

Restructuring Small and Medium-sized Enterprises In Korea

K o r e a D e v e l o p m e n t I n s t i t u t e

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1. Summary of SMEs

❑ Descriptive Statistics

➤ About 3 million SMEs

< 10	: 2,671,000 firms
10~49	: 242,000 firms
> 50	: 85,000 firms

➤ Average no. of employees is too small

Japan	: 7.2 persons
Taiwan	: 6.7 persons
Korea	: 4.0 persons

➤ Problems of small size : low innovation capacities, hard rehabilitation



Distribution of Enterprises: by Firm Size and Industry (as of 2003)

(unit: thousand firms, %)

	Total	SMEs				Large Company
		Micro Business	Small Business	Medium Business	Subtotal	
All Industries	3,004,105 (100.0)	2,670,850 (88.9)	2,913,850 (97.0)	85,447 (2.8)	2,999,297 (99.8)	4,808 (0.2)
Manufacturing	325,819 (100.0)	266,177 (81.7)	316,468 (97.1)	8,578 (2.6)	325,046 (99.8)	773 (0.2)
Construction	82,182 (100.0)	65,340 (97.5)	80,595 (98.1)	1,488 (1.8)	82,083 (99.9)	99 (0.1)
Wholesale & Retail	889,661 (100.0)	806,176 (90.6)	863,037 (97.0)	25,834 (2.9)	888,871 (99.9)	790 (0.1)
Accommodation & Foodservices	647,411 (100.0)	587,598 (90.8)	635,874 (98.2)	11,150 (1.7)	647,024 (99.9)	387 (0.1)
Business Services	81,442 (100.0)	49,451 (60.7)	68,072 (83.6)	12,387 (15.2)	80,459 (98.8)	983 (1.2)
Education	97,019 (100.0)	76,940 (79.3)	90,373 (93.1)	6,219 (6.4)	96,592 (99.6)	427 (0.4)



2. Polarization

☐ SMEs vs. Large Enterprises

- SMEs are getting worse in various measures

☐ Among SMEs

- The gap between good and performers get widened

☐ Persistence of Polarization

- The good and bad performances are very persistent relative to the middle performers



Comparison of Financial Ratios between LEs and SMEs

(unit: %)

		1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Sales Growth	Large	17.81	11.67	11.23	18.96	22.25	11.27	12.92	1.97	6.58	16.68	0.84	7.21	6.55
	SME	16.79	6.31	7.13	16.47	15.9	7.82	7.02	-2.01	10.79	12.45	3.38	10.21	5.39
Interest Costs / Sales	Large	6.12	6.79	6.51	6.17	6.1	6.34	7	10.45	8.49	5.62	4.98	2.95	1.9
	SME	4.44	4.78	4.61	4.34	4.19	4.58	5.03	5.56	3.94	2.94	2.58	1.93	1.81
Salary / Sales	Large	—	—	—	—	—	—	—	8.62	8.72	8.21	8.43	8.85	8.89
	SME	—	—	—	—	—	—	—	12.3	11.71	12.48	12.89	12.28	12.67
Raw material Costs / Sales	Large	—	—	—	—	—	—	—	50.29	49.43	51.05	50.92	49.99	53.28
	SME	—	—	—	—	—	—	—	47.35	48.08	47.86	47.51	49.6	47.6
R&D / Sales	Large	—	—	—	—	—	—	—	2.02	1.77	1.47	1.52	1.72	2.02
	SME	—	—	—	—	—	—	—	0.62	0.47	0.71	0.99	0.85	0.78
Operating Profits / Sales	Large	7.2	7.44	7.95	8.62	9.75	7.31	9.72	6.53	7.38	8.21	6.03	7.54	8.16
	SME	4.73	4.1	4.97	5.26	4.61	4.62	4.98	5.15	5.23	5.83	4.54	5.29	4.64
Ordinary Profits / Sales	Large	1.84	1.86	1.87	3.06	4.4	0.98	-0.67	-2.91	1.01	0.26	-0.58	5.42	5.96
	SME	1.47	0.47	1.32	1.94	1.49	0.99	0.4	0.55	2.92	3.28	2.16	3.39	2.49
Net Profits / Sales	Large	1.55	1.25	1.24	2.2	3.46	0.51	-1.26	-6.08	-1.26	-4.34	-0.7	8.37	4.84
	SME	0.9	-0.05	0.82	1.4	1.18	0.59	-0.52	-0.45	2.37	2.6	1.37	2.48	2.08



Comparison of Financial Ratios between LEs and SMEs (*continued*)

(unit: %)

		1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Debt-to-Equity Ratio	Large	290.6	302.5	273.5	282.9	268.3	301.6	390.0	295.4	208.9	224.6	201.6	128.9	113.5
	SME	415.5	418.4	388.1	394.2	380.6	387.4	418.4	334.4	232.4	179.7	144.7	152.1	147.6
Current Ratio	Large	96.1	93.06	94.97	95.51	96.23	92.25	90.86	86.1	84.95	70.96	84.9	98.47	105.5
	SME	94.5	91.55	91.95	92	92.88	90.88	94.24	100.49	107.63	114.57	123.96	119.29	116.57
Fixed Asset Ratio	Large	216.4	224.63	214.84	217.41	210.2	237.65	268.23	251.23	214.53	224.7	213.11	154.61	137.47
	SME	235.7	244.39	234.69	233.16	224.36	234.01	235.95	206.47	164.24	140.71	120.9	120.91	119.35
Borrowing-to-Asset Ratio	Large	45	47.8	47.67	45.72	45.98	49.31	56.45	52.92	44.46	43.64	41.96	31.2	25.85
	SME	43.1	44.23	43.69	40.25	39.98	41.49	46.76	43.01	37.82	35.04	34.55	32.89	33.46
Average Borrowing Rate	Large	12.68	12.18	10.99	11.23	11.53	10.95	10.26	13.45	11.93	10.83	9.89	7.77	6.97
	SME	14.25	13.13	11.86	12.01	12.3	12.24	11.8	13.8	10.22	9.4	8.07	7.32	6.57
Interest Coverage Ratio	Large	—	—	—	—	—	—	—	62.2	86.88	146.05	121.07	255.42	428.83
	SME	—	—	—	—	—	—	—	3.92	2.83	2.04	175.56	273.7	255.93
Return on Equity	Large	5.42	4.33	4.04	7.28	11.77	1.69	-4.52	-19.27	-3.18	-11.64	-1.99	21.08	10.8
	SME	6.15	-0.33	5	8.88	7.44	3.54	-3.05	-2.45	10.15	9.41	3.99	8.32	6.54
Equity Growth Rate	Large	16.73	9.78	19.26	14.12	23.18	5.49	-0.06	28.61	36.3	-12.53	3.46	27.3	11.47
	SME	11.73	1.71	10.94	14.12	12.86	7.02	5.21	16.64	39.31	23.03	9.71	11.8	9.18



Return on Equity of the Externally Audited SMEs

(unit: %)

Decile \ Year	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
10	51.7	51.1	60.6	60.9	56.7	63.5	58.3	69.3	89.4	74.6	69.1	73.3	78.4	74.4
9	28.5	27.7	29.1	30.2	29.2	29.4	27.8	31.0	36.6	32.7	32.8	34.9	31.1	34.2
8	21.0	20.3	21.0	22.7	20.7	20.9	18.8	20.8	25.3	22.4	22.6	23.9	21.9	23.4
7	16.4	15.6	16.1	17.5	16.1	15.2	13.7	14.6	18.9	16.2	16.2	17.5	16.3	17.7
6	12.6	11.8	12.2	13.7	12.1	11.3	9.6	10.3	14.6	11.6	11.7	13.0	11.9	13.0
5	9.5	8.2	8.8	10.2	8.9	8.1	6.1	6.7	10.9	8.1	8.1	9.2	8.4	9.3
4	6.1	4.9	5.7	6.9	5.5	4.9	3.5	3.8	7.5	4.6	4.5	5.5	5.2	5.9
5.3	2.5	1.9	2.5	3.1	1.8	1.9	0.4	1.3	3.8	1.6	1.7	3.0	2.1	2.8
2	-2.5	-6.5	-2.0	-1.2	-5.3	-7.2	-15.2	-8.3	-0.2	-5.8	-7.0	-5.4	-5.4	-3.5
1	-52.8	-61.6	-59.3	-35.1	-59.2	-65.8	-104.7	-86.7	-64.8	-62.5	-67.5	-87.7	-71.8	-62.0
Mean	12.1	10.4	12.1	13.1	10.4	10.0	7.3	9.5	7.5	11.7	11.0	12.3	13.5	14.4
Median	11.1	10.0	10.5	12.0	10.4	9.7	7.9	8.4	12.6	9.7	9.9	11.0	10.2	11.0
No. of normal firms (A)	2,444	2,766	3,114	3,497	3,547	3,736	4,164	4,329	6,036	6,656	7,114	7,511	6,959	7,829
No. of firms w/ capital depleted (B)	228	285	309	346	399	424	572	526	628	675	861	1,039	1,002	1,301
No. of sample firms (A+B)	2,672	3,051	3,423	3,843	3,946	4,160	4,736	4,855	6,664	7,331	7,975	8,550	7,961	9,130
Ratio (=B/(A+B))	8.5	9.3	9.0	9.0	10.1	10.2	12.1	10.8	9.4	9.2	10.8	12.2	12.6	14.2



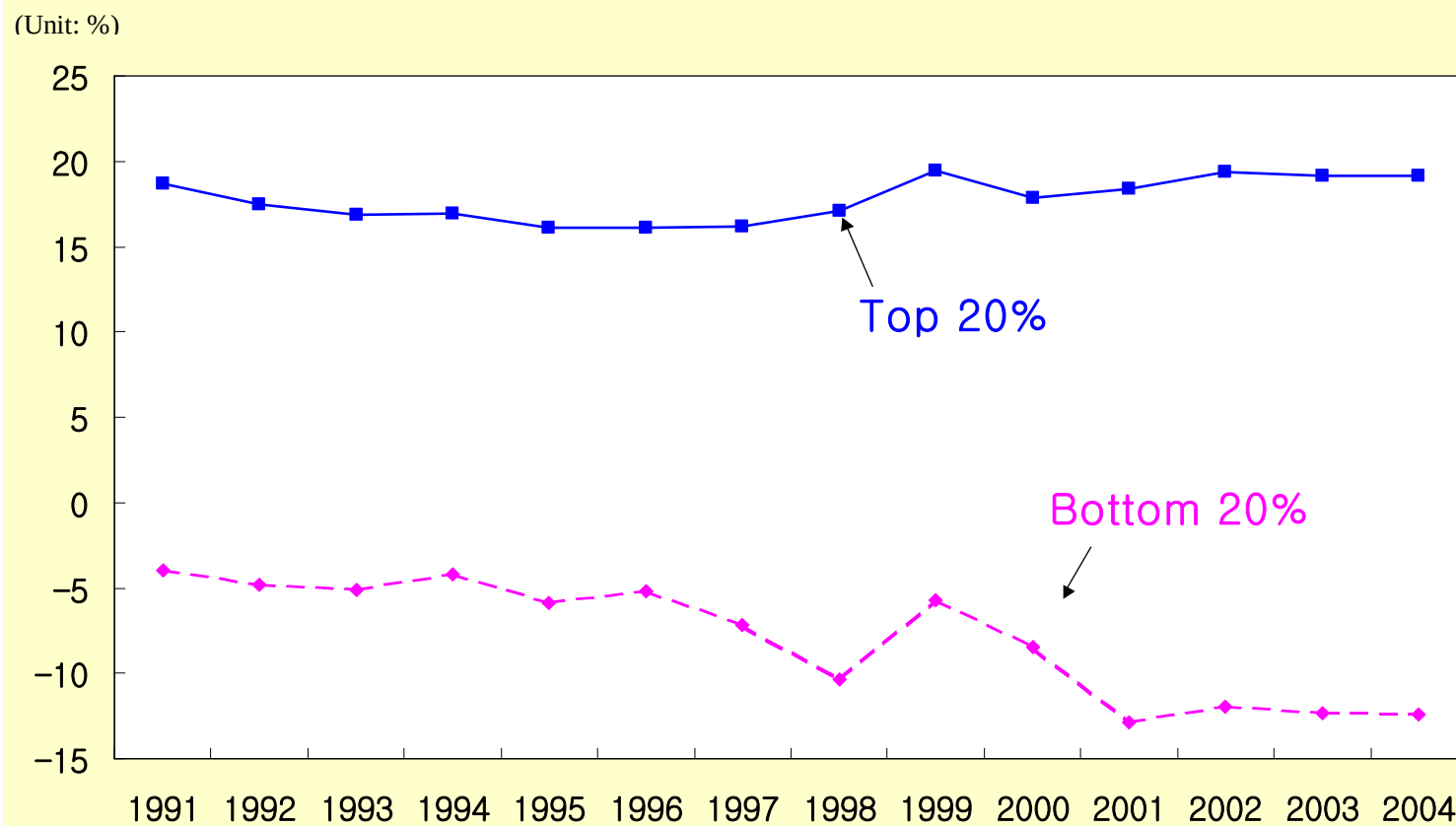
Debt-Equity Ratio of the Externally Audited SMEs

(unit: %)

Decile \ Year	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
1	46.9	41.7	42.8	43.5	45.7	44.7	42.3	32.9	28.5	22.2	20.8	20.7	18.3	18.1
2	105.1	104.9	103.1	105.2	109.1	106.7	109.9	84.9	67.7	55.7	55.2	57.6	49.8	48.5
3	157.4	159.9	156.0	161.2	164.7	172.0	171.5	129.3	108.8	92.4	90.4	95.6	83.2	81.4
4	219.2	221.6	216.6	224.0	230.9	231.7	238.2	178.7	151.6	131.2	128.9	138.2	124.3	122.7
5	295.5	290.8	283.1	295.0	303.2	303.0	310.5	228.5	199.1	178.3	174.4	190.5	176.0	172.1
6	378.4	372.2	365.9	380.2	390.2	387.9	399.5	294.8	257.5	232.8	230.2	256.3	235.0	229.5
7	479.4	468.5	471.3	489.0	504.7	494.7	521.9	376.9	325.4	302.0	304.4	340.7	313.3	305.4
8	639.8	605.8	613.2	636.7	664.8	642.1	694.7	498.7	433.3	412.2	415.4	472.2	438.2	426.3
9	979.2	881.2	886.6	924.4	978.4	960.5	1068.2	780.1	650.6	640.8	650.0	796.5	704.3	711.8
10	2,873.8	2,334.5	2,610.5	2,434.7	2,465.3	2,773.9	3,063.3	2,440.4	1,760.6	1,823.5	1,979.6	2,823.6	2,249.7	2,427.8
Mean	316.7	311.3	298.0	308.9	324.1	328.5	332.0	250.8	185.9	186.1	170.2	158.6	164.0	163.4
Median	333.4	332.8	321.6	335.5	347.3	344.1	350.2	259.2	228.4	204.5	201.8	222.3	203.3	199.9
No. of normal firms (A)	2,457	2,776	3,123	3,531	3,651	4,034	4,536	4,441	6,039	6,724	7,254	7,554	6,959	7,830
No. of firms w/ capital depleted (B)	229	286	311	350	409	449	602	539	629	681	869	1,039	1,002	1,301
No. of sample firms (A+B)	2,686	3,062	3,434	3,881	4,060	4,483	5,138	4,980	6,668	7,405	8,123	8,593	7,961	9,131
Ratio (=B/(A+B))	9	9	9	9	10	10	12	11	9	9	11	12	13	14

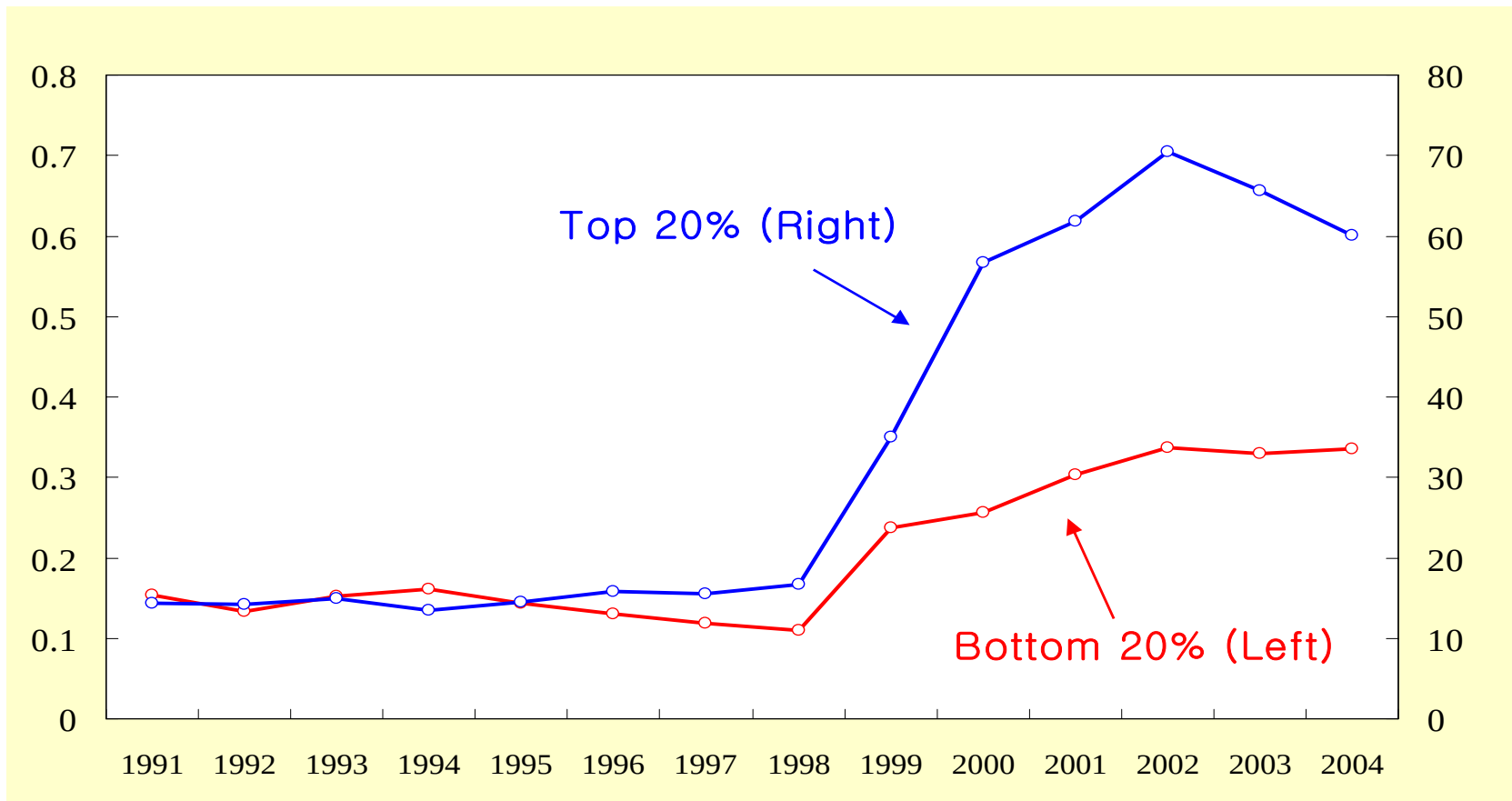


Operating Profits to Sales of the Externally Audited SMEs





Interest Coverage Ratio of the Externally Audited SMEs





Decile Transition Matrix of Interest Coverage Ratio: One-year ahead

(unit: %)

1 year later Base year	Dec. 1	Dec. 2	Dec. 3	Dec. 4	Dec. 5	Dec. 6	Dec. 7	Dec. 8	Dec. 9	Dec. 10	Loss(-)
Dec. 1	60.0	18.0	16.1	3.5	1.9	1.3	0.9	0.4	0.5	0.1	7.3
Dec. 2	19.4	37.0	17.7	8.3	3.7	2.4	1.5	1.1	0.8	0.9	7.1
Dec. 3	5.7	19.7	27.4	16.7	9.1	5.2	3.4	2.0	1.2	1.1	8.4
Dec. 4	1.6	8.7	18.8	21.8	15.3	9.8	5.9	3.7	2.6	1.6	10.1
Dec. 5	1.1	3.9	9.5	17.4	19.8	15.0	9.8	6.2	4.5	2.5	10.3
Dec. 6	0.7	2.0	5.0	9.5	16.2	19.5	14.2	9.6	6.2	4.1	13.0
Dec. 7	0.3	1.2	2.8	5.6	10.1	15.8	19.5	15.4	8.6	6.1	14.6
Dec. 8	0.3	0.8	1.3	3.3	6.2	9.8	15.1	20.3	16.2	9.7	17.0
Dec. 9	0.2	0.3	1.2	2.0	3.0	5.7	10.6	16.1	23.4	16.6	20.8
Dec. 10	0.1	0.4	0.8	1.5	2.0	3.8	5.5	9.6	18.0	29.6	28.6
Loss(-)	1.8	2.3	2.7	3.3	4.1	4.0	4.7	5.8	6.9	10.2	54.1



Decile Transition Matrix of Interest Coverage Ratio: Three-year ahead

(unit: %)

3 year later Base year	Dec. 1	Dec. 2	Dec. 3	Dec. 4	Dec. 5	Dec. 6	Dec. 7	Dec. 8	Dec. 9	Dec. 10	Loss(-)
Dec. 1	41.1	16.8	9.8	6.9	4.4	3.6	2.2	1.9	1.6	1.5	10.3
Dec. 2	20.4	21.0	14.4	9.8	7.2	4.4	4.1	3.0	2.0	2.0	11.5
Dec. 3	9.9	15.3	16.4	12.3	9.7	7.0	5.6	3.9	2.9	2.9	13.9
Dec. 4	5.4	10.6	11.9	13.9	10.7	8.7	7.1	6.2	5.2	4.2	16.0
Dec. 5	3.7	7.6	10.8	11.7	10.8	11.0	9.5	7.9	6.1	5.1	15.8
Dec. 6	2.1	5.3	7.7	9.7	11.8	12.3	10.6	10.0	9.3	6.5	14.9
Dec. 7	1.7	3.2	5.7	7.4	9.5	11.4	11.8	12.4	10.8	9.0	17.1
Dec. 8	1.0	2.5	4.3	6.2	7.8	10.3	12.0	14.0	12.1	12.3	17.6
Dec. 9	0.4	1.9	3.3	3.8	5.6	9.0	10.2	13.2	17.2	15.5	19.9
Dec. 10	0.5	1.6	2.1	3.9	5.1	6.1	8.7	11.1	15.6	21.0	24.3
Loss(-)	2.9	3.8	4.4	5.1	5.8	6.5	6.6	7.5	8.2	10.4	38.8



3. Causes of SME Distress

❑ Direct Causes for Distress

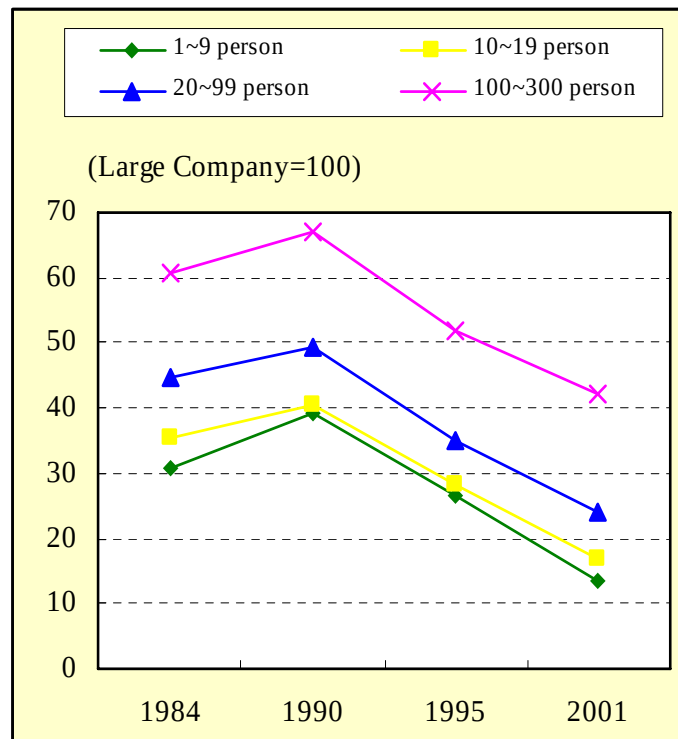
- **Declining Sales**
- **Poor collection of trade receivables**
- **Counter-party defaults**

❑ Fundamental Causes for Distress

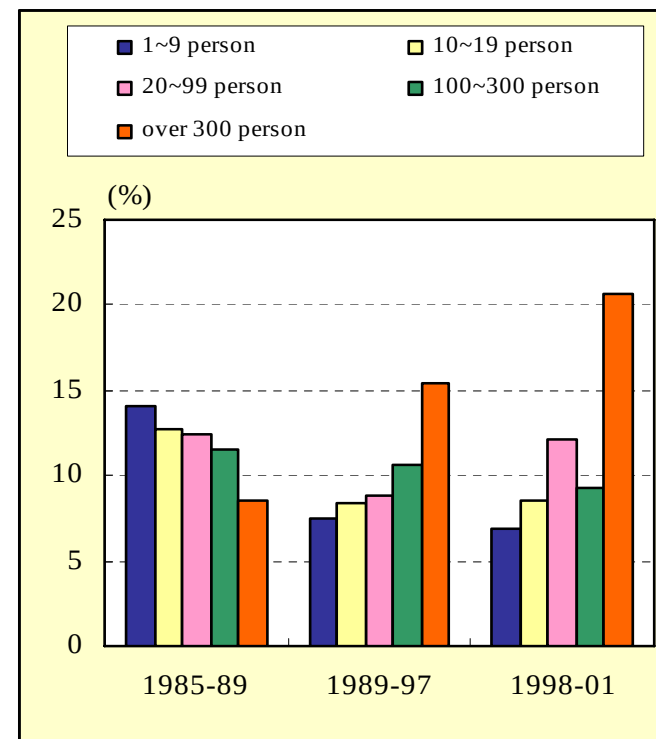
- **Lack of risk management expertise and absence of its tools**
- **Excessive supply of government financial assistances**
- **Dwindling productivity and profitability**



Labor Productivity and Its Annual Growth Rate: by Firm Size



(Labor Productivity)



(Average Annual Labor Productivity Growth Rate)

Source: Korea Development Institute (2003)



4. Restructuring Distressed SMEs

- ❑ Differences in restructuring large companies and SMEs
 - Little intangible assets
 - Weak and fragile sales network
 - Deficient management expertise
- ❑ Size of firms to determine the methodology
 - Large : market-led restructuring (e.g.) CRC, CRV, CRF, PEF
 - Medium : bank-led workouts
 - Small : debt relief, collection, liquidation
- ❑ Key Success Factors of SME restructuring
 - Early and confidential restructuring before getting seriously distressed

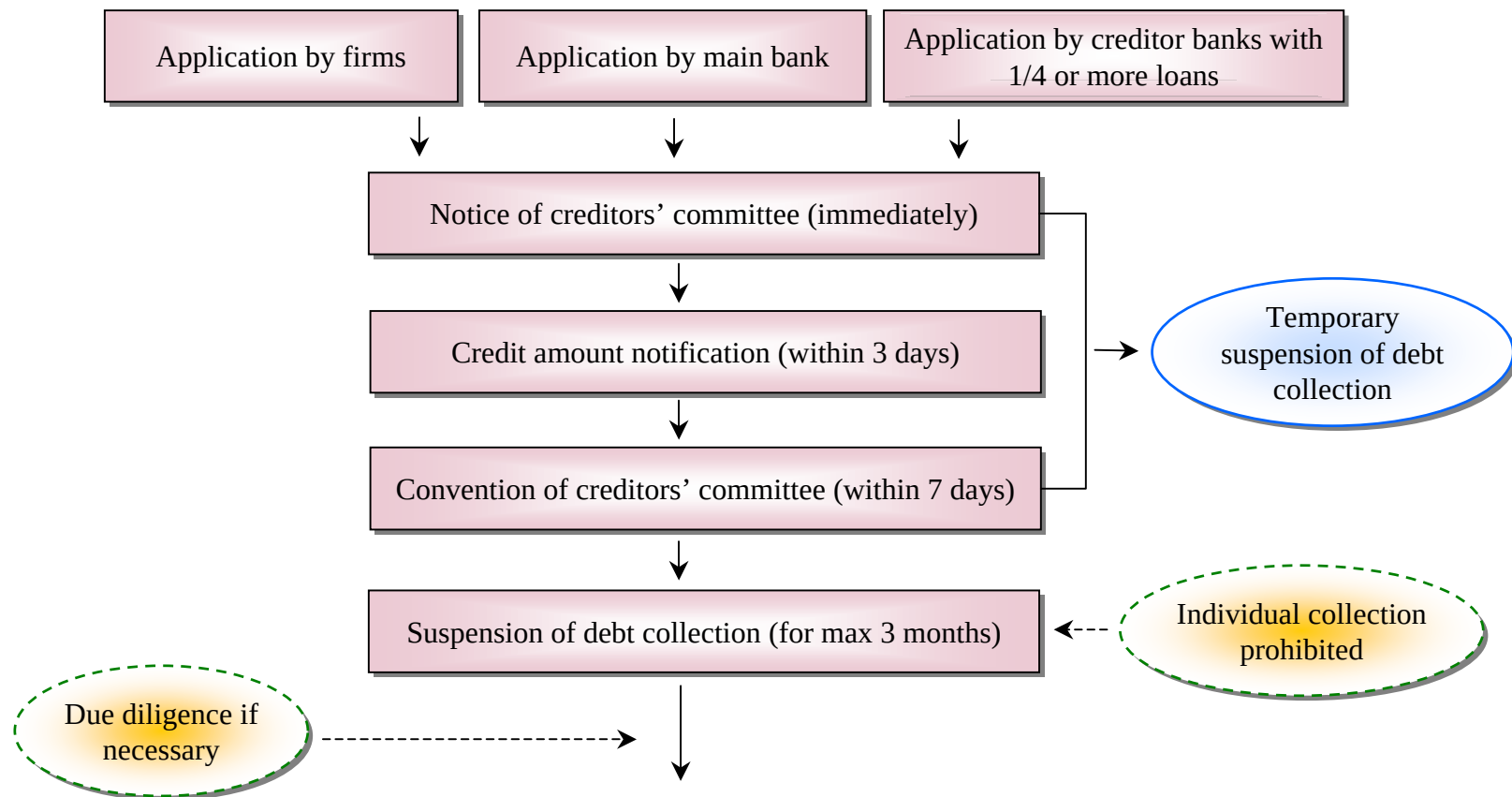


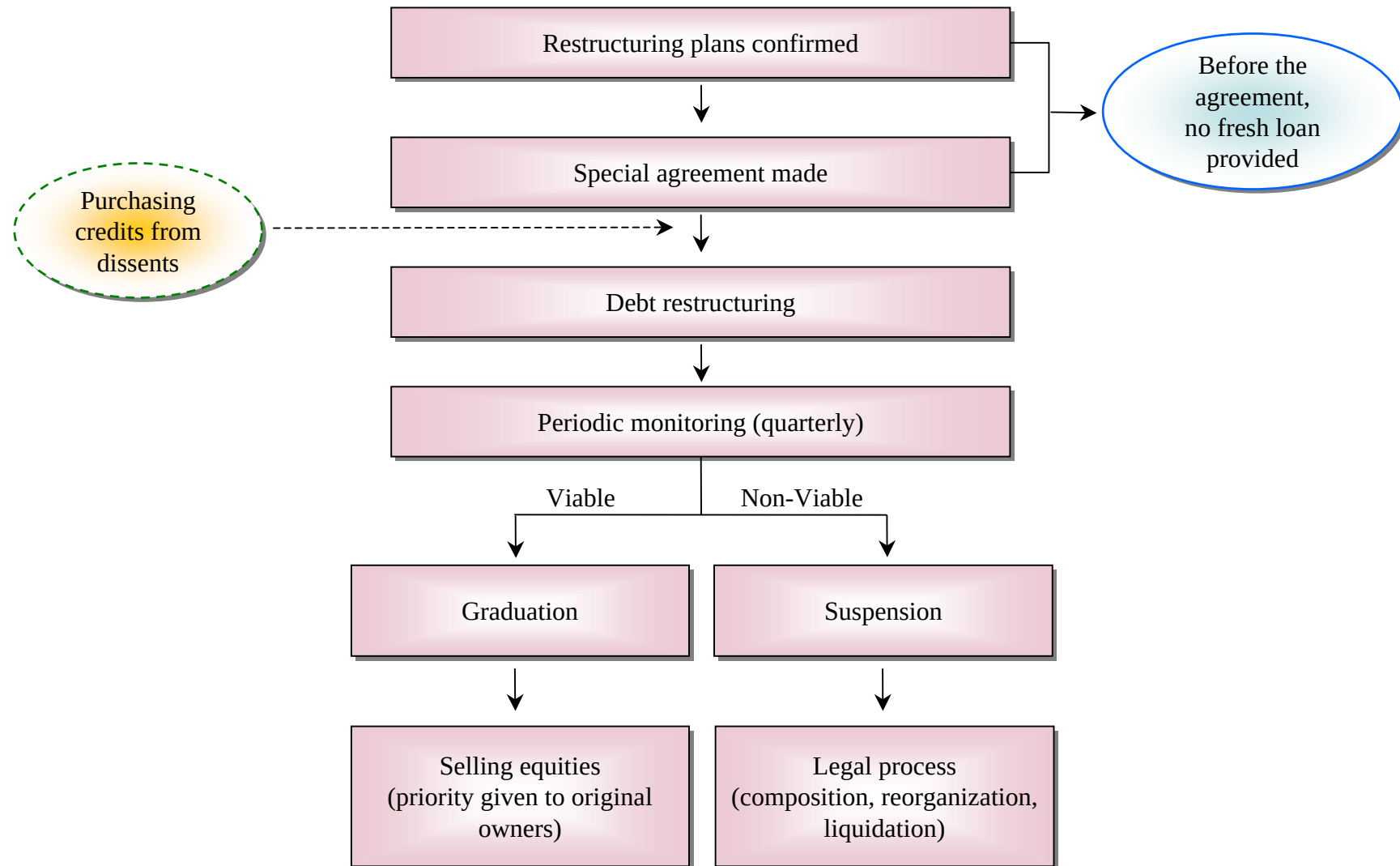
❑ Main Features of SME restructuring

- Started on June 29, 2001 but actively used from the second half of 2004
- Based on private agreement by financial institutions (FIs)
- 22 Participating FIs: Banks (16+3), **Guarantee Funds** (3)
- Similar to restructuring under Corporate Restructuring Promotion Act
- Shortened the processes
- Provided with the **initial owners the priority to buy back converted equities**
- In-court procedures initiated if not successful



Flowchart of the Collaborative SME Corporate Workouts







Summary of SME Corporate Workouts (as of March in 2006)

● SMEs under Workouts (as of March in 2006)

(unit: no. of firms)

	Graduation	Suspension	In Progress	Total
Collaborative Workout	1	13	23	37
Internal Workout	796	527	1,797	3,120
Total	797	540	1,820	3,157

● Debt Restructuring under Workouts (as of September in 2005)

(unit: 100 million Won)

	Maturity Extension	Interest Reduction	Fresh Loan	Others	Total
Collaborative Workout	2,565	1,038	15	120	3,738
Internal Workout	36,824	3,287	3,597	331	44,039
Total	39,389	4,325	3,612	451	47,777

Source: Financial Supervisory Commission



5. Issues and Challenges for SME Restructuring

(1) Banks and Bankers' Incentives

❑ Current Problem:

- Presumably large distresses but little emerged yet
- Financial pyramiding caused by tension between headquarter and branches
- Little ex post losses even after SME default

❑ Solutions:

- Active Roles of Financial Supervisory Services (FSS)

Financial Health at the Commencement of Workout

		Financial Health Measure				Total
		1st	2nd	3rd	4th	
Collaborative Workout	Audited	2	4	1	15	22
	Non-audited	-	-	-	1	1
Internal Workout	Audited	16	22	11	15	64
	Non-audited	20	8	4	4	36
Total		38	34	16	35	123

4th : Liability > Asset

3rd : ICR < 1 for 3 years & Borrowing/Asset > 50%

2nd : [ICR < 1 for 2 years & Borrowing/Asset > 40%] or [Debt/Equity > 500%]

1st : Rest of the firms



(unit: %)

		Collaborative Workouts		Internal Workouts	
		Audited(22)	Non-A(1)	Audited(64)	Non-A(36)
Sales Growth	2002	17.80	589.23	-6.40	40.24
	2003	-11.69	308.18	-13.94	27.58
	2004	-24.90	96.10	3.18	29.78
Operating Profits/ Sales	2001	1.79	1.79	2.20	-4.13
	2002	0.50	2.25	0.82	0.35
	2003	-2.72	2.91	-2.77	0.51
	2004	-20.35	-50.55	1.18	-1.09
Debt-Equity Ratio	2001	408.5	217.1	244.8	289.0
	2002	513.1	179.6	323.3	306.0
	2003	1043.1	327.4	550.3	447.6
	2004	Cap depleted	Cap depleted	559.1	782.4
Interest Coverage Ratio	2001	34.2	252.1	57.7	-147.3
	2002	12.5	430.8	20.8	14.5
	2003	-51.8	125.7	-65.1	15.4
	2004	-238.6	-656.0	31.9	-31.1



(2) Institutional Constraints

❑ Current Problem:

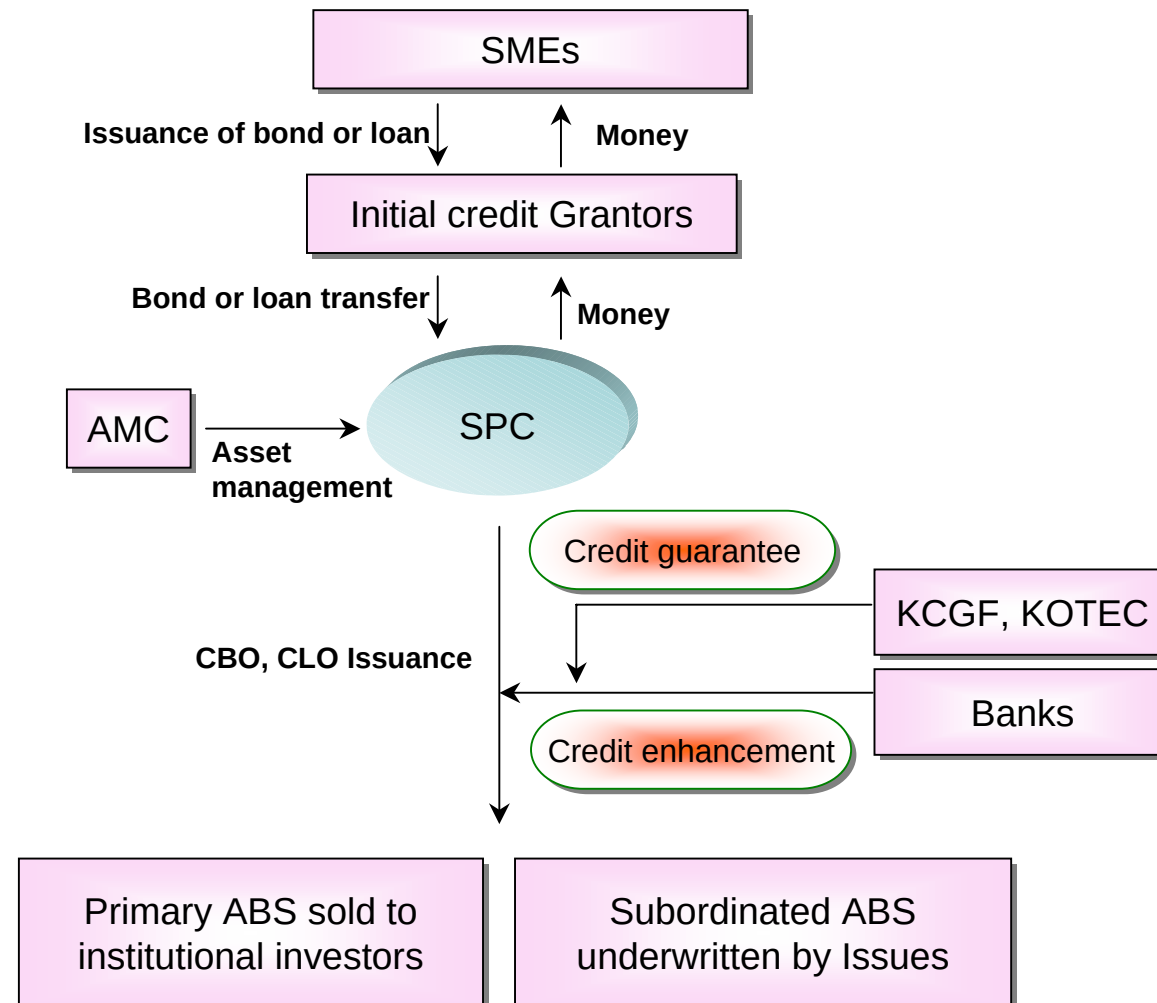
- **Legal straitjackets on KCGF and KOTEC in debt restructuring**
- **Issuance of P-CBO and P-CLO**
- **Large outside creditors of the workouts agreement**

❑ Solutions:

- **Amendments to Acts on KCGF and KOTEC**
- **Inserting restructuring clauses in the contract of securitized assets**
- **Including more agencies**



Structure of P-CBO and P-CLO for SMEs





(3) Imperfections of Corporate Restructuring Markets

❑ Current Problem:

- **Owners of distressed SMEs refusing to being restructured**
- **Undersupply of restructuring services**
- **Social stigma on defaulters and little second chance**

❑ Solutions:

- **Consulting services to distressed firms at an early stage**
- **Providing bona fide defaulters with opportunities to **restart business****
- **Enhancing dynamic consistency by connecting the programs**