, the ratio increases to half) 2. Improvement of foreign investors' and institutional investors' rights – Abolition of regulations on foreigners' shareholdings – Liberalisation of M&A market (permitting hostile takeover) – Mutual funds are no longer required to engage in shadow voting
Stronger accountability	1. Protection of minority shareholders' rights – Reduction of the minimum shareholding requirements for initiating derivative suits, inspecting accounts, and making proposals for the dismissal of directors and auditors – Introduction of the cumulative voting system and the class action lawsuit 2. Regulations on equity holding among affiliated firms – Cross-shareholding between affiliates is banned for groups with total assets higher than 2 trillion Won (Inter-affiliated debt guarantees are also forbidden, for groups) – Large groups whose total assets exceed 5 trillion Won cannot invest over 25% equity in other firms in the group 3. Registration of controlling shareholders as representative directors of leading affiliates – The chairman is considered as a de facto director of a company, if he exercises substantial influence on it, even if he was not registered as a formal director

Source: Adapted from Sohn (2002).

situation, performance, ownership and governance of the company." Before the economic crisis, *chaebols* had incentives to hide or manipulate corporate information, either to gain access to credit from banks, or to maintain control over the group without monitoring from external stakeholders. The lack of corporate disclosure regulations further exacerbated the problem of corporate transparency deficiencies. For instance, the real financial condition of *chaebol* groups had never been publicly disclosed since the groups were not required to report combined financial statements in which the internal transactions between affiliate firms were recorded.

Realising the importance of transparency, the government enacted a series of reforms to improve corporate transparency after the crisis. Accounting rules became stricter in line with international accounting standards. To ensure the independence of external auditors, listed firms were also required to establish an auditor selection committee consisting of outside directors, major creditors and shareholders. (Before the economic crisis, external auditors acted under the influence of firm management as the management had the exclusive right to appoint them). Further, auditors were subjected to legal sanction and made responsible for their audit performance. As a symbolic example of the impact of this regulation, the third largest accounting firm (Sandong Co.) had to dissolve its business in 2001, after the government ordered the firm to suspend its operations for one year because of negligence in auditing the financial statements of Daewoo Group-affiliated firms. This incident demonstrated the government's commitment to the independence of external auditors and to strengthening accounting rules.

Listed firms were also required to announce important business information through daily disclosures, together with periodic announcements of financial statements. In particular, the government introduced the electronic public disclosure system, requiring companies to disclose their audited annual and semi-annual financial statements, unaudited quarterly financial statements, annual reports, and other important announcements electronically. This rule was applied to firms whose financial statements were required to be inspected by independent public accountants. The new system made it easier for shareholders and other interested parties to gain access to information on the firms' financial conditions and other important matters.

As a direct measure to improve transparency in *chaebol* firms, since 1999 the government required the top 30 business groups to report combined financial statements in which internal transactions among affiliated firms were cancelled out, and detailed information on these transactions was footnoted. In 2002, this law was amended; requiring groups with asset size higher than two trillion Won to report combined financial statements. Moreover, the fair trade law was enforced more strictly to eradicate unfair business practices.

Lastly, in order further to facilitate the adoption of a more transparent governance system, the government amended the fair trade law in 1999. The new law allows *chaebols* to adopt a holding company ownership structure in which the holding company owns at least 30% of each of the affiliates, and affiliates are no longer allowed to cross invest in each other. Although some groups, such as LG, have successfully migrated to the structure, it has not yet proved popular among other groups. So far, only LG and three other groups (Dongwon, Seia, Nongshim) among the top 51 largest groups that were regulated by the newly amended fair trade law in 2001 have adopted the holding company structure.

Internal and External Monitoring Mechanisms

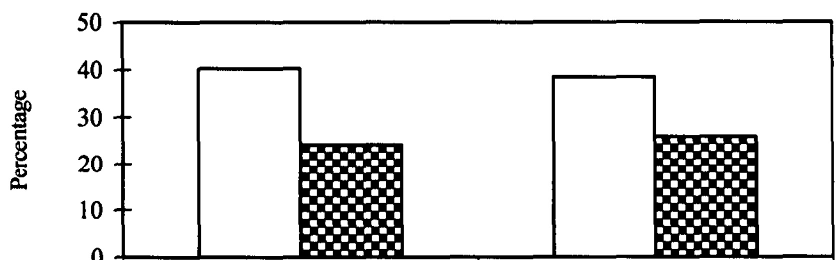
In order to put a check on the discretion of top management, a system of using external directors was introduced for listed firms. Furthermore, the regulations on foreign investors and institutional investors were relaxed to allow them to act as external monitors of the management. Because of these changes, group-owner managers have to face stricter internal and external monitoring than in the pre-crisis period.

Introduction of Outside/External Directors

The securities law was amended in 1998 to require all listed firms to have at least a quarter of their directors as outside directors (or at least one outside director) on their boards. The law was again changed in 2000, requiring large listed firms whose total assets exceeded two trillion Won to have at least half of their directors as outside directors (or at least three outside directors). To ensure the independence of outside directors, the law also required that listed firms with assets higher than two trillion Won form an outside director nomination committee. At least a half of the committee members were to be incumbent outside directors, and the committee's duty was to select the candidate outside directors and recommend them to the annual shareholders' meeting for approval.

Both the rights and duties of outside directors were outlined by the law. Thus, they have a right to express their opinions and vote on important agenda items in board meetings; and they also have a fiduciary duty to act on behalf of shareholders. By law the shareholders can bring them to court for compensation if they breach their fiduciary duties. This potential threat from shareholders (especially from minority shareholders) can make outside directors an effective internal mechanism for monitoring owner-managers in large firms and *chaebol* groups.

Figure 6 shows the average ratios of outside directors comparing *chaebol* and non-*chaebol* firms in 2003-04. The data shows that *chaebol* affiliates have higher ratios of



	2003	2004
Chaebol	40.2	38.43
Non Chaebol	24.14	25.81

Year

Figure 6. Average outside director ratios in *Chaebol* and non-*Chaebol* firms.
Source: Authors' calculation from annual reports of firms listed in KSE

outside directors than the non-*chaebol* affiliates.[14] This finding suggests that *chaebol* group firms have appointed high numbers of outside directors in their boards, probably as a result of the fact that they have many large listed firms in their groups.

Improvement of Foreign and Institutional Investors' Rights

In order to lure foreign investors, the Korean government eliminated most regulations on foreign investment following the crisis. Foreign investors were allowed to acquire domestic firms without restrictions in most industries (except for a few sectors including agriculture, stock farming, fishery, transportation, electricity, telecommunication, broadcasting, etc.). The government also abolished the regulations that made it difficult to acquire another firm, in order to develop the Mergers & Acquisitions market. With theses changes, foreign investors purchased significant shares of large firms, and they often became actively involved in the management of these firms to protect their interests. In addition, mutual funds were no longer required to shadow vote in shareholders' meetings.[15] This means that institutional investors can now have a voice in important management issues in firms where they have a shareholding.

The effectiveness of institutional investors as external monitors is yet to be seen. However, foreign investors are already serving as active monitors by requesting the sacking of incumbent directors or threatening firms with potential hostile takeovers. An important example is provided by the SK group. In early 2003, Sovereign Asset Management, a private mutual fund headquartered in Dubai, secretly acquired 14.99% of the group's listed holding company, SK Corp., and requested that the Annual General Meeting sack the group's chairman and his directors in 2004. The attempt failed, but Sovereign continued to push for improvements to the group's governance structure, and many of these were accepted by the group. In 2005, Sovereign withdrew from the SK group by divesting its equity. Just before the move, SK announced that it would fundamentally change its governance structure by increasing the outside director's ratio to over 50% and by delegating most of important decisions to the boards of directors in member firms. Figure 7 that shows a steady growth of foreign ownership in *chaebol*-affiliated firms listed in KSE.

Stronger Accountability

The government also strengthened the rights of minority shareholders, and implemented the regulations on the equity-holding between affiliated firms. These regulatory changes have made group owners more accountable for their management. Moreover, the commercial law was amended to clarify the responsibility of the *chaebol* chairman with regard to his management of affiliated firms.

Protection of Minority Shareholder Rights

As a means of protecting the rights of minority shareholders, the government significantly reduced the minimum shareholding requirements for participation in various governance processes. For instance, before the crisis, the shareholder had to possess 5% or more to initiate a derivative suit,[16] 5% or more to request the

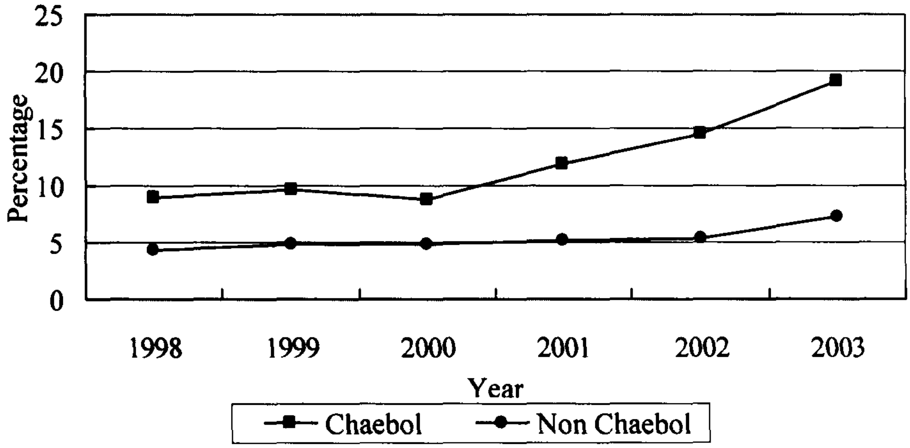


Figure 7. Average foreign ownership trend.
Source: Authors' calculation from annual reports of firms listed in KSE

dismissal of a director, and 10% or more to exercise the right to inspect books and related documents. After the crisis, however, these minimum shareholding requirements reduced to 1%, 3%, and 3% respectively.[17]

In addition, the government introduced the "cumulative voting" system along with a mail-in voting system. In cumulative voting, the shareholders would vote for all candidate directors at the same time in the shareholders' meeting. Therefore, they have a higher chance to appoint their director to a board. Also, a shareholder with at least 3% equity was allowed to make proposals to the shareholders' meeting.[18] Lastly, the class action lawsuit was adopted in 2005 for large firms with the assets higher than two trillion Won, and was to be applied to smaller firms in 2007. Under the new rule, if a shareholder wins a lawsuit against the firm and receives compensation, the firm has to give the same compensation to all other affected shareholders.

Taken together, these changes made it much easier for minority shareholders to take legal action if their interests were damaged by unfair or misguided management decisions. Unlike the situation before the economic crisis, this meant that the owners of *chaebols* could no longer manage affiliated firms without considering minority shareholders' interests.

Regulations on Equity-holding Among Affiliated Firms

Before the crisis, the fair trade law banned mutual investments between firms affiliated with the top 30 largest *chaebol* groups, and precluded these firms from investing in more than 25% equity in other firms in the group. In 1998, the government repealed the second rule, because *chaebol* groups claimed that the rule put them at a disadvantage in fighting hostile takeovers by foreign investors. But, the government had to reintroduce the regulation in 2001, because *chaebols* had actively extended their control over firms beyond their ownership through circular investments. Figure 8 shows that affiliate ownership in group firms increased sharply in 1998, the year in which the ban on circular investments was lifted.[19] In 2001, the

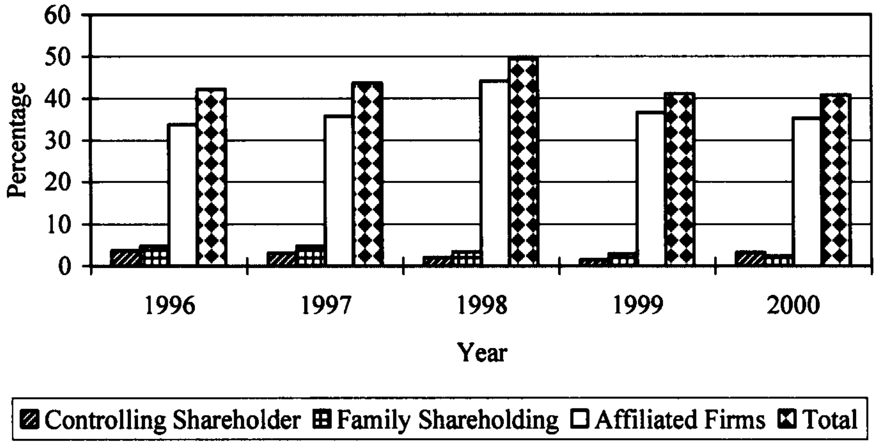


Figure 8. Insider ownership ratio trend.
Source: Korea Fair Trade Commission (2000)

government amended the law so that it applied according to the size of the group: under the new law, cross-shareholding between affiliated firms was banned for groups whose total assets exceeded two trillion Won. Firms affiliated with these groups were also not allowed to make debt-payment guarantees for other members. Additionally, the firm could not invest over 25% equity in other member firms if the group's total assets exceed 5 trillion Won.[20]

These regulations reduced the discrepancy between ownership and control rights in *chaebols*, by disallowing group owners from controlling affiliated firms through other firms in which they held majority equity. Thus, it became much easier to hold owner-managers to account for their management in the group. These regulations have operated as a basic safeguard against the desire of large groups to strengthen their control over affiliated firms through cross-shareholdings and circular investments.

Registration of the Chairman as Representative Directors of Leading Affiliates

Before the Asian crisis, the group chairman frequently did not register himself as a formal director of an affiliated firm to avoid any possible claim for damages, although the firm was in fact under his control. To resolve the problem, the commercial law was revised in 1998 to increase the responsibility of the group chairman. Under the revised law the chairman would be considered a de facto director of a company, if he exercised substantial influence on the management of the company.

Conclusion

In previous sections, we investigated the evolution of Korean *chaebols* after the Asian crisis from three complementary perspectives: (i) their business restructuring strategies; (ii) their diversification activities and financial condition in the post-crisis period; and (iii) changes to their corporate governance systems. In this section, we summarise major findings and discuss their implications for understanding contemporary Korean business groups.

The analysis on the restructuring strategies suggests that, after the crisis, *chaebols* had attempted to rectify the problems that had arisen as a result of their past expansion strategies. By comparing the characteristics of divested and consolidated firms with those of sustained firms in the group, we found that *chaebol* groups divested many firms that did not operate in their major industries. Besides, the groups, especially surviving ones, had a tendency to eliminate highly indebted firms through divestitures. Business relations between affiliated firms were also tightened after the crisis, as groups actively sorted out firms that did not have close business relations with other members.

We also found that surviving groups implemented their restructuring programmes relying more on divestiture than on consolidation. In general, with a divestiture the business in question will be eliminated from the group immediately and permanently. On the other hand, in a consolidation deal, the group will not be totally free of the baggage of the past, since it actually does not withdraw from the business; most of the business will be transferred to another affiliated firm. This difference makes a divestiture a more effective mode for strategic restructuring than a consolidation (Dranikoff, Koller and Schneider, 2002). Consequently, it seems that surviving groups effectively addressed two critical problems – over-diversification and poor financial condition – by their restructuring strategies.

In addition, our analysis of *chaebols*' diversification activities and financial condition in the post-crisis period pointed up several important features indicating the enduring impact of the economic crisis. First, although most surviving *chaebols* expanded their business scope after they overcame their financial difficulties, the extent of diversification, measured by the entropy index, generally remained lower than in the pre-crisis period. Second, a significant number of groups increased participating industries. In most cases, however, the new industries were closely related to their existing industries, and they rarely entered unrelated new industries. Third, the ratio of core industry sales remained high for most groups. However, there were a few groups whose sales in non-core businesses increased significantly, relative to the sales in core-businesses. These groups' core businesses are usually saturated, not providing enough growth opportunities. Thus, it seems that they had a strong motivation to expand into growing industries. Finally, debt ratios of surviving groups have been significantly lowered in the aftermath of the crisis, and the ratios have remained favourable throughout the post-crisis period.

In sum, we found that in the post-crisis period *chaebols* did not pursue diversification as aggressively as before, although some of them reconfigured their business portfolios to sustain and grow in the changed business environment. Also, in contrast with former practice, they did not rely heavily on external debt to finance their investment plans. With these findings, we reason that *chaebols* have substantially changed their business strategy following the crisis, to focus on their core businesses and to ensure their financial stability.

Lastly, we found that the implementation of government-led reform programmes have increased corporate transparency of *chaebols* both in terms of quantity of information disclosure and the quality of information, with the help of several regulatory changes such as stricter accounting rules, the reassurance of the independence of auditors, and the introduction of the mandatory combined financial statements. Besides, the outside director system has been adopted as an internal monitoring mechanism for listed firms, and foreign investors and institutional investors have emerged as external monitors of *chaebols*. Our analysis indicates that *chaebol* groups have actively embraced the outside director system, and foreign shareholders' influence on *chaebol* firms has continued to increase after the economic crisis. Moreover, group owners have become more accountable for their management, due to several regulations such as the strengthening of minority shareholders' rights, the ban on mutual investments and the limit on circular investments for large business groups, and the registration of group chairmen as *de facto* directors of their subordinate member firms.

Based on these observations, we judge that the governance system of the *chaebol* has significantly improved since the Asian crisis so as to increase corporate transparency and to discipline group owners to act more responsibly. In this changed institutional environment, it is unlikely that group owners can manage affiliated firms without paying attention to the interests of minority shareholders and other stakeholders. Consequently, we suppose that the improvements in the governance system have not only facilitated the transformation of Korean *chaebols* after the Asian crisis, but also helped them maintain the changes to their strategies and structures beyond the crisis period.

Thus, the crisis appears to have provided those groups with an opportunity to make a transition toward a more focused management system in which groups' core competencies can efficiently be shared among sub-units to explore potential synergies. The changed institutional environment in Korea after the crisis has facilitated and reinforced the transformation of Korean business groups.

In this regard, we judge that *chaebol* groups have quite successfully implemented significant corporate transformation to adapt to the new business environment emerging in Korea following the crisis. We can view the contemporary *chaebol* as a more focused and disciplined business conglomerate that is more efficient, transparent, and accountable. Despite this, our analysis suggests that they still face two difficult challenges for the future.

First, the reform of *chaebols* was mostly directed by the Korean government. The intrinsic motivation of *chaebols* in continuing the improvement of management systems is still questionable. This is a critical issue because many outsiders, especially foreign investors, still view the *chaebol* system as lacking transparency and accountability because of group owners' desire to keep their groups as their own dominions without interference from other interested parties (Haggard et al., 2003). For *chaebols* to continue to grow and prosper in the global economy, this pressure for change will continue.

Second, the most difficult challenge for Korean *chaebols* will be how to improve their governance system beyond the family management system. The founding family controls the affiliated firms in the group through the circular chains of ownership. If a linking chain in the structure malfunctions or is removed, the whole group can easily be dismantled. This governance problem is fundamentally rooted in the nature of the family management of *chaebols*. It is a problem which will not easily be resolved, and will continue to pose a great threat to the continuity of the *chaebol* system.

Notes

[1] This research was financially supported by the Yonsei Center for Global Studies, Yonsei University.

[2] The Korean economy unexpectedly achieved an early and strong recovery from the severe recession in 1999. At the end of the year, the Korean government officially announced that the country "virtually" graduated from the IMF's rescue programme (*The Korea Times*, 30 December 1999).

[3] Since 2002, the FTC expanded the list to include all the groups whose total assets exceeded two trillion Won.

[4] Each group's major industries were identified as follows. First, we obtained the lists of the business groups' major industries from the two largest credit rating agencies, Korea Investor Service (KIS) and National Information and Credit Evaluation Inc. (NICE), as of 1997. Then, we checked if an industry (at the Korean SIC three-digit level) shown in the lists accounted for at least 10% of the group's total sales in 1997. We classified the industry as a major industry of the group, only if the portion of sales in that industry was at least 10% or above.

[5] In order to prevent chain bankruptcies amid large non-performing loans, the Korean government adopted the "work out" programme in which creditor financial institutions and debtor firms negotiated as to the viability of the corporation voluntarily under the supervision of Financial Supervisory Services (FSS).

[6] In an additional analysis, we also found that *chaebols* had a tendency to divest or consolidate the smaller-sized firms, and the firms over which they could exercise stronger equity-based control.

[7] SIC is the Standard Industry Classification. SIC codes are defined by the Ministry of Commerce, Industry and Energy in Korea.

[8] These indices were calculated for the non-financial affiliated firms of the group. The groups in the table are listed in the order of their total assets as of 2001.

[9] After the death of the founding chairman, Jooyong Chung, in 2000, the Hyundai group span off its automobile and steel businesses that were inherited by the founder's first son (Mongkoo Chung). The group also conceded its debt-ridden Hynix electronics business to an association of lenders in that year. As a result, the group's total sales in 2001 decreased approximately 71.1% compared with the previous year's figure. Similarly, the Dongyang group span off its food and entertainment businesses in 2000, which formed a new independent business group, Orion. Because of the split, the size of the group decreased approximately 28.5% in terms of total sales.

[10] Dongbu actively undertook diversification before the crisis and the momentum continued until 1999. In the case of Hansol, its new mobile phone service business took off in 1998, and grew at an exponential rate. This substantially increased the group's diversification indices until the mobile phone service business was sold to another service provider (KTF) in the late 2001.

[11] Our data indicate that this group has invested in many new information technology (IT) sectors during the last several years to augment its core telecommunication service business.

[12] The Hansol group sold its mobile phone business to another service provider in 2001. The group again divested one of its joint venture paper manufacturing companies by selling its equity to foreign partners in 2001. This caused another drop of the group's ratio in 2002. In addition, a sudden increase of Dongbu's ratio in 2000 was caused by the fact that the group massively restructured its non-core firms by consolidating and divesting them in 1999-2000. But, the group's ratio dropped in 2003, because the group newly entered the semiconductor business by acquiring an existing firm that was formerly owned by a bankrupt *chaebol* group, Anam.

[13] In the combined sales of top four groups in 2004, Samsung, LG, SK, and Lotte's shares were 39.1%, 31.8%, 20.1%, and 9% respectively.

[14] The database consists of firms listed in Korea Stock Exchange (KSE). We compiled data on a total of 844 firms (2003: 423; 2004: 421 firms). Of these, 76 firms were designated as *chaebol*-affiliated firms by the FTC and the rest as non-*chaebol* firms. The reported results are the average proportion of outside directors as a percentage of total number of directors.

[15] The shadow voting regulation required institutional investors to allocate their votes in proportions equivalent to the yes and no votes of other shareholders.

[16] A derivative suit means a shareholders' action brought on behalf of the corporation against the directors and officers of the corporation for a breach of fiduciary duty.

[17] For listed companies, the minimum requirements were further lowered to 0.01%, 0.5%, and 0.1%. If the listed company's capital were not less 100 billion won, the second and third criteria would become 0.025% and 0.05%.

[18] The minimum requirement was 1% for the listed company, and 0.5% for the list company with the capital not less than 100 billion Won.

[19] The sudden drop of the insider ownership ratio in 1999 was due partly to the fact the *chaebol* groups eliminated many firms through divestitures and consolidations in which they had higher controlling stake in the year.

[20] As of 2004, the first rule applied to 51 business groups, and the second rule to 18 groups. The first 51 groups included the second 18 groups.

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