

On the Insider Trades of the SK *Chaebol*

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Song Won-Geun
Faculty of Industrial Economics, Jinju National University
660-758, 150 Chilamdong Jinju Kyungnam, KOREA
Telephone : 82 55 751 3425
Telefax : 82 55 751 3429
Mobile : 011-*-******
e-mail: swg@jinju.ac.kr
Homepage : <http://swg.jinju-econ.ac.kr/>

Abstract

This paper concerns the insider trades between affiliates of the SK group. Before the IMF crisis, this group was one of the top five *Chaebols*, which was in relatively sound financial statements and kept less diversified business structure. Moreover SK group has rapidly grown under the Kim Dai-Jung administration, and has since a far-reaching influences upon the Korean economy. But, after the exposure of the 2002 window-dressings made by the SK Global Co., many economists and financial analysts debate again over the merits and demerits of the *Chaebols*.

Obviously, the insider trades between group affiliates are one of the key points concerning the *Chaebol* problems. It has an effect on the structures of business systems like the *Chaebol* and it also indicates the outcomes of business restructuring. Insider trades are classified as trades of goods and services; trades of capitals such as investment into the stocks of other affiliates, debt guarantees; and dispatching manpower to other affiliates.

The main focus of this paper is on the topics related to the insider trades of goods and services. Those insider trades of goods and services will be specified in detail by subcategories such as 1) insider sales (gains), 2) insider purchases (expenses), 3) insider account receivables, and 4) insider trade account payables.

In section , we briefly reviews the historical growth paths of the SK *Chaebol*, by looking at total assets, capital stocks, debts and sales. In Section , we demonstrate the resources, scales and rates of the insider trades of the SK group in general by including their individual affiliates. Based on these findings, some hypothetical analyses are suggested, for example, a comparative analysis on the results of before and after the IMF crisis, and on the rates of insider trades between listed and unlisted companies. Also we focus on the insider trades between Information & Telecommunications (IT) companies and non-IT companies. The supporting effects of insider trades on the IT companies, especially incorporated after the financial crisis (1997), will be discussed in this section. And lastly but not least, we investigate the relationships of the insider trades with stock shareholdings. In section we conclude by presenting some hypothetical suggestions on the transformation of business structures and the evolution of the *Chaebol* organization.

JEL classification: L22

Key words: insider trades, Chaebol,

Section Introduction

The financial crisis that occurred in late 1997 has struck the entire Korean society unprecedentedly. In the process of many reforms, there were no such entities as *Chaebol*, which has attracted so much attention. If it wouldn't be for the reform pressures following the economic crisis, the serious and rapid changes in economic circumstances, so called 'globalization', would have compelled the transformation of the *Chaebol*-systems. *Chaebols* had no choices but to reform to be able to survive. Nevertheless the professedly self-directed reforms initiated at the beginning of the administration of Kim Dai-Jung (1998-2002; so called "peoples' government") now resulted as a failure. The government was unable to touch the commanding or controlling powers of the chief of the *Chaebol* group. The Korean economic system got a lesson from the reforms. There are many insuperable limits in the self-directed reforms. The reforms of the *Chaebol* have influenced all aspects of Korean society. Moreover, the SK group's entanglements which accidentally happened at the beginning of the 'Participatory Government' were fully informed of the difficulties in the *Chaebol* reforms.

Our interest here is not in addressing specially the *Chaebol* reforms in-itself. It rather concerns the insider trades between affiliates of the SK group. Before the IMF crisis, SK group was well known as one of the top five big *Chaebols*, it was in relatively sound financial statements and they kept up less diversified business structures. Moreover the SK group has rapidly grown under the Kim Dai-Jung administration, and has since had a far-reaching influences upon the Korean economy. But after the exposure of the 2002 window-dressings made by the SK Global Co. financial analysts and economists debate again over the merits and demerits of the *Chaebols*.

Obviously the insider trades between group affiliates are one of the points concerning the *Chaebol* problems. It had an effect on the structures of business systems like the *Chaebol*, and it also indicates the outcomes of business restructuring. Insider trades are classified as trades of goods and services; trades of capitals such as investment into the stocks of other affiliates; debt guarantees; and dispatching manpower to other affiliates.

The main focus of this paper is about the changes appeared over a period of several years into the insider trades of goods and services. Those insider trades of goods and services will be specified in detail by subcategories

such as 1) insider sales (gains), 2) insider purchases (expenses), 3) insider account receivables, and 4) insider trade account payables.

In section , we will briefly reviews the historical growth paths of the SK *Chaebol* by looking at total assets, capital stocks, debts and sales. In section , we demonstrate the resources and the scales of the insider trades of the SK group in general by including their individual affiliates. Based on these findings, some hypothetical analyses are suggested, for example, a comparative analysis on the volumes and the rate of the insider trades before and after the IMF crisis, and on the rates of insider trades between listed and unlisted companies. Also we focus on the insider trades between Information & Telecommunication (IT) companies and non-IT companies. The supporting effects of insider trades on the IT companies, especially incorporated after the financial crisis (1997), will be discussed in this section. And lastly but not the least, we investigate the relationships of the insider trades with stock shareholdings. In section , we conclude by presenting some hypothetical suggestions on the transformation of business structures and the evolution of the *Chaebol* organization.

Section The growth of the SK *Chaebol* after the financial crisis of 1997

Before the IMF crisis, SK group was known as one of the top five big *Chaebols*, they were in relatively sound financial statements and they kept up less diversified business structures. Moreover, this group has rapidly grown under the Kim Dai-Jung administration. Their total assets ranked 5th in 1994. At that time, the scale of assets represents a half of the 4th LG group. But in 1999, SK had 40,147 billion won assets; it had grown by 7,381 billion won per a year. This growth rate was without parallel in any other large *Chaebols*. In a way the total debts increased from 23,910 billion won in 1997 to 29,721 billion won in 2002. Capital stocks are three times larger than those of the financial year 1997. In 2002, total sales were recorded up to 53,415 billion won. It increased rapidly like any other group did before. A better picture of this impressive growth from 1997 to 2002 of the SK *Chaebol* is shown on the following table 1.

During these years, we have to take into consideration the rapid increasing number of affiliates. From thirty-two affiliates in April 1996, it raised to sixty in May 2003. At that time they ranked second behind the

Samsung *Chaebol* (sixty-three affiliates) in respects of number of group affiliates. Among these sixty affiliates, eleven companies are listed (in KSE and KOSDAQ), ten companies are enrolled in Financial Supervisory Services (hereafter FSS), and twenty-six companies are statutory audited companies.

Table 1. The growth of the SK *Chaebol* (1997-2002)
(End of the year, Billion Won)

Year	Non-financial companies					Total companies				
	Asset	Stockholder's Equity	Debts	Capital stocks	Sales	Total assets		Stockholder's Equity	Capital Stocks	Sales
						Official Assets	General Assets			
1997	29,019	5,109	23,910	1,102	30,167	29,267	30,431	5,243	1,327	30,691
1998	32,045	9,418	22,627	1,849	36,829	32,766	34,185	9,503	2,562	37,449
1999	39,581	16,959	22,622	2,391	37,347	40,147	41,447	16,908	2,949	38,039
2000	45,891	18,301	27,590	3,392	45,380	47,379	49,570	18,377	4,870	47,596
2001	45,603	18,972	26,631	3,214	48,561	46,754	49,345	19,247	4,353	50,319
2002	46,315	16,594	29,721	3,371	51,801	47,463	50,511	16,876	4,510	53,415

Source: FTC

By industry, eight companies (including SK Corporation Ltd.) are participating in chemical industries, sixteen companies are in electronic/gas/energy, another sixteen companies are in information & telecommunication industries, and the remaining eleven companies are in engineering & construction including logistics business (see table 2).

Table 2. Business categories and Affiliates of SK *Chaebol* (2003.2.28)

Business category	Listed or not	Affiliates
Chemicals (8)	Listed	SK Corporation, SK Chemicals, SKC, DongSin Pharma
	Not-Listed	Daehan Oil Pipeline, SK NIC, SK UCB, SK Pharma,
Electronics/Gas/ Energy (16)	Listed	SK Gas, Daehan City Gas, Pusan City Gas
	Not-Listed	SK-Enron, Chungju City Gas, Pohang City Gas, Kumi City Gas, Chonnam City Gas, Kangwon City Gas, Iksan City Gas, Daehan City Engineering, Pusan City Gas Development, SK Electric Power, Iksan Energy, Chungnam City Gas, Eunkwang Gas Industrial Co.
Information & Telecommunications (16)	Listed	SK Telecom
	Not-Listed	SK C&C, SK Teletech, SK Telink, SK IMT, IWinz, Infosek, WiderThan.Com, The Contents Company, SK Telesys, Innoace, Paxnet Inc., Air Cross, Entro E&M, Smartic, SK Communications
Engineering & Construction/ Logistics (11)	Listed	SK Global, SeGye Corporation
	Not-Listed	SK Engineering & Construction, SK Shipping, SK Forest, SK DtoD, Stella Shipping, MRO Korea, IACC, Benex International, Oil Chain
Financials (5)	Listed	SK Securities
	Not-Listed	SK Life Insurance, SK Investment Trust Management, SK Capitals, Global Credit & Information
Others (4)	Not-Listed	Walkerhill Hotels, ENCar Networks CO. JungliWon, SK Wyverns

Source: SK Corporation's Annual Audit Report(2002)

In table 3, a comparative scale of five financial companies is shown. SK *Chaebol* entered into the financial business in March 1988 with the SK Life Insurance Co. and SK Investment Trust Management Co. In 1991, SK *Chaebol* incorporated Pacific Securities Co. and renamed it SK Securities Co. Moreover SK Capitals Co. was established by investments of the SK Telecom in 1995. The entrance of the SK *Chaebol* into financial was relatively late compared with the other top four *Chaebols*. Therefore the share of the financial business in assets and sales was smaller than any other else.

Four financial companies excluding Global Credit & Information Co. are sharing about 8.3 percent of assets and 8.7 percent of workers to the group totals at May 2003. But notice the share of the capital stocks is very high, it is 25 percent of the group totals compared with the 3 percent of total sales (which is a usual practice for the top five *Chaebol*.)

Table 3. Comparative scale of Financial and Non-Financial companies
(2003. 5)

	(Million won, %)				
	Total Assets	Capital Stocks	Sales	Net-Incomes	Workers
Non-Financials	46,190,266	3,336,822	51,586,961	1,371,531	25,896
Financials (B)	4,187,786	1,136,349	1,586,656	5,512	2,478
Total (A)	50,378,052	4,473,171	53,173,617	1,377,043	28,374
Shares (B/A)	8.3	25.4	3.0	0.4	8.7

In respects of sales for each business divisions, petroleum & chemical companies shared 50 percent and more during the late 80's and it decreased by 20 percent in the financial year of 2001. By adding distribution & logistics division to these companies, two divisions' share became over 70 percent. After the IMF crisis, the distribution division outran the petroleum & chemicals. Followed by the information & telecommunications division which had grown rapidly in 1990's, they were then ranked 3rd in the group. By excluding the information & telecommunications division, we notice that the changes in ranking of each division within the group have been relatively stable since 1987.

On the other hand, the study of total assets brings us to other results concerning the growth of the *Chaebol*: During the financial year of 2001 the petroleum & chemicals is evaluated to approximately 17 billion won (34.7 percent), the information & telecommunications division represents 13.7 billion won (27.8 percent), and the distribution divisions totalize 7.6 billion won (15.5 percent). In the 1990's, it is noticeable that the shares of textiles

& clothing division have declined and those of the information & telecommunications, electronics & gas, and the financials divisions have increased markedly their assets as in the case of gross sales. But the fluctuation of the share of each division was more violent in assets than in sales.

Section The insider trades of the SK *Chaebol*

3.1 Definitions on the Insider Trade

The insider trades includes trades of goods and services, capital trade such as investment into the stocks of other affiliates, debt guarantees and manpower. Our analysis is concentrating on one specific aspect of the inside trades i.e. the trades of goods and services. Insider trades of goods and service are divided into several sections: insider sales including gains (hereafter IS), insider purchases including expenses (hereafter IP), insider account receivables (hereafter IAR), and the insider trade account payables (hereafter ITAP) among affiliates.

The insider trades of goods and services are usually done between vertically diversified affiliates by purchasing and selling intermediate goods and materials. But these trades are also done between companies indirectly related in the lines of manufacturing. For example an engineering & construction company included in the group can sell to another affiliates. Also a system integration company in the group is allowed to sell various computer-related services to the other affiliates.

Therefore, the amount of “insider sale” is measured by company’s total sums of sales of goods and services (recorded as business incomes in the Financial Statements), which were sold to other group affiliates, this including the rents. Also the “*rate of insider sales*” is defined by the ratio of insider sales to total sales of relevant company. “Insider purchases” represents a total amount of goods (intermediate goods and plants and other fixed assets etc.) and services purchasing from other affiliates. In the case of purchasing the services, it is recorded as purchasing costs (i.e. bills for computing services, communication expenses etc.) in F/S including leasing fees. Now considering that total amount of insider purchases exercised by all the affiliates is equal to total amount of insider sales of all the affiliates within the group by definition. With the same manner, the

“rate of insider purchases” is defined by the ratio of insider sales (i.e. purchases) to total “cost of sales” in income statement. In case of missing data in cost of sales, it will be filled up by the “purchase of raw materials” in the statement of costs of goods manufactured.

On the other hand, “insider account receivables” are claims in exchange for payments including accrued incomes, leasing guarantees existing between affiliates. The “insider trade account payables” are liabilities on which a company owe to other group affiliates by including other liabilities such as account payables, guarantees in advance from other affiliates at rental contract (Song, 2001a; 2001b).

3.2 The rate of insider trades of SK group after 1987

The facts we can find on the changes of various rates concerning insider trades after 1987 are as follows; First, the numbers of affiliates being related to the insider trades have been increase for 16 years except during three years from 1997 to 1999. Second, the rate of insider sales of the SK group total (insider sales of all affiliates to the sales of group total) has declined from 27 percent in FY1987 to 15 percent in FY1994 and inclined to 37.5 percent in FY 1999, and thereafter it declined again slightly. Third, the rate of credit sales or purchases to the insider trades has increased progressively after 1987 and scored 25 percent in 1998. Fourth, the rate of insider account receivables among group affiliates has increased rapidly after 1997 and kept up the level about 37 to 38 percent during the following two years. And lastly, the rate of trade account payables among group affiliates to the total trade account payables has recorded over 50% after FY1997 and declined to 34.6 percent in FY2002.

From these trends, we can present hypothetical assumption. After the IMF crisis in 1997, the growth of the SK *Chaebol* could happen via the expansion of new affiliates into the same lines of business. This growth effects happened because the insider trades was developing among group affiliates. Before the crisis, the rate of insider trades of SK is the lowest among the other top five *Chaebols*, but after the crisis it has increased rapidly especially from the end of 1998 and to the end of 1999.¹⁾ During

¹ According to our calculation, the rate of insider trades of the 17 affiliates is 40.1 percent at the end of FY1998 and it differs from the 21.6 percent in table 4. This

this period, the government regulations on investments in the stocks of group affiliates were nullified. Thereafter for 3 years (2000,2001,2002) it recorded respectively 30.3 percent, 32.4 percent, and 31.8 percent. All these records are higher than those compiled before the crisis by 10 percent and some times even more.

Table 4. Changes of rates concerning insider trades of SK after 1987
(%, Number of companies)

Year	Rate of insider sales	Rate of IAR	Rate of ITAP	Number of relevant affiliates
1987	26.9	0.0	12.5	14
1988	25.5	7.6	10.9	16
1989	19.0	15.1	22.8	20
1990	24.5	14.8	20.5	21
1991	18.4	12.6	16.4	21
1992	22.7	12.7	23.4	24
1993	16.5	12.7	30.0	24
1994	15.0	12.8	25.2	25
1995	18.4	5.9	29.8	25
1996	16.2	7.4	23.7	35
1997	21.5	37.0	61.3	31
1998	21.6	38.6	61.4	29
1999	37.5	38.5	52.2	29
2000	30.3	31.8	52.3	41
2001	32.4	15.4	43.1	44
2002	31.8	12.2	34.6	47

Source: Kisline, Song (2000: 99-105)

3.3 Insider Trades before and after the IMF Crisis: Comparing with other top three *Chaebols*

According to the Financial Supervisory Services (FSS) analysis, which was based on the consolidated F/S (FY1999) of each group, the average rate of the insider sales of 16 *Chaebols* was 34.9 percent. By excluding the top four *Chaebols*, the average rate of the twelve remaining groups was 13.5 percent in 1999. It shows that the rates of the insider trades of the top four *Chaebols*

difference came from the SK Telecom Co. Ltd. of which the rate of insider sales was about 162 percent. The reason why the rate of insider sale is over 100 percent is that the insider sale also includes income for telecommunication services to insiders.

are higher than all the other 12 *Chaebols*. The FSS investigation revealed an average rate of insider sales of the top 4 *Chaebols* (excluding Daewoo group) was 39.2 percent.²⁾ Especially, the rates of insider sales dedicated to the domestic affiliates of the top three *Chaebols* (excluding SK group) exceeded up to 40 percent. In the case of the rates of insider sales to overseas, Samsung and SK group exceeded up to 40 percent of total sales to overseas. On the other hand, Hyundai and LG group concentrated their insider sales relatively in domestic affiliates. Comparing the rate of the insider sales dedicated to the domestic affiliates with the rate of insider sales for the overseas in the SK group, the latter was twice higher than the former group.

Table 5. Amounts of insider sales of top 4 *Chaebols* (FY1999)
(Billion Won, %)

Name	Total Sales ¹⁾			Insider Sales ²⁾		
	Total	Domestics	Overseas	Total	Domestics	Overseas
Hyundai	112.98	83.33	29.65	43.04 (38.1%)	41.27 (49.5%)	1.78 (6.0%)
Samsung	148.17	111.21	36.96	61.73 (41.7%)	46.56 (41.9%)	15.17 (41.1%)
LG	83.48	62.28	21.20	31.76 (38.0%)	25.96 (41.7%)	5.80 (27.3%)
SK	51.72	38.39	13.34	18.68 (36.1%)	11.46 (29.8%)	7.22 (54.1%)
Sub-total	396.36	295.21	101.15	155.21 (39.2%)	125.24 (42.4%)	29.97 (29.6%)
Other <i>Chaebols</i>	77.89	71.17	6.72	10.43 (13.4%)	9.48 (13.3%)	0.95 (14.2%)
Total	474.25	366.38	107.87	165.64 (34.9%)	134.72 (36.8%)	30.92 (28.7%)

Note: 1) Total sales before offsetting the insider sales.

2) Numbers in the () are rate of insider sales to total sales of each *Chaebol*.

Data: FSS (2000)

Based on the FSS investigations, we compare the rates of insider trades of the major *Chaebols* before and after the IMF crisis in table 6. Remarkable fact can be notified in this table; the rates of insider sales of all the top four *Chaebols* are increased after the IMF crisis. But in other *Chaebols* excluding Hanjin, Hanhwa and Hansol group, their rates of insider sales to total sums of sales were declining after the IMF crisis.³⁾ As the FSS (2000) points

² As a reference, the rate of insider sales of Daewoo group was 32.7 percent in FY1997 and 32.0 percent in FY1998.

³ A study estimated that the average rate of insider trades of the thirty groups was 26 percent and 8.74 percent when excluding the amounts of general trading companies (in case of top 5 *Chaebols*, it was 7.33 percent). It suggested that this

out, the increasing rate of insider sales could be considered as a results of the corporate restructurings or reforms by selling and merging of non-profitable affiliates and business departments. Therefore, the degree of vertical integration among the independent affiliates is higher than ever before. But at the same time, we believe that the increasing rate of insider sales could also be interpreted as a consolidation of *Chaebol*-like organization. High degrees of dependency among the group affiliates were rather results of increasing investment to the stocks of affiliates after the IMF crisis.

Table 6. Changes of the rate of insider sales of major *Chaebols* before and after the IMF crisis (%)

		Hyun dai	Sam sung	LG	SK	Han jin	Lotte	Han hwa	Ssang yong	Han sol	Du san	Dong yang
Before	87-96 Avr.	20.0	24.1	24.2	20.3	4.7	9.1	12.4	17.4	23.2	13.3	9.0
IMF Crisis	1997(A)	31.6	30.3	24.5	21.5	5.8	11.6	4.7	38.6	24.1	16.7	18.0
	1998	28.4	24.6	24.3	21.6	4.3	10.7	11.7	41.8	25.3	12.3	22.0
After IMF Crisis	1999(B)	38.1	41.7	38.0	36.1	6.8	10.8	10.7	8.6	25.2	8.3	6.6
	B-A	6.5	11.4	13.5	14.6	1.0	0.8	6.0	30.0	1.1	8.4	11.4

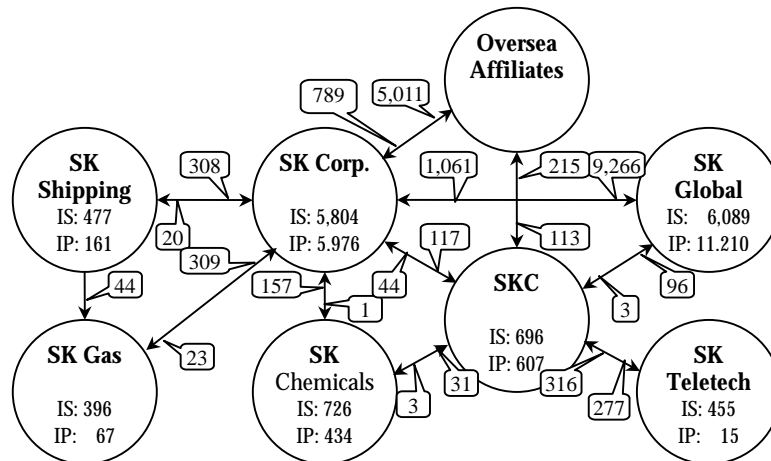
Note: 1) Daewoo and Saehan group are excluded because of missing data
 2) Data before the FY1999 is from the sums of individual companies
 3) 87-96 average rate of Hansol group is made by data from FY 1996 alone.
 Source: FSS (2000), Song (2000: 99)

3.4 Insider trades of major affiliates of SK *Chaebol*

A remarkable aspect to notify concerning the insider trades among affiliates in the SK group is an unbalanced distribution in the degrees of insider sales. At the end of the FY2002, total amounts of the insider sales are 16,586 billion won of which 71.7 percent (11,893 billion won) are done by two major affiliates, i.e. SK Corporation Ltd. and the SK Global Co. Ltd. On the rates of insider trades of other individual companies, it exceeded up to 80 percent in the SK NJC Co. Ltd., the Innoace Co.Ltd., the SK Teletech Co. Ltd. and the SK Telesys Co. Ltd. Figure 1 shows the flowcharts of the insider trades among major affiliates in FY2002.

average rate is similar to that of Japanese group (*Keiretzu*)(Lee, 2000). But this may be the effect of an underestimation.

Figure 1. Flowcharts of the insider trades among major affiliates
(End of FY2002)



3.4.1 SK Corporation Ltd.

The insider trades of SK Corporation Ltd. happen towards the process of purchasing raw petroleum and supplying refined oil products. For four years the amounts of insider sales and purchases to group affiliates are respectively of about six billion won. The degree of insider trades is higher than other affiliates because some company has a high degree of vertical integration among business related group affiliates. The rate of insider sales of the SK Corporation has kept up the ranges from 35 percent to 49 percent (FY99: 46.0, FY00: 34.8, FY01: 48.7, FY02: 43.4) of total sales.

Table 7. Insider trades of SK Corporation Ltd.

(Yearly, Million Won, %)

Year	Insider Sales	(%)	Insider Purchase	(%)	Insider Account Receivables	(%)	Insider Trade Account Payables	(%)*
1999	5,803,785	46.0	5,975,513	61.1	988,418	47.4	299,368	121.9
2000	6,870,014	34.8	6,826,591	55.3	661,424	41.7	146,087	28.7
2001	4,885,304	48.7	5,937,342	46.6	842,942	79.1	213,665	50.1
2002	5,207,697	43.4	5,060,156	41.8	1,223,559	65.2	36,579	10.1

Note: * ratio of trade account payables to costs of sales.

Data: SK Corporation Ltd.(Annual Audit Report)

At the same time, the rate of insider purchases has maintained the level about 42 percent to 61 percent (FY99: 61.1, FY00: 55.3, FY01: 46.6, FY02: 41.8). On the other hand, the rate of insider AR to the total AR is declined by 14 percent from 79.1 percent in FY2001 to 65.2 percent in FY2002. But high rate in itself means high ratio of credit sales for other affiliates. We notice that the rate of insider TAP is declining rapidly recently (1999-2002).

3.4.2 SK Engineering & Construction Co. Ltd.

Actually, the insider sales of SK Engineering & Construction Co. Ltd. have been substantial by the construction of oil refinery establishments of SK Corporation Ltd. and the installation of telecommunication bases of SK Telecom Co. Ltd. But after the mid-90s, the rate of insider sales was declined because of the decreases in the facility investments and in construction orders from the SK Corporation Ltd. The economic depressions after the 1997 crisis did aggravate construction demands. As a result, the rate of insider trades continued to decline. Nonetheless, it restarted to increase in the year of 2001(9.0 percent) and later in FY2002 it recorded a significant high of 27.8 percent.

Table 8. Trading affiliates with SK Engineering & Construction
(Yearly, Million Won, %)

Purchasing companies	1995	1996	1998	1999	2000	2001	2002
SK Corporation	356,801	591,936	91,967	76,131	21,742	31,826	30,378
SK Telecom			105,190	96,189	95,440	82,071	281,191
SK Global	26,535	45,989	7,320	66,264		2,395	
SK Chemicals	2,309	6,661	671	6,841	570		217
SKC	13,785	12,527	651	1,565	666	9,120	115
SK Gas	263	5,130	34,440	17,393	165	0	
SK C&C	-	-	17	251		20,565	2
SK Evertec	2,558	24,237	21,796		3,052	201	26
Shinsegi Telecom	-	-			359		
Walkerhill Hotels	-	25	34		7,674	29,520	23,564
Pohang City Gas	-	105	586	1,841	2,199		
SK NJC	-	-		266,475	8,417		
Daegu Electricity	-	-				158	56,016
SK Forest	-	-			67	445	114
Others	36,742	29,387	3,531	1,686	555	13	380
Total (A)	438,993	715,997	266,203	268,161	140,906	176,314	392,003
Sales (B)	1,244,532	1,625,389	1,818,513	2,066,574	2,066,070	1,950,676	1,408,334
A/B	35.3	44.1	14.6	13.0	6.8	9.0	27.8

3.4.3 SK Chemical Co. Ltd.

The SK Chemical established in July 1969 as Sunkyung Synthetic Fiber Co. Ltd. and was renamed in 1988 as Sunkyung Industry Co. Today SK Chemical Co. purchase from such companies as SK Pharma, SK Engineering & Construction Co. Ltd. Recently it enlarged to SK Corporation Co. Ltd. and SK C&C. Major insider sale partners are SK Global, SK Telecom, SKC, SK Corporation, Walkerhill Hotels, SK Evertec, Pohang City Gas, SK KERIS, SK Pharma, SK UCB, SK NJC etc. (see table 2) The rate of insider sales was under 20 percent from FY1987 until FY1993, and increased from 25 to 35 percent during the mid-90s. After the FY2000 it spread to a 40 percent and reached to a 70 percent at the end of FY2002.

Table 9. Insider trades of SK Chemicals Co. Ltd.
(Yearly, Million Won, %)

	Purchasing from Affiliates	Shares to Costs of Sales	Sales to Affiliates	Shares to Total Sales
1987	15,258	8.5	32,362	15.3
1988	33,310	14.3	23,542	8.6
1989	26,263	8.5	46,757	13.5
1990	56,152	17.3	84,005	21.8
1991	62,917	17.6	92,997	21.1
1992	n.a.	n.a.	n.a.	n.a.
1993	73,388	16.1	99,136	17.6
1994	120,111	22.2	187,336	28.1
1995	218,208	31.4	311,143	36.3
1996	142,474	25.4	193,992	28.8
1997	164,944	28.7	223,734	30.0
1998	160,607	25.2	216,179	25.4
1999	140,098	24.2	138,499	18.7
2000	182,615	25.6	352,179	42.3
2001	189,798	31.3	367,061	49.1
2002	216,898	34.2	544,058	69.6

On the other hand, the rates of insider purchases had kept up below 20 percent until FY1993. But from the FY1995 now on, it have shown the stable movement between the level 25 percent and 35 percent.

3.4.4 SKC Co. Ltd.

Founded in July 1973, the SKC Co. Ltd. was known as Sunkyung Chemicals. This company got listed in 1997 and merged with the SK

Evertec Co. Ltd. in 2001.⁴ The dominant shareholder of the SKC was Choi Tai-Won (who owned 12.1 percent of total stock of the company) at the end of FY2002.

Concerning the insider trades, all of insider sales were mostly happening around the SK Global Co. Ltd. in the late 80's. The scale of insider sales was 53.4 percent of total sales of the company, but since FY1995 insider sale partners in the group have extended by including SK Corporation Ltd., SK Chemicals Co. Ltd. and SKM Co. Ltd. Among these companies, the SK Chemicals Co. Ltd. has become an important purchasing company in the group. During these last four years the rate of insider sales has been unchanged, it maintains around 50 percent, but the shares of insider purchases to costs of sales have grown rapidly from 27 percent in FY1999 to 63 percent in FY2002.

Table 10. Insider trades of SKC Co. Ltd.

(Yearly, Million Won, %)

	Insider Sales	(%)	Insider Purchases	(%)	Insider Account Receivables	(%)	Insider Trade Account Payables	(%)
1999	301,906	50.9	135,906	27.4	106,729	136.4	30,254	46.1
2000	295,965	50.6	125,596	27.7	106,404	112.3	30,296	49.3
2001	343,627	50.9	212,341	39.7	120,370	111.1	60,831	67.7
2002	684,625	58.3	607,399	63.0	107,008	96.5	130,866	80.4

The facts attracting our attentions here are the rates of insider account receivables, they were over 100 percent and the rates of insider trade account payables were around 80 percent. These mean that almost all the volumes of total credit sales and purchases are originated from group affiliates and the degree of company's dependency on group was higher than any other affiliates.

3.4.5 SK Gas Co. Ltd.

The SK Gas Co. Ltd., which was founded in 1985 as Yukong Gas Co. Ltd has grown by merging Kukil Energy Co. Ltd. in 1999, and added the

⁴ Before the merger, SK Evertec (former YuKong Arco Chemicals Co. Ltd.) purchased ethylene, benzene, and propylene from SK Corp. Ltd and the rate of insider purchases was reached 81%. On the other hand, SK Evertec sold to SK Corp. Ltd. via SM manufacturing contract and the rate of insider sales to total sales was 52 percent in FY1999.

Eunkwang Gas Industrial Co. as a subsidiary company. Their main business areas are import, storage and sales of liquidated petroleum gas (LPG). The SK Enron Co. Ltd. as a holding company it owns 45.53 percent from the total stocks, and now it is controlling shareholder of SK Gas Co. Ltd. In table 11, we can see the various rates concerning the insider trades of SK Gas Co. Ltd.

Table 11. Insider trades of SK Gas Co. Ltd.
(Yearly, Million Won, %)

	Insider Sales	(%)	Insider Purchases	(%)	Insider Account Receivables	(%)	Insider Trade Account Payables	(%)
1999	409,439	34.6	97,171	9.2	42,321	54.9	5,456	21.6
2000	589,796	33.4	66,601	4.2	49,178	38.2	3,464	3.7
2001	614,583	33.4	68,868	4.2	55,349	30.2	6,576	6.8
2002	416,647	22.8	72,619	4.3	38,551	14.8	25,376	18.7

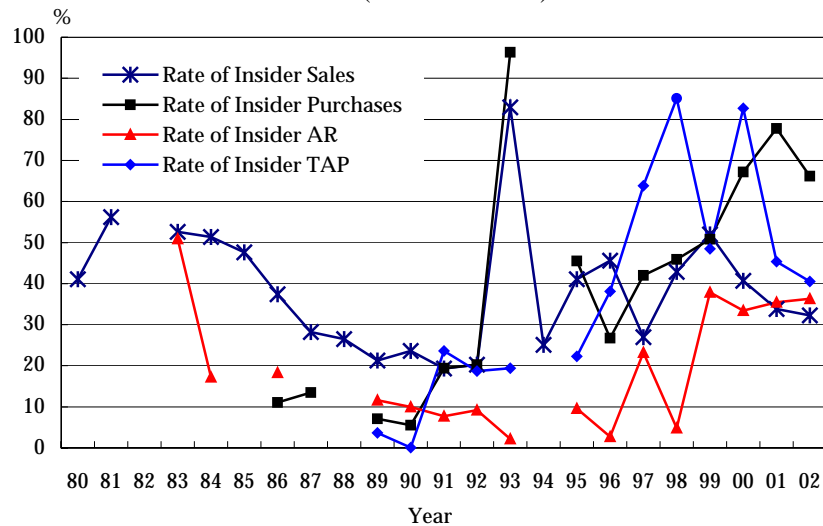
3. 5 Purchasing affiliates in the group

Previously, we outlined insider trades of SK *Chaebol* in general and also those of major constituting independent affiliates. From these discernible facts we are now able to separate purchasing affiliate from the group. We can define the “purchasing affiliate” as an affiliate whose share of the insider sales is low (tentatively under the 10 percent of total costs of sale) and their share of insider purchases is high. For example, most sales of general trading company (hereafter GTC) in the group usually are occurred towards the outsider companies and consumers. In this case, the rate of insider sales will become lower. On the other hand, the shares of insider purchases must be very high when this GTC is willing to buy commodities from other affiliates in the same group.

When the SK Global Co. Ltd. has taken the role of exporting window within the group, it was a typical example. It's rates of insider sales and insider purchases have kept up the levels of 40 to 50 percent respectively. Recently, the rate of insider sales is lower and lower down to about 30 percent (FY1999: 52.0, FY2000: 40.7, FY2001: 33.8, FY2000: 32.3). But the rate of insider purchases has continued to increase after FY1996 and has recorded a high of 77.8 percent in FY2001 and 66.2 percent in FY2002.⁵⁾

⁵ As an additional information, the rate of insider purchases for export of the general trading company (GTC) in the group was 55.4 percent on the average and

Figure 2. Trends in the Rate of Insider Trades of SK Global Co. (End of the Year)



This means that the scale of SK *Chaebol* was smaller than other *Chaebols* (for example Samsung) and therefore SK Global had small volumes of sales and purchases from other affiliates in the group. Thereafter, the SK *Chaebol* found some new affiliates. And the SK Global Co. merged SK Energy Sales Co. Ltd. and SK Distributions Co. Ltd. at the end of the 1999. This breakthrough contributes to the enlargement of insider trades of SK Global. Besides, the SK Global continued to try to reform the business structure, which was biased by the exporting. This also represents the weakening role of the GTC within the group, caused by the enlargement of domestic demands and the direct sales of other affiliates. Therefore, entering in 1990's, the role of GTC was transformed to holding company in the group via investment to group affiliates and debt guaranteeing.

the rate of insider sales of commodities imported by GTC to the group affiliates was 37.5 percent on the average. In case of the top five *Chaebols'* GTC (excluding SK Corp. Ltd.), the above-mentioned two rates are over 60 percent. Especially in the case of Hyundai *Chaebol*, it reached 89 percent (Federation of GTC, 1989: 199). These trends are maintained until the early 1990's. In 1997 the average rate of insider purchases of top 5 *Chaebols* recorded 42.85 percent and the average rate of insider sales recorded 28.13 percent (Chamyoyondai, 1999:126-133; Song, 2000).

By comparing the rate of insider purchases of SK Global with other GTCs such as Samsung Corporation Ltd. and LG International Corp.; the Samsung Corporation Ltd. (of which the rates of insider sales are under 3 percent) recorded more than 70 percent in the rate of insider purchases for the last three years. In the case of LG International Corp. the rates of insider sales just remained the level of 10 percent to 13 percent, but its rates of insider purchases were ranged from 16 percent to 26 percent. Concerning the rates of insider purchases, SK Global were much higher than LG International Corp., but those of these two companies had declined by 10 percent between FY2001 and FY2002.

Table 12. The rates of insider purchases of Samsung Corp. & LG International Corp.

(Billion Won, %)

	Samsung Corporation Ltd.					LG International Corp.			
	1994	1996	2000	2001	2002	1999	2000	2001	2002
Insider purchases	5,610	7,584	27,379	22,242	27,651	3,299	4,984	3,746	2,943
Costs of Sales	15,167	23,241	39,577	31,883	36,070	17,688	19,343	17,828	19,029
(%)	37.0	32.6	69.2	69.8	76.7	18.7	25.8	21.0	15.5

Besides, manufacturing companies of which the rates of insider sales are low and the rates of insider purchases are high concerns the SK Telink Co. Ltd. and the SK UCB Co. Ltd.

3.6 Insider Trades of Listed and Non-listed affiliates

When grouped by listed and non-listed companies, the average rate of insider sales of the eight listed companies (excluding Daehan City Gas, Pusan City Gas) was respectively 31.2 percent, 33.7 percent, and 31.4 percent for the last three years. These records were similar to those of the group total for each year. Specified by individual listed companies, the rate of insider sales in SKC Co. Ltd. and SK Chemicals Co. Ltd., are higher than other listed companies. But that of SK Global is declining slowly for the last three years as above mentioned. Otherwise, the level of insider sales of SK Telecom was quite low (around 5 percent) but continued to increase during these last three years (See table 13).

Also the rate of insider sales of all the enrolled companies in KOSDAQ market and FSS had increased slowly by 4.3 percent for three years from 1999 to 2001, but rapidly increased to 49.0 percent in FY2002. The SK

Engineering & Construction Co. Ltd. had recorded to have the largest volumes of sales among other enrolled companies. They kept up the level around 10 percent until FY2001 and increased up to 27.8 percent in FY2002. For two other companies, SK C&C Co. Ltd.⁶⁾ and SK Telesys Co. Ltd.,⁷⁾ their rate of insider sales are 76 percent and 87 percent respectively in FY2002.

Table 13. The rate of insider sales of listed companies in SK *Chaebol*
(Billion Won, %)

Selling Affiliates	FY2000			FY2001			FY2002		
	Insider Sales	Sales	(%)	Insider Sales	Sales	(%)	Insider Sales	Sales	(%)
SK Corp.	4,885	14,022	34.8	6,870	14,115	48.7	5,804	13,388	43.4
SK Gas	590	1,768	33.4	615	1,841	33.4	417	1,827	22.8
SK Evertec	194	363	53.3						
SKC	296	585	50.6	344	675	50.9	685	1,174	58.3
SK Global	5,699	14,021	40.7	6,102	18,036	33.8	6,089	18,822	32.3
SK Chemicals	352	833	42.3	367	747	49.1	544	782	69.6
SK Telecom	208	5,761	3.6	284	6,227	4.6	489	8,634	5.7
Shinsegi Telecom	82	2,056	4.0	123	2,007	6.1			
Total	12,306	39,410	31.2	14,704	43,649	33.7	14,027	44,627	31.4

Note: SK Evertec merged into SKC, Shinsegi Telecom merged into SK Telecom

Concerning the statutory audited companies, it included thirteen companies in FY2002,⁸⁾ their rates of insider sales were declining from 39.3% in FY1999 to 30.6% in FY2001, but it rose up to 35.3% in FY2002.⁹⁾ This percentage is higher than the group totals by 5% and sometimes more. The companies whose rate of insider sales is relatively high are SK Shipping Co. Ltd. and SK Teletech Co. Ltd. On the other hand, SK Telink Co. Ltd. and SK UCB Co. Ltd. are classified as purchasing companies where the rate of insider sales is respectively estimated fewer than 10 percent as mentioned above section 3.5. By excluding these two

⁶ Computer system design, S/W development and supply and consulting business

⁷ Its former name was NSI Technology Co., Ltd. Manufacture of communication apparatuses without any line connection and radio or television broadcasting apparatuses

⁸ Statutory audited company is non-listed company of which the total assets are over 7 billion won.

⁹ Among statutory audited companies Pohang City Gas is excluded and among enrolled companies Chongju City Gas and Walkerhill Co. Ltd. are excluded.

purchasing companies, the average rate of insider sales of statutory audited companies is 36.5 percent.

According to the types of companies, we found that the average rate of listed companies was the highest, followed by the statutory audited companies and the enrolled companies.¹⁰⁾ They were consistent from FY1999 to FY2001. But the average rate of the listed companies has declined from 39.5 percent in FY1999 to 31.4 percent in FY2002. Also, if we exclude the purchasing companies such as SK Telelink Co. and SK UCB Co., the rates of statutory audited companies are higher than any other types of companies except FY2001. In FY2002, the rate of insider sales of the enrolled companies ranked first. Moreover we can see that the significant rises in the average rate of those enrolled companies from FY1999 to FY2002. Considering that the most of IT (Information and Telecommunication) affiliates are statutory audited companies and the enrolled companies except the several Gas distribution affiliates. Then we can interpret this as it is closely related to the higher rates of insider sales of IT companies in the group.

Table 14. Comparing the rate of insider sales by types of companies
(Million Won, %)

Types	FY1999		FY2000		FY2001		FY2002	
	Insider Sales	(%)	Insider Sales	(%)	Insider Sales	(%)	Insider Sales	(%)
Listed	11,015,741	39.5	12,306,492	31.2	14,703,988	33.7	14,026,503	31.4
Enrolled	607,651	24.3	724,813	26.6	826,557	28.6	1,273,863	49.0
Statutory 1	761,869	39.3	1,044,194	31.3	1,080,388	30.6	1,270,018	35.3
Statutory 2*	757,806	40.4	1,040,188	32.0	1,075,383	31.5	1,264,033	36.5

*: Excluding SK Telelink Co. Ltd. and SK UCB Co. Ltd.

Arise a comparison of the rankings of each type of companies in SK group with the other *Chaebols*. First, in the case of Samsung *Chaebol*, the rates of insider sales of listed companies were 12.4, 13.6, and 13.8 percent for the last three years. These figures are lower than the average rate of group totals. But those of the statutory audited companies were 34.1, 49.7, 50.5 percent at the same period, and those of enrolled companies (excluding financial companies and Carecamp.com, CV Net, HTH) recorded 61.6 percent on the average for these same last three years.

¹⁰ SK Engineering & Construction, SK Enron, SK C&C, SK Telesys

Second, the rate of insider sales of the listed companies in LG *Chaebol* was 26 percent on the average for two years (FY2000, FY2001) and it was higher than the group totals. In 2002, it recorded 17.5 percent and was below the level of group total. The rate of insider sales of enrolled and statutory companies recorded 20.7 percent and 19.8 percent respectively (on the average FY2000 and FY2001) which is under the level of group average, but in 2002 it outran the group average. These observations brings us to assume that until FY2001 the insider sales in LG *Chaebol* has been done mainly by large listed companies and thereafter by non-listed companies. It contrasts with the Samsung *Chaebol* whose rates of insider sales of non-listed companies doubled a to the listed companies during that same period FY2000 to FY2003 (Song, 2003a).

3.7 Insider trades of affiliates in IT Sector

One of the remarkable features in the growth of the SK *Chaebol* is its rapid expansion of IT sector in the group business. In this paper, the IT sector includes such industries as D322 (Manufacture of Communication Apparatuses Without Any Line Connection and Radio or Television Broadcasting), J64 (Mobile Telephone Services), and M72 (Data Processing and Consultancy) according to the Korean Standard Industry Classifications (KSIC). The total sum of assets of these three IT sector is 13,709 billion won, it ranked 2nd in the group and the total volumes of sales reached 712 billion won. The IT sector covers 16 companies including SK Telecom Co. Ltd., which is the largest company in the group.

The SK *Chaebol* entered into the IT business by founding the company named Sunkyung Information System Co. Ltd. in May 1990 and YC&C Co. Ltd. in October 1990. At once in April 1991 was founded Sunkyung Telecom Co. Ltd. (now SK C&C). In 1994 the SK *Chaebol* was participating as a dominant shareholder in the management of Korean Mobile Telecommunication Co. Ltd. Then in 1996, Sunkyung Information System Co. Ltd. and YC&C Co. Ltd. merged as new company named SK C&C. The Korean Mobile Telecommunication Co. Ltd. was included as a group-affiliate and was renamed SK Telecom Co. Ltd. in 1997. The following year of 1998 was founded SK Telink Co. Ltd. As a result, there was 3 affiliates in the IT sector until 1999. The venture bubbles start from the year 2000, SK *Chaebol* founded Infosek Korea Co. Ltd. (Jul.), The Contents Company Ltd. (Aug.), Letsgo Co. Ltd. (Sep.), and incorporated WiderThan.Com (Sep.), SK Telesys (Sep.), Innoace (Nov.) by stocks acquisition. In the next year

2001 SK IMT and Wizwith Korea was founded by SK *Chaebol* and Shinsegi Telecom merged into SK Telecom. The SK *Chaebol* incorporated SK Communications Co. Ltd. as a dominant shareholder in 2002 and Paxnet Inc. in 2003.

The average rate of insider sales of all the companies included in the IT sector is 18.7 percent during FY2002 (See table 15). Compared with that of FY1999, it increased by 6 percent on the average. Concerning the Mobile Telephone Services industry (J64) including the SK Telecom Co. Ltd. and SK Telink Co. Ltd., the rate of insider sales is rating at 5.6 percent. It is the lowest one in 2002 among the three sub-categories, this is because these two affiliates belong to this category are large selling companies. The rate of insider sales of companies belonging to industry like M72 is 75.3 percent. And lastly in case of the industry D322, it increased rapidly from 66.6 percent in FY1999 to 95.1 percent in FY2000 and recorded 92.3 percent at the end of FY2002.

Table 15. The insider sales of IT sectors in the SK *Chaebol*
(Billion Won, %)

By Industry	FY1999			FY2000			FY2001			FY2002		
	IS	Sales	(%)	IS	Sales	(%)	IS	Sales	(%)	IS	Sales	(%)
J64	839	6,185	13.6(3)	292	7,876	3.7 (3)	410	8,322	4.9(5)	493	8,736	5.6(2)
M72	332	366	90.7(1)	516	574	89.9(2)	585	785	74.6(3)	732	972	75.3(4)
D322	122	183	66.6(2)	308	324	95.1(2)	377	442	85.4(3)	746	808	92.3(3)
Total	1,293	6,734	19.2(6)	1,116	8,774	12.7(7)	1,372	9,549	14.4(9)	1,971	10,516	18.7(9)

Note: 1) D322: Manufacture of Communication Apparatuses Without Any Line Connection and Radio or Television Broadcasting), J64: Mobile Telephone Services, M72: Data Processing and Consultancy on the Korean Standard Industry Classifications (KSIC).

2) The numbers in () are companies summed up.

In table 16, we can see the rate of insider sales of each individual companies belonged to the IT sectors. It is the SK C&C that the volumes of the insider sales to other affiliates are largest. The rate of insider sales to the total sales is 75.6 percent at the end of FY2002. Started from a team within the SK group targeting business development in mobile telecommunication services, SK C&C have traditionally sold system integration services to group affiliates. The major trading partners are SK Telecom Co. and other eleven affiliates. The rate of insider sale of SK C&C was highly 90.7 percent at the end of the FY1999 and it was declined to 75.6 percent in FY2002. The high level of the rate of insider sales has reflected in the high rate of insider account receivables: 80 percent in

FY2002. On the other hand the rate of insider purchases of the company was fewer than 10 percent, and we can say this company as typical selling company in the group. In case of the other IT companies such as SK Telesys, WiderThan.Com, and Innoace, the rates of insider sales are over 70 percent and even 90 percent in FY2002.

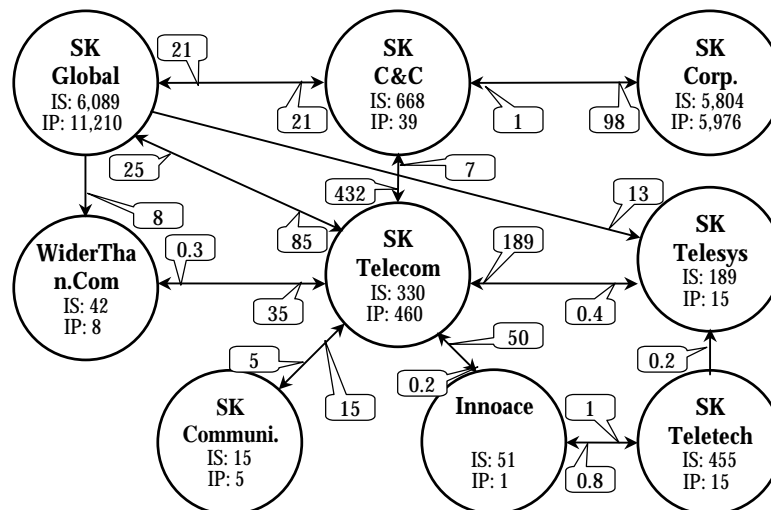
Table 16. The rate of insider sales of IT companies in SK *Chaebol*
(Million Won, %)

Affiliates	Types of firms	FY2001			FY2002		
		IS	Sales	(%)	IS	Sales	(%)
SK C&C	Enrolled	555,830	754,305	73.7	668,053	884,251	75.6
WiderThan.Com	Statutory audited	24,966	25,271	98.8	42,153	56,125	75.1
Infosek Korea	Statutory audited	4,683	5,107	91.7	6,921	9,060	76.4
SK Communications	Statutory audited				14,730	22,788	64.6
Innoace	Statutory audited	10,141	12,029	84.3	51,431	53,943	95.3
IWings*	With F/S	654	1,058	61.8			
SK Telesys	Enrolled	72,331	91,230	79.3	189,114	216,023	87.4

Note: * end of FY2000

Figure 3 shows the flowcharts of insider trades among IT affiliates. The pivot company of the insider trades among the IT companies is the SK Telecom Co. The function of the SK Telecom within the SK group is buying the products and services of other IT affiliates, i.e. SK C&C, SK Telesys, WiderThan.Com, Innoace, and the SK Communications.

Figure 3. Flowcharts of insider trades among IT affiliates (End of FY2002)



3.8 Relationships between insider trades and stock shareholdings

Following our analysis, it can be assumed that the increase of rates of insider sales between 1998 and 1999 is related to the growth of investments with other affiliates after the abolition of government regulations on the total investment to group affiliates. This assumption can be ascertained by investigations over the relations between the insider trades and the stock shareholdings. The reason is it is the shareholding structures that determine the volumes and the rates of insider trades.

On the other hand the relationship between insider trade and share ownership is depending on each group-affiliate who can have one or more relationship with other affiliates among the following nine categorical types of relations. (1) First, one company can invest and sell to the other affiliates. In this case insider sales may be mediated by the share ownership. (2) Second, this firm can be invested from other affiliates and also can sell to the same affiliates. These companies are named “supported firms”. (3) Third, there is no direct investment relation but it is possible to sell to other affiliates. This way of doing may be called simple “selling relation”. (4) Fourth, one company can invest to other affiliates and purchase from the same affiliates. These firms are considered “supporting companies” (5) Fifth, one company can be invested from other affiliates and therefore purchase from the same companies. The affiliates having this relation belong to the counter-traders of first relation. (6) Sixth, it can be possible to purchase from other affiliates without any direct investment relations. This relation may be called simple “purchasing relation”. (7)(8) Seventh and Eighth, these types of relations are come into being when there are no trade relations but only investment relations exist. (9) Lastly it can be possible that there are no direct investment or trade relations at all.

Table 17 Categorical types of relations between insider trade and share ownership

	Investment to	Investment from	No insider investment
Sell to	(1)	(2) supported	(3) selling
Purchase from	(4) supporting	(5)	(6) purchasing
No insider Trade	(7) dominate	(8) dominated	(9) no direct relations

To investigate the relationship between insider sale and share ownership, we try to overlap two matrices of insider sale and share ownership by specifying each affiliate company according to the above-mentioned types of relations (in table 18 and table 19). For example, the SK Corporation Co. Ltd. had relations with thirteen other affiliates in FY2002, among these firms, some (4) of its trading relations concurred with the shareholding relation. In case of the SK Global Co. Ltd. and SK Telecom, there were 2 and 3 overlapping relations respectively. The relationships of insider sales in SK Chemicals Co. Ltd. towards other affiliates are relatively based on share ownerships. Those related companies are SK Corp., SK Global, SK Eng. & Con., SK Pharma, SK UCB, SK NJC. The SKC has no relationship with SK Teletech but sells and purchases from SK Teletech, therefore two relations exist concurrently (i.e. #3, #6 relation in table 17).

[Table 18 and Table 19, here]

The SK Shipping invested in SK Eng. & Con, SK Forest and Stella Shipping but it purchased from the companies such as SK Corp., SK Gas and SK Global. The SK Gas Co. of which SK Enron owns largely 45.88 percent of shares sells to other group-affiliates such as SK Corp., SK Global, and SK Shipping. Based on these overviews, we suggest that trade relations are not always consistent with the share ownership relations. This is one of the general features of the Korean *Chaebol*-like organizations.

Next, we try to sum up the insider sales and investments by calculating the rate of insider trades of each major investor companies in FY2001. In table 20, numbers standing in the upper line are rates of insider investments and those standing in the lower line are rate of insider trades.

Table 20. Rate of Insider trades of major investor companies in SK *Chaebol*
(End of FY2001, %)

	SK Corp.	SK Global	SK Telecom	SK Chemi.	SKC	SK E&C	SK Ship.	Walker Hill	SK Gas	SK C&C	SK Enron	The Contents Com.	Wider Than	Group Total
Invest/	16.09	3.77	5.7	1.95	1.64	1.3	0.68		0.49	3.23	2.27			37.92
Sell To	48.7	33.8	4.6	49.1	50.9	9.0	39.7	0.5	33.4	73.7	24.7		98.8	33.1
Be Invested/	15.92	49.07	32.57	6.2	49.6	73.66	99.53	10.18	45.88	40.5	50.0	15.0	20.0	
Buy From	18.08	43.84	22864.5	1.65	13.71	1.26	2.39	48.21	3.50	11.49			97.7	

For example, SK Corp. Ltd. invested to other affiliates 16.09 percent of their total stockholder's equity (i.e. total asset minus total debt) and sold

48.7 percent of their total sales. On the other hand, the SK Corp. of which 15.92 percent of total shares were owned by other affiliates purchased 18.08 percent of total purchases from other affiliates.

The company whose rate of insider investment was low and the rate of insider sale was relatively high (i.e. over the group average) includes SK Global Co. SK Chemicals, SKC, SK Shipping, SK Gas, and SK C&C. The companies whose rate of subordination was high but the rate of insider purchases was low cover the SK Eng. & Con., SK Shipping, and SK Gas. By putting together the two results, it was made clear that there existed “supported affiliates” such as SK Shipping, and SK Gas. In this case SK Chemicals is the typical case of a low rate of subordination and a low rate of insider purchases. We can call this company as typical selling company with a weak invest relationship.

Section Conclusions

The insider trades between group-affiliates has the most sophisticated dilemma; whether it was legal or illegal. In fact, supporting the insolvent affiliates, the counter competition activity and the illegal heritage of wealth was happening through the insider trades. To say without mentioning, the investment to affiliates and acquisition of other affiliates’ stocks, roundabout support via financial affiliate companies and the reciprocal debt guarantees between affiliates are ubiquitous. Up till now, the illegality of insider trades have not been proved and traced thoroughly.

In this article, we reviews the insider trades of SK *Chaebol* restricting the sales and purchases between group-affiliates and we find out some stylized facts. In the following paragraph, we will reveal some hypothetical suggestions on the transformations of business structure and on the evolutions of the *Chaebol*-like organization.

Initially, the rates of insider sales in the SK *Chaebol* have been recorded around 30% for the last three or four years. By comparing with the levels registered before the IMF crisis, it increased by 10% and more. This could be considered as the results of the corporate restructurings or reforms by the selling and the merging of non-profitable affiliates and business departments. Therefore, the degree of vertical integration among the independent affiliates is higher than ever before as the FSS points out. But this interpretation isn’t applicable to SK group because the insider

purchases of SK Global (which is purchasing companies in the group) have continued to decrease and those of SK Corporation Ltd. and SK Telecom Co. Ltd. have stayed stable (at the level 40%) since the IMF crisis. Therefore the 10 % increases were due to the expansion of firms in IT sector and growth of their insider sales to non-IT affiliates.

Secondly, by comparing the rates of insider sales of listed firms with those of non-listed companies, we find that the volume of the insider sales in the former was larger than that in the latter. But in case of the rate of insider sales, the latter was higher than the former. Also, if we exclude the purchasing companies, the rates of statutory audited companies are higher than any other types of companies except FY2001. In FY2002, the rate of insider sales of the enrolled companies ranked first. Moreover we can see that the significant rises in the average rate of those enrolled companies from FY1999 to FY2002. Considering that the most of IT (Information and Telecommunication) affiliates are statutory audited companies and the enrolled companies except the several Gas distribution affiliates. Then we can interpret this as it is closely related to the higher rates of insider sales of IT companies in the group.

Among the four enrolled companies, the volumes of insider sales of SK C&C Co. Ltd. totalize two-thirds of the total insider sales of enrolled companies. Almost all the statutory audited companies are companies in IT sector. Therefore, these findings are closely related to the high rates of insider sales of IT related companies. This assertion is to be backed by more data and some detailed findings. Nevertheless, we can assume that tunneling of wealth is happening from the listed companies to the statutory companies, especially to the IT-related companies whose shares of the families during the second generations are high.

Third, the hypothesis i.e. the growth of the IT-related companies was the results of supports of many other affiliates become more forceful. Entering into the IT business may represent a kind of venture investments. Unfortunately it was lead by successors from the second or the third generations of group founders. These successors use new IT-related venture firms to try to expand their commanding or controlling powers within the group. It is completely different from the general purposes such as business diversification and management strategy (Song, 2003b).

Fourth, it can be assumed that the increases of rates of insider sales between 1998 and 1999 would be related to the growth of investments

from other affiliates after the abolition of government regulations on the total investment from the group affiliates. This assumption expected to be ascertained by investigations over the relation between the insider trades and the stock shareholdings. Contrary to the general recognitions, the research results are being pessimistic; the volumes and rates of insider trades are not related to the shareholding structures and its changes. It is to say; that the main purpose of shareholding is not to improve vertical integration between the business-related group affiliates but to sustain controlling powers of a chief or his successors within the group.

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Table 18. Overlapped Matrix of Insider Sales and Share Ownership
(End of FY2002, %)

Invest(sell) dominated(buy)	SK Corp	SK Glo.	SK Tele	SK Che	SKC	SK E&C	SK Ship.	SK Gas	SK C&C	Wider Than	R. of Share/ R. of IPs
SK Corp.		5.64	0.04	2.26 4.03	7.56	2.37 2.16	30.35	16.84	8.63 11.05		13.26 16.49
SK Global	38.68 42		4.44	2.51 15.62	3.29 8.20	3.55	2.83	1.50	6.67		48.03 37.85
SK Telecom	20.85 0.22	3.55 0.45		0.00	0.02	19.97			48.88	67.61	24.4 2466.22
SK Chemicals					6.2 0.07	0.02					6.2 2.45
SKC	47.66 0.87			3.78		0.01			1.08		47.66 24.52
SK Eng. & Con.			0.01	40.67 0.00			30.99		1.71		74.12 1.56
SK Shipping	47.81 0.15	33.17			19.02			0.01			100 1.96
SK Gas		0.35					3.95				45.88 2.64
SK C&C		10.5 0.11	30 0.08	0.00		0.00				1.72	45 5.15
SK Pharma	20			80 2.11							100 78.07
SK Forest		0.41				23.74 0.01	18.21				42.36 0.57
SK-UCB				50 0.16							50 6.31
SK NJC				60 0.81							60 51.22
SK Teletech			61.66		23.53						61.66 70.18
SK Telink			90.77								90.77
SK Telesys			0.00		77.13						77.13 0.15
SK Elec.	100					3.98					100
SK Communi.			90.4 0.05							5.58	90.4 175.74
Innoace			13.13 0.00						7.5		28.13 0.49
Aircross			40						45 0.20		85 2.08
ENCar Net.	50										50
Stella Shipping						70					70
IWings	66.15		12.15								78.3
Infosek					20.68				48.28		68.96
MRO Korea		51									51
IACC	100										100
SK IMT			61.34								61.34
Global Cre. & Info			50								90
Entro E&M	50										50
Oil Chain	38.1										38.1
Smartic	75										75
Benex Int.l		66.67									100
SK D to D		90.94									90.94
Daehan Oil Pipe.	29.43	4.61									34.04

SK UCB				50.00													50.00
				0.26(1.23)													9.04
SK NJC				60.00													60.00
				(87.58)													0
Innoace				14.00										8.00	8.00		30.00
				(78.27)													1.09
SK Life Ins.		71.72															97.37
	(12.43)	(0.65)	(0.61)														1.73
SKSecurity		14.47															41.37
																	3.16
SK Capital				100.00													100.00
SK Inv. Trust																	35.00
Iridum Korea				100.00													100.00
Pusan City Devl.																	51.00
Stella Ship.																	70.00
SK Enron	50.00																50.00
The Contents Com.				15.00													15.00
WiderThan.Com				20.00													20.00
				(97.7)													
Daehan Pipe	29.43	4.61															34.04
Daehan City Eng.																	100.00
Infosek							25.85							60.34			86.19
Global				50.00													90.00
MRO Korea		51.00															51.00
IWings	66.15			12.15													78.30
Netsgo				96.82													96.82
Bill Plus	20.00			80.00													100.00
Jungjiwon																	40.00
Madnet				40.00													60.00
ENCar Net.	50.00																50.00
CareBest		52.69															52.69
IACC	100.00																100.00
SK IMT				61.58													61.58
Mobiya														60.00			60.00
Bescare														100.00			100.00
SK Media	40.00			40.00										20.00			100.00
Oil Chain	38.10																38.10
Smartic	75.00																75.00
Benex Int'l.		66.67															100.00
Wizwith Korea		94.00															94.00
R. of Insider Invest	16.09	3.77	5.7	1.95	1.64	1.3	0.68							0.49	3.23	2.27	37.92 ⁴⁾
R. of Insider Sales	48.7	33.8	4.6	49.1	50.9	9.0	39.7							0.5	33.4	73.7	24.7
																	98.8
																	33.1

Note. : 1) At 2002. 3. SKC 0.26%, 2) SK C&C 3.54%.

3) Rate of Insider Purchases to selling & general admin. Expense

4) Rate of stocks of affiliates to stockholder's equity. Rate of stocks of affiliates to total assets is 15.73%

5) Numbers in the () are the rate of insider purchases to total purchases(manufacture).