

Table 1 Numbers of Employees by Industry

(Unit : 1,000 Persons)

Industry		1907		1919		1922		1931		1937	
Primary Industry Total		15,448	61.6%	14,644	54.7%	14,708	53.3%	14,860	49.6%	14,779	46.0%
Agriculture & Forestry		14,761	58.9%	14,115	52.7%	14,159	51.3%	14,278	47.7%	14,204	44.2%
Manufacturing, Mining & Construction Total		4,068	16.2%	5,586	20.9%	5,893	21.3%	6,087	20.3%	7,437	23.1%
Mining		233	0.9%	424	1.6%	260	0.9%	251	0.8%	412	1.3%
Construction		600	2.4%	780	2.9%	836	3.0%	985	3.3%	994	3.1%
Manufacturing		3,199	12.8%	4,294	16.0%	4,691	17.0%	4,739	15.8%	5,905	18.4%
	Textile Industry	884	3.5%	1,339	5.0%	1,438	5.2%	1,384	4.6%	1,434	4.5%
	Wood & Bamboo Products	540	2.2%	510	1.9%	652	2.4%	648	2.2%	701	2.2%
	Food & Beverage Industry	448	1.8%	493	1.8%	603	2.2%	599	2.0%	491	1.5%
	Clothing Industry	420	1.7%	465	1.7%	493	1.8%	482	1.6%	511	1.6%
	Metal Industry	282	1.1%	444	1.7%	461	1.7%	390	1.3%	538	1.7%
	Ceramic, Clay & Stone Manufacturing	164	0.7%	237	0.9%	179	0.6%	167	0.6%	234	0.7%
	Machinery & Tool Industry	142	0.6%	350	1.3%	399	1.4%	524	1.7%	1,268	3.9%
	Chemical Industry	109	0.4%	125	0.5%	174	0.6%	198	0.7%	296	0.9%
	Paper & Paper Products	99	0.4%	104	0.4%	125	0.5%	137	0.5%	164	0.5%
	Printing & Bookbinding Industry	50	0.2%	78	0.3%	100	0.4%	136	0.5%	140	0.4%
	Leather, Bone & Feather Products	31	0.1%	36	0.1%	29	0.1%	29	0.1%	53	0.2%
	<u>Textiles Total</u>	1,304	5.2%	1,804	6.7%	1,930	7.0%	1,866	6.2%	1,945	6.0%
	Heavy & Chemical Industries	632	2.5%	1,024	3.8%	1,158	4.2%	1,249	4.2%	2,266	7.0%
Gas, Electricity and Water Supply		36	0.1%	88	0.3%	108	0.4%	112	0.4%	126	0.4%
Tertiary Industry Total		5,557	22.2%	6,549	24.5%	7,014	25.4%	9,006	30.1%	9,940	30.9%
Commerce		2,761	11.0%	3,215	12.0%	2,775	10.0%	3,709	12.4%	3,882	12.1%
Finance & Insurance		n.a.	n.a.	n.a.	n.a.	158	0.6%	188	0.6%	217	0.7%
Transportation & Communication		759	3.0%	962	3.6%	1,059	3.8%	1,156	3.9%	1,262	3.9%
Domestic Service		823	3.3%	880	3.3%	665	2.4%	794	2.7%	859	2.7%
Total Employees		25,073	100.0%	26,780	100.0%	27,616	100.0%	29,952	100.0%	32,156	100.0%
Total Population		47,654		55,033		57,390		65,458		70,630	

(Source) Umemura et al.(1988), Table nos.1, 2, 8 & 9.

(Notes) Although the data are not continuous before and after 1920, it is not problematic for us to understand the rough changes. Data of the colonies are not included. Textiles' mean the total of 'Textile Industry' and 'Clothing Industry'. 'Heavy & Chemical Industries' include 'Metal Industry', 'Machinery & Tool Industry', 'Chemical Industry' and 'Paper & Paper Products'. 'n.a.' means 'data not available.'

Table 2 Significance of Japanese Cotton Industry in Foreign Trade

1. Commodity Imports

(Unit: million yen)

Year	Commodity Imports			Textiles		Raw Cotton (4)	Wool (5)	(4)+(5)	Textile Materials (6)/(7)		Total (7)
	Cotton Yarn (1)	Cotton Fabric (2)	(1)+(2)	Total (3)	(3)/(7)						
1874	4.2	5.6	9.8	12.9	54.2%	1.1		1.1	1.1	4.6%	23.8
1875	4.1	5.4	9.5	16.0	51.8%	0.4		0.4	0.4	1.3%	30.9
1876	7.2	5.0	12.2	13.8	56.6%	0.5		0.5	0.5	2.0%	24.4
1877	4.1	4.9	9.0	14.6	52.3%	0.4		0.4	0.4	1.4%	27.9
1878	7.2	4.2	11.4	18.9	56.8%	0.3		0.3	0.5	1.5%	33.3
1879	6.2	5.0	11.2	18.2	55.3%	0.1		0.1	0.2	0.6%	32.9
1880	7.7	5.8	13.5	20.4	55.4%	0.2		0.2	0.3	0.8%	36.8
1881	7.3	5.5	12.8	17.9	59.3%	0.2		0.2	0.3	1.0%	30.2
1882	6.6	5.0	11.6	14.8	50.3%	0.5		0.5	0.5	1.7%	29.4
1883	6.2	4.2	10.4	13.8	47.8%	0.3	0.1	0.4	0.4	1.4%	28.9
1884	5.2	2.8	8.0	12.5	40.1%	0.6	0.0	0.6	0.6	1.9%	31.2
1885	5.2	2.5	7.7	12.2	39.4%	0.8	0.1	0.9	0.9	2.9%	31.0
1886	5.9	2.9	8.8	12.7	38.6%	0.7	0.2	0.9	0.9	2.7%	32.9
1887	8.3	2.3	10.6	19.4	41.8%	0.9	0.2	1.1	1.2	2.6%	46.4
1888	13.7	3.4	17.1	27.6	41.4%	2.2	0.3	2.5	2.6	3.9%	66.6
1889	12.6	4.7	17.3	26.1	38.6%	5.7	0.3	6.0	6.1	9.0%	67.6
1890	10.0	4.7	14.7	24.4	29.3%	5.4	0.4	5.8	5.9	7.1%	83.3
1891	5.7	4.1	9.8	16.4	25.5%	8.2	0.2	8.4	8.6	13.4%	64.4
1892	7.3	3.4	10.7	20.5	27.6%	13.6	0.3	13.9	12.8	17.3%	74.2
1893	7.4	4.7	12.1	23.0	25.8%	16.2	0.4	16.6	16.9	19.0%	89.0
1894	8.1	5.7	13.8	24.5	20.9%	19.6	0.6	20.2	20.7	17.6%	117.4
1895	7.4	7.0	14.4	30.1	23.3%	24.8	1.1	25.9	26.6	20.6%	129.0
1896	11.5	6.9	18.4	47.2	26.2%	32.6	1.0	33.6	34.5	19.1%	180.4
1897	9.9	9.5	19.4	35.3	15.4%	43.6	1.1	44.7	45.7	19.9%	229.6
1898	8.9	10.7	19.6	36.8	12.7%	45.7	1.6	47.3	48.2	16.7%	288.9
1899	5.3	8.9	14.2	29.8	12.9%	62.2	4.3	66.5	68.4	29.5%	231.9
1900	7.4	18.1	25.5	52.0	16.5%	59.5	3.9	63.4	65.7	20.8%	315.8
1901	4.9	7.9	12.8	27.2	9.5%	60.7	3.1	63.8	65.5	22.8%	287.6
1902	1.7	13.6	15.3	33.4	11.3%	79.8	3.4	83.2	85.4	28.8%	296.7
1903	0.8	10.8	11.6	27.8	8.5%	69.5	4.8	74.3	77.0	23.4%	328.8
1904	0.3	9.2	9.5	30.4	8.0%	73.4	10.0	83.4	68.1	17.9%	380.1
1905	1.7	18.4	20.1	61.4	12.3%	110.6	8.3	118.9	122.9	24.6%	499.1
1906	4.7	19.4	24.1	56.7	12.1%	82.7	9.2	91.9	96.1	20.5%	468.2
1907	2.0	17.9	19.9	50.7	9.8%	115.6	14.4	130.0	134.7	26.1%	515.9
1908	1.4	18.1	19.5	43.4	9.4%	90.3	6.9	97.2	100.3	21.7%	462.9
1909	0.9	14.3	15.2	38.9	9.0%	108.3	9.1	117.4	120.8	28.0%	430.9
1910	0.3	13.9	14.2	41.9	8.0%	159.2	13.5	172.7	177.6	34.0%	522.8
1911	0.7	14.3	15.0	43.7	7.5%	147.1	11.3	158.4	163.1	28.1%	581.3
1912	0.6	100.0	100.6	36.0	5.2%	201.2	16.3	217.5	226.4	32.6%	693.6
1913	0.5	10.3	10.8	39.7	4.8%	234.5	17.0	251.5	260.5	31.3%	831.3
1914	0.2	5.5	5.7	26.8	3.9%	220.5	14.8	235.3	260.0	38.1%	682.7
1915	0.2	4.9	5.1	15.6	2.5%	218.5	30.6	249.1	261.9	41.5%	630.5
1916	0.3	4.4	4.7	20.5	2.3%	277.6	33.5	311.1	324.3	37.1%	875.0
1917	0.6	3.7	4.3	23.7	2.0%	334.7	52.1	386.8	411.8	34.6%	1,189.8
1918	0.9	6.3	7.2	41.8	2.2%	522.6	60.1	582.7	616.6	32.6%	1,890.2
1919	5.5	7.7	13.2	62.3	2.5%	674.6	61.3	735.9	765.6	30.8%	2,483.1
1920	4.5	16.2	20.7	93.7	3.5%	727.4	121.6	849.0	871.6	33.0%	2,641.3
1921	1.8	9.2	11.0	98.3	5.0%	438.2	32.2	470.4	496.7	25.4%	1,958.3
1922	2.2	14.4	16.6	159.7	7.2%	427.8	55.7	483.5	512.8	23.2%	2,206.1
1923	2.2	8.0	10.2	188.4	8.0%	513.2	80.0	593.2	630.9	26.9%	2,349.3
1924	3.4	12.9	16.3	201.5	6.8%	605.3	88.0	693.3	743.7	25.0%	2,973.4
1925	1.9	10.9	12.8	185.8	6.0%	923.4	121.1	1,044.5	1,100.3	35.3%	3,115.6
1926	1.0	6.8	7.8	133.7	4.6%	725.9	86.0	811.9	854.0	29.3%	2,916.6
1927	0.9	7.7	8.6	139.6	5.2%	624.6	101.7	726.3	763.1	28.2%	2,710.5
1928	1.6	7.9	9.5	129.0	4.7%	549.9	111.9	661.8	701.8	25.8%	2,723.6
1929	1.8	8.9	10.7	105.2	3.8%	573.0	101.8	674.8	717.6	26.2%	2,740.0
1930	1.9	5.1	7.0	76.6	3.9%	362.0	73.6	435.6	463.4	23.4%	1,981.7
1931	15.6	4.4	20.0	80.8	4.9%	296.3	86.1	382.4	401.9	24.2%	1,662.0
1932	5.9	4.2	10.1	63.5	3.3%	447.4	87.6	535.0	558.1	29.1%	1,915.5
1933	14.5	3.0	17.5	76.0	3.1%	604.8	164.2	769.0	801.6	32.9%	2,436.5
1934	13.3	1.0	14.3	60.6	2.1%	731.4	186.5	917.9	956.2	32.5%	2,937.8
1935	5.2	1.2	6.4	63.0	1.9%	714.3	191.8	906.1	950.7	29.4%	3,236.4
1936	4.3	1.0	5.3	66.4	1.8%	850.5	200.9	1,051.4	1,106.0	30.8%	3,592.5
1937	4.1	0.8	4.9	80.9	1.7%	851.2	298.4	1,149.6	1,202.6	25.5%	4,712.4

(Sources) Seki (1956), pp.302-7; Kajinishi(ed.) (1964), appendix, pp.62-3, 68; Yamazawa & Yamanoto(1979), pp.176

Table 2 (Continued)

2. Commodity Exports

(Unit: million yen)

Year	Commodity Exports				Raw Silk (3)	1)+(2)+(3)	Textiles		Total (5)
	Cotton Yarn (1)	Cotton Fabric (2)	(1)+(2)				Total (4)	(4)/(5)	
1874		0.0	0.0		5.3	5.3	5.7	30.3%	18.8
1875		0.0	0.0		5.4	5.4	5.8	32.0%	18.1
1876		0.0	0.0		13.2	13.2	13.8	50.7%	27.2
1877		0.0	0.0		9.6	9.6	10.0	43.7%	22.9
1878		0.0	0.0		7.9	7.9	8.6	33.3%	25.8
1879		0.0	0.0		9.7	9.7	11.2	40.3%	27.8
1880		0.0	0.0		8.6	8.6	10.1	35.9%	28.1
1881		0.0	0.0		10.7	10.7	12.9	42.0%	30.7
1882		0.0	0.0		16.3	16.3	18.8	50.1%	37.5
1883		0.1	0.1		16.2	16.3	18.6	51.7%	36.0
1884		0.1	0.1		11.0	11.1	13.5	41.0%	32.9
1885		0.2	0.2		13.0	13.2	15.0	41.4%	36.2
1886		0.2	0.2		17.4	17.6	21.2	44.4%	47.7
1887		0.2	0.2		19.4	19.6	23.7	45.8%	51.7
1888		0.2	0.2		26.0	26.2	30.9	47.4%	65.2
1889		0.1	0.1		26.6	26.7	32.6	47.0%	69.3
1890	0.0	0.2	0.2		13.9	14.1	21.0	37.6%	55.9
1891	0.0	0.2	0.2		29.4	29.6	37.5	47.5%	78.9
1892	0.0	0.5	0.5		36.3	36.8	49.1	54.1%	90.7
1893	0.1	1.1	1.2		28.2	29.4	42.1	47.4%	88.8
1894	1.0	1.9	2.9		39.4	42.3	60.7	53.9%	112.6
1895	1.0	2.3	3.3		47.9	51.2	72.9	53.9%	135.3
1896	1.0	2.2	3.2		28.8	32.0	52.9	45.2%	117.1
1897	13.5	2.5	16.0		55.6	71.6	91.0	55.0%	165.6
1898	20.1	2.6	22.7		42.0	64.7	87.4	52.2%	167.4
1899	28.5	3.9	32.4		62.6	95.0	124.1	55.9%	221.9
1900	20.6	5.7	26.3		44.7	71.0	103.3	49.3%	209.4
1901	21.5	5.5	27.0		74.7	101.7	141.4	54.6%	258.8
1902	19.9	6.0	25.9		76.9	102.8	146.1	55.1%	265.3
1903	31.4	6.9	38.3		74.4	112.7	159.9	53.7%	297.5
1904	29.3	7.7	37.0		88.7	125.7	184.5	56.7%	325.2
1905	33.2	11.5	44.7		72.0	116.7	171.1	51.7%	330.9
1906	35.3	15.6	50.9		110.5	161.4	227.5	52.4%	434.3
1907	30.3	16.3	46.6		116.9	163.5	229.7	51.3%	447.5
1908	20.7	14.6	35.3		108.6	143.9	205.1	52.0%	394.2
1909	31.7	17.7	49.4		124.2	173.6	234.5	54.4%	430.8
1910	46.7	20.5	67.2		130.8	198.0	280.0	55.6%	503.5
1911	43.2	19.7	62.9		128.9	191.8	278.5	55.3%	503.7
1912	56.6	25.8	82.4		150.3	232.7	331.7	55.3%	599.7
1913	73.1	43.0	116.1		189.0	305.1	405.7	57.6%	704.2
1914	80.9	43.4	124.3		161.8	286.1	372.7	57.0%	654.3
1915	69.0	47.9	116.9		152.0	268.9	388.5	50.5%	769.7
1916	80.9	73.1	154.0		267.0	421.0	589.9	50.0%	1,180.8
1917	113.8	148.1	261.9		355.2	617.1	807.2	47.9%	1,685.7
1918	162.8	268.6	431.4		370.3	801.7	1,099.3	53.1%	2,070.1
1919	121.6	351.2	472.8		623.6	1,096.4	1,456.6	63.5%	2,293.0
1920	155.0	352.2	507.2		382.7	889.9	1,257.0	59.0%	2,132.0
1921	80.6	203.7	284.3		417.1	701.4	926.2	63.9%	1,448.5
1922	114.7	222.1	336.8		670.0	1,006.8	1,249.5	69.1%	1,807.6
1923	78.5	234.2	312.7		566.2	878.9	1,107.9	68.1%	1,628.0
1924	109.6	326.6	436.2		685.4	1,121.6	1,431.8	70.3%	2,035.9
1925	123.1	432.9	556.0		880.0	1,436.0	1,794.7	70.1%	2,558.8
1926	70.7	416.3	487.0		734.1	1,221.1	1,572.6	68.0%	2,312.6
1927	38.8	383.8	422.6		742.3	1,164.9	1,515.8	66.9%	2,265.6
1928	25.9	352.2	378.1		733.4	1,111.5	1,481.9	64.3%	2,305.7
1929	26.8	412.7	439.5		784.2	1,223.7	1,629.2	64.8%	2,513.4
1930	15.0	272.1	287.1		419.1	706.2	1,007.3	56.0%	1,799.6
1931	8.5	198.7	207.2		356.9	564.1	809.5	56.8%	1,426.1
1932	21.5	288.7	310.2		382.9	693.1	1,014.5	59.0%	1,719.9
1933	15.7	383.2	398.9		391.2	790.1	1,257.8	55.2%	2,278.4
1934	23.5	492.4	515.9		287.7	803.6	1,427.4	52.6%	2,713.4
1935	35.9	496.1	532.0		387.8	919.8	1,620.6	50.9%	3,185.6
1936	38.3	483.6	521.9		393.5	915.4	1,699.4	48.7%	3,491.7
1937	54.9	573.1	628.0		409.1	1,037.1	1,952.7	47.7%	4,093.8

5-9, 180-3.

Table 3 Value Added Related to Japanese Textile Industry in 1929-1937 (Unit: million yen)

Year	Cotton Industry					Silk Industry		Textiles				
	Spinning: A	Weaving: B	A+B	Others	Total	Reeling	Total	Total	Cotton Total	Silk Total	Other Textiles	
1929	316.6	190.5	507.1	42.9	550.0	188.6	251.9	907.5	60.6%	27.8%	11.6%	
1930	117.0	112.1	229.1	54.7	283.9	143.1	250.1	617.3	46.0%	40.5%	13.5%	
1931	128.7	76.4	205.2	64.2	269.4	110.6	231.8	605.4	44.5%	38.3%	17.2%	
1932	216.3	107.8	324.1	69.8	394.0	115.6	237.1	748.0	52.7%	31.7%	15.6%	
1933	266.5	131.3	397.8	95.2	493.0	39.7	172.8	808.1	61.0%	21.4%	17.6%	
1934	220.6	125.8	346.5	101.8	448.3	75.8	231.0	793.6	56.5%	29.1%	14.4%	
1935	179.5	123.5	303.1	81.9	385.0	111.1	254.0	795.2	48.4%	31.9%	19.6%	
1936	234.2	95.9	330.1	92.0	422.1	89.1	214.1	852.1	49.5%	25.1%	25.3%	
1937	262.6	94.2	356.7	109.7	466.4	102.8	239.2	916.6	50.9%	26.1%	23.0%	

(Sources) Shokosho; Ohkawa, Takamatsu & Yamamoto(1974), p.178.

Table 3 (Continued)				(Unit: million yen)			
Year	Manufacturing Total	Textiles Total	Gross National Product Current Price	Cotton/ GNP	Silk/ GNP	Manufacturing Total/GNP	
1929	3,033.3	29.9%	16,286.0	3.4%	1.5%	18.6%	
1930	2,349.7	26.3%	14,671.0	1.9%	1.7%	16.0%	
1931	2,123.0	28.5%	13,309.0	2.0%	1.7%	16.0%	
1932	2,541.3	29.4%	13,660.0	2.9%	1.7%	18.6%	
1933	3,162.5	25.6%	15,347.0	3.2%	1.1%	20.6%	
1934	3,642.1	21.8%	16,966.0	2.6%	1.4%	21.5%	
1935	4,111.1	19.3%	18,298.0	2.1%	1.4%	22.5%	
1936	4,540.3	18.8%	19,324.0	2.2%	1.1%	23.5%	
1937	5,832.4	15.7%	22,823.0	2.0%	1.0%	25.6%	

Table 4 Cotton Spinning Companies with Over Ten Thousand Spindles at the End of 1889

Company Name	Prefecture Headquarter	Year of Establishment	Number of Spindles			Manufacturer of Spindles	Company in 1932
			Ring	Mule	Total		
<Opened before 1886>							
Tamashimabo	Okayama	1882	7,020	4,000	11,020	Platt Platt(Ring)	Toyobo Toyobo
Osakabo	Osaka	1883	34,020	27,300	61,320		
Nagoyabo	Aichi	1885	1,000	8,000	9,000		
Dojimabo	Osaka	1885	8,468	2,400	10,868		
<Opened after 1886>							
Miebo	Mie	1888	4,472	11,800	16,272	Platt	Toyobo
Tenmabo	Osaka	1888	4,608	10,528	15,136	Brooks	
Naniwabo	Osaka	1888	0	10,704	10,704	Dobson	
Tokyobo	Tokyo	1889	6,224	2,880	9,104	Platt	
Hiranobo	Osaka	1889	4,992	0	4,992	Platt	Dai Nipponbo
Owaribo	Aichi	1889	12,240	3,040	15,280	Platt	Toyobo
Kanebo	Tokyo	1889	28,920	1,616	30,536	Brooks	Kanebo
<Not Yet Opened>							
Kanakin Seishoku	Osaka	1890	13,552	0	13,552	Platt	Toyobo
Settsubo	Osaka	1890	19,200	0	19,200	Platt	Dai Nipponbo
Senshubo	Osaka	1891	10,320	0	10,320	Platt	Dai Nipponbo
Amagasaki	Hyogo	1891	9,216	0	9,216	Platt	Dai Nipponbo
Miikebo	Fukuoka	1891	10,568	0	10,568	Platt	Kanebo

(Notes) Data about the companies not yet opened are those at the beginning of operation.

'Bo' means 'spinning company' in Japanese.

(Source) Takamura(1971), p.116.

Table 5 Large Cotton Spinning Companies in the Early Twentieth Century

Company Name	Number of Installed Spindl (%) at the End of 1903	Company Name	Number of Installed Spindl (%) at the End of 1914
Osakabo	55,344 (4.0%)	Toyobo	441,700 (16.6%)
Miebo	83,428 (6.0%)		
Osaka Godobo	91,608 (6.6%)	Osaka Godobo	180,400 (6.8%)
Settsubo	103,600 (7.5%)	Settsubo	157,900 (5.9%)
Amagasakibo	45,212 (3.3%)	Amagasakibo	218,600 (8.2%)
Kanebo	217,312 (15.7%)	Kanebo	429,700 (16.2%)
Fujibo	44,820 (3.2%)	Fuji Gasubo	238,400 (9.0%)
Tokyo Gasubo	56,184 (4.1%)		
Subtotal	697,508 (50.5%)	Subtotal	1,666,700 (62.7%)
Total	1,381,306 (100.0%)	Total	2,657,000 (100.0%)

(Note) 'Bo' means 'spinning company' in Japanese.

(Source) Takamura(1971) , Vol.2, p.180.

Table 6 Main Mergers in Cotton Spinning: 1899-1903

Spinning Company	Merged Company	Paid-up Capital (yen)	Number of Spindles	year	month	Conditions at Merger	(yen)
Kanebo	Shanghaibo at Kobe	900,000	19,840	1899	9	Exchanged Shares	900,000
	Kashubo	368,138	10,368	1899	10	Cash	319,000
	Kunijimabo	400,000	15,360	1899	10	Cash	389,769
	Awajibo	280,000	10,368	1900	1	Cash	320,000
	Hakata Kenmenbo	600,000	11,136	1902	9	Exchanged Shares	240,000
						Cash	40,000
						Succeeded Debt	110,000
	Nakatsubo	400,000	10,368	1902	10	Exchanged Shares	275,000
	Kyushubo	1,288,400	56,232	1902	10	Exchanged Shares	1,288,400
	(Total)	4,236,538	133,672			Exchanged Shares	2,703,400
						Cash	1,068,769
						Succeeded Debt	110,000
Osaka Godobo	Asahibo	423,750	30,668	1900	2	Exchanged Shares	580,000
	Tenmabo	738,000	27,288	1900	6	Exchanged Shares	270,000
	Chugokubo	420,000	9,984	1902	8	Cash	200,000
						Succeeded Debt	171,000
	Meijibo	850,000	26,720	1903	2	Exchanged Shares	600,000
	(Total)	2,431,750	94,660			Exchanged Shares	1,450,000
						Cash	200,000
						Succeeded Debt	1,450,000
Settsubo	Yamatobo	440,000	11,520	1902	4	Cash	290,000
	Hiranobo	500,000	39,168	1902	10	Exchanged Shares	400,000
	(Total)	940,000	50,688			Exchanged Shares	400,000
						Cash	290,000

(Source) Takamura (1971), vol.1, p.105.

Table 7 The Early Vertical Integration of Weaving Sector by Cotton Spinning Companies

Year	Fact
1890	Osakabo merged Osaka Weaving Co., its subsidiary established in 1899.
1890	Kanakin Seishoku [Shirting Weaving Co.] was established as an integrated firm.
1894	Onagigawa Weaving Co., established in 1888, began to produce yarn.
c.1894	Tenma Weaving Co., established in 1890, began to produce yarn.
1894	Wakayama Weaving Co.began to work as an integrated firm.
1895	Okayamabo began to work as an integrated firm.
1896	Miebo, established in 18 , completed the first weaving factory.
(Source) Takamura(1971),Vol.2.	

Table 8 Demand of Machine-Spun Yarn, 1887/1888-1935/1936

(Unit: 1000 *kori*)

Year	Production	Imports	Exports	Integrated Weaving Mills	<i>Sanchi</i> (Production Centres)	Total Demand
1887 - 1888	58 (18%)	269 (82%)	- (-)	- (-)	328 (100%)	328 (100%)
1889 - 1890	178 (42%)	250 (58%)	0 (0%)	- (-)	428 (100%)	428 (100%)
1891 - 1892	374 (73%)	140 (27%)	0 (0%)	- (-)	513 (100%)	513 (100%)
1893 - 1894	527 (82%)	119 (18%)	13 (2%)	- (-)	633 (98%)	646 (100%)
1895 - 1896	812 (87%)	117 (13%)	54 (6%)	- (-)	876 (94%)	930 (100%)
1897 - 1898	1,215 (92%)	109 (8%)	370 (28%)	- (-)	954 (72%)	1,324 (100%)
1899 - 1900	1,433 (96%)	59 (4%)	550 (37%)	48 * (3%)	894 (60%)	1,492 (100%)
1901 - 1902	1,431 (98%)	29 (2%)	407 (28%)	84 * (6%)	970 (66%)	1,460 (100%)
1903 - 1904	1,497 (100%)	5 (0%)	565 (38%)	108 (7%)	830 (55%)	1,502 (100%)
1905 - 1906	1,851 (99%)	28 (1%)	535 (28%)	193 (10%)	1,151 (61%)	1,878 (100%)
1907 - 1908	1,862 (99%)	11 (1%)	394 (21%)	230 (12%)	1,248 (67%)	1,873 (100%)
1909 - 1910	2,160 (100%)	4 (0%)	607 (28%)	321 (15%)	1,236 (57%)	2,164 (100%)
1911 - 1912	2,481 (100%)	4 (0%)	660 (27%)	440 (18%)	1,385 (56%)	2,485 (100%)
1913 - 1914	3,184 (100%)	2 (0%)	1,039 (33%)	588 (18%)	1,560 (49%)	3,186 (100%)
1915 - 1916	3,646 (100%)	1 (0%)	1,123 (31%)	653 (18%)	1,871 (51%)	3,647 (100%)
1917 - 1918	3,728 (100%)	2 (0%)	892 (24%)	758 (20%)	2,080 (56%)	3,730 (100%)
1919 - 1920	3,738 (100%)	9 (0%)	535 (14%)	924 (25%)	2,288 (61%)	3,747 (100%)
1921 - 1922	4,040 (100%)	6 (0%)	686 (17%)	827 (20%)	2,533 (63%)	4,046 (100%)
1923 - 1924	4,244 (100%)	15 (0%)	519 (12%)	1,206 (28%)	2,534 (59%)	4,259 (100%)
1925 - 1926	5,045 (100%)	7 (0%)	516 (10%)	1,422 (28%)	3,114 (62%)	5,052 (100%)
1927 - 1928	4,983 (100%)	6 (0%)	189 (4%)	1,490 (30%)	3,310 (66%)	4,989 (100%)
1929 - 1930	5,317 (100%)	14 (0%)	127 (2%)	1,582 (30%)	3,622 (68%)	5,331 (100%)
1931 - 1932	5,378 (97%)	144 (3%)	121 (2%)	1,568 (28%)	3,833 (69%)	5,522 (100%)
1933 - 1934	6,572 (98%)	113 (2%)	113 (2%)	1,868 (28%)	4,704 (70%)	6,685 (100%)
1935 - 1936	7,168 (100%)	32 (0%)	207 (3%)	1,942 (27%)	5,051 (70%)	7,200 (100%)

Sources and Notes: Takamura(1971), vol.1, p.146 and vol.2, p.82; Koda 1931, pp.26-27 and 199-200; Dai Nihon Boseki Rengokai, relevant years. In this table dashes indicate that the data are not available, while asterisks indicate estimates. Japanese unit, one *kori* represents 400 pounds' cotton yarn. I am grateful to Professor Toshiaki Ushijima for his assistance in compiling this table.

Appendix 2
The Hundred Largest Firms in Japan (Measured by Employment)
(1) 1905

Rk.	Firm	SIC(1968)	Employees	Comments
1	Bureau of Railways, Ministry of Transport & Communicatio	22	25,453	
2	Ichihel Furukawa	2	14,446	In 1905 Furukawa Mining Co.
3	Tokyo Military Arsenal	27	14,140	
4	Kure Naval Arsenal	25	12,847	
5	Kanegafuchi Spinning Co. (Kanebo)	13	12,444	
6	Nippon Railway Co.	22	11,633	Nationalized after the Russo-Japanese War.
7	Osaka Military Arsenal	27	9,466	
8	Kyushu Railway Co.	22	8,659	Nationalized after the Russo-Japanese War.
9	Mitsubishi Mining	7	7,365	In 1918 Mitsubishi Mining Co.
10	Settsu Spinning Co.	13	7,293	In 1918 Dai Nippon Spinning.
11	Yokosuka Naval Arsenal	27	6,551	In 1914 Toyobo.
12	Mie Spinning Co.	13	5,414	In 1917 Mitsubishi Shipbuilding & Engineering.
13	Mitsubishi Nagasaki Shipyard	10	5,058	Nationalized after the Russo-Japanese War.
14	Sanyo Railway	22	4,490	
15	Hittachi Mining Co.	2	4,415	
16	Sasebo Naval Arsenal	27	4,288	
17	Osaka Shosen Co. (OSK)	22	4,053	
18	Hokkaido Coal & Railway Co.	22	3,643	In 1906 Hokkaido Colliery & Steamship Co.
19	Osaka Merger Spinning Co.	13	3,638	Merged by Toyobo in 1931.
20	Fujitargami Co.	7	3,437	
21	Murari Brothers and Co.	3	3,292	Nationalized during the Russo-Japanese War.
22	Kansai Railway Co.	22	3,251	Nationalized after the Russo-Japanese War.
23	Osaka Spinning Co.	13	3,208	In 1914 Toyobo.
24	Iron Wrg. Factory, Ministry of Agriculture & Commerce	6	3,202	
25	Tokyo Gas Spinning Co.	13	3,191	In 1906 Fuji Gas Spinning.
26	Kawasaki Shipbuilding and Engineering Co.	10	3,060	
27	Nippon Spinning Co.	13	3,006	Merged by Dai Nippon Spinning in 1916.
28	Bureau of Printing of the Cabinet	18	2,373	
29	Silk Yarn Spinning Co.	13	2,155	Merged by Kanebo in 1911.
30	Fuji Spinning Co.	13	2,078	In 1906 Fuji Gas Spinning.
31	Osari Spinning Co.	13	1,958	Merged by Mie Spinning in 1905.
32	Senju Military Factory of Woolen Textile	13	1,933	
33	Amagasaki Spinning Co.	13	1,849	In 1918 Dai Nippon Spinning.
34	Moriyama Spinning Co.	13	1,840	Bought by Settsu Spinning in 1907.
35	Seiryoku Naito	2	1,773	
36	Koyama Spinning Co.	13	1,738	Merged by Silk Yarn Spinning Co. in 1911.
37	Shirring Weaving Co.	13	1,690	Merged by Osaka Spinning in 1906.
38	Tokyo Spinning Co.	13	1,685	Merged by Amagasaki Spinning in 1914.
39	Tokyo Mulin Spinning & Weaving Co.	13	1,655	
40	Osaka Ironworks	10	1,623	
41	Tanaka Iron Factory at Kamishi Mine	6	1,577	
42	Yasui Dock Co.	10	1,523	
43	Iwano & Co.	3	1,500	Nationalized during the Russo-Japanese War.
44	Naval Arsenal	27	1,468	
45	Kyomi Co.	13	1,444	
46	Ryojochu	13	1,390	*
47	Kurashiki Spinning Co.	13	1,383	
48	Kiyoa Sakamoto	2	1,362	
49	Kanetaro Katakura	13	1,345	In 1920 Katakura Silk Spinning.
50	Fine Yarn Spinning Co.	13	1,309	
51	The Royal Brush Co.	16	1,254	
52	Nippon Yusen Co. (NKK)	22	1,250	
53	Meiji Spinning Co.	13	1,236	Merged by Osaka Merger Spinning in 1903.
54	Hoson Spinning Co.	13	1,219	In 1904 Kido Spinning Co.
55	Hokkaido Hard & Bast Fiber Wfg. Co.	13	1,213	In 1907 Imperial Hard & Bast Fiber Wfg.
56	Kurea Silk Wfg. Co.	13	1,152	
57	Nippon Spinning & Weaving	13	1,107	Bought by Naigai Wata Co. in 1905.
58	Senshu Spinning Co.	13	992	Merged by Kishiwada Spinning in 1903.
59	Fukagawa Hatch	5	859	
60	Shuetisha Co.	18	955	In 1935 Dai Nippon Printing.
61	Kawana Spinning Co.	13	955	Merged by Mie Spinning in 1907.
62	Shimotsuke Hard & Bast Fiber Wfg. Co.	13	940	In 1903 Nippon Hard & Bast Fiber Wfg.
63	Kibi Spinning Co.	13	914	Bought by Kurashiki Spinning in 1908.
64	Shimotsuke Spinning Co.	13	885	Merged by Mie Spinning in 1911.
65	Tanawari Bari	2	877	
66	Kishiwada Spinning Co.	13	867	
67	Kanizye Harashi	13	860	
68	Naitsei Silk Wfg. Co.	13	855	*
69	Kyoto Cotton Flannel Co.	13	847	In 1908 Nippon Cloth Wfg. Co.
70	Chita Spinning Co.	13	833	Merged by Mie Spinning in 1907.
71	Pongigawa Cotton Cloth Co.	13	813	Merged by Fuji Spinning in 1903.
72	Naoki Match Wfg.	6	797	
73	Saku Railway Co.	22	785	Nationalized after the Russo-Japanese War.
74	Mitsuru Naval Arsenal	27	774	
75	Fukuyama Spinning Co.	13	774	Bought by Fukushima Spinning in 1903.
76	Ichikimura Spinning Co.	13	755	Merged by Nippon Spinning in 1907.
77	Kyoto Fabric Co.	13	742	
78	Mulin Spinning & Weaving Co.	13	740	In 1927 Godo Wool Textile Co.
79	Imperial Brush Co.	16	724	
80	Kobor-kan	2	722	
81	Tokyo Wool Weaving Co.	13	722	In 1927 Godo Wool Textile Co.
82	Tama Textile Co.	13	721	
83	Yasuda Commerce Co.	7 and 13	713	
84	Fanaka Filature, Ministry of Agriculture & Commerce	13	710	
85	Nankai Railway Co.	22	708	
86	Hokutsu Railway	22	706	Nationalized after the Russo-Japanese War.
87	Tano Co.	13	703	
88	Japan Oil Co.	2 and 4	697	
89	Sakai Spinning Co.	13	693	Bought by Fukushima Spinning in 1917.
90	Konkisha Co.	5	693	Merged by Mie Spinning in 1905.
91	Nagoya Spinning Co.	13	675	
92	Pji Paper Co.	18	666	
93	Fuji Paper Co.	18	655	
94	Kassoka Spinning Co.	13	654	Bought by Fukushima Spinning in 1909.
95	Indotsu-kan	13	643	
96	Sampet Co.	12	631	
97	Dai Bemp Spinning & Weaving Co.	13	626	
98	Soto Wool Fabric Wfg. Co.	13	620	
99	Kobu Railway Co.	22	605	Nationalized after the Russo-Japanese War.
100	Kansai Brush Co.	19	601	
Total			270,822	

Sources: Noshon-rusho[the Ministry of Agriculture and Commerce]

(ed.), *Koyo Teuran [the Directory of Japanese Factories]*

(Oschoer-sho, Tokyo, 1904).

Motowoshi Makino (ed.), *Nippon Zenkoku Shogwaisha Yakumroku Dai 10 Kai*

[*the Directory of Executives of Japanese Companies: the 10th Edition*]

(Shogyo Koshinjo, Osaka, 1902).

Teishin-risho [the Ministry of Transport & Communication] (ed.),

Meiji 35 Nenado Teishun-Ayaku Nenpo [Annual Report of Railway Bureau in 1902 Fiscal Year]

(Teishin-risho, Tokyo, 1903).

Naikaku Tokai-kyoku[the Statistic Bureau of Cabinet] (ed.),

Nippon Teikoku Tokesi Nenkan [Annual Data Book of Japanese Empire]

(Tokyo Tokai Kyokai Shuppan-sha, Tokyo, 1901).

Tomoo Kanda (ed.), *Osaka Shosen Kaishaku Kaisha 50 Nen-shi*

[*50 Years' History of Osaka Shosen Kaisha*] (OSK, Osaka, 1934).

Notes: The data of the railway companies are those at the end of March 1903.

The others are the data at the end of 1902.

Figures with * mark are under-estimates.

Blue-collar workers only.

Such industries as construction, distributive trades, insurance, banking, finance,

professional services and miscellaneous services are not included.

The associations organized by the local small-sized silk reelers which were shown on

ay Japanese paper, "20 Seiki no Nippon ni okeru Juyusha Su Jun Joui 200 Kigyo

ni kansuru Shiryo(I): 1902 nen, 1931 nen, 1954 nen" [The Lists of the 200 Largest

Enterprises in Japan in the Twentieth Century], *Osaka Daigaku Keizai-gaku*

(Osaka Economic Papers); 46-1 (August 1968) are excluded.

(2) 1931

RR	Firms	SIC(1968)	Employees	Comments
1	Bureau of Railway, Ministry of Railway	22	188,363	
2	Toyo Spinning Co. (Toyobo)	13	34,257	
3	Kanegafuchi Spinning Co. (Kanebo)	13	28,761	
4	Mitsui Mining Co.	2	28,074	
5	Bureau of Monopoly, Ministry of Finance	3	24,428	
6	Katakura Silk Spinning Co.	13	20,650	In 1943 Katakura Industry.
7	Mitsubishi Mining Co.	2	19,127	
8	Dai Nippon Spinning Co.	13	18,391	
9	Iron Mfg. Factory, Ministry of Commerce	6	17,554	In 1934 Nippon Steel Co.
10	Kure Naval Arsenal	27	15,560	
11	Fuji Gas Spinning Co.	13	15,088	In 1945 Fujii Spinning Co.
12	Bureau of Electricity, the City of Tokyo	21	14,821	
13	Onoda Silk Mfg. Co.	13	13,729	
14	Japan Wool Textile Co.	13	12,586	
15	Tokyo Electric Light Co.	21	11,729	
16	Bureau of Electricity, the City of Osaka	21	10,696	
17	Mitsubishi Shipbuilding & Engineering Co.	10	10,679	In 1934 Mitsubishi Heavy Industries (MHI).
18	Coal Mines of the Ministry of Commerce	2	10,220	
19	Osaka Shosen (OSK)	22	9,100	
20	Yokosuka Naval Arsenal	27	8,563	
21	Kawasaki Shipbuilding & Engineering Co.	10	8,561	In 1939 Kawasaki Heavy Industries.
22	Japan Mining Co.	2	8,465	
23	Nishin Spinning Co.	13	7,721	
24	Furukawa Mining Co.	2	7,690	
25	Hokkaido Colliery & Steamship Co.	2 and 22	7,020	The number of employees is only that of mining.
26	Kobushiro Spinning Co.	13	6,506	In 1944 Shikishima Spinning.
27	Shohei Silk Mfg. Co.	13	6,453	Former Yamaji Silk Mfg.
28	Tokyo Maslin Spinning & Weaving Co.	13	5,949	In 1936 Daito Spinning & Weaving Co..
29	Kishikawa Spinning Co.	13	5,900	Merged by Dai Nippon Spinning in 1940.
30	Sasebo Naval Arsenal	27	5,842	
31	Suntomo Coal Mining Co.	2	5,389	
32	Japan Taki Co.	15	5,119	In 1937 Nippon Rubber.
33	Iwaki Coal Mining Co.	2	5,025	
34	Shikoku Wool Textile Co.	13	5,021	Merged by Toyo Wool Textile Co. in 1936.
35	Daido Match Co.	5	4,970	
36	Kaijima & Co.	2	4,900	In 1931 Kaijima Coal Mining.
37	Hayashi-gumi Silk Mfg. Co.	13	4,837	
38	Toho Electric Power Co.	21	4,834	
39	Imperial Marumae Fibr Co.	5	4,813	
40	Kurashiki Spinning Co.	13	4,562	
41	Aso Shoten Co.	2	4,490	
42	Fujita Mining Co.	2	3,391	Later Dowa Mining.
43	Wei Ji Mining Co.	2	2,265	
44	Okunoyama Coal Mining Co.	2	2,117	
45	Bureau of Electricity, the City of Kyoto	21	3,878	
46	Hinode Spinning Co.	13	3,860	In 1940 Daiwa Spinning.
47	Kushu Colliery & Steamship Co.	2 and 22	3,810	The number of employees is only that of mining.
48	Nankai Railway Co.	22 and 21	3,800	In 1947 Nankai Electric Railway.
49	Hattori Shoten Co.	13	3,797	
50	Japan Oil Co.	2 and 4	3,706	
51	Toyoda Spinning & Weaving Co.	13	3,660	In 1942 Chuo Spinning Co.
52	Kienjima Coal Mining Co.	2	3,615	
53	Guguchi Silk Mfg. Co.	13	3,554	
54	Fuji Paper Co.	18	3,538	Merged by Oji Paper in 1933.
55	Kinka Spinning Co.	13	3,512	In 1940 Daiwa Spinning.
56	Keihan Electric Railway Co.	22 and 21	3,479	
57	Osaka Military Arsenal	27	3,463	
58	Suntomo Besshi Mining Co.	2	3,450	In 1937 Suntomo Mining Co.
59	Fukushima Taki Co.	15	3,381	
60	Toyo Rayon Co.	5	3,264	
61	Okaya Silk Mfg. Co.	13	3,259	
62	Kaneko Fujizawa	2	3,239	
63	Hitsachi, Ltd.	9	3,217	
64	Osaka Ironworks Co.	10	3,117	In 1943 Hitachi Shipbuilding & Engineering.
65	Imperial Hard & Brist Fiber Mfg. Co.	13	3,114	In 1940 Imperial Textile Co.
66	Hanshin Electric Railway	22 and 21	3,109	
67	Oji Paper Co.	18	3,104	
68	Bureau of Printing of the Cabinet	18	3,085	
69	Kobe Steel Co.	6	3,022	In 1940 Asahi Spinning Co.
70	Imai Seisochu Co.	13	2,977	Merged by Nippon Rayon in 1939.
71	Nippon Silk Textile Co.	13	2,919	
72	Kyoto Electric Light Co.	21	2,916	
73	Tejima Weaving Co.	13	2,820	In 1940 Daiwa Spinning.
74	Ishikawa-gumi Silk Mfg. Co.	13	2,731	
75	Baizuru Port Workshop	27	2,712	
76	Osaka Electric Railway Co.	22 and 21	2,707	Later Kinki Nippon Railway.
77	Taisho Mining Co.	2	2,650	
78	Pondor Mfg. Factory of Military Arsenal	27	2,650	
79	Tomu Textile Co.	13	2,640	In 1940 Asahi Spinning Co.
80	Asahi Rayon Co.	5	2,630	Later Asahi Chemical Industry.
81	Mitsubishi Aeroplane	11	2,584	In 1934 Mitsubishi Heavy Industries.
82	Fukayama Spinning & Weaving Co.	13	2,577	In 1940 Daiwa Spinning.
83	Itsumi Spinning & Weaving Co.	13	2,574	In 1942 Chuo Spinning Co.
84	Tokyo Military Arsenal	27	2,496	
85	Nagasaki Spinning & Weaving Co.	13	2,480	In 1937 Kokko Spinning Co.
86	Godo Electric Power Co.	21	2,475	
87	Japan Steel Works, Ltd.	6	2,442	
88	Jigawa Electric Power Co.	21	2,428	Merged by Fuji Spinning in 1941.
89	Beisei Spinning & Weaving Co.	13	2,365	
90	Naval Coal Mine	2	2,365	
91	Maruto-gumi Silk Mfg. Co.	13	2,339	Merged by Toyobo in 1936.
92	Izumi Spinning Co.	13	2,299	
93	Nitto Spinning Co.	13	2,297	Merged by Nitto Spinning in 1937.
94	Nagoya Spinning Co.	13	2,296	
95	Nippon Kokan Co.	6	2,295	
96	Freschi Iwaya Coal Mine Co.	2	2,264	
97	Asano Cement Co.	16	2,220	In 1947 Nippon Cement.
98	Dai Nippon Beer Co.	3	2,200	
99	Nippon Rayon Co.	5	2,195	
100	Dai Nippon Fertilizer Co.	8	2,160	Later Niscom Chemical Industries, Ltd.
Total			811,741	

Sources: Tatsujiro Machida (ed.), *Zenkoku Kopo Kozan Meibo* (the *Directory of Japanese**Factories and Mines*) (Kyochokai, Tokyo, 1932);Jiunryu Aoki (ed.), *Ginko Kaisha Yoran* (the *Directory of Japanese Companies and Banks*)

[the 35th edition & the 36th edition, Tokyo Kohshin, Tokyo, 1931, 1932];

Masao Noda et al. (eds.), *Showa-ki Tetsudokushi Shiryō* (the *Materials on the History of Japanese Railway*

Industry in the Showa Period], Vol. 17 (Nippon Keizai Hyoron-sha, Tokyo, 1984);

Teishin-sho Denki-kyoku (the Electricity Bureau of the Ministry of Transport & Communication) (ed.),

Dai 29 Kai Denki-Jigyo Yoran (the *29th Annual Data Book of Electric Power Supply Business*) (ed.),

(Denki Kyokai, Tokyo, 1932);

Kazumasa Hamamoto, *Osaka-shi Denki-kyoku 40 Nenishi, Unyū-shen* [*40 Years' History*

of Bureau of Electricity of C.O.: the Part of Transportation] (Bureau of Electricity of C.O., Osaka, 1943);

Tomoo Kondo (ed.), *Osaka Shosen Kaishaku Kaisha 50 Nenishi*[*50 Years' History of Osaka Shosen Kaisha*] (OSK, Osaka, 1934).

Notes: The number of workers of Japan National Railway is that at the end of March 1932.

The numbers of workers of the firms of the order 12, 15, 16, 38, 45, 48, 56, 66, 72, 76, 86 and 88

are those at the end of June 1931.

The others are the data on 1st October 1931.

Blue-collar workers only.

Such industries as construction, distributive trades, insurance, banking, finance,

professional services and miscellaneous services are not included.

(3) 1954

RR	Firms	SIC(1968)	Employees	Comments
1	Japan National Railway	22	439,603	In 1987 privatized and reorganized into JR Co.
2	Nippon Telegraph & Telephone Public Corp.	22	159,901	In 1985 privatized.
3	Nippon Express Co.	22	78,777	
4	Mitsui Mining Co.	2	48,791	
5	The Monopoly Public Corp.	3	40,678	In 1987 privatized.
6	Tawata Iron & Steel Co.	6	36,724	Former Nippon Steel Co. In 1970 new Nippon Steel.
7	Mitsubishi Mining Co.	2	35,719	
8	Tokyo Electric Power Co.	21	29,737	
9	Kanegafuchi Spinning Co. (Kanebo)	13	28,344	
10	Hitsachi, Ltd.	9	27,101	
11	Toyo Spinning Co. (Toyobo)	13	25,844	
12	Nippon Kaken Co. (NKK)	6	25,356	Later NKK.
13	Hokkaido Colliery & Steamship Co.	2 and 22	24,419	
14	Kansai Electric Power Co.	21	23,848	
15	Tokyo Shihara Electric Co. (Toshiba)	18	22,241	In 1984 Toshiba.
16	Fuji Iron & Steel Co.	6	22,824	Former Nippon Steel Co. In 1970 new Nippon Steel.
17	Dai Nippon Spinning Co.	13	22,669	In 1969 Initia.
18	New Mitsubishi Heavy Industries, Ltd.	7	21,944	Former MHI. In 1964 new MHI.
19	Kajima Construction Co.	20	21,586	Later Kajima Corp.
20	Nishimatsu Construction Co.	20	20,156	
21	Yokushu Electric Power Co.	21	18,917	
22	The Industries, Ltd.	2	18,575	
23	Toyo Rayon Co.	5	17,534	In 1970 Toyoda Industries.
24	Chubu Electric Power Co.	21	17,358	
25	Kawasaki Steel Corp.	6	17,213	
26	Mitsubishi Shipbuilding & Engineering, Ltd.	10	15,725	Former MHI. In 1964 new MHI.
27	Mitsubishi Electric Corp.	9	16,742	
28	Asahi Chemical Industry Co.	5	16,513	
29	Furukawa Mining Co.	2	16,381	
30	Shomo Denko Co.	5	16,236	
31	Tokoku Electric Power Co.	21	15,127	
32	Sanyama Chemical Co.	5	14,400	
33	Johsen Coal Mining Co.	2	14,210	
34	Imperial Marumae Fibre Co.	5	13,767	In 1962 Teijin.
35	Nippon Mining Co.	10	13,723	Later Japan Energy Corp.
36	Hitsachi Shipbuilding & Engineering Co.	10	13,704	
37	Mitsubishi Metal Mining Co.	13	13,199	
38	Suntomo Coal Mining Co.	2	13,108	
39	Suntomo Metal Industries, Ltd.	6	13,086	
40	Japan Wool Textile Co.	15	12,974	
41	Mitsubishi Japan Heavy Industries, Ltd.	7	12,994	Former MHI. In 1964 new MHI.
42	Daigaku Electric Power Co.	21	12,538	
43	Nittetsu Mining Co.	2	12,254	
44	Wei Ji Mining Co.	2	11,952	
45	Kinki Nippon Railway Co.	22	11,422	
46	Dai Kenshi Spinning Co.	13	10,909	In 1968 Onikenshi Co.
47	Kurashiki Spinning Co.	13	10,700	
48	Toho Railway Co.	13	10,415	
49	Katakura Industry Co.	13	10,323	
50	Kurashiki Rayon Co.	13	10,159	In 1970 Kuraray Co.
51	Nagoya Railroad Co.	22	9,969	
52	Kureha Spinning Co.	13	9,846	Merged by Toyobo in 1966.
53	Kaijima Coal Mining Co.	2	9,577	
54	Mitsui Metal & Smelting Co.	6	9,428	
55	Nitto Spinning Co.	13	9,266	
56	Sanoa Bank, Ltd.	24	9,227	
57	Kobe Steel, Ltd.	6	9,209	
58	Kawasaki Heavy Industries, Ltd.	7 and 10	9,168	
59	Fuji Spinning Co.	13	9,140	
60	Fuji Motors Corp.	11	8,867	Merged by Fuji Heavy Industries, Ltd. In 1955.
61	Nishi-Nippon Railroad Co.	22	8,881	
62	Nippon Coal Mining Co.	2	8,557	
63	Daiwa Spinning Co.	13	8,509	
64	Mitsubishi Bank, Ltd.	24	8,347	
65	Kobe Steel, Ltd.	24	8,289	
66	Gunze Silk Mfg. Co.	13	8,234	In 1967 Gunze.
67	Suntomo Metal Mining Co.	6	8,230	
68	Daigo Fishery Co.	1 and 3	8,220	
69	Nishin Spinning Co.	13	8,155	
70	Kyowa Bank, Ltd.	24	7,929	Later Asahi Bank.
71	Suntomo Bank, Ltd.	24	7,923	
72	Bureau of Printing, Ministry of Finance	18	7,493	Former Bureau of Printing of the Cabinet.
73	Nissam Motor Co.	13	7,341	
74	Iaso Industries Co.	2 and 16	7,002	
75	Nippon Kangyo Bank, Ltd.	24	6,892	In 1971 Dai-ichi Kangyo Bank.
76	Osaka Bank, Ltd.	24	6,791	
77	Asahi Glass Co.	16	6,784	
78	Matsumita Electric Industrial Co.	9	6,771	
79	Toyo Kotsu Industries, Inc.	5	6,765	
80	Tokyo Gas Co.	21	6,700	
81	Kienjima Coal Mining Co.	2	6,510	
82	Daieiatsu Coal Mining Co.	2	6,494	
83	Mitsubishi Rayon Co.	5	6,427	
84	Furukawa Electric Co.	12	6,417	
85	Dowa Mining Co.	2	6,355	
86	Shikoku Electric Power Co.	21	6,348	
87	Ishikawajima Heavy Industries Co. (IHI)	7 and 10	6,320	In 1960 Ishikawajima-Harima Heavy Industries Co.
88	Japan Steel Works, Ltd.	6	6,275	
89	Fuji Electric Co.	9	6,243	
90	Nippon Electric Co. (NEC)	9	6,149	Later NEC.
91	Hokkaido Electric Power Co.	21	6,149	
92	Dai-ichi Bank, Ltd.	24	6,075	In 1971 Dai-ichi Kangyo Bank.
93	Mitsui Shipbuilding & Engineering Co.	10	6,072	
94	Shikishima Spinning Co.	13	6,049	
95	Nankai Electric Railway Co.	22	6,046	
96	Harima Shipped Co.	10	5,999	Merged by IHI in 1960.
97	Hokuriku Electric Power Co.	21	5,992	
98	Mitsui Bank, Ltd.	24	5,857	In 1992 Sakura Bank.
99	Keihanshin Kyuko Electric Railway Co.	22	5,806	In 1973 Hankyu.
100	Toyo Textile Co.	13	5,772	
Total			1,852,049	

Sources: Yoshikuni Sato (ed.), *1955 New-han Kaisha Nenkan* (*Annual Corporation Reports: 1955*)

(Nippon Keizai Shinbunsha, Tokyo, 1954); ibid., 1956 edition(1955);

Nippon Kokury Teisudo [Japan National Railway] (ed.), *Showa 29 Nendo Tetsudo Tokai Nengo*[*Annual Data Book of Japan National Railway: 1954*] (Nippon Kokury Teisudo, Tokyo, 1955);

Sorifu Tokai-kyoku [Statistic Bureau, Management and Coordination Agency] (ed.),

Dai 7 Kai Nippon Tokai Nenkan (the *7th Japan Statistical Yearbook*)

(Nippon Tokai Kyokai & Mainichi Shinbunsha, Tokyo, 1957).

Notes: The data are those at the end of September or March 1954.

(4) 1994			
RS	Firms	SIC (1988)	Employees
1	Nippon Telegraph & Telephone Corp. (NTT)	22	215,629
2	East Japan Railway Co.	22	79,670
3	Mitsubishi, Ltd.	9	79,339
4	Fujitsu Corp.	9	74,568
5	Toyota Motor Corp.	11	73,046
6	Fujitsu, Ltd.	9	54,091
7	Nippon Express Co.	22	51,538
8	Nissan Motor Co.	11	51,398
9	Amato Transport Co.	22	50,444
10	Mitsubishi Electric Corp.	9	49,842
11	Matsushita Electric Industrial Co.	9	48,369
12	West Japan Railway Co.	22	47,579
13	Mitsubishi Heavy Industries, Ltd.	7 and 10	44,077
14	NFC Corp.	9	42,287
15	Nippondenso Co.	11	41,996
16	Tokyo Electric Power Co.	21	41,967
17	Nippon Steel Corp.	6	34,619
18	Mazda Motor Co.	11	31,036
19	Mazda Motor Co.	11	29,161
20	Mitsubishi Motors Corp.	11	28,678
21	Sanyo Electric Co.	9	28,535
22	Kansai Electric Power Co.	21	26,205
23	Sony Corp.	9	23,245
24	Central Japan Railway Co.	22	22,810
25	Sharp Corp.	9	22,615
26	Sakura Bank, Ltd.	24	22,255
27	NKK Corp.	6	22,214
28	IBM Japan, Ltd.	9	21,903
29	Fumitomo Metal Industries, Ltd.	6	21,565
30	Japan Airlines Co. (JAL)	22	21,396
31	Chubu Electric Power Co.	21	20,611
32	Kobe Steel Corp.	6	19,415
33	Matsushita Electric Works, Ltd.	9	19,292
34	Bai-ichi Kangyo Bank, Ltd.	24	19,189
35	Daiei, Inc.	23	18,807
36	Canon Corp.	9	18,264
37	Fumitomo Bank, Ltd.	24	17,622
38	Kawasaki Heavy Industries, Ltd.	7 and 10	17,494
39	Kawasaki Steel Corp.	6	17,276
40	Kodai Chemical Industry Co.	5	17,234
41	Yamazaki Baking Co.	3	16,907
42	Fuji Bank, Ltd.	24	16,321
43	Ichikawa-Iwai-Marine Heavy Industries Co. (IIM)	7 and 10	16,173
44	Bridgestone Corp.	5	16,059
45	Kubota Corp.	7	16,040
46	Mitsubishi Bank, Ltd.	24	15,943
47	Fukuyama Transporting Co.	22	15,876
48	Fuji Xerox Co., Ltd.	9	15,343
49	Fumitomo Electric Industries, Ltd.	6 and 12	15,412
50	Seino Transportation Co.	22	15,259
51	Torifondo Co.	23	15,161
52	Fuji Heavy Industries, Ltd.	11	15,018
53	Sawaya Bank, Ltd.	24	14,963
54	Kodai Bank, Ltd.	24	14,918
55	Tokio Marine & Fire Insurance Co.	24	14,900
56	All Nippon Airways Co. (ANA)	22	14,657
57	Kajima Corp.	20	14,566
58	Komatsu, Ltd.	7	14,514
59	Shi Nippon Printing Co.	18	14,308
60	Foppan Printing Co.	18	14,148
61	Fuji Electric Co.	9	14,094
62	Tokai Electric Power Co.	21	14,091
63	Victor Company of Japan, Ltd.	9	14,000
64	Matsushita Electrics Corp.	9	13,992
65	Kyushu Electric Power Co., Inc.	21	13,958
66	Kyushu Japan Railway Co.	22	13,900
67	Eicoh Co.	9	13,724
68	Japan Life Insurance Co.	24	13,679
69	Sankyu, Inc.	22	13,664
70	Faisel Corp.	20	13,551
71	Kyocera Corp.	16	13,470
72	SOK	26	13,450
73	NKK	26	13,220
74	Suzuki Motor Corp.	11	13,218
75	Izusu Motors, Ltd.	11	13,084
76	Tokyo Gas Co.	21	12,849
77	Kinki Nippon Railway Co.	22	12,650
78	Sekisui House, Ltd.	20	12,632
79	Tsuda Fire & Marine Insurance Co.	24	12,544
80	Oni Electric Industry Co.	9	12,425
81	Hayashi Corp.	20	12,418
82	Ballieton Motor Co.	11	12,307
83	Seiko Epson Corp.	9	12,350
84	Kodai Bank, Ltd.	24	12,282
85	Mitsukoshi, Ltd.	23	12,225
86	Jusco Co.	23	12,151
87	Shinzu Corp.	20	12,139
88	Japan Travel Bureau, Inc.	26	12,010
89	Japan Freight Railway Co.	22	11,998
90	Hokkaido Japan Railway Co.	22	11,908
91	Fuji Photo Film Co.	5	11,899
92	Fumitomo Life Insurance Co.	24	11,756
93	Foto, Ltd.	16	11,602
94	Aisin Seiki Co.	11	11,314
95	Mitsubishi Chemical Corp.	5	11,209
96	Fakush Chemical Industries, Ltd.	5	11,089
97	Chugoku Electric Power Co.	21	11,089
98	Toho Railway Co.	22	11,028
99	Nomura Securities Co.	24	10,948
100	Baishu House-Industry Co.	20	10,906
	Total		2,296,886

Sources: Noriuchi Okai (ed.), 1985 *Nen-ban Kaisha Nenkan* [Annual Corporation Reports:1985] (2 Volumes, Nippon Keizai Shinbunsha, Tokyo, 1994); Harubumi Ozawa (ed.), 1988 *Nen-ban Kaisha Sokan* [Annual Corporation Reports (Unlisted):1985] (2 Volumes, Nippon Keizai Shinbunsha, Tokyo, 1995)

Note: The data are those at the end of March 1994.