

## Chapter 2 Changes in Corporate Behavior and Evaluation of Structural Reform by Corporate sector

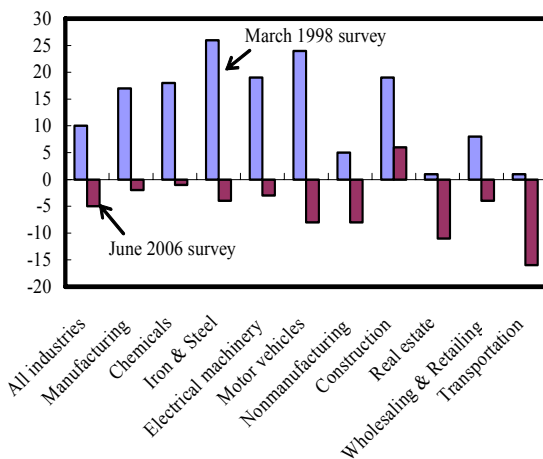
### Section 1 Corporate Behavior Returning to Normal following Post-Bubble Adjustment

- The corporate sector has almost eliminated the three excesses in employment, equipment and debts. The decrease in fixed costs has sharply lowered corporations' ratio of the break-even point to sales (the level of sales whereby corporations are neither making a profit nor incurring a loss), resulting in a strengthening of their balance sheets.

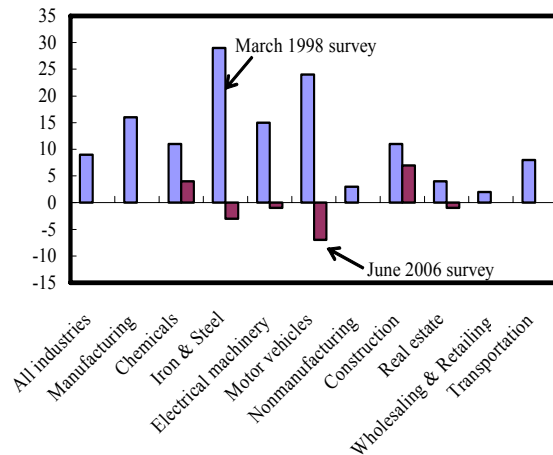
**Figure 2-1-2 Changes in the 3 excesses and trends in the break-even point ratio, by industry**

(1) Changes in the 3 excesses

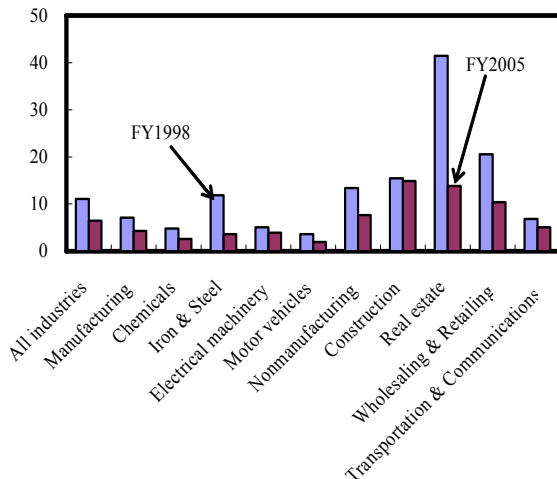
1) Changes in the sense of employment surplus  
("excess" – "shortage", % point)



2) Changes in the sense of equipment surplus  
("excess" – "shortage", % point)



3) Changes in interest-bearing debt to cash flow ratio  
(times)



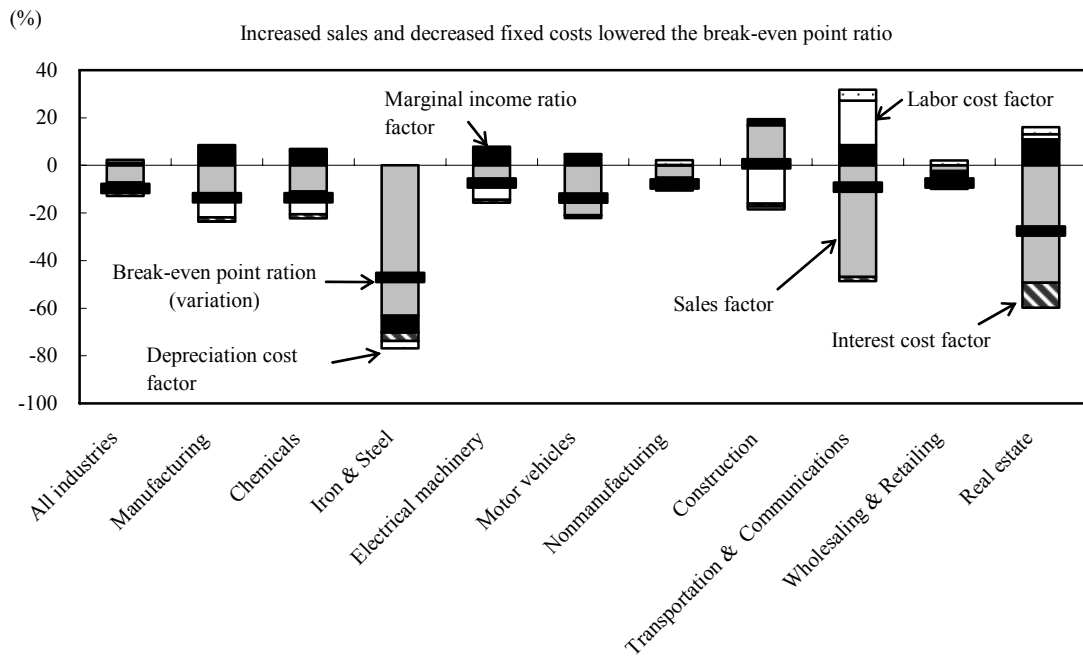
Notes: 1. *Short-term Economic Survey of Enterprises in Japan*, Bank of Japan, *Quarterly Financial Statements Statistics of Corporations by Industry*, Ministry of Finance

2. Interest-bearing debt-to-cash flow ratio = Interest-bearing debts / Cash flow

Interest-bearing debts = Long-term borrowings + Short-term borrowings + Corporate bonds

Cash flow = Current profits x 0.5 + Cost depreciation

(2) Factor analysis of break-even point ratio



Notes: 1. *Quarterly Financial Statements Statistics of Corporations by Industry*, Ministry of Finance

2. Break-even point ratio = Break-even point sales / Sales

Break-even point sales = Fixed cost / Marginal income ratio = Fixed cost x Sales / (Sales - Variable cost)

Fixed cost = Labor cost + Interest cost • discount charge + Depreciation cost

Variable cost = Sales - Fixed cost - Current profit

Marginal income ratio = (Sales - Variable cost) / Sales

3. Break-even point ratio (variation) is variation from fiscal 1998 to 2005.

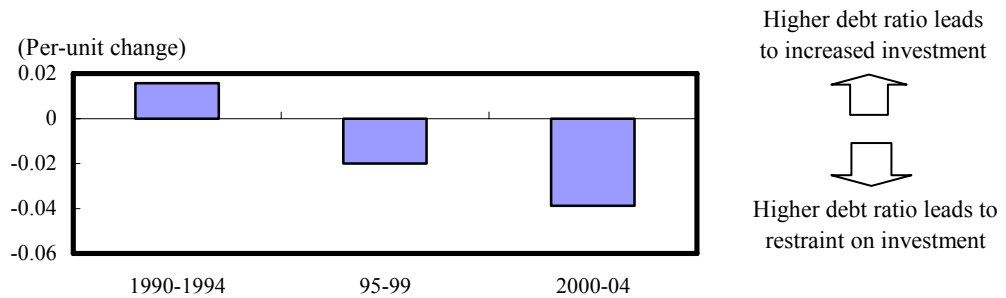
- Judging from corporations' fund-procurement and capital-investment behavior, their financial strategies are focused more on capital efficiency than before. Also, the growth in wages is moderate due partly to the introduction of performance-based wage systems.
- On the whole, corporations have come to adopt more prudent business management than before.

[Analysis]

- Panel data estimates of listed companies' fund procurement, capital investment, and wages show that 1) decisions on capital investment have come to be more influenced by balance sheet conditions than before, 2) regarding determinants of assets-to-liabilities ratio, increased profits have been used more intensively to reduce liabilities than before, and 3) regarding wage setting, wages at corporations adopting a performance-based wage system are less sensitive to the profit rate than those at corporations not adopting such a system.

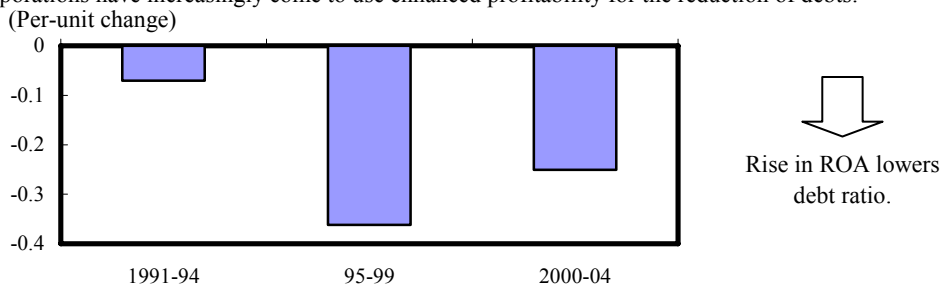
**Compiled from Figure 2-1-8: Capital investment's sensitivity to debt ratio**

Corporations are making investment decisions focusing more on balance sheet conditions than before.



**Compiled from Figure 2-1-7: Debt ratios' sensitivity to ROA**

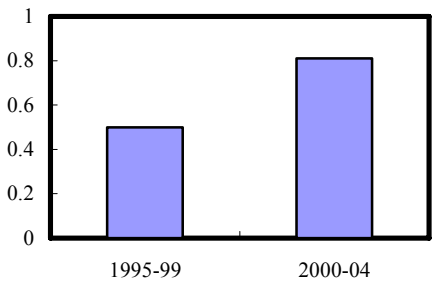
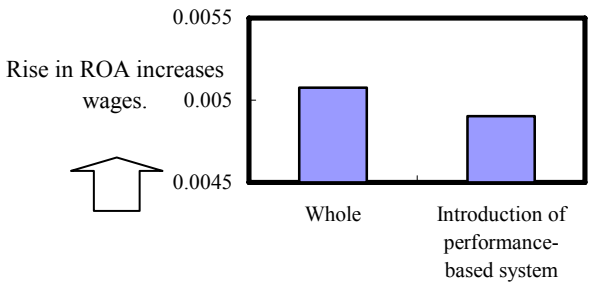
Corporations have increasingly come to use enhanced profitability for the reduction of debts.





**Compiled from Figure 2-1-12: Wages' sensitivity • wages' adjustment speed relative to ROA**

Introduction of performance-based wage system curbs wages.

Adjustment speed of wages increases



Higher adjustment speed  
  
 Lower adjustment speed  


## Section 2 Characteristics of Japanese Corporations and their Changes

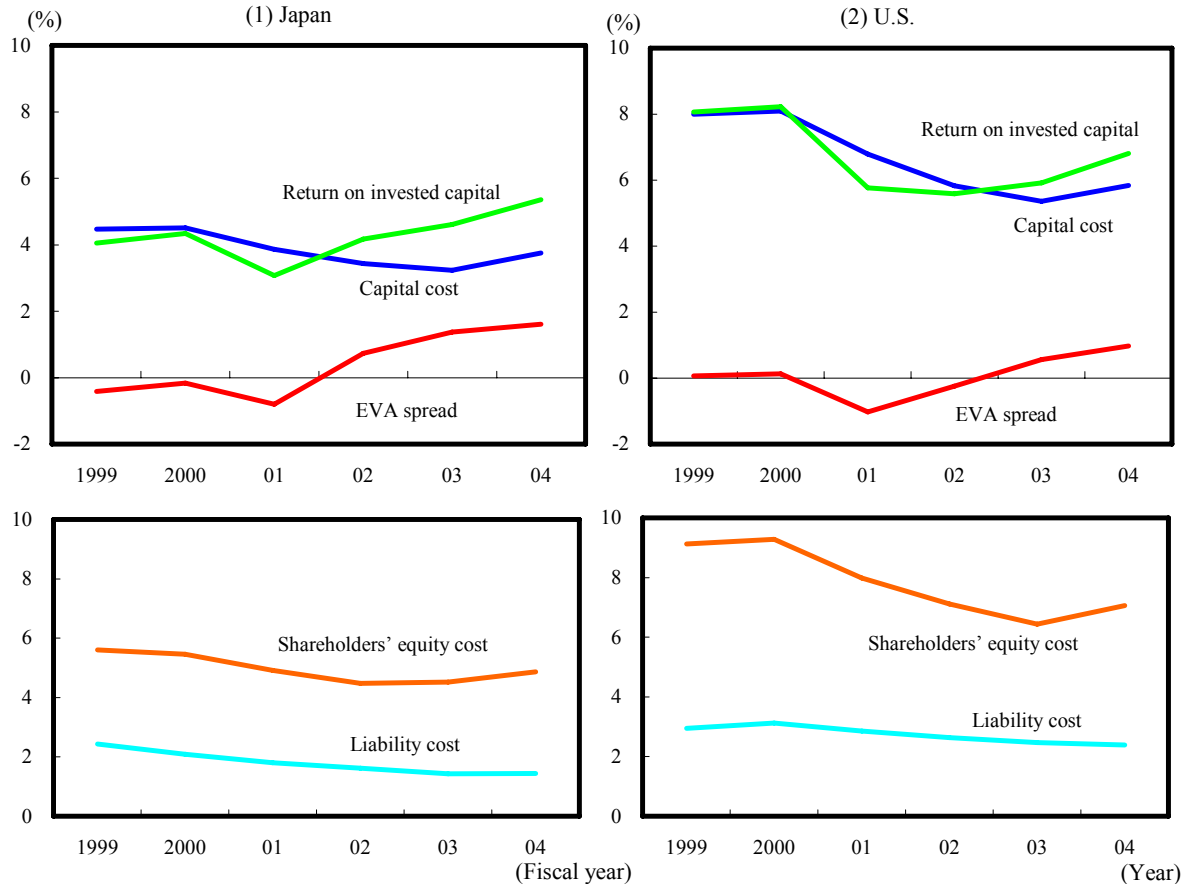
- A comparison of Japanese and U.S./European corporations based on financial data shows that the capital efficiency of Japanese corporations is low in terms of return on assets (ROA).
- The low capital efficiency of Japanese corporations is likely to reflect insufficient corporate monitoring by shareholders due to cross-shareholdings, etc. Recently, however, the capital efficiency has been improving.

[Analysis]

• Calculation of 1) returns on assets (after-tax operating profits divided by capital invested), 2) capital costs (weighted average of liability cost and shareholders' equity cost), and 3) the ratios of economic value added (note), by using financial data of Japanese and U.S. corporations, shows that the capital cost in Japan has been continually lower than in the U.S., indicating that monitoring by shareholders has been insufficient. However, capital efficiency is now improving, with the economic value added entering positive territory.

(Note): Economic Value Added (EVA) is a registered trademark of Stern Stewart & Co. However, our analysis is based on general economic value added and our calculation method is slightly different.

**Figure 2-2-7 Comparison of Capital Cost Between Japan and U.S.**



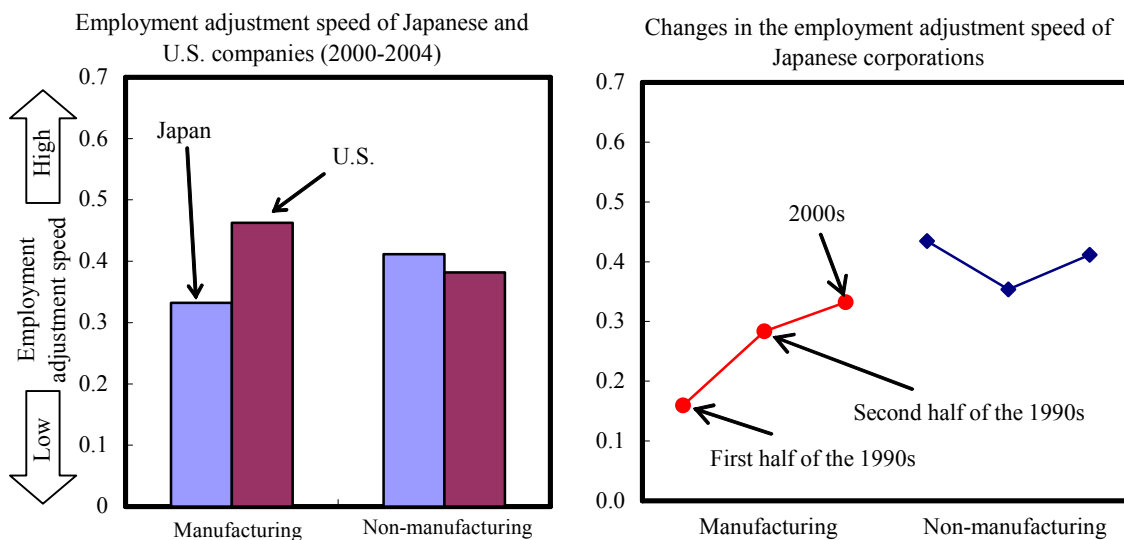
- Notes: 1. "Osiris," Bureau van Dijk; Bloomberg  
 2. Companies covered are listed companies (excluding financial and insurance companies) selected from the above database, whose consolidated financial data for fiscal 1999 and onward are available and whose financial statements have no missing values based on the necessary items. Japan: 814 companies; U.S.: 1,307 companies

- The adjustment speed of employment in Japan is slower than in the U.S.. But, the speed has picked up since the second half of the 1990s.
- Notwithstanding the pickup in speed, Japan's long-term employment practices have not changed drastically, with the average tenure of continuous employment in Japan remaining long by international standards.

[Analysis]

- Estimates of employment adjustment function based on corporate data show that the adjustment speed of the Japanese manufacturing industries is slower than their U.S. counterparts'. However, when the estimation periods are separated, it shows that the adjustment speed of the Japanese manufacturing industries has been increasing since the second half of the 1990s.

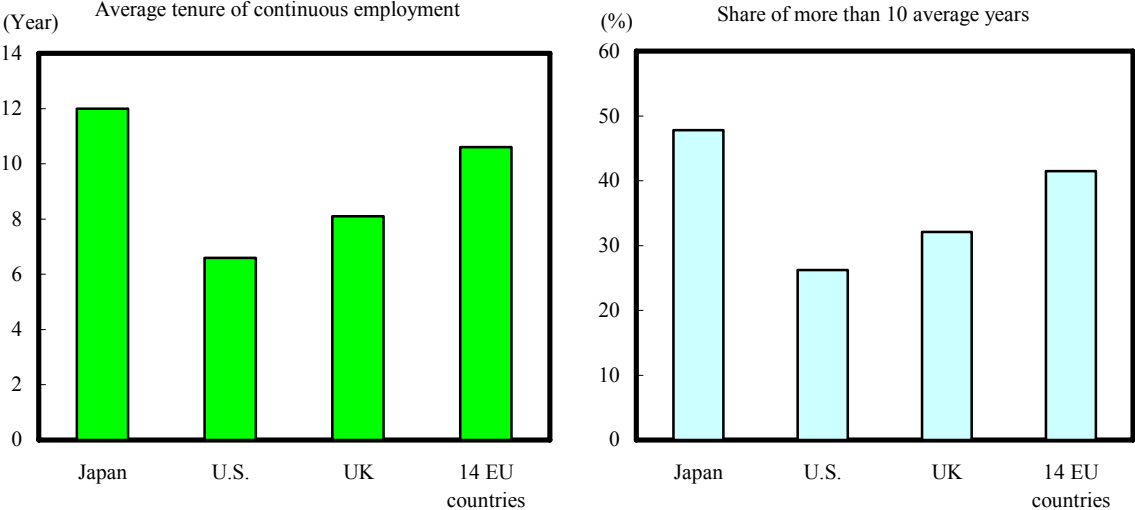
**Figure 2-2-10 Comparison of Employment Adjustment Speed between Japan and U.S.**



Notes: The estimate was made based on the data of 1,126 companies (705 manufacturers, 421 non-manufacturers) listed on the First Section of the Tokyo Stock Exchanges and extracted from Nikkei NEEDS, and 1,439 companies (635 manufacturers, 804 non-manufacturers) extracted from Osiris.

- An international comparison of average years of continuous employment shows that Japan has a longer average number of years than other advanced countries.

**Figure 2-2-13 International Comparison of Average tenure of Continuous Employment**



- Notes: 1. *Basic Survey on Wage Structure*, Ministry of Health, Labour and Welfare; Perter Auer, Janie Berg and Ibrahim Coulibaly, 2004, “Insights into the tenure-productivity-employment relationship”, Employment Analysis and Research Unit
2. Average tenure of continuous employment is in 2005 for Japan, in 1998 for the U.S. and in 2002 for 14 EU countries.  
The ratio of employees with more than 10-year continuous services to total employees is in 2004 for Japan, 2002 for the U.S., and in 2002 for 14 EU countries.



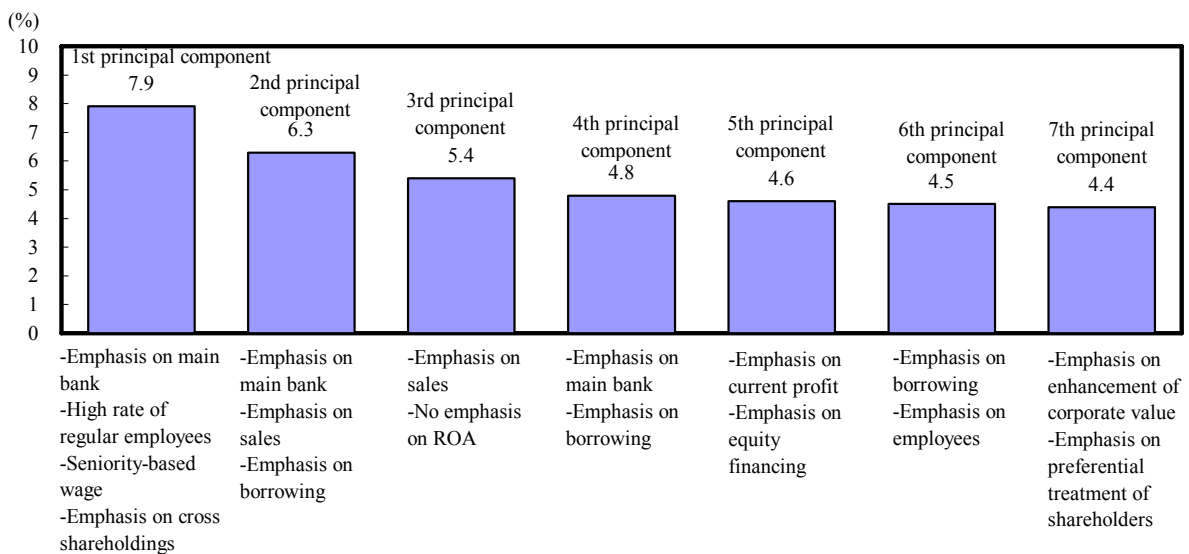
- The outcome of a questionnaire survey on Japanese corporations' policies strategy finance/management, employment, etc. reveals the longstanding characteristics of Japanese-style management in terms of placing emphasis on employees and long-term employment. However, regarding financial strategy and relations with trading partners, many corporations are seeking higher efficiency.

[Analysis]

- The Cabinet Office conducted a questionnaire survey on 3,791 companies and obtained responses from 669 of them (response rate: 17.6%). The corporations were asked to evaluate in five stages the emphasis they place respectively on finance/management strategy, employment, etc.
- Based on the survey findings, a principal component analysis was made to extract characteristics common to many Japanese corporations. The analysis has found that the top four principal components indicate emphasis on the main banks as stakeholders, emphasis on sales rather than ROA, emphasis on stable dividend payments (face-value dividend), and a high ratio of regular employees based on the seniority-based wage system. However, the analysis also reveals the diversification of corporations, with the top four components' explanatory power accounting for only 25% of the total.

**Figure 2-2-15 Breakdown of Principal Components in Corporate Survey**

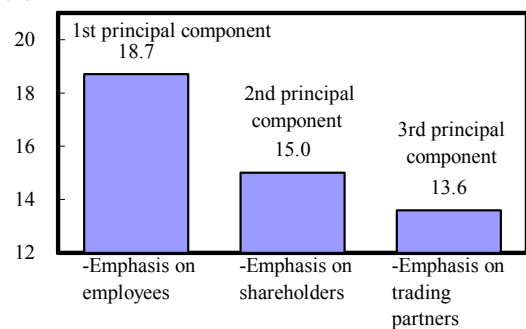
(1) All items



(2) Analysis of each item

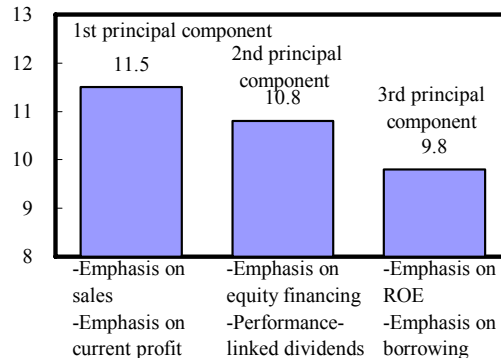
1) Corporate governance

(%)



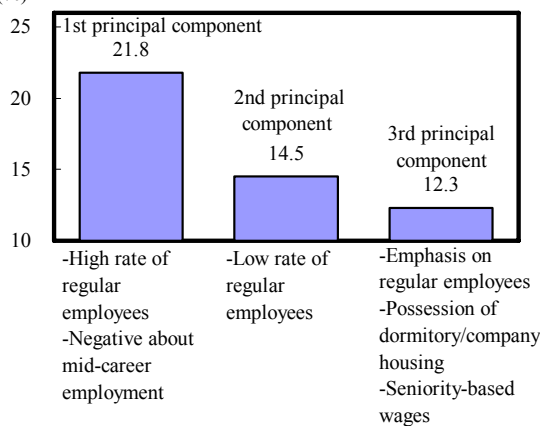
2) Financial strategy

(%)



3) Employment

(%)



Note: Questionnaire concerning corporate governance, finance, and employment(2006), Cabinet Office; Nikkei NEEDS

- An estimated correlation between Japanese-style management and corporate performance, etc. shows that the capital efficiency of the corporations having characteristics of Japanese-style management, such as emphasis on employees, is not so low as is generally believed.
- Corporations placing heavy emphasis on main banks are mostly mature companies with low potential for growth. The capital efficiency of such corporations has declined in the process of restructuring.
- Corporations placing emphasis on equity financing have strong growth potential and also place emphasis on shareholders as stakeholders.

[Analysis]

- With regard to the principal components extracted in the corporate questionnaire survey, each corporation's points were computed and their correlations with ROA, Tobin's q, growth rate of total assets, and price-book value ratio (PBR are estimated). The study found the following.
  - 1) Since the principal components with the characteristic of placing emphasis on employees are positively correlated with ROA, the capital efficiency of corporations having the characteristics of Japanese-style management with emphasis on employees is rather high.
  - 2) Since the principal components placing emphasis on main banks and with a high ratio of regular employees are negatively correlated with ROA, Tobin's q, etc., corporations having such characteristics are mostly mature companies with low growth potential. The capital efficiency of such corporations has declined in the process of restructuring.
  - 3) The principal component placing emphasis on equity financing is positively correlated with Tobin's q, growth rate of total assets, etc. Corporations placing emphasis on equity financing have strong growth potential and also place emphasis on shareholders as stakeholders

**Compiled from Figure 2-2-16; Correlation between Japanese-style Management and Corporate Performance**

	Corporate performance			
	ROA	Tobin's q	Growth rate of total assets	PBR
Principal components in all items				
○ Emphasis on main bank; High ratio of regular employees; Seniority-based wages; Emphasis on cross shareholdings	*** -	*** -	*** -	*** -
Principal components by category				
○ Emphasis on employees	+ ***	+	+	+
○ Emphasis on equity financing, Performance-linked dividend	+ **	+ ***	+ ***	+ ***

- Notes: 1. *Questionnaire concerning corporate governance, finance, and employment (2006)*, Cabinet Office; Nikkei NEEDS
2. The survey covered 490 listed companies (excluding financial and insurance companies) whose data are available. The financial data used are averages of the five nearest accounting terms ending in January 2006.
3. \*\*\* denotes those that are significant at the 1% level, \*\* denotes those significant at the 5% level, and \* denotes those significant at the 10% level
4. ROA = Operating profit / Total assets (average of beginning and term-end); Tobin's q = (Liabilities + Total market capitalization) / Total assets; PBR = Total market capitalization / Capital
5. The estimates include the ratio of changes in employment, the asset-liability ratio, sales growth rate, number of years listed, market dummies (TSE Second Section, upstart market), and industry dummies (13 types of business)

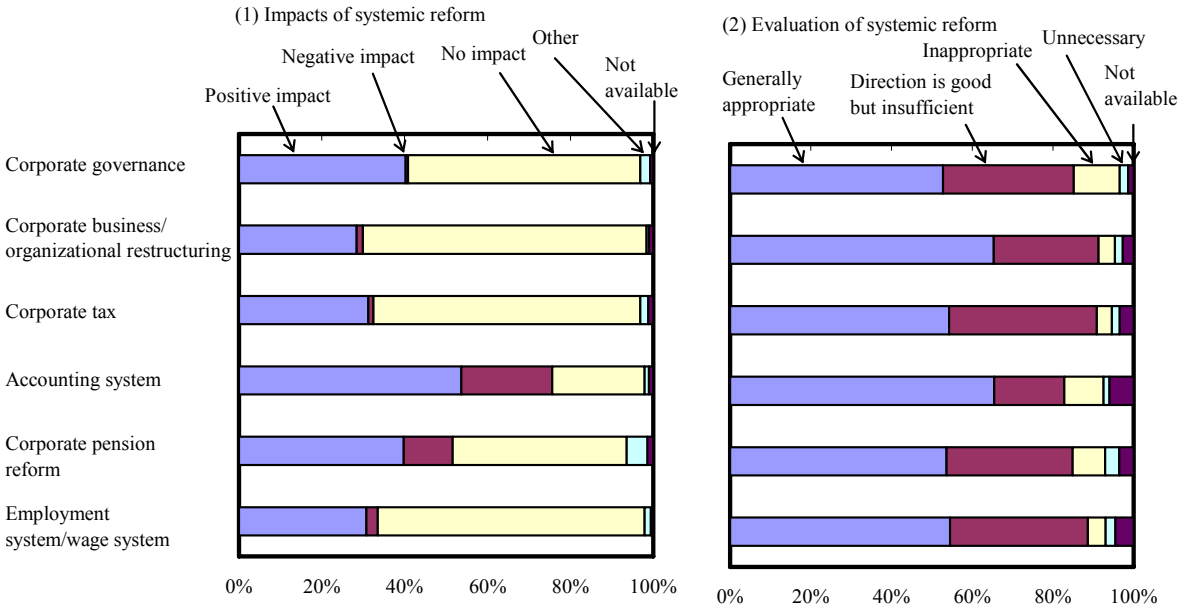
### Section 3 Structural Reform and Corporate Management Environment

- Since the second half of the 1990s, various systems pertaining to corporate activities have been reformed in a wide range of fields, including corporate governance, business restructuring, corporate accounting, tax/corporate pension systems, and employment. According to a questionnaire survey, many corporations have evaluated these reforms highly.
- With regard to the enhancement of convenience and transparency of administrative procedures, corporate taxation, and the promotion of deregulation and opening up of government activities to the private sector, many corporations are calling for further reforms.

[Analysis]

- With regard to reforms in the areas of corporate governance, business restructuring, corporate accounting, tax/corporate pension systems, and employment, the survey found that more than 50% of the responding corporations evaluated the reforms as “generally appropriate.”
- The policy objects of the reforms have received just appraisal, with corporations that have implemented corporate integration, such as holding companies, and those that have increase R&D investment giving high marks to the relevant reforms.

**Figure 2-3-4 Findings of Corporate Questionnaire Survey**



**Figure 2-3-5 Evaluation of Structural Reform and Corporate Attributes**

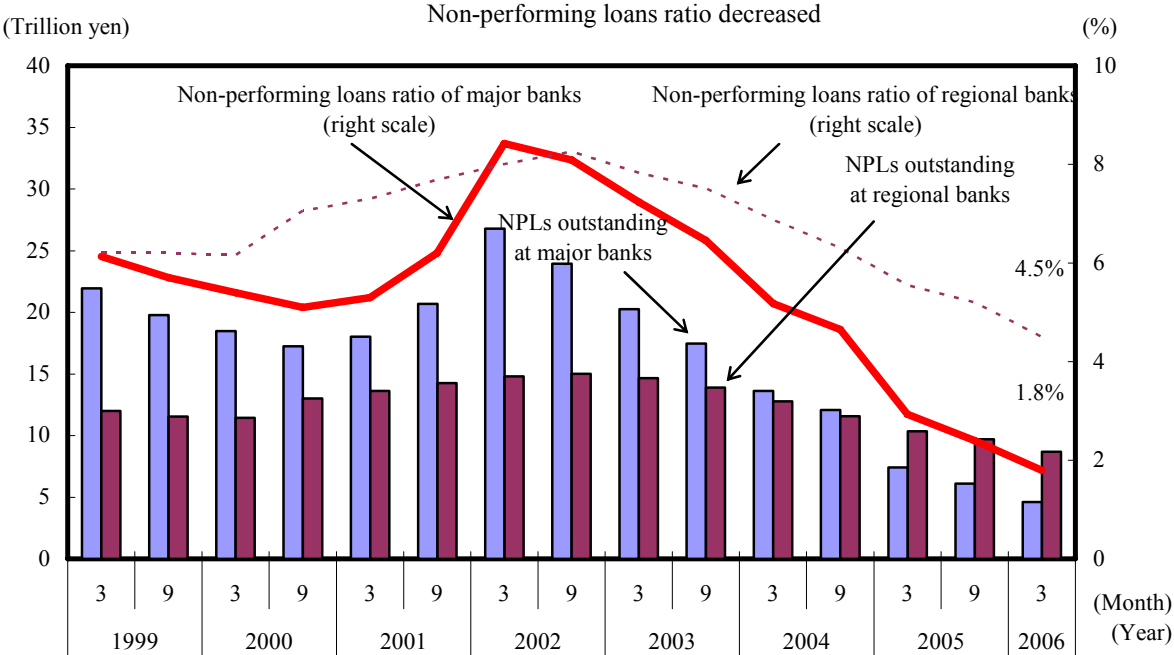
	Corporate governance	Business organization	Corporate taxation	Accounting system	Corporate pension	Employment compensation
Business strategy						
M&A	-	+	+	+	+	-
Corporate spin-off	-	-	-	-	+	-
Holding company	-	+	+	+	+	+
R&D	+	+	+	+	+	+
ROA	-	-	-	-	-	+
Tobin's q	+	+	+	+	+	+

- Notes: 1. *Questionnaire concerning corporate governance, finance, and employment(2006)*, Cabinet Office; Nikkei NEEDS  
2. The survey covered 449 listed companies (excluding financial and insurance companies) whose data were available.  
3. \*\*\* denotes those that are significant at the 1% level, \*\* denotes those significant at the 5% level, and \* denotes those significant at the 10% level  
4. The estimates include foreign sales ratio, form of organization, corporate structure, circumstance of competition, advantage of the company, diversification of business, number of employees, ratio of changes in employment, number of years listed, market dummies (TSE Second Section, upstart market), and industry dummies (13 types of business).

### Section 4 Current Status of Japanese Financial Institutions and the Challenges They Face

- Although the management vitality of financial institutions has recovered along with the normalization of the non-performing loan issue, financial institutions still face challenges, such as enhancement of their earnings capacity.

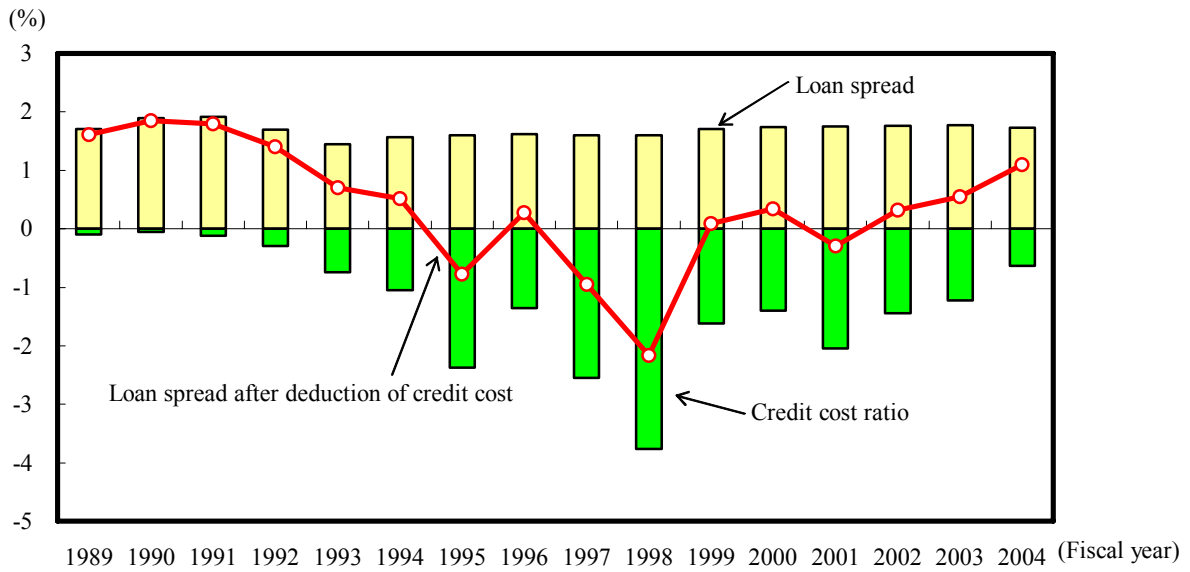
**Figure 2-4-1 Improving Situation of Banks' Non-Performing Loans**



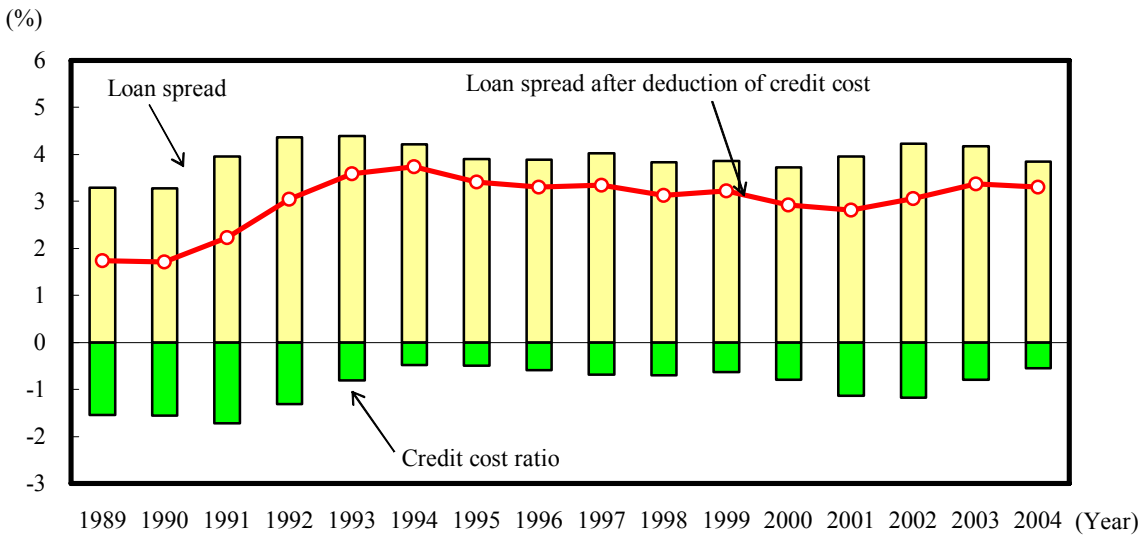
Notes: 1. Outline of closing of accounts in fiscal year 2005 of major banks and regional banks(tentative value), Financial Services Agency  
 2. The total NPLs of major banks include those of city banks, long-term credit banks, and trust banks, but not those of Shinsei Bank and Aozora Bank.  
 3. The total NPLs of regional banks include those of Saitama Risona Bank.

**Figure 2-4-3 Changes in Loan Spread of Japanese and U.S. Banks**

(1) Japan



(2) U.S.



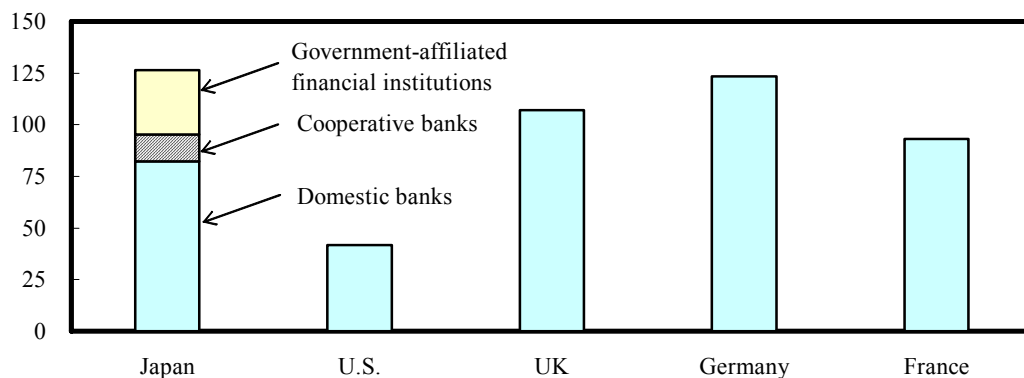
- Notes: 1. Bank of Japan materials  
 2. Federal Deposit Insurance Corporation (FDIC)  
 3. Loan spread = Yield on lending – Fund cost (%)  
 Credit cost rate = Non-performing loan disposal loss / Loan balance



- The competitive environment surrounding bank lending has become increasingly severe. Various indicators suggest that there is a possibility of overbanking in Japan.
- With the fund procurement behavior of the corporations that went through structural adjustment changing, banks are looking to retail banking targeting the household sector as a new profit-earning opportunity. However, there are lots of problems that must be addressed.

**Figure 2-4-4 International Comparison of Banks in Five Major Countries**

(2) Ratio of outstanding loan balance to nominal GDP (%)



Notes: 1. *Bank Profitability*, OECD; *Deposits / lending-related statistics*, Bank of Japan

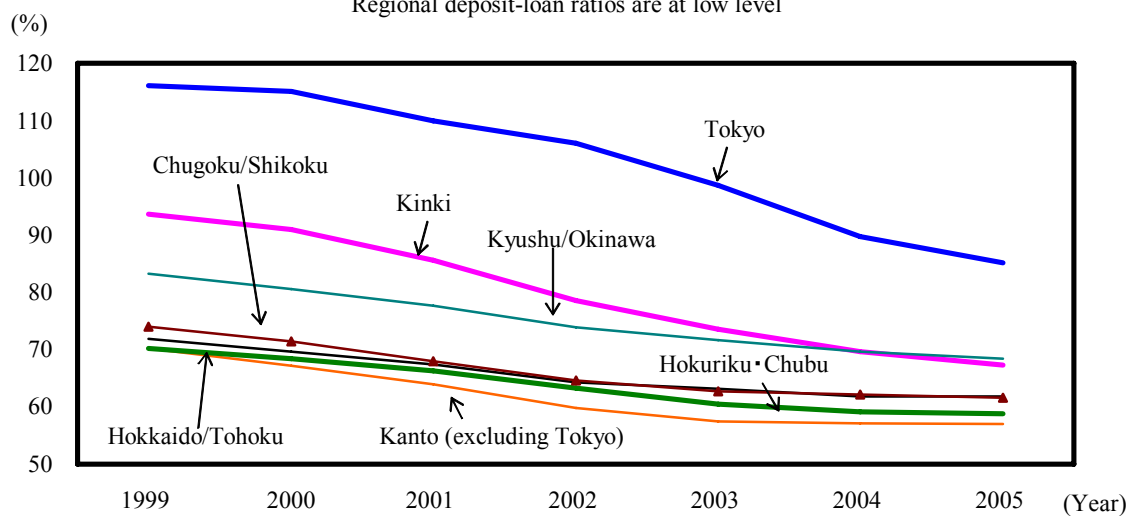
2. Japan's government-affiliated financial institutions are Development Bank of Japan, Japan Bank for International Cooperation, National Life Finance Corporation, Housing Loan Corporation, Agriculture, Forestry and Fisheries Finance Corporation, Japan Finance Corporation for Small and Medium Enterprise, Japan Finance Corporation for Municipal Enterprises, Okinawa Development Finance Corporation, and Central Cooperative Bank for Commerce and Industry.

3. U.S. and UK are on a commercial bank basis and Germany and France are on an all-bank basis.

**Figure 2-4-5 Japan's Lending Market**

(2) Changes in deposit-loan ratio by region

Regional deposit-loan ratios are at low level



Note: *Deposits/Cash/Lending by Prefecture*, Bank of Japan

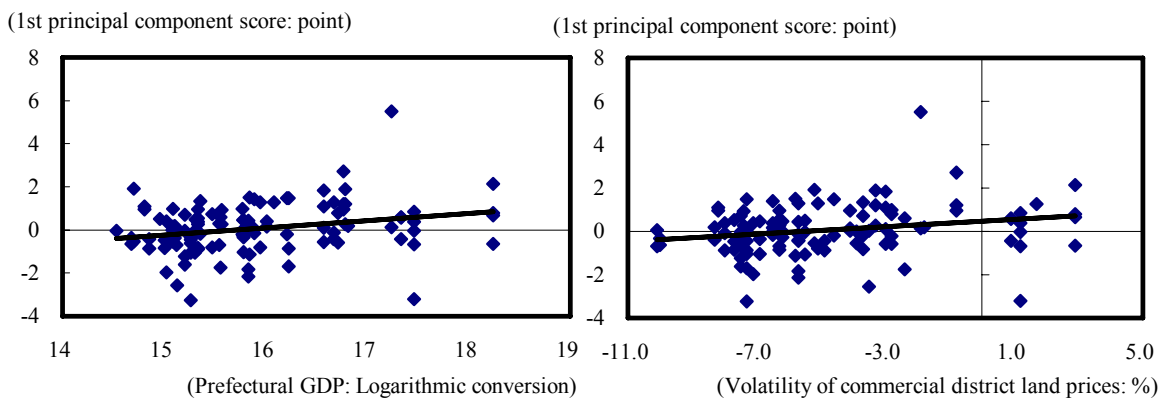
- The management performance of regional financial institutions is closely linked to the business conditions and economic structure of their region. For regional financial institutions that face challenges in achieving “economies of scale” and are not necessarily blessed with a good business base as compared with major banks, it is important to step up management efforts to improve their business performance by promoting the economic development of their regions.

[Analysis]

- A principal component analysis of regional banks (112 banks) based on their financial ratios shows that banks with high management performance (scoring high in principal component points) are in the regions blessed with large economies and a cluster of commercial banking functions and that they are enjoying a respectable market share.

**Figure 2-4-8 Business Environment that Affects Profit Performance of Regional Banks**

Moderately positive correlations with prefectural nominal GDP and volatility of commercial district land prices



(4) Regression analysis of prefectural nominal GDP, volatility of commercial district land prices, and share of prefectural loan balance

	Prefectural GDP (logarithmic conversion)	Volatility of commercial district land prices	Share of prefectural loan balance	Constant term	adj-R2
Estimation equation 1	0.83 (7.31)	—	0.06 (8.18)	-14.26 (-7.58)	0.41
Estimation equation 2	—	0.18 (5.40)	0.05 (6.50)	-0.04 (-0.22)	0.31

Figures in the brackets are t values

- Notes: 1. Principal component scores are those calculated from 2000 to 2004 for regional banks (64 banks) and second-tier regional banks (48 banks), with each bank’s score being the average for the five years.
2. *Analysis of Financial Statements of All Banks*, Japanese Bankers Association; *Prefectural Accounts 2003*, Cabinet Office; Land Price Publication, Ministry of Land, Infrastructure and Transport; *Financial Journal*, December 2005 extra number