

Comments on

Governance Transparency and Firm Value: Evidence from Korean Chaebols (by Chattopadhyay, Shin, and Wang)

June 16-17, 2023, Seoujl 2023 Global Corporate Governance Colloquium (GCGC)

> Discussed by Woojin Kim Seoul National University Business School

In a nutshell,

- Empirical paper that examines the relationship between
 (1) removal of the loop structure in Korean chaebols (X), and
 (2) valuation of non-loop member firms (Y)
- Main Findings: removal of loop structure is associated with

 (1) + relationship between SUE and CAR
 (2) larger (smaller) Q in low (high) wedge
 non-loop firms but only for lower in the group (i.e. high *Position* value)
 or low direct ownership firms

- Interpretations: improved transparency may improve earnings informativeness and valuation, but it depends on the degree of relative agency problem within the group



- A very interesting paper that examines a wellknown phenomena (at least in Korea) from a different angle
- Empirically supports the regulatory reforms of the Korean government to suppress loop structure (with appropriate caveats)
- But I have more questions than answers.....

1. Unconditional Effect of SUE

58 R. Bhushan / Journal of Accounting and Economics 18 (1994) 45-65

Table 4 Regression tests of size as an explanation for drift

Panel A: Tests using announcement period returns over the four subsequent quarters Model: $AR_1 + AR_2 + AR_3 - AR_4$ (%) = $b_0 + b_1SUE + b_2SUE * Size$

Variable	Coefficient	t-statistic	Alternative t-statistic	# of yrs (max = 12) w/coeff. > 0
SUE	4.65	28.25	8.58	12
SUE * Size	- 3.18	- 17.65	- 7.07	0
N Adj. R ² (%)	77,741 1.02			

			Sample		
	All	Lower in Group	Higher in Group	Low Direct Own	High Direct Own
	(1) Forward CAR	(2) Forward CAR	(3) Forward CAR	(4) Forward CAR	(5) Forward CAR
Removal Fraction \times Forward SUE	0.592**	1.162***	-0.157	1.107***	0.070
	(0.29)	(0.25)	(0.84)	(0.37)	(0.72)
Forward SUE	0.029	0.012	0.045	0.014	0.059
	(0.02)	(0.01)	(0.04)	(0.02)	(0.04)
Removal Fraction	0.062^*	0.099	0.075	0.157	0.059
	(0.03)	(0.08)	(0.05)	(0.10)	(0.04)
Centrality	-0.005	-0.053	-0.003	-0.078*	0.015
	(0.01)	(0.05)	(0.02)	(0.04)	(0.02)
Ultimate Ownership	0.002	0.015	0.007	-0.076	-0.024
	(0.01)	(0.05)	(0.02)	(0.05)	(0.02)
Control	-0.012*	-0.029	-0.010	-0.021	-0.006
	(0.01)	(0.02)	(0.01)	(0.02)	(0.01)
VR	-0.010	0.037	-0.015	0.024	0.007
	(0.01)	(0.05)	(0.03)	(0.04)	(0.02)
ROA	0.034	-0.036	0.045	0.023	-0.020
	(0.04)	(0.06)	(0.06)	(0.05)	(0.08)
Log Market-cap	-0.000	0.005*	-0.003	0.000	-0.002
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Log Leverage	0.008	0.017	0.023	0.045	-0.017
	(0.02)	(0.03)	(0.03)	(0.03)	(0.04)
Returns	-0.011**	-0.020***	-0.008	-0.013*	-0.008
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Industry FE	Yes	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes	Yes
Group FE	Yes	Yes	Yes	Yes	Yes
Observations	699	234	459	326	365
R-sq	0.0374	0.0386	0.0386	0.0171	0.0378

2. Distribution and Definition of Removal Fraction

: group-year level variable defined as the fraction of group firms that had loops removed in a given year

<i>p2</i> <i>CAR</i> -0.		Mean	p75	p95	SD	Count
CAR -0	-0.00	0.00				
0.116	0.00	-0.00	0.02	0.08	0.05	1,154
Centrality 0.0	0.00	0.05	0.05	0.32	0.11	1,950
Control 0.0	0 1.00	0.54	1.00	1.00	0.50	1,951
Direct Ownership 0.0	0 0.01	0.12	0.20	0.49	0.19	1,951
Log Leverage 0.0	0.09	0.11	0.17	0.28	0.10	1,941
Log Market-cap 12.	34 13.49	13.60	14.83	16.55	1.67	1,843
Loop 0.0	0.00	0.16	0.00	1.00	0.37	1,951
LTE Expectations 0.0	0.12	0.14	0.18	0.32	0.10	1,156
Net RPT -0.	0.01	0.06	0.11	0.58	0.23	1,569
Position 1.2	2.00	1.96	2.38	3.27	0.81	1,951
0.8	8 1.00	1.18	1.24	2.33	0.64	1,843
Removal Fraction 0.0	0.00	0.02	0.00	0.10	0.06	1,951
Returns -0.	-0.03	0.03	0.18	0.73	0.39	1,790
ROA 0.0	0.04	0.04	0.07	0.16	0.06	1,908
Separation -0.	0.00	0.10	0.22	0.44	0.17	1,951
SUE -0.	03 -0.01	-0.03	-0.00	0.02	0.11	1,180
Ultimate Ownership 0.0	0.17	0.22	0.32	0.57	0.18	1,951
<i>VR</i> 0.0	0.33	0.32	0.49	0.73	0.24	1,951

2. Distribution and Definition of Removal Fraction

(1) Number of business groups with loops in 2011 (KFTC): 13 groups

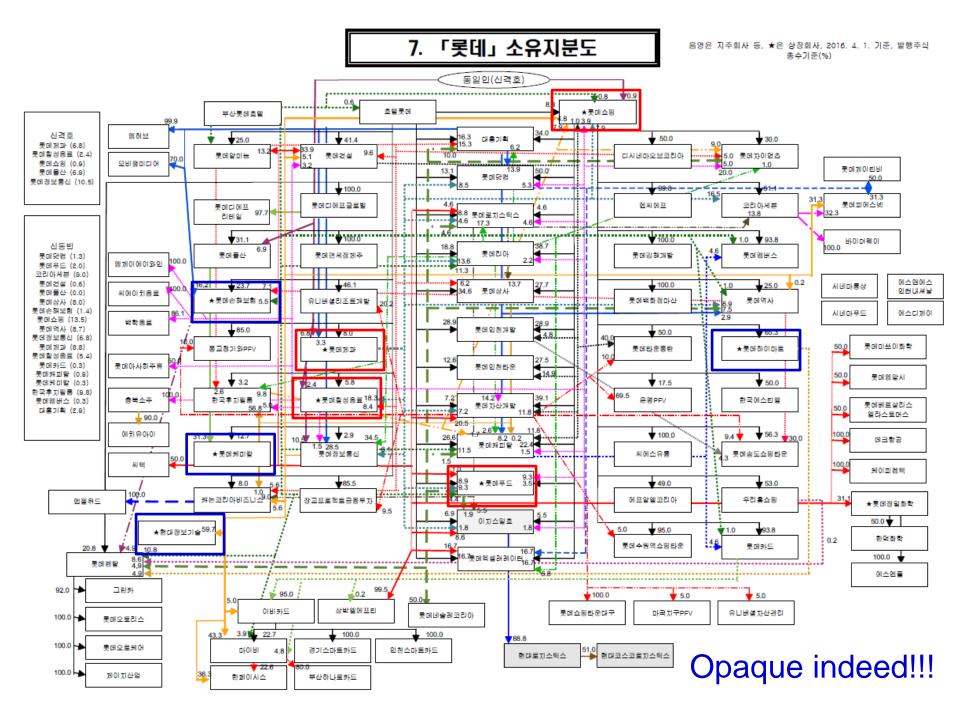
-Samsung, Hyundai Motors, Lotte, Hyundai Heavy Industries, Hanjin Keumho-Asiana, Daelim, Dongbu, Hyundai, Hyundai Department Store, Dongyang, Youngpoong, Taekwang

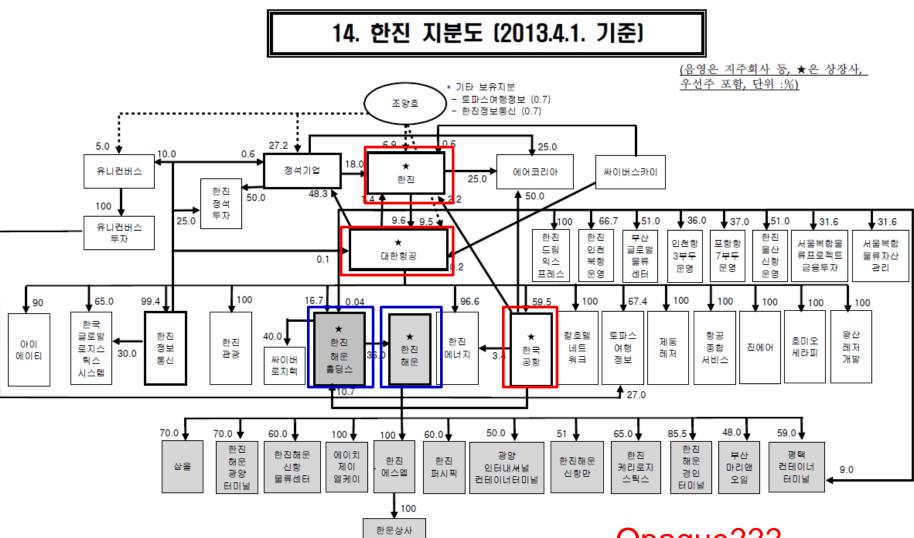
(2) Number of business groups with loops in 2018 (KFTC): 6 groups

-Samsung, Hyundai Motors, Hyundai Heavy Industries, Youngpoong, SM, Hyundai Industrial Development

(3) Number of business groups that removed loops in between: 8 groups

-Lotte, Hanjin, Keumho-Asiana, Daelim, Dongbu, Hyundai, Hyundai Department Store, Taekwang (Dongyang exited KFTC reg)





< 2세 주식소유현황 >

- 조현아 : 한진 (0.03), 대한항공 (0.11), 정석기업 (1.3), 유니컨버스 (25.0), 싸이버스카이 (33.3)

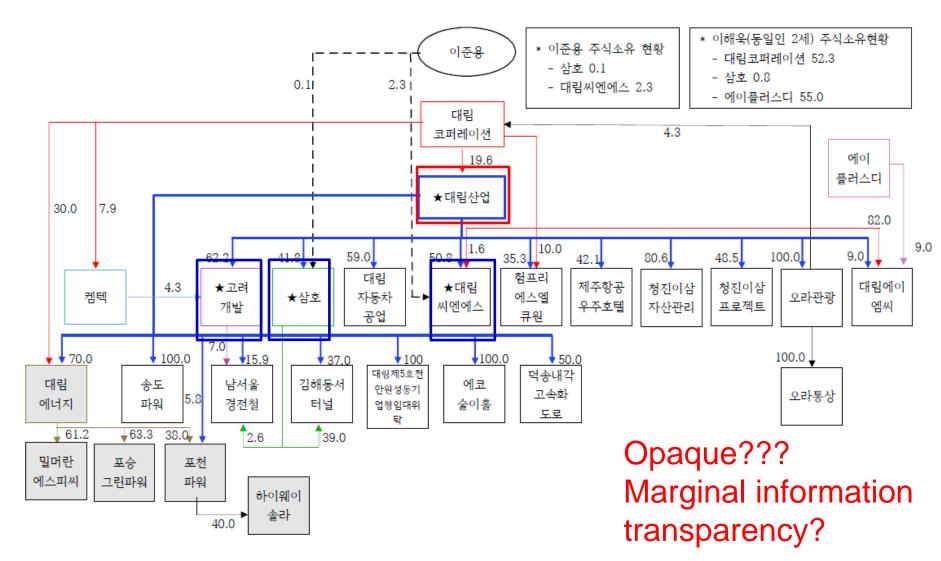
- 조원태 : 한진 (0,03), 대한항공 (0,12), 정석기업 (1,3), 유니컨버스 (35,0), 싸이버스카이 (33,3)

- 조에밀리리 : 한진 (0.03), 대한향공 (0.11), 정석기업 (1.3), 유니컨버스 (25.0), 싸이버스카이 (33.3)

Opaque??? Marginal information transparency?

18. 「대림」 소유지분도

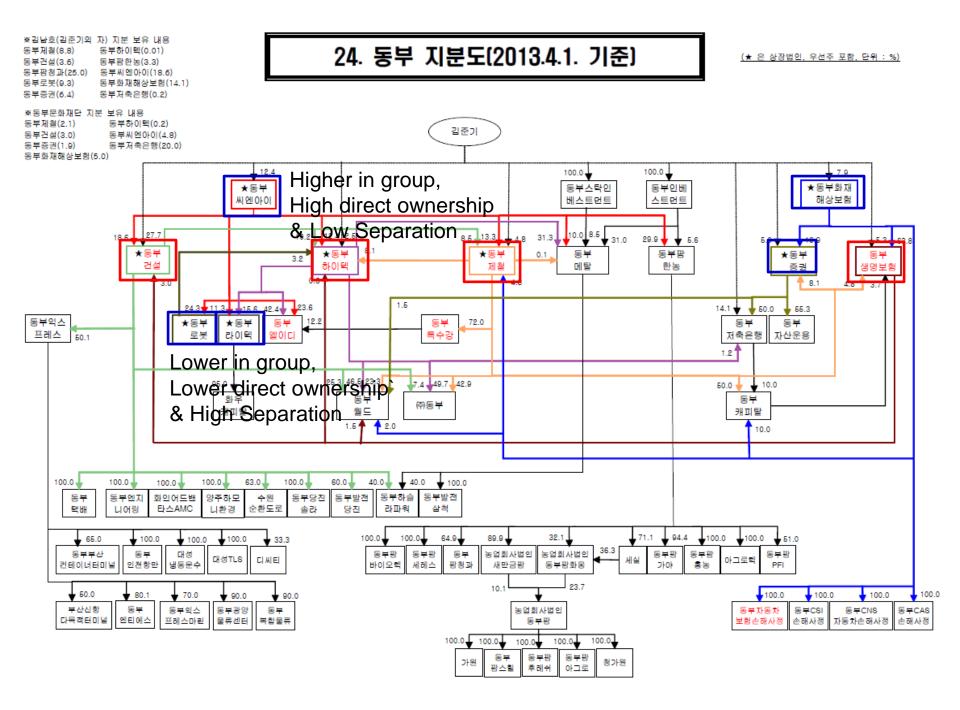
(음영은 지주회사, ★은 상장회사, 2017. 5. 1. 기준, 발행주식총수기준, 단위 : %)



- 3. Cross-sectional Variation in Agency and Uncertainty
 - (1) Separate high vs. low separation or 'wedge'
 - \Rightarrow Proxy for incentive conflicts or agency problem
 - ⇒ OK in the literature, but does 'wedge' really capture degree of agency in the Korean context? That is, would the family exercise low control with 30% VR (voting rights) compared to 90% VR?
 - ⇒ Perhaps just Ultimate Ownership (or Cashflow rights) may be a better measure of agency conflicts, given that control is full for all firms?
 - (2) Within high vs. low

further separate high vs. low position or direct ownership

- \Rightarrow Proxy for uncertainty about severity of incentive conflicts
- \Rightarrow Perhaps trying to tease out too much???
- \Rightarrow Clearly (1) and (2) are correlated, e.g. high position \Leftrightarrow low separation



1. Valuation Consequences for Loop Firms

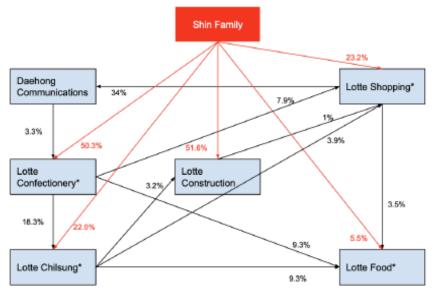


Fig. 2. A partial example of Lotte's ownership structure in 2016

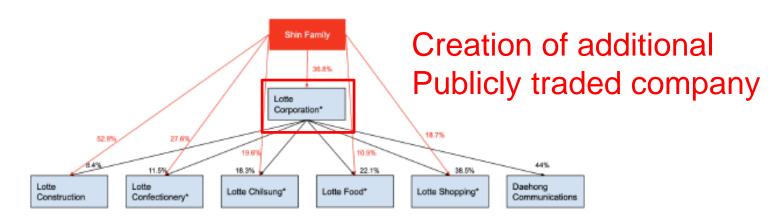
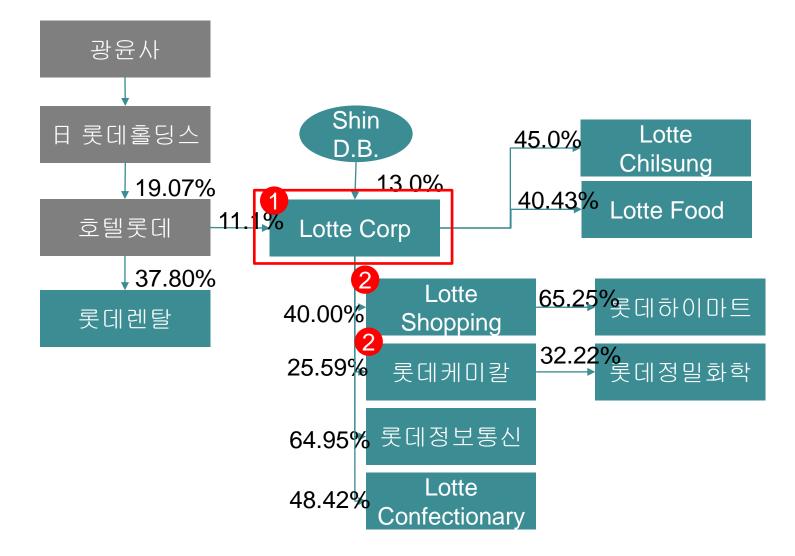


Fig. 4. A partial example of Lotte's ownership structure in 2017

Lottle as of 2021-12-31 Green: Public firms



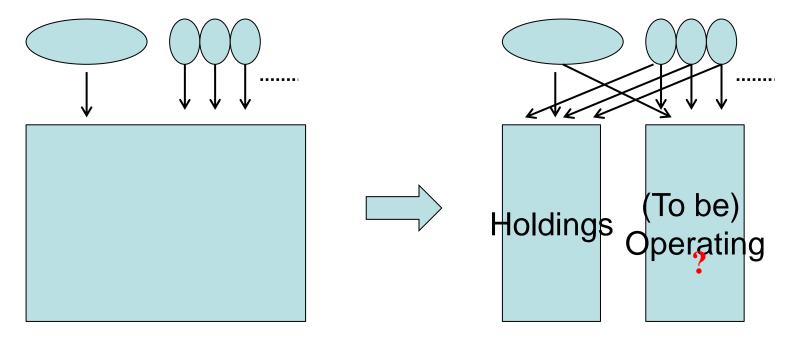
What is the valuation consequences for the additional publicly traded (holding) company?

그룹	Business Group	Holding Company	Level Number of P	ubli	c Holdings 🔄	Value of Public	A/B
	 79 SK그룹2	에스케이케미칼	² Subsidiaries		² Mkt Cap (A) ¹⁰	Subsidiary	0.24
	61 애경그룹	AK홀딩스	1	3	256,340,305,350	Shares (B)	0.25
	143 하이트진로그룹	하이트진로홀딩스	1	1	290,084,562,500	1,100,418,098,009	0.26
	165 새로닉스그룹	새로닉스	1	1	339,784,748,900	1,165,458,081,799	0.29
	136 코오롱그룹	코오롱	1	4	397,732,419,000	1,302,448,312,978	0.31
	20 비비안그룹	광림	1	2	145,773,839,920	456,531,713,748	0.32
	166 원익그룹	원익홀딩스	2	4	393,913,703,100	1,206,205,408,018	0.33
	125 일진그룹	일진다이아몬드	2	1	427,509,547,500	1,173,585,652,224	0.36
	167 심텍그룹	심텍홀딩스	1	1	178,513,111,810	467,778,089,955	0.38
	202 명신산업그룹	엠에스오토텍	1	1	201,934,045,500	522,948,827,558	0.39
	163Samsung	Samsung C&T	1	5	22,052,675,558,000	54,634,469,741,950	0.40
	48 영풍그룹	영풍	2	2	1,247,061,080,000	3,043,701,883,806	0.41
	134 코스맥스그룹	코스맥스비티아이	1	2	130,613,325,600	307,646,090,725	0.42
	121 농심그룹	농심홀딩스	1	2	358,037,388,000	842,826,067,968	0.42
	79 SK그룹2	에스케이디스커버리	1	3	906,201,898,000	2,080,188,714,301	0.44
	151 한일시멘트그룹	한일홀딩스	1	2	409,184,076,000	936,923,943,526	0.44
	140 하림그룹	하림지주	1	4	879,094,126,400	2,012,017,084,324	0.44
	114 LG그룹	LG	1	5	13,166,093,114,100	29,399,398,539,322	0.45
	12 두산그룹	두산	1	2	1,974,598,282,500	4,319,884,163,987	0.46
	75 화승그룹	화승인더스트리	2	2	342,430,800,000	745,116,456,334	0.46
	13 DB그룹	디비아이엔씨	1	1	185,281,192,293	394,272,781,016	0.47
	78 SK그룹1	에스케이스퀘어	2	4	9,167,098,600,800	18,987,106,427,308	0.48
	164 에코프로그룹	에코프로	1	2	2,972,983,328,000	5,654,644,981,586	0.53
	68 티웨이그룹	티웨이홀딩스	2	1	74,993,057,656	139,956,165,517	0.54
	148 한국콜마그룹	한국콜마홀딩스	1	2	364,103,692,400	678,156,545,677	0.54
	153 한화그룹	한화	1	3	2,413,671,267,000	4,434,032,822,202	0.54
	17 한라그룹	한라홀딩스	1	2	509,466,205,500	929,382,789,115	0.55
	40 알루코그룹	케이피티유	1	1	32,232,200,000	57,577,729,608	0.56
	101 세방그룹	세방	1	1	227,842,542,000	404,850,600,000	0.56
	65 KEC그룹	한국전자홀딩스	1	1	98,754,616,960	175,131,237,204	0.56
	52 오리온그룹	오리온홀딩스	1	2	1,017,988,107,500	1,775,055,791,746	0.57
	172 NICE그룹	NICE홀딩스	1	5	613,693,260,000	1,069,962,932,779	0.57
	5 대덕그룹	대덕	1	2	280,271,540,500	486,476,122,591	0.58
	106 아세아그룹	아세아	1	2	276,069,024,000	475,512,605,349	0.58
	21 BGF그룹	비지에프	1	2	509,213,328,120	876,551,960,820	0.58
	149 한세그룹	한세예스24홀딩스	1	3	296,800,000,000	510,694,623,046	0.58
	93 무림그룹	무림페이퍼	2	1	105,063,507,750	180,646,887,971	0.58
	198 아이디스그룹	아이디스홀딩스	1	4	140,212,093,800	240,902,601,923	0.58

그룹 Business Group	Holding Company	Level	Number of Pu	blic Holdings	Value of Public	₽ A/B
1 SNT그룹	SNT홀딩스	1	Subsidiaries	28Mkt Cap (A)	Subsidiary	0.59
113 LX그룹	엘엑스홀딩스	1	3	778,063,038,000	1Shares (B)	0.59
105 CJ그룹	CJ	1	4	2,529,645,726,600	4,205,057,711,882	0.60
45 F&F그룹	F&F홀딩스	1	1	1,341,622,788,100	2,215,786,945,527	0.61
181 초록뱀그룹	초록뱀컴퍼니	1	1	120,744,265,740	195,802,811,537	0.62
124 일동그룹	일동홀딩스	1	1	162,142,620,000	261,221,653,198	0.62
54 웅진그룹	웅진	1	1	136,675,306,800	218,959,497,995	0.62
276 슈프리마그룹	슈프리마에이치큐	1	2	73,931,190,400	116,094,529,537	0.64
150 한솔그룹	한솔홀딩스	1	6	149,970,619,890	234,032,686,565	0.64
47 영원무역그룹	영원무역홀딩스	1	1	659,962,652,800	989,467,990,605	0.67
82 넥센타이어그룹	넥센	1	2	249,514,932,820	368,886,354,515	0.68
126 JW그룹	JW홀딩스	1	3	240,228,548,820	353,153,811,097	0.68
155 크라운해태그룹	크라운해태홀딩스	1	2	127,241,763,790	186,911,135,171	0.68
48 영풍그룹	영풍정밀	1	1	148,680,000,000	211,351,885,412	0.70
10 미원그룹	미원홀딩스	2	3	345,680,000,000	488,563,761,020	0.71
166 원익그룹	원익	1	1	79,322,482,800	110,020,097,276	0.72
92 Lotte	Lotte Corp	1	6	3,262,677,270,700	4,500,187,018,053	0.73
212 휴맥스홀딩스그룹	휴맥스홀딩스	1	1	51,882,212,250	71,470,807,838	0.73
16 이지홀딩스그룹	이지홀딩스	1	6	261,234,838,450	359,860,213,130	0.73
4 종근당그룹	종근당홀딩스	1	3	390,769,158,000	536,128,726,899	0.73
86 동아에스티그룹	동아쏘시오홀딩스	1	2	749,005,708,000	1,023,782,108,415	0.73
288 매일그룹	매일홀딩스	1	1	125,248,115,520	170,536,377,396	0.73
137 다우그룹	다우기술	2	3	1,038,662,183,550	1,402,438,496,197	0.74
108 HDC그룹	에이치디씨	1	3	639,236,414,700	844,784,733,679	0.76
28 세아홀딩스그룹	세아홀딩스	1	2	420,000,000,000	548,904,438,367	0.77
137 다우그룹	다우데이타	1	4	557,265,000,000	714,817,866,264	0.78
218 제이에스아이그룹	아이즈비전	3	2	72,171,152,220	90,551,559,605	0.80
186 덕산그룹	덕산하이메탈	1	1	429,379,668,900	522,661,057,676	0.82
174 녹십자그룹	녹십자홀딩스	1	4	1,293,275,775,000	1,569,926,701,758	0.82
158 현대중공업그룹	한국조선해양	2	3	6,617,286,346,000	7,815,752,090,245	0.85
125 일진그룹	일진홀딩스	1	2	276,345,904,800	321,578,744,185	0.86
78 SK그룹1	SK	1	7	18,945,153,559,500	21,791,889,508,531	0.87
189 삼지전자그룹	삼지전자	1	1	200,717,820,600	226,760,813,337	0.89
132 KG그룹	KG케미칼	1	2	425,689,147,200	471,661,458,284	0.90
69 풍산그룹	풍산홀딩스	1	1	310,203,934,400	336,515,530,224	0.92
20 비비안그룹	쌍방울	2	1	204,559,268,491	220,980,398,934	0.93 16
37 아모레퍼시픽그룹	아모레퍼시픽그룹	1	1	3,788,953,371,000	3,927,238,934,915	0.96
81 금호아시아나그룹	금호건설	1	1	443,270,480,400	447,626,570,754	0.99

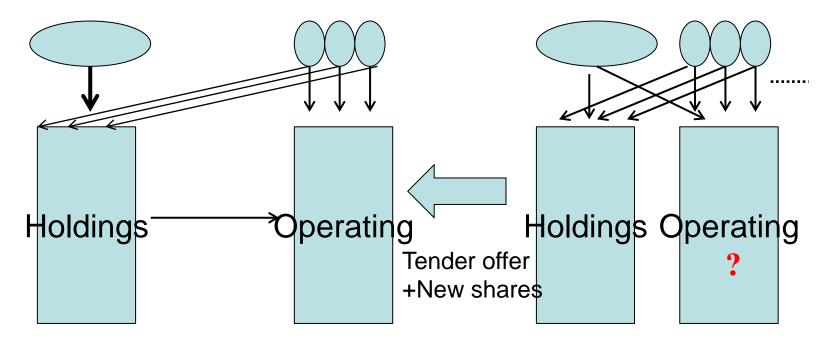
2. How to and Why form a Holding Company Structure?

Stage 1: Spin off



2. How to and Why form a Holding Company Structure?

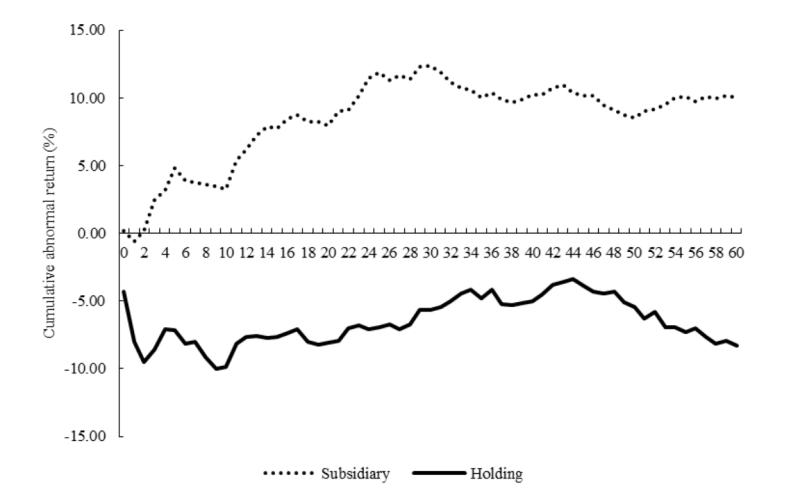
Stage 2: Tender Offer paid by Holding's New Shares



- Most minority shareholders do not tender....
- Family's ownership in Holdings almost doubles.....
- Why do this? To prepare for succession....pay inheritance tax.....

2. How to and Why form a Holding Company Structure?

Cumulative Returns since Re-listing: H vs. S



2. How to and Why form a Holding Company Structure?

Tendering Decisions by Investor Types

		Mean	Median	Min	Max
	Subscription ratio	88.45	79.73	50.77	403.42
Subsidiary	Family tender/family held	80.51	97.55	2.20	100.00
	Affiliated tender/affiliated held	39.90	9.16	0.00	100.00
	Outsider tender/outsider held	7.11	3.17	0.00	31.12

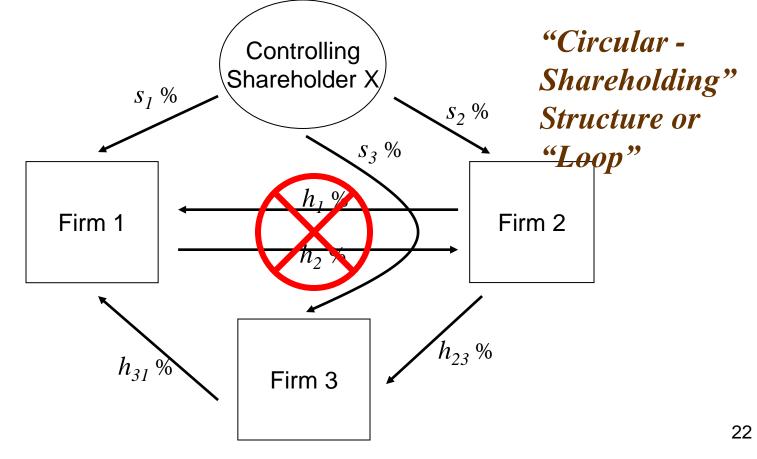
2. How to and Why form a Holding Company Structure?

Changes in Ownership Structure

Panel B: Family ownership change								
e (%)	24.88	24.71	0.99	65.91				
(%) 25%+ 0	48.14	47.31	2.25	89.26				
Increase in number of shares held (%)		273.10	54.60	2,143.88				
e (%)	24.75	24.71	0.99	65.91				
(%)	5.16	0.39	0.00	26.10				
se in number of shares held (%)	-80.99	-99.07	-100.00	30.08				
e (%)	10.90	7.66	0.00	42.09				
After (%)		35.30	17.20	67.09				
se in number of shares held (%)	813.18	205.10	15.53	11,376.84				
	e (%) (%) 25%+ 0 se in number of shares held (%) e (%) se in number of shares held (%) e (%) (%)	$e(\%)$ 24.88 $(\%)$ $25\% + \alpha$ 48.14 se in number of shares held (%) 431.40 $e(\%)$ 24.75 $(\%)$ 5.16 se in number of shares held (%) -80.99 $e(\%)$ 10.90 $(\%)$ 36.63	$e(\%)$ 24.88 24.71 $(\%)$ $25\% + \alpha$ 48.14 47.31 se in number of shares held (%) 431.40 273.10 $e(\%)$ 24.75 24.71 $(\%)$ 5.16 0.39 se in number of shares held (%) -80.99 -99.07 $e(\%)$ 10.90 7.66 $(\%)$ 36.63 35.30	$e(\%)$ 24.88 24.71 0.99 $(\%)$ $25\% + \mathbb{C}$ 48.14 47.31 2.25 se in number of shares held (%) 431.40 273.10 54.60 $e(\%)$ 24.75 24.71 0.99 $(\%)$ 5.16 0.39 0.00 se in number of shares held (%) -80.99 -99.07 -100.00 $e(\%)$ 10.90 7.66 0.00 $(\%)$ 36.63 35.30 17.20				

Other Comments / Questions

- 1. Cross or Reciprocal-shareholdings Regulation
- Banned for Large Business Groups already in 1986, not in 2002
- Loop structure naturally arose as a response to above regulation......



Other Comments / Questions

2. Degree of Family Control

(1) "Family controls 54% of listed group firms"

⇒ Family effectively controls all group firms (by appointing executives etc.)..
 ⇒ This is how the boundaries of groups are defined by KFTC, regardless of ownership percentage....

(2) "Families controlled about 57% of chaebol firms in 2011 and in 2018"

 \Rightarrow Are non-family business group (e.g. POSCO, KT) included in the sample?

Other Comments / Questions

3. Distribution of Separation or "Wedge"

	p25	p50	Mean	p75	p95	SD	Count
CAR	-0.03	-0.00	-0.00	0.02	0.08	0.05	$1,\!154$
Centrality	0.00	0.00	0.05	0.05	0.32	0.11	1,950
Control	0.00	1.00	0.54	1.00	1.00	0.50	1,951
Direct Ownership	0.00	0.01	0.12	0.20	0.49	0.19	1,951
Log Leverage	0.01	0.09	0.11	0.17	0.28	0.10	1,941
Log Market-cap	12.34	13.49	13.60	14.83	16.55	1.67	1,843
Loop	0.00	0.00	0.16	0.00	1.00	0.37	1,951
LTE Expectations	0.08	0.12	0.14	0.18	0.32	0.10	1,156
$Net \ RPT$	-0.04	0.01	0.06	0.11	0.58	0.23	1,569
Position	1.24	2.00	1.96	2.38	3.27	0.81	1,951
Q	0.88	1.00	1.18	1.24	2.33	0.64	1,843
Removal Fraction	0.00	0.00	0.02	0.00	0.10	0.06	1,951
Returns	-0.22	-0.03	0.03	0.18	0.73	0.39	1,790
ROA	0.01	0.04	0.04	0.07	0.16	0.06	1,908
Separation	-0.01	0.00	0.10	0.22	0.44	0.17	1,951
SUE	-0.03	-0.01	-0.03	-0.00	0.02	0.11	1,180
Ultimate Ownership	0.08	0.17	0.22	0.32	0.57	0.18	1,951
VR	0.08	0.33	0.32	0.49	0.73	0.24	1,951

Median Separation too low, given that these are public firms?

Separation = 0 implies (1) CF = VR and (2) position = 1

More than half of the sample (public firms) are directly held by the family?