

Creating the Keiretsu System: The Regulatory Framework

- The Dodge Plan and Reconstruction
- Zaibatsu Dissolution
- The Rise of Keiretsu
- Corporate Finance Policy prior to the big bang

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Reconstruction in Japan

- At end of war, Japanese economy was in a mess
 - 7.6 million people came back to Japan but there were no jobs
 - High unemployment and underemployment, people flooded agricultural sector
 - Coal production was far too low
 - Had been mined with forced Korean and Chinese labor, but this ceased
 - Massive inflation
 - Return to price system lead to massive inflation
 - Government was printing money to pay debts
 - Reconstruction Finance Bank, IBJ, and Wartime Finance Bank were lending money freely to firms
 - 1/3 of all bank lending 1945-1949

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Money Supply Growth

	Currency in Circulation In Millions of Yen	Price Level
1940	5.2	1.00
1941	6.8	1.07
1942	8.0	1.17
1943	11.2	1.25
1944	18.9	1.41
1945	56.7	2.13
1946	94.9	9.91
1947	220.9	29.34
1948	356.8	77.96
1949	358.0	127.22
1950	425.4	150.40

(Nihon Keizai Tokei-shu p. 195)

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The Dodge Plan

- System ended with Dodge Plan in 1949
 - Joseph Dodge was a Detroit banker and became financial advisor to SCAP
 - Dodge had drafted the W. German currency reforms of 46-7
 - Strong believer in free market
- Main policies
 - Balanced budget
 - Actually generated surpluses
 - Ending all loans from reconstruction bank
 - Termination of all subsidies
 - Set exchange rate at 360
- Lead to a big drop in inflation

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The Postwar Banking Crisis

- Banks served munitions companies but could not evaluate risk
- Enormous amounts of bad debts
 - Munitions companies were owed money from Gov't
 - But SCAP pressured the government to default on payments
 - 66.9 billion yen
 - Banks held government guaranteed corporate bonds, but government dropped guarantees
 - 19.8 billion yen
 - Cancelled ability of banks to collect on losses arising from forced loans to munitions companies
 - 5 billion yen
 - Total banking losses were on the order of 20% of GNE
- Nevertheless, financial cleanup of banks proceeded quickly and was complete by 1948

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Other Problems in Japanese Finance

- Securities markets
 - Very confusing mix of debt obligations between firms and banks
 - Made it hard to evaluate the risk of bonds and equity
 - Stock market did not reopen until 1949
- Cleanup of firms proceeded more slowly than banks
 - Government forced interest rates to be low
 - Made bonds very attractive to issue
 - Government
 - Because of tremendous inflation in immediate postwar period, many banks were helped

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Zaibatsu Dissolution

- Following WWII, occupation reviewed Japanese financial markets
 - Severed many of the equity ties between companies but did not touch the banks
 - Holding companies were banned in 1947 after intense lobbying by The Federation of Corporate Managers (*Keidanren*)
 - Companies were prohibited from holding each other's shares
 - Banks limited to holding 5% of any company
 - In 1949 law was revised to prohibit holding of competitors shares
 - 1953 banks allowed to hold only 10% of shares (now 5%)
 - Interest rates were regulated following the Temporary Interest Rate Adjustment Law of 1947

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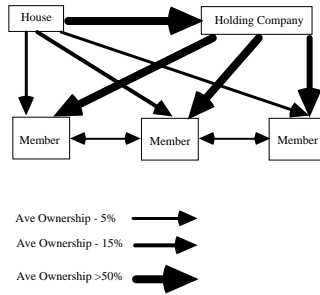
Zaibatsu Dissolution

- Zaibatsu leaders were banned from activity in financial world
- Created a governance crisis in most zaibatsu
 - Restructured companies were forced to appoint managers were appointed from inside firm and from their banks
- President's clubs emerged among formerly affiliated companies
 - President's clubs were monthly or bimonthly meetings between the major companies of the former zaibatsu
- Banks were forbidden from underwriting bond issues
 - Similar to US law

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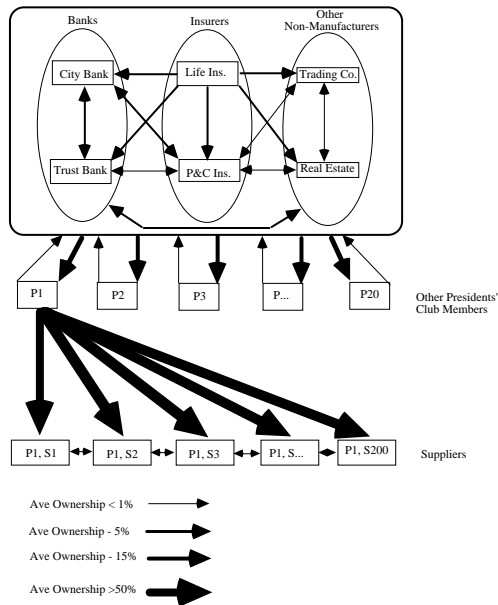
Transformation of Zaibatsu Into Keiretsu

Zaibatsu Financial Structure



Keiretsu Financial Structure

Financial Core

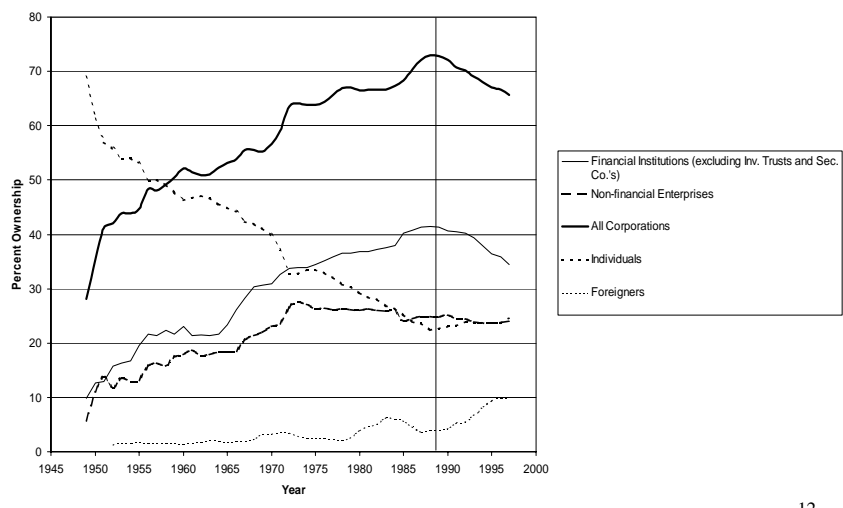


Mitsui Group Ownership Structure 1993

Owned \ Owners	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	Sum
1 Sakura Bank, Ltd.	x	1.66	3.49	1.06	0.88	?	0.11	?	0.93	0.13	0.21	0.14	0.45	0.92	0.33	?	0.06	0.20	0.29	0.24	0.20	?	1.48	0.49	0.25	2.56	16.1
2 M. Trust	2.51	x	4.24	1.73	1.34	?	0.20	?	2.91	0.08	0.73	0.22	1.24	1.55	0.97	?	0.17	0.40	0.64	0.49	0.23	?	1.27	0.54	0.62	1.79	23.9
3 M. Life Ins.	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
4 M. Mar & Fire	4.82	4.33	5.11	x	3.55	?	0.20	?	1.52	0.13	0.49	0.36	1.35	0.87	0.20	?	0.07	0.58	0.26	0.64	0.09	?	0.42	1.32	-	2.12	28.4
5 M. & Co.	4.93	3.91	4.69	2.71	x	?	0.11	?	0.12	0.91	0.06	0.09	0.15	0.79	0.11	?	0.12	0.21	0.10	-	-	?	0.42	0.28	0.22	0.38	20.3
6 M. Mining	4.97	6.37	9.29	2.08	5.53	x	2.96	?	2.03	0.33	-	-	-	-	-	?	-	-	0.49	2.91	-	?	-	-	-	-	37.0
7 M. Construction	4.66	5.13	6.78	1.17	2.10	?	x	?	15.7	-	0.18	0.31	0.11	0.75	-	?	1.97	-	-	0.19	0.24	?	-	-	-	-	39.3
8 Mitsubishi, Ltd.	4.59	3.89	4.27	0.81	0.23	?	0.03	x	0.21	-	-	-	-	-	-	?	-	-	-	-	-	?	-	-	-	-	14.0
9 M. Fuosan	4.64	5.42	2.86	1.72	0.34	?	0.97	?	x	0.17	0.07	0.24	-	0.19	-	?	-	0.02	-	0.02	0.13	?	0.25	0.16	-	-	17.2
10 M. O.S.K. Lines	3.71	4.22	4.11	2.98	0.69	?	-	?	0.51	x	0.09	-	-	-	-	?	0.02	-	-	-	-	?	-	3.78	1.05	-	21.2
11 M.-Soko	4.99	7.14	8.85	5.87	-	?	0.90	?	0.87	-	x	0.43	0.43	-	-	?	-	-	0.45	-	-	?	-	-	-	-	29.9
12 Sanki Engineering	4.16	3.37	9.46	1.70	-	?	0.35	?	-	0.22	x	-	-	-	-	?	-	-	-	-	0.14	?	-	1.18	-	-	20.6
13 Nippon Flour Mill	4.99	5.61	6.25	5.21	2.65	?	0.36	?	-	0.36	-	-	-	-	-	?	x	-	-	-	-	?	-	-	-	-	26.4
14 Toray Industries	4.49	4.61	4.89	1.43	0.56	?	0.14	?	0.17	-	0.05	-	-	x	-	?	-	-	0.03	-	-	?	-	0.15	-	-	16.5
15 New Oji Paper	3.49	3.08	3.48	-	0.23	?	-	?	0.02	-	-	-	0.02	-	x	?	-	-	-	0.07	-	?	-	0.20	0.17	-	10.8
16 Nippon Paper Inds.	2.69	2.78	4.05	-	-	?	-	?	-	0.15	-	-	-	1.04	x	-	-	-	-	-	-	?	-	-	-	-	10.7
17 M. Toatsu Chem	4.99	4.50	3.75	2.30	1.78	?	0.33	?	-	0.05	0.16	-	-	-	-	?	x	0.05	0.14	-	-	?	-	0.09	-	-	18.1
18 Denki Kagaku Kog.	3.11	3.23	6.82	2.67	1.45	?	-	-	-	-	-	-	-	-	-	?	-	-	-	-	-	?	-	-	-	-	17.3
19 M. Pet. Industries	4.99	5.19	4.32	2.21	4.14	?	0.17	?	-	-	0.19	-	-	11.5	-	?	2.62	-	-	-	-	?	-	3.26	-	-	38.6
20 Onoda Cement	4.99	5.75	4.87	2.15	0.86	?	0.12	?	0.28	-	-	-	-	-	0.44	?	-	-	-	-	x	?	-	0.21	-	-	19.7
21 Japan Steel Works	4.86	4.65	6.50	1.85	-	?	0.50	?	1.02	-	-	0.08	-	-	-	-	-	-	-	-	-	x	?	-	-	-	19.5
22 M. Min&Smelting	2.48	4.42	4.09	0.87	0.50	?	0.26	?	0.45	-	-	-	-	-	-	?	0.14	-	-	-	-	x	-	-	-	-	13.2
23 Toshiba	3.73	2.27	2.90	1.32	0.41	?	0.01	?	0.06	0.09	-	-	-	-	0.04	?	0.02	-	-	0.00	0.04	?	x	0.03	0.58	-	11.5
24 M Eng & Ship	2.44	3.14	3.99	2.07	2.35	?	-	?	0.41	1.87	-	0.30	-	0.29	0.26	?	-	-	-	0.12	0.14	?	-	x	-	0.61	18.0
25 Ishikawajima-IHHI	1.54	2.26	1.56	-	0.22	?	?	?	0.07	-	-	-	-	-	-	-	-	-	-	-	-	?	4.26	-	x	-	10.4
26 Toyota Motor	4.95	2.39	2.23	2.45	0.25	?	0.06	?	0.04	-	-	0.06	-	-	0.01	-	-	-	-	-	-	?	0.15	0.06	-	x	12.7
Average	3.44	3.06	3.72	1.61	0.81	?	0.14	?	0.56	0.17	0.1	0.07	0.17	0.44	0.16	?	0.08	0.07	0.09	0.1	0.05	?	0.54	0.4	0.2	0.53	

Capital Markets

Ownership of Japanese Securities



Securities Regulation

- MOF made it difficult to raise funding through equity issues again
 - Existing shareholders had right to buy new issues at par rate--well below the market rate
 - Equity issues were more like stock splits
 - Increased importance of bank financing
 - Set tough issuance criteria lined to dividend payouts and profitability prior to the issuance of stock
 - Dividends were required to rise after stock issues until 1996
 - Fixed commission rates deterred the development of a secondary market

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Example of Issuing Shares at Par

- Initial Conditions
 - Price per share = $P = 10$
 - Number of shares = $Q = 50$
 - Market Value = $MV = 10 * 50 = 500$
- What happens if the firm offers 50 shares at $p = 2$?
 - Firm raises $2 * 50 = 100$ in new capital
 - $MV = 500 + 100 = 600$
 - $P = 600 / (50 + 50) = 6$

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Bond Regulation

- MOF placed regulations on bond markets by permitting a bond cartel (Kisai kai)
 - Membership consisted of bureaucrats and bankers
 - Set coupon rate, issue price, and amount of issue until 1955
 - Later regulation
 - Only fully secured bonds issues were permitted
 - Yields were set artificially low which reduced demand
 - Minimum firm size levels were set for bond issuers
 - Necessary because interest rates were set artificially low
 - Corporate bonds were rationed because gov't bonds and bonds by public enterprises were given priority (until late 1960's)
 - Limited bond market prevented the development of rating agencies
 - Also hurt newcomers

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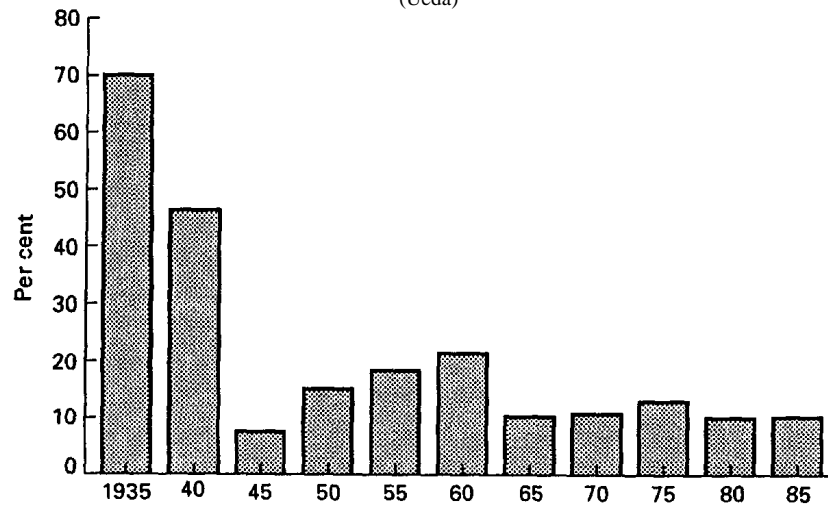
The Return of Long-Term Credit Banks

- Japanese government moved quickly to reestablish LTCB's
 - In 1952 LTCB of Japan was founded
 - IBJ was soon transformed into an LTCB
 - 1957 Nippon Credit Bank was founded
- These banks were not allowed to take in deposits
 - Raised money by issuing bonds
 - LTCB's benefited because their debentures were not rationed
 - LTCB's also were the only ones issuing long-term debt

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Bond and Equity Issues As a Share of External Finance

(Ueda)



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The Creation of Keiretsu: Tax Policy

- Insurance companies
 - In Japan, the value of all life insurance is 4.75 times national income. In Korea, it is 2.7 and in the US, 2.15
 - Why is there so much money in insurance?
 - Tax code: half of premium is deductible to ¥100,000
 - Historically, this was a very large number
 - In 1961 this was ¥60,000 at that time 83% of households had income below ¥500,000
 - Tax code allows tax free investment either through insurance co.'s, corporate pensions, or postal insurance

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The Creation of Keiretsu: Competition Policy

- Banking sector regulation
 - MOF regulated interest rates since 1947
 - Banks and firms circumvented this by using the “compensating balance system” whereby firms deposited up to half of their borrowings back in the banks
 - Example: If I lend ¥ 3 at 10% interest and require you to deposit ¥ 1 back with me at 0%, then the effective loan amount is ¥ 2, interest payments are ¥ 0.3, and the effective interest rate is 15%
 - Corporate bond rates were kept artificially low and tied to government bond yields
 - The convoy system: stronger banks should help weaker banks
 - No bank failures

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Estimates of the Impacts of Selected Policies

- Artificially low deposit rates helped banks that took deposits
 - Benefit is difference between deposit rate and call rate (free rate)
- BOJ lending to banks at below market rates helped banks as well
 - Benefit is difference between BOJ loan rate and call rate
- LTCB’s benefited (and purchasers of bonds lost) because yields on bonds were kept artificially low
- Quantity effects not estimated

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Implicit Interest Rate Subsidies and Taxes

(Ueda)

(billion yen)

1955	1960	1965	1970	1975	1980	1985	1990	Subsidy or taxation due to regulation of: ¹
City Banks								
2.2	15.8	15.1	60.5	174.9	302.6	149.7	–	Deposit rates
0.3	5.3	15.6	44.2	39.8	66.1	45.7	53.1	Official discount rates
–0.5	–6.0	–23.4	–15.2	–9.3	–	–	–	Bond yields
39.5	76.8	154.5	340.2	451.7	523.8	1,129.0	1,658.6	Profits
Regional Banks								
2.2	13.3	13.8	48.1	147.2	283.9	143.3	–	Deposit rates
0.0	0.1	0.3	0.9	0.8	1.5	3.4	8.1	Official discount rates
–0.3	–2.2	–7.3	–4.6	–4.9	–	–	–	Bond yields
22.0	53.7	90.0	255.9	372.9	375.6	603.6	788.2	Profits
Long-Term Credit Banks								
0.8	2.4	8.7	2.7	3.1	–	–	–	Trust Fund Bureau ²
0.0	0.1	0.4	1.0	1.4	0.1	4.3	9.1	Official discount rate
1.6	13.2	55.1	45.0	53.3	–	–	–	Bond yields
7.8	14.3	24.4	61.6	91.6	107.6	210.9	279.0	Profits

Notes:

¹ Profits are 'current profits' and given for comparative purposes.

² Trust Fund Bureau's purchase of long-term bank debentures at non-market prices.

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The Creation of Keiretsu: Competition Policy

- Segmentation of financial function
 - City banks focused on large corporations in urban areas
 - Regional banks and city banks focused on SR lending
 - Could lend to large regional banks or city banks
 - Sogo banks, Shinkin banks, and credit unions specialized in lending to smaller firms
 - Long term credit banks and trust banks lent long term
 - Life insurers could not engage in property and casualty insurance and vice versa
 - Corporate pensions had to be managed by trust banks or insurance companies

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Financial Institutions in Japan (Hoshi-Kashyap)

	Funding Restrictions?	Lending Restrictions?	Primary Lines of Business	Miscellaneous Attributes
Ordinary Banks	Generally cannot issue any long-term bank debt; did not take deposits for longer than 2 years prior to 1993.	No significant restrictions	Lending and deposit taking; must use subsidiaries to engage in trusts or securities underwriting.	Can issue some subordinated debt and convertible bonds.
City Banks	See rules for ordinary banks	No significant restrictions	Historically have dealt with large corporate customers	Large branch networks usually concentrated in urban areas; national operations
Regional Banks	See rules for ordinary banks	Typically choose to only lend within their region	Historically have operated only within their base region	Branch networks usually limited to their base region
Type II Regional Banks (once called Sogo banks)	See rules for ordinary banks	Historically have lent only to small businesses	Historically have operated only within their base region	Branch networks usually limited to their base region

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Financial Institutions in Japan (Hoshi-Kashyap)

	Funding Restrictions?	Lending Restrictions?	Primary Lines of Business	Miscellaneous Attributes
Long-term Credit Banks	Prior to 1993 could only take deposits from members or governments	No significant???	Provision of long-term credit	Prior to 1993 the only institutions that could issue bank debt up to five years; very limited branching, created by special legislation.
Trust Banks	Prior to 1993 could only raise funding for purposes of trust management	No short term- financing	Primarily pension fund and individual trust management	?
Shinkin banks	Mostly financed by members	Mostly service members' needs	Focus on members and local community needs	Non-profit, cooperatives; Only limited transactions with non-members

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Financial Institutions in Japan

(Hoshi-Kashyap)

	Funding Restrictions ²	Lending Restrictions ²	Primary Lines of Business	Miscellaneous Attributes
Credit Cooperatives	Mostly financed by members	Mostly service small businesses	Focus on serving small businesses	Non-profit, cooperatives; Only limited transactions with non-members
Agricultural Cooperatives	Mostly financed by members	Mostly lend to members	Focus on serving needs of farmers and other agricultural businesses	Non-profit, cooperatives; Only limited transactions with non-member s
Fishery Cooperatives	Mostly financed by members	Mostly lend to members	Focus on serving needs of fishermen and others in the fishing businesses	Non-profit, cooperatives; Only limited transactions with non-members
Credit Federations	Accept funding from members	Assist members only	Provide services to members	Membership is made up of individual cooperatives
Norinchukin Bank	Accepts funding from members, public corporations and non-profit organizations; can issue debentures.	Assist members only	Provide services to members	Central cooperative bank for forestry, fishery and agricultural cooperatives; created by virtue of the Norinchukin Bank Law.
Justen	?	Real-Estate financing only	?	?
Securities firms	Cannot accept deposits	Only permissible using separate trust subsidiaries	Securities underwriting banking and securities business	Article 65 separates

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Plant and Equipment Loan by Type of Bank (¥ Billions)

(Lending to Small Firms in Brackets, Source Ueda)

Year	City	Regional	Long-Term	Trust
1955	108 [9]	44 [13]	233 [8]	70 [1]
1960	380 [43]	157 [63]	802 [47]	473 [19]
1965	833 [179]	496 [294]	1923 [212]	1706 [62]
1970	2500 [890]	1802 [1244]	3908 [618]	4144 [330]
1975	9060 [4946]	6031 [4680]	7935 [1188]	8895 [1687]
1989	57926 [49726]	29107 [25932]	13985 [4582]	13536 [7235]

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Financial Regulation: Competition Policy

- Restrictions on entry
 - 1945-1949 No restrictions on new bank branches
 - 1949-1953 No new branches are allowed
 - 1953-1958 Banks encouraged by MOF to reduce branches
 - 1958-1993 Banks allowed to open branches only if pass MOF review. No more than 1 new branch every two years
 - 1993- Elimination of restrictions on new branches

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Changes in the Number of Domestic Branches

Year ending 31 March	Dai-ichi	Nihon-Kang	Fuji	Sumitomo	Mitsubishi	Sanwa	Mitsui	Taiyo	Kohji	Tokai	Kyowa	Saitama	Daiwa	Tokyo	Hokkaido
Total in	93	116	182	135	156	182	100		151	174	234		99	35	108
1957	2	0	0	0	0	1	0		-8	0	0		0	1	0
1958	2	1	1	2	1	1	0		-4	-5	-2		0	1	0
1959	0	1	-1	0	1	2	0		2	3	-3		0	4	3
1960	0	4	4	4	0	0	2		1	-1	-1		4	2	2
1961	-	-	-	-	-	-	-		-	-	-		-	-	-
1962	3	4	3	2	3	0	5		3	2	0		1	1	4
1963	6	4	1	3	5	4	5		-2	4	2		6	1	4
1964	32 ^a	2	7	3	5	5	3		4	6	-5		4	0	8
1965	7	8	4	25 ^b	6	3	10		3	4	1		4	3	4
1966	-1	2	4	1	2	5	0		3	4	0		3	0	5
1967	-1	0	0	0	0	0	1		-2	1	0		2	0	-1
1968	1	0	0	1	1	0	17 ^c		3	0	-1		1	1	0
1969	1	1	-1	2	1	1	2	0	2	3	1		7	-1	7
1970	2	2	4	2	1	1	1	2	-1	1	-1	3		1	1
1971	-1	0	-1	2	4	-1	2	2	1	0	-1	2	1	0	0
1972	0	2	3	1	1	-3	2		-2	4	1	4	1	-1	2
1973	5	-1	1	3	0	1			-7	0	0	4	2	0	2
1974	5	4	4	3	3	2			4	3	2	1	1	1	0
1975	6	1	-2	1	1	2			6	4	0	2	1	0	5
1976	1	2	6	2	0	2			6	0	1	2	3	1	2
1977	1	2	3	2	5	4			1	0	0	4	5	2	2
1978	3	0	5	2	4	4			4	6	0	4	4	1	4
1979	1	6	4	4	1	2			0	1	0	2	1	-2	1
1980	1	5	3	4	2	3			1	6	4	4	3	0	1
1981	8	0	2	4	3	4			3	4	3	1	1	0	2
1982	3	7	5	1	3	4			1	2	1	5	5	1	4
1983	3	2	3	5	3	5			0	2	1	1	1	-1	7
1984	1	3	2	5	0	4			-6	3	0	0	1	0	3
1985	1	2	5	7	2	2			0	3	-6	1	1	-1	-2
1986	3	6	9 ^d	6	4	3			-3	1	-4	1	1	0	1
1987	0	6	-1	4	3	2			-2	4	-3	1	2	-1	-3
1988	3	9	-1	8	4	-1			4	-1	0	3	4	0	2
1989	3	11	7	4	14	6			-1	2	2	8	2	1	2
1990															

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Case: Heiwa Sogo Bank and Sumitomo

(Hoshi-Kashyap)

- Ministry of finance examination of Heiwa Sogo bank in the summer of 1985 revealed massive problem loans
- MOF policy
 - Suspension of interim dividends payment for September 1985
 - Change of the president
 - Acceptance of a management team from ministry of finance and bank of Japan
 - Heiwa Sogo initially tried to rebuild the bank under the new management, but could not
- Solution: MOF approached Sumitomo bank, the most profitable and third largest private bank at that time. Sumitomo agreed to merge Heiwa Sogo and write off all the bad loans. In return, Sumitomo got all the 101 branches of Heiwa Sogo located in and around Tokyo

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The Creation of Keiretsu: Competition Policy

- Property and casualty insurance regulations also reduced competition
 - Premium rating agency is exempt from anti-monopoly law and sets rates
 - Approval of new products requires release of new information reduces return for innovation

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The Creation of Keiretsu: Competition Policy

- Restraint on competition in life insurance
 - Competition is allowed through the investment component of the policy
 - Life insurers offer guaranteed investment contracts to customers which should allow competition
 - But big problem here is post office:
 - Assets equal ¥74 trillion
 - Roughly a third as large as the private sector
 - Nippon life, the largest private carrier, has assets of ¥35 trillion
 - Rate setting mechanism is anticompetitive

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The Creation of Keiretsu: Investment Policy

- Restrictions on investment
 - Corporate pensions had to be managed by trust banks or insurance companies
 - But 5-3-2 rule constrained investment vehicles to be similar
 - Little variance in return

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Impacts on Firms

- Absence of competition in banking on interest rates led to competition along other lines
 - Competition by banks as providers of services (role as main bank)
 - Competition by banks as stable shareholders
 - Prevents hostile takeovers

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The Midterm

Average	39
Median	36
Standard Dev.	15
Max	66
Min	11
60+	3
50-59	7
40-49	6
30-39	11
20-29	7
10-19	4

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