

The Changes of Accounting Standards and Structural Reform in Japanese companies

Yasuhiro Asami

Principal Fellow, Center for Research and Development Strategy

Japan Science and Technology Agency

Abstract

In the business year beginning on April 1 1999 or later our accounting standards have been greatly changed. Concretely (1) the disclosure of consolidated financial statements as audited documents, (2) consolidated statements of cash flows, and (3) tax consequences accounting have been introduced in the business year beginning on April 1 1999 or later. In addition (4) the standard for fair value accounting of financial instruments and (5) the accounting standard for employees' retirement benefits (Hereafter this accounting standard will be abbreviated to retirement benefits accounting) have been introduced in the business year beginning on April 1 2000 or later. This has been often called, 'Big Bang Reforms of Accounting Standards' in our country. The reforms of accounting standards are still now in progress.

In this paper I tried to analyze not only the direct effects of the above 5 new accounting standards into the figures of financial statements of Japanese companies, but also the ripple effects into their behaviors and our economic performances on macro basis. Also I tried to consider the implications of the changes of Japanese companies caused by the Big Bang Reforms of Accounting Standards for economic policy makers.

For the transition from the former accounting standards to the new ones, Japanese companies had been forced to report the huge amount of costs as extra-ordinary losses in FY1999, FY2000, and FY2001. However, the amount of extra-ordinary losses has continued to show a decrease since FY 2001. This could indicate that Japanese companies have made progress to adapt with new accounting standards. Additionally Japanese companies with the capital of 10 billion yens or more in particular have improved their performances of indicators such as ROA, ROE and turnover of tangible assets since FY2002. Moreover the close relationships between banks and private companies through cross-shareholding stocks, has been weak.

These changes on micro basis could affect Japanese economy as a whole. One of the above possible positive effects may be that private investments have shown a recovery mainly due to the improvements of rate of return of Japanese companies as a natural effect of new accounting standards, accompanied by the export boom and strong demand for digital electronic devices.

On the other hand, considering at least the following two examples, it may be meaningful to reconsider the effects of economic policy measures to private corporations' activities under the new accounting standards.

- (1) As many Japanese companies have been streamlined, there has been produced fund surplus in private non-financial corporations' sector as a whole. In contrast the amount of fund surplus in households sector has been decreased due to the lack of enough size of flow of fund from private non-financial corporations to household sector as well as to the effect of the aging population. If we should try to reduce fund shortage in general government sector on the assumption that the size of fund surplus in private corporations' sector would be unchanged, by definition, this might increase the size of fund shortage in overseas sector or decrease the size of fund surplus in households sector. However there may be limitations to the both above changes, whereas we cannot expect very much that private corporations will increase compensation of employees.
- (2) The retirement benefits accounting may weaken the effect of loose monetary policy. One example for this is that the low interest rate policy has been increasing the amount of retirement projected benefits obligation of companies through the decline of discount rate under retirement benefits accounting, and decreasing expected rate of return on pension assets, although it has much contributed to the decrease of interest repayments of companies with lots of liabilities.

(Note) Any opinions and views in this paper should not be interpreted as those of the organization, which the author is belonging to. In addition any possible mistake in this paper is responsible exclusively for myself. I am very grateful to my colleagues in the Research and Statistics Department of the Policy Research Institute of Ministry of Finance for providing me with the relevant data and information on accounting standards and taxation system. Also I thank the people in Ministry of Finance and Financial Supervisory Agency for extremely helpful comments. Moreover I really appreciate the assistance of Ms. Nagai, and her colleague in Research Department of this institute to correct the tables and the charts in this paper from the initial stage.

I. Introduction

Our private corporate accounting standards have been greatly changed, which has been often called, 'Big Bang Reforms of Accounting Standards'. Concretely in the business year beginning on April 1 1999 or later private large companies have been supposed to disclose consolidated financial statements as formal documents, and also introduce consolidated statements of cash flows and tax consequences accounting. In addition in the next business year beginning on April

1 2000 or later they have been supposed to adopt the standard for fair value accounting of financial instruments and the accounting standard for employees' retirement benefits. Moreover in the business year beginning on April 1 2005, accounting standards for impairment of fixed assets will be applied to them on a mandatory manner (See Table1). These changes have primarily been aimed at enabling investors to analyze financial statements of Japanese enterprises in the context of International Accounting Standards and also at inviting foreign enterprises or foreign investors to make transactions in capital markets in Japan. In reality these changes have pushed the managements of Japanese enterprises to shift their focus from unrealized profits with land and securities to cash flows generated by their assets. This change of management style has naturally led to the improvements of efficiency of capital, for example, by transferring companies' resources to a sector producing more cash flows.

Accounting standards are not applied to all the enterprises in Japan. They are applied to only the companies initially listing and already listed on stock exchange, companies with outstanding common stock of 500 million yens or more, or total liabilities of 20,000 million yens or more (See the note1 in the next page),and so on. But even companies capitalized at greater than 1 billion yens occupy, for example, about 60% of operating income of all the companies excluding finance and insurance industry (See Reference of Table1). These companies are supposed to have audit by public certified accountants. If the above-defined companies should fail to compile financial statements in conformity with accounting standards, public certified accountants could not approve such financial statements. In this sense the changes of accounting standards could affect the structure and performance of our economy as well as Japanese large enterprises (See the note 2 below). In fact on micro basis the amount of their net profits recorded by Japanese companies in FY 2002 and FY 2003 respectively showed a sharp increase and on macro basis the real GDP of our economy also increased in FY2002 and FY 2003(See Table2 & 3) accompanied by export and private investment.

With respect to the effects of the changes of accounting standards, however, there is another opinion that the difference between financial statements pursuant to the former accounting standards and those pursuant to the present ones is like the difference of financial statements between written in English and in Japanese. Therefore these changes have given almost no substantial impact on Japanese enterprises and our economy. Taking into consideration this opinion in this paper, I tried to consider the impact of changes of accounting standards on performances, and behaviors of Japanese enterprises, and its impact on our economy mainly based on 'Financial Statement Statistics' and 'Survey on the Effects of Changes of Accounting Standards on the figures in Financial Statements Statistics' compiled both by Policy Research Institute of Ministry of Finance (See the note3).

(Note1) According to the Japanese Institute of Certified Public Accountants, as of March 2003, 4448 companies were audited in accordance with the Securities and Exchange Law, and 6025 companies were audited in accordance with the Commercial Code and Related Laws.

(Note2) For the purpose of raising confidence of financial institutions towards small and medium sized enterprises, the government has recommended them to compile statements of cash flows.

(Note3) Financial Statement Statistics survey the performances of companies excluding finance & insurance industry on financial statements basis every fiscal year. In case of FY2001, the number of the samples was 29,208 companies and the number of respondent companies was 23,887. Also the Survey about the Effects of the Changes of Accounting Standards on the figures in Financial Statements Statistics covered the same samples of Financial Statement Statistics just in FY1999, FY2000 and FY2001 to grasp the effects of new representative accounting standards. The business year of surveyed companies is not necessarily identical. These above statistics in a certain fiscal year cover all the companies, whose business year ends at the day within an identical fiscal year.

II. All the picture of the theme in this paper

Before entering into the details of accounting standards, it may be necessary to explain the overall picture of my theme; the possible linkage among the changes of accounting standards, the behaviors or performances of private companies, and Japanese economy. This is shown in the chart4.

In this paper I pick up the following five accounting standards;

- ① disclosure of consolidated financial statements as audited documents
- ② consolidated statements of cash flows
- ③ fair value accounting of financial instruments
- ④ retirement benefits accounting
- ⑤ tax consequences accounting

(1) In the first place with regard to the effect produced by the disclosure of consolidated financial statements, it could be pointed out that excess employment and debts, which a company had transferred to its subsidiaries, have been revealed in its consolidated financial statements. Before the business year beginning on April 1 1999, companies under corporate accounting standards had been supposed to disclose in principle just their non-consolidated financial statement. At this stage consolidated financial statements had been placed as only a supplementary document. Moreover, in those days 'consolidated subsidiaries' had been defined simply as a company, whose a majority of issued voting shares was owned by a parent company. Therefore as a parent company could transfer its excess debt and employment to its companies with less than 50% of a parent company's ownership of their issued voting shares, it had been generally difficult for investors to grasp these problems in non-consolidated financial statements of a parent company. But after the introduction of disclosure of consolidated financial statements in the business year beginning on April 1 1999 or later, these

problems have been basically shown in consolidated financial statements. Therefore a company has been obliged to restructure its subsidiaries with excess debt and employment from the standpoint of management of enterprises on consolidated basis. Although the restructuring or downsizing of its subsidiaries with excess debts and employment had temporarily created large amount of extra-ordinary losses, in the medium-term this would improve the rate of return of a company on a consolidated basis. Accompanied by the export boom and strong demand for digital electronic devices this would lead to the increase in private investments.

- (2) Secondly by the introduction of consolidated statements of cash flows, low profitability of assets held by companies has been revealed in consolidated statements of cash flows. Before the business year beginning on April 1 1999, they had placed the great importance on their potential profits, typically with lands and securities owned by them in their management. They had held such assets for a long time, which had been important collateral to get new loans from banking institutions. But after the introduction of consolidated statements of cash flows in the business year beginning on April 1 1999 or later, they have naturally been forced to place emphasis on cash flows. Particularly the increase in the share of foreign stakeholders has pushed Japanese companies to emphasize capital turnover and cash flows. For such purpose they have sold unemployed assets or assets with low profitability to raise the efficiency of their assets. At the same time they have returned their debts to financial institutions so as to reduce the amount of repayment of interests in the next business year. As a result the amount of cash flows has been increasing and the asset turnover has shown a sign of stopping a decline and beginning to rise. However this may lead to surplus of funds in private corporations' sector and subsequently to stagnant money supply.
- (3) Thirdly by the introduction of fair value accounting of financial instruments, the low profitability and the unrealized losses of cross-share-holding stocks caused by the collapse of bubbles in particular have been revealed in consolidated financial statements. According to this accounting standard, valuation gains or losses associated with securities available for sale, which is one of the components of financial instruments, should be reflected to the statements of income. In addition, according to the rules of Commercial Code, companies are supposed to reassess and modify their estimate of fair value of holding securities, if prices of holding securities should show a decline by 50% or more than their cost and this fall of prices should be considered as unrecoverable. This valuation loss under the Commercial Code, should be also reflected to the statements of income as extra-ordinary losses. The aggregated amount of extra-ordinary losses recorded by Japanese companies for the business year ended on the day within FY2000 was very large, especially due to the decline of Japanese stock markets in this period. However because prices of holding stocks for valuation of them on balance sheets were lowered as a result of write-down, the downward risk of the more decline of the value of their holding stocks would be diminished, even if the stock prices should show more fall in

the future. Additionally banks have sold their stocks in the recent time. This is firstly because banks had to prepare for the new rule to prohibit banks from holding stocks exceeding the amount of Tier I of their own capital (See the below note), and secondly because they have had to reduce the risks against their keeping the level of capital adequacy ratio more than that required by BIS. These movements in this recovery phase could not be observed in the previous recovery phase in CY 2000.

(Note) The effective date of this limitation was postponed to September 2006.

- (4) Fourthly, by the introduction of retirement benefits accounting the amount of retirement benefits obligation of a parent company and its subsidiaries has been made clear in its consolidated financial statements. Roughly speaking, net liability for retirement benefits is the discounted value of severance indemnities and pension benefits paid by a company in the future for employees minus fair value of pension assets.

Before the business year beginning on April 1 2000, or introducing retirement benefits accounting, Japanese enterprises had usually accumulated the funds for severance indemnities in accordance with corporate tax law. Typically they had appropriated just a certain percentage of the necessary amount of funds for severance indemnities as a reserve, on the assumption that all the active employees should retire at the nearest end of business year on their own intention. Also actual rate of return on pension assets had been often lower than expected rate of return and the amount of pension benefits had not promptly been cut in accordance with the decline of rate of return in most pension funds established by private corporations.

Therefore at the stage of introducing retirement benefits accounting, the amount of funds for severance indemnities and pension benefits for employees in accordance with corporate tax law was very insufficient compared with that required by retirement benefits accounting among many Japanese companies. In consideration with the size of shortage of reserve for severance indemnities and pension benefits for employees among most companies, this should be compensated within 15 years by straight-line method. If this shortage should be compensated within 5 years, it is possible for companies to classify this expense as extra-ordinary losses so that ordinary income may not be affected. The amount of extra-ordinary losses caused by the introduction of retirement benefits accounting peaked in business calendar of 2000, and thereafter it has decreased. In this sense the above effect of retirement benefits accounting has been diminished.

However to restrain the amount of personnel expenses under the retirement benefits accounting, companies have shifted from defined benefit funded pension plan to defined contribution funded pension plan and also to adopt employment policy to restrain the number of regular employees.

- (5) As a consequence of the introduction of retirement benefits accounting and fair value accounting of financial instruments, the more amount of expenses or valuation losses in

financial statements have been revealed. However these expenses and losses are not necessarily regarded as expenses or losses to be deducted from taxable income under corporate tax law. Because these losses are not completely determined, in other words companies have not yet sold the stocks with unrealized losses or they have not yet paid severance indemnities to their all employees. According to tax consequence accounting, corporate tax imposed on such expenses and valuation losses, is deducted from the total amount of corporate tax on a basis of statement of income. In this sense, tax consequence accounting mitigated partly the size of decrease in net profits after tax caused by the other new accounting standards, although retirement benefit accounting and valuation of financial instruments at quoted market prices affected their capital or net profits before tax.

In summarizing my hypothesis, the changes of accounting standards have been assumed to promote the restructuring and downsizing of Japanese companies. Additionally due to the strong demand from China and also for digital electronic devices, Japanese companies have been assumed to make progress in accommodating with new accounting standards. Consequently a rate of return of Japanese companies has been actually shown a rise. This would be one of the important factors for the robust increase in equipment investment, which is one of the differences between this expansionary phase beginning in January 2002 and the previous corresponding phase from January 1999 to October 2000.

III. The summary of new accounting standards

Originally the changes of accounting standards have aimed at enabling investors at home and abroad to grasp returns and risks of investments towards Japanese enterprises and compare with those of investments towards other companies. For this purpose the new accounting standards have been made consistent with IAS in principle. In addition to these initial purposes, the changes of accounting standards have repercussion effects on the management style of Japanese enterprises.

In the following new accounting standards are summarized on a brief manner particularly from the viewpoint of their repercussion effects on the management style of Japanese enterprises.

III. 1. *Consolidated financial statements as formal documents (effective from business year beginning on April 1 1999, or later)*

III.1.1. *The enlargement of definition of consolidated subsidiaries (See Table3)*

We had already adopted consolidated financial statements since FY1977. However they had been placed just as supplementary documents and listed companies had been required to

disclose non-consolidated financial statements as audited documents. Moreover before introducing new accounting standards we had adopted the criteria for classifying companies as consolidated subsidiaries simply in terms of whether or not a parent company had majority of their issued voting shares. Therefore it had been possible for a parent company to transfer its excess debt or excess labor to another company, which had not satisfied the above criteria so that these problems could not be revealed in its non-consolidated financial statements.

But since business year beginning on April 1 1999 or later, consolidated financial statements have been set down as audited documents. As a result business and financial situation of a parent company and its subsidiaries as a whole group have been revealed in consolidated financial statements and subsequently the management of a parent company has had to restructure or downsize its subsidiaries and affiliates with excess debt, employment, and capacity. Based on this accounting standard, whether or not a company should be a consolidated subsidiary depends on not only majority of a parent company's ownership of its issued voting shares, but also on the extent of a parent company's control over the management of a subsidiary. Concretely according to this accounting standard, the consolidated financial statements should include the accounts of a parent company and its subsidiaries over which a parent company can exercise 'substantive control', even if a parent company should have less than majority but greater than 40% of issued voting shares of its subsidiary. In this context 'substantive control' is defined as the continuous possession of majority of voting shares in a general meeting of stockholders through cooperative shareholders like its affiliates.

In addition the consolidated financial statements should include the accounts of an important subsidiary in terms of a parent company's strategy. One example is a subsidiary, which has assets with considerable amount of unrealized or potential losses, which could be realized by any contingent incident.

III.1.2. Affiliates

An affiliated company is, in principle, defined as a company with a parent company's ownership of greater than 20% but less than 50% of its voting shares. Additionally if a parent company should have less than 20% but greater than 15% of voting shares of a company and can exercise substantive control over its management and policies, such company should be included in the concept of an affiliated company. Investments in affiliated companies are accounted for by equity method of accounting.

For restructuring any existing systems, it is extremely important at the initial stage to clarify what is going on under a present system. In this sense it may be possible to say that the introduction of consolidated financial statements could reveal the over-all financial situation of private companies to a greater extent and subsequently has driven their downsizing or

restructuring (See the note in the next page).

(Note) The accounting standard on consolidated financial statements has not completely been successful of full-scale disclosure of financial situation of a company. It is pointed out that there still remain some issues in connection with Special Purpose Entity established for loan securitization. Pursuant to the present accounting standards in Japan, as long as SPE should be set up for the purpose of repaying the interest of securities to their holders, backed by the transferred assets at a reasonable price, and should also execute the designated businesses on an appropriate manner in accordance with its objectives, SPE is not supposed to be a consolidated subsidiary. Such SPE can be regarded as an independent entity from a parent company financing or originating SPE. Accordingly Japanese banking institutions have no obligation to disclose the financial situation of their SPE. However IASB has initiated the project to consider the issues on consolidation and disclosure of the accounts of SPE (Roanne Elizabeth Coman, 'The international Comparison on the consolidation and disclosure of the accounts of SPE for loan's securitization', Journal of JICPA Vol.16, No.9).

III.2. Consolidated statements of cash flows (effective from business year beginning on April 1999 or later)

Before adopting consolidated statements of cash flows, balance sheet and statement of income had been regarded as the main documents to evaluate financial situation and performances of a company. Therefore as long as a company had reported, for example, enough profits and retained earnings, the efficiency of capital had not become the issue among the management of a company and its shareholders. In particular when land prices could be expected to rise and subsequently increase the value of lands as a collateral, it had been one of the successful business models that a company expanded its business by getting loans from financial institutions based on the increased value of their land as a collateral. In addition the purchase of a land had not given so much impact on the figure of ordinary income, although the amount of repayment of interest might be increased for the additional debt to purchase a land. This is because the accounting standards for impairment of fixed assets had not yet been introduced and also because we are not supposed to report any depreciation expense for a land.

After consolidated statements of cash flows have been introduced, investors could grasp outflows and inflows of cash from operating, investing and financing activities respectively. The management of Japanese companies has been forced to place the importance on cash flows. In case of purchasing land, the amount of fund is reported as an item of cash outflows from investing activities in consolidated statements of cash flows. Additionally as the risk of management depending on a rise of asset prices had been revealed by a actual decline of land prices after the burst of bubbles, most of managements for big companies have changed their

focus in consideration of the idea that the necessary cash outflows from investing activities should be financed by cash inflows from operating activities. Particularly as many companies could not expect to increase sharply their sales under the deflationary pressure, they have actively returned their debts to reduce the repayment of interests for the purpose of increasing the cash flows in the next term, or sold their assets with low profitability.

III.3. Tax consequences accounting (effective from business year beginning on April 1 1999 or later)

The objective of tax consequences accounting is reconciliation between the reported actual income tax expense based on corporate tax law and the amount computed by multiplying the income on a financial statement basis by the applicable normal corporate tax rate. Due to the adoption of retirement benefits accounting, and fair value accounting of financial instruments, more losses have been recognized on a financial statement basis, compared with the case before their introduction. This is partly because the price of stocks showed a decline in CY2001. However based on corporate tax law such increased amount of losses (which is called 'temporary difference') cannot be necessarily recognized as the loss deductible from taxable income, excluding items such as company's contribution to pension funds in cash. This is because the above loss is not realized in the present business year. As a result corporate income tax is also imposed on this part of temporary difference. By tax consequence accounting, income tax imposed on the part of temporary difference can be deducted as income tax-differed from income tax on basis of statements of income. In other words tax consequences accounting may play a role of mitigating the size of decrease in net profits after tax on financial statement basis in the business year of 2000 and 2001. However tax consequences accounting has no impact on cash flows, therefore the amount of cash flows is decreased by the paid amount of corporate income tax.

III.4. Retirement benefits accounting (effective from business year beginning on April 1 2000, or later)

Before introducing retirement benefits accounting, about severance indemnities, most of companies had accumulated a reserve for employees' retirement benefits based on corporate tax law. More concretely this was to reserve just a certain share of the necessary fund for employees' severance indemnities without tax burden on the assumption that all employees would retire from a company on voluntary basis. About pension liabilities, actual rate of return on pension assets had been often lower than necessary rate of return for the initially stipulated amount of pension benefits. Additionally in many cases the amount of pension benefits per a pension beneficiary had not fully been cut in accordance with the decline of rate of returns on pension

assets. Therefore the amount of reserve for retirement benefits of employees in most companies had been below the necessary amount stipulated by this new accounting standard, in other words, they had faced the large amount of 'unrecognized' net asset obligation at transition from the former accounting standard to the new one. Because such unrecognized net asset obligation at transition was too much to be amortized at only once in many companies, they could amortize this obligation by straight-line method within 15 years at maximum. If companies should amortize the obligation within 5 years, they could record this expense as extra-ordinary loss. Considering the structure of accounting standard for employees' retirement benefits, there could be a tendency that the more employees a company has, the larger amount of obligations it should amortize.

Moreover it has been pointed out that they might have the insufficient amount of pension assets relative to 'projected benefit obligation' and the large amount of other unrecognized obligations. In this context 'projected benefit obligation' is defined as the discounted value of severance indemnities and pension benefits. Also 'unrecognized obligations' are defined such that the obligations caused by revisions of arrangements for severance indemnities and pension benefits or by discrepancies between actual figures and assumed figures for calculations of projected benefit obligation have not yet amortized (See the below note).

(Note) The change of rules about severance indemnities and pension arrangements, has naturally influenced the size of projected benefit obligation. The amount of increase in projected benefit obligation created by such reasons should be amortized in accordance with the residual period of each employee's service for a company. The part of this increase in projected benefit obligation, which has not yet been amortized, is called 'unrecognized prior service cost'.

Because projected benefit obligation is calculated on the assumptions about expected rate of return on pension assets and discounted rate, there may be the discrepancies between actual data and assumed ones. The increase in projected benefit obligation created by the above discrepancies should be amortized within the average rest period of services of employees. Particularly the part of this increase in projected benefit obligation, which has not yet been amortized, is called 'unrecognized actuarial loss'. The size of these types of unrecognized obligation has been far from small. The insufficient amount of plan assets and this amount of unrecognized obligation have been a burden in the future for most of Japanese companies in terms of financial statements. As explained later, these factors have affected their employment policy and pension policy.

III.5. *Fair value accounting of financial instruments (effective from business year beginning April 2000)(See the note)*

Before introducing this accounting standard for fair value accounting of financial

instruments, the information on valuation of marketable securities at market prices had been disclosed in notes of financial statements. However in the business year beginning on April 1 2000, or later derivative instruments and securities have been required to be recorded at market prices. More precisely the method of valuation of securities prescribed by accounting standards has depended on the objective of holding securities(See Table5).

Although the classification of securities in Financial Statements Statistics is not completely identical to that of accounting standard for fair value accounting of financial instruments, this statistics could give us the approximate picture about volume of securities by each method of valuation of financial instruments. In Financial Statements Statistics marketable securities available for sale and bonds due in one year or less are classified as securities in current assets, and the other securities are classified as investment securities in fixed assets. According to this statistics, companies capitalized at greater than 1 billion yens (all the industries excluding finance and insurance industry) have the value of 6,546,000 million yens of securities as current assets and also have the value of 89,496,600 million yens of securities as investment securities in fixed assets at the end of business year of 2003. Particularly stocks available for sale amounted to only 275,600 million yens, on the other hand stocks classified in investment securities amounted to 82,692,500 million yens. These figures suggest that the third group called 'other securities' in Table4 occupy the great importance. The details in methods of fair value accounting of financial instruments are shown in Table6.

(Note) The fair value accounting of 'other securities' has been effective after business year beginning on April 1 2001 or later.

(i) Securities available for sale

Securities available for sale are defined as those held by companies to get profits through fluctuations of their prices. Securities available for sale should be recorded at market prices at the end of business year on the balance sheet and also the resultant gain or loss should be recognized in current earnings. However the amount of this resultant gain or loss may be limited judging from the figures of Financial Statements Statistics.

(ii) Securities being held to maturity

This type of securities are defined as those held by companies until their maturity. These securities should be recorded at acquisition cost or amortized cost on the balance sheet.

(iii) Stocks issued by subsidiaries and affiliates

Stocks issued by subsidiaries and affiliates should be recorded at acquisition cost on the balance sheet.

(iv) Other securities

This type of the securities is defined as the securities, which cannot be classified in the above categories. So-called cross share holding stocks 'MOCHIAI KABUSHIKI' are classified into this category. 'Other securities' should be recorded at market prices and the resultant gain or loss should be recorded in either of the two following method.

- The total amount of valuation gains of each security is recorded in shareholders' equity on the balance sheet.
- Concerning securities whose market price is more than their acquisition cost, the total amount of their valuation gains is recorded in shareholders' equity on the balance sheet. About securities whose market price is less than their acquisition cost, the amount of their valuation losses is recognized as extra-ordinary losses.

In practice most companies are said to adopt the former method. Judging from the figures in Financial Statements Statistics mentioned earlier, the valuation of other securities on financial statements was forecasted to affect shareholders' equity to a great extent due to the huge volume of 'other securities'. Therefore valuation of other securities at market prices was effective since the business year beginning on April 1 2001 or later. But valuation gains or losses have no effect on cash flow.

(v) Non-marketable securities

Corporate bonds and the other bonds among non-marketable securities should be recorded at their acquisition cost or at the cost calculated by amortized cost method on the balance sheet. The other non-marketable securities should be recorded at their acquisition cost.

(vi) Impairment of securities investment

Additionally Commercial Code provides that companies must reassess and modify their estimate of the value of bonds being held to maturity, stocks of subsidiaries or affiliates, and marketable securities classified as other securities, if a decline in the value of them should be considered as other than temporary and as unrecoverable. In this case they should be recorded at market prices on balance sheet and valuation losses should be recognized as extra-ordinary loss on statement of income. Also companies should reduce their estimate of the value of non-marketable securities in the category of other securities, if the real value of such securities should be seriously lowered by the deterioration of issuers' financial situation.

IV. The impacts of the changes of accounting standards on companies

IV.1. *The adoption of new accounting standards—Mainly the big companies adopted new accounting standards—*

Table7 shows the development of adoption of retirement benefits accounting, fair value accounting of financial instruments and tax consequences accounting based on the Survey about the Effects made by the Changes of Accounting Standards upon the figures of Financial Statements Statistics (See the below note).

(Note) This survey was conducted in January and July 2002 together with Financial Statements Statistics (FY2001). The survey covers the companies in all the industries

excluding finance and insurance industry. The number of samples was 29,208 and the number of respondents was 22,761. As a result the respondent ratio was 77.9%.

IV.1.1. Retirement benefits accounting

(1) The adoption of this accounting standard by the size of capital

According to the above statistics conducted in FY2001, among 5,896 companies capitalized at greater than 1 billion yens there were 5117 companies, which had already adopted or had been planning to adopt this accounting standard in the future (See Table7). More precisely 76.1% of them had adopted it until FY2000 and 98.7% of them had adopted it until FY2001.

About the category of 29,408 companies with the size of capital between 100 million yens and less than 1 billion yens, there were 17,389 companies, which had introduced or had been planning to introduce this accounting standard in the future. Among 17389 companies, 68.5% of them had introduced it until FY2000 and 90.9% of them had introduced it until FY2001.

However about companies capitalized at less than 100 million yens, there was relatively high percentage of them, which had initially had no plan to adopt this accounting standard. For example, among 50,394 companies with the size of capital between 50 million yens and less than 100 million yens, there were 78.0% of them, or 39,289 companies, which had no plan to adopt this accounting standard. In addition only 55.6% of the rest companies in the above category had adopted it until FY2000 and 19.4% of the rest companies would intend to introduce it in FY2003 or later. This tendency could be observed clearly in the smaller sized companies.

(2) The adoption of this accounting standard by industries

According to Table8, companies in manufacturing tended to adopt this accounting standard in earlier stage compared with those in non-manufacturing. Concretely in case of manufacturing industries, the ratio of the number of companies adopting retirement benefits accounting before FY2000 to the total was 75.9%. In this contrast the corresponding ratio of non-manufacturing industries was 59.9%. Especially companies in retail had relatively more employees and subsequently had a heavier retirement benefits obligation. As a result the above ratio of retail industry was 51.4%. Also the same ratio of real estate industry was 49.1 %, mainly because many companies in real estate suffered from a relatively big amount of loss. In fact at the end of FY2002, the total amount of accumulated loss of companies capitalized at greater than 1 billion yens in real estate was 1,135.6 billion yens.

IV.1.2. Fair value accounting of financial instruments

(1) The adoption of this accounting standard by the size of capital

According to Table7, in FY2001 among 5,888 companies capitalized at greater than 1 billion yens, there were 4,867 companies, which had already adopted or had been planning to adopt this accounting standard in the future. More precisely 63.9% of them had adopted it until FY2000 and 97.2% of them had adopted it until FY2001.

About the category of 28,863 companies with the size of capital between 100 million yens and less than 1 billion yens, there were 13,597 companies, which had introduced or had been planning to introduce this accounting standard in the future. Among 13,597 companies, 51.6% of them had introduced it until FY2000 and 88.6% of them had introduced it until FY2001.

However about companies capitalized at less than 100 million yens, there was relatively high percentage of them, which had initially had no plan to adopt this accounting standard. For example, among 50,399 companies with the size of capital between 50 million yens and less than 100 million yens, there were 43,362 companies, or 86.0% of them, which had no plan to adopt this accounting standard. In addition only 39.4% of the rest companies in the above category had adopted it until FY2000 and 22.3% of the rest companies would intend to introduce it in FY2003 or later. This tendency could be observed clearly in the smaller sized companies.

(2) The adoption of this accounting standard by industries

According to Table9, there were 90.5% of all the companies in manufacturing, which had adopted this accounting standard in FY2000 and FY 2001. On the other hand the corresponding percentage figure in non-manufacturing was just 73.9%. In particular there were 23.4% of companies in non-manufacturing, which had no plan to adopt it, although there were just 7.7% of such companies in manufacturing.

IV.1.3. Tax consequences accounting

The adoption of this accounting standard by the size of capital

According to Table7, in FY2001 among 5,819 companies capitalized at greater than 1 billion yens, there were 5,269 companies, which had already adopted or had been planning to adopt this accounting standard in the future. More precisely 78.6% of them had adopted it until FY2000 and 96.1% of them had adopted it until FY2001.

About the category of 28,757 companies with the size of capital between 100 million yens and less than 1 billion yens, there were 18,342 companies, which had introduced or had been planning to introduce this accounting standard in the future. Among 18,342 companies, 60.0% of them had introduced it until FY2000 and 88.2% of them had introduced it until FY2001.

As above explained, it may be possible to say that most of companies capitalized at 1 billion or

companies capitalized at between 100 million and less than 1 billion yens had adopted new accounting standards until FY2001 on the whole.

IV.2. The effect of new accounting standards on corporate income—The size of their negative effect on corporate income had diminished since FY2001—

IV.2.1. The effect of retirement benefits accounting on corporate income

The effect of this accounting standard on corporate income could be divided into the following three issues. The first one is that in adopting this accounting standard, most of Japanese companies could not immediately have the amount of reserve for their employees' benefits required by this accounting standard. The second one is that also in most Japanese companies the amount of periodic cost for employees' retirement benefits recorded in a statement of income under this new accounting standard, is bigger than the corresponding figure under the former practice. The third one is that the amount of their pension assets has been insufficient for their projected benefit obligation.

(1) About the first issue, if a company should compensate the shortage of reserve for employees' retirement benefits based on retirement benefits accounting immediately and collectively, this would be recorded as extra-ordinary losses (In case of small size of the shortage of reserve for employees' retirement benefits, this could be recorded as non-operating expenses). In FY2001 the total amount of the shortage of reserve for employees' retirement benefits was estimated at 3,648.4 billion yens in all the industries excluding finance and insurance industry by adding the amount of extra-ordinary losses, 3,642.3 billion yens to losses on placing trust for retirement benefits, 6.1 billion yens (See Table10). This amount of shortage of reserve of all the size of companies excluding finance and insurance companies occupied about 52% of net income before tax, 7,078.3 billion yens. With regard to the way to deal with the above shortage of reserve, it depended on companies. It has pointed out that one third of the companies compensated the shortage of reserve for employees' retirement benefits immediately and collectively, another one third of the companies compensated it within 5 years and the rest of them compensated it within 15 years (See the note in the page of 21). Taking a look at the amount of extra-ordinary loss caused by an immediate and collective amortization of the shortage of reserve for employees' benefits from FY1999 to FY2001, it amounted to 7,579.3 billion yens in FY2000. This was mainly due to the fact that large companies in particular compensated the shortage of reserve for employees' retirement benefits immediately and collectively. However in FY2001 the amount of net asset obligation at transition created by the adoption of retirement benefits accounting showed a decline by more than 50% (See the Reference1 of Table10).

(Note) Mr. Komiyama, managing partner of ASAHI Audit Corporation (at that time) indicated

to such effect in the extension course of Hitotsubashi University on June 19th 2003.

(2) About the second issue, for convenience, I dare to simply calculate the average amount of retirement benefits obligation per company capitalized at greater than 1 billion yens based on the survey, although theoretically I should calculate the amount of retirement benefits obligation of an identical company under the new accounting standard and the former practices. The reference² of Table10 shows the result of calculation. If periodic cost for employees' benefits should be recorded as a part of selling, general and administrative cost, the average cost for employees benefits of companies capitalized at greater than 1 billion yens under the new accounting standard is about 990 million yens, on the other hand the average cost for companies not adopting this accounting standard in the same category is just about 10 million yens (See the below note).

(Note) The gap of the amount of selling, general and administrative cost between the companies adopting retirement benefits accounting and those not adopting this standard cannot be explained only by this accounting standard on a strict manner. Because some of respondent companies adopting this accounting standard were assumed to add the other factors to selling, general and administrative cost.

(3) The third one is that the amount of their pension assets was far from enough for their projected benefit obligation. According to the paper titled by 'The Effects of Retirement of Baby Boomers on Severance Indemnities and Pension Benefits paid by Japanese companies', Mr. Kashiwazaki pointed out the following points.

(i) At the end of FY2002 the amount of projected benefit obligation owed by 1421 companies listed on first section of Tokyo Stock Exchange was 92.6 trillion yens. On the other hand the amount of pension assets amounted to 41.4 trillion yens. This meant that the amount of their pension assets was only about half of their projected benefit obligation, although this was exaggerated by a decline of stock prices.

(ii) Besides this the amount of unrecognized obligations was 29.4 trillion yens. This was 1.164 times as much as their operating income in FY2002.

(iii) The amount of periodic retirement cost was 7.3 trillion yens. This occupied 29.0% of their operating income and 44.0% of their ordinary income.

By the adoption of retirement benefits accounting, a kind of potential labor cost held by companies has been revealed in its consolidated financial statements. As a result they have faced the shortage of reserves for employees' benefits and more amount of periodic cost, although this accounting has not increased the actual amount of retirement benefits its employees will receive. Therefore some Japanese companies have shifted from defined benefit pension plan to defined contribution pension plan, transferred the substitutional portion of Employees' Pension Fund plan prescribed by the Japanese Welfare Pension Insurance Law to the government (See the below note), and restrained the number of regular employees. In this sense retirement benefits

accounting has influenced pension and employment policy of Japanese companies.

(Note) We have Employees' Pension Fund plans, which are defined benefit pension plans established under the Japanese Welfare Pension Insurance Law. These plans are composed of (a) a substitutional portion and (b) a corporate portion. Benefits of the substitutional portion are based on a standard remuneration schedule determined by the Japanese Welfare Pension Insurance Law. On the other hand, the benefits of a corporate portion are based on a formula of each employees' pension fund plan. As the size of pension assets were very small at the initial stage of pension funds established by companies, the government had permitted those pension funds to manage a portion of fund under the Japanese Welfare Pension Insurance on behalf of the government and if those pension funds should earn the income exceeding a standard remuneration schedule by the law, such excess part of the income could be allotted to the contribution to a corporate portion of Employees' Pension Fund plans. However mainly due to the prolonged historical-low interest rates, most of employees' pension funds have not been able to earn the income in accordance with a standard remuneration schedule. Therefore some companies have transferred this substitutional portion to the government.

IV.2.2. The effect of fair value accounting of financial instruments on corporate income

According to Financial Statements Statistics shown in the reference of Table6, marketable securities available for sale and bonds due in one year or less, which are classified as securities in current assets, amounted to just 6,546.0 billion yens. The other securities, which are classified as investment securities in fixed assets, amounted to 89,496.6 billion yens. These figures suggested that if prices of stock and bonds should fluctuate, fair value accounting of financial instruments would give bigger impact on the fair value of 'other securities' than that of marketable securities available for sale and bonds due in one year or less. In fact 'the Survey about the Effects of the Changes of Accounting Standards on the figures in Financial Statements Statistics in FY2001' showed that extra-ordinary losses connected with valuation of securities in current assets were only 138.9 billion yens for all companies excluding finance and insurance industry (See Table11). In contrast the extra-ordinary losses created by write-down of investment securities amounted to 6,257.6 billion yens (See the notes of the next page). The sum of the both losses was 6,396.5 billion yens, which corresponded 90.4% of 7,078.3 billion yens of income before tax in FY2001. Especially companies capitalized at greater than 1 billion yens suffered from 5,695.9 billion yens of valuation losses, which occupied about 90% of the total valuation losses associated with holding securities. This has demonstrated that fair value accounting of financial instruments mainly affected large corporations. Although they realized valuation gains of stocks and bonds to offset the increase in additional expense created by the adoption of retirement benefits accounting in FY2000, this accounting standard accompanied by

the decline of stock prices has affected adversely corporate income in FY2001.

However according to the above survey, on a balance sheet all the companies excluding finance and insurance industry recorded the retained earnings of 5,701.0 billion yens as valuation gain on other securities in FY2001. This could be due to valuation gain of holding bonds created by a decline of long-term interest rates and also due to valuation gain of stocks held by companies with acquisition cost lower than market prices in spite of the sharp fall of TOPIX. Therefore the amount of total shareholders' equity was decreased by only 695.5 billion yens in spite of valuation losses of 6,396.5 billion yens.

In the final analysis the total impacts created by the introduction of retirement benefits accounting and fair value accounting of financial instruments were estimated to be 9,413.6 billion yens of losses(See Table13). This size of losses exceeded the size of income before tax in FY2001, 7,078.3 billion yens.

(Note1) The write-down of investment securities, which has been stipulated in Commercial Code since 1962, could not be included in the Big-Bang Reforms of Accounting Standards. However, in this paper, the effects of the both are treated as the effect of fair value accounting standard of financial instruments.

(Note2) As shown in Table1, fair value accounting of 'other investment securities' was introduced in one year later than that of financial instruments (excluding other investment securities).

IV.2.3. *The effect of tax consequences accounting on corporate income*

At the end of FY1999 the amount of deferred tax assets and deferred tax liabilities of all the companies excluding finance and insurance industry amounted to 14,231.2 billion yens and 1,206.7 billion yens respectively. These figures suggested that tax consequences accounting might mitigate the negative impact of the above two accounting standards on income after tax on corporate accounting basis. In principle valuation loss cannot be deducted from taxable corporate income, although we have exceptions. For example if the extra-ordinary loss of 6,257.6 billion yens of all the companies excluding finance and insurance industry created by write-down of holding securities had not been authorized to be recognized as tax loss, the amount of current income taxes could be deducted by 2,503.0 billion yens as income taxes deferred on corporate accounting basis on the assumption that effective corporate tax rate was 40%. However, deferred tax assets could be recorded only if companies should be forecast to make enough corporate income to refund the same amount of referred tax assets from tax authority in the future. In this context it has been pointed out that the amount of deferred tax assets held by most of companies had been reviewed downwards since FY2001 due to the reduction of effective corporate tax rates and also due to a decline in expected profitability of

their business in the downward cyclical movement of economic activities until CY2001 (See the below note).

(Note) Based on the judgment made by the Cabinet Office, the peak of cyclical movement of Japanese economy was in October 2000, its trough was in January 1999 and in January 2002.

IV.2.4. *The overall effect of new accounting standards*

(1) Corporate profit is one of the important factors for the judgment of economic situations, although for that purpose it is difficult to determine on which profit, operating profits, ordinary profits, or net profits the more importance should be placed. According to Financial Statements Statistics, operating profit, ordinary profit, and net profit of all the companies excluding finance and insurance industry capitalized at 1 billion yens or more had hit the bottom in FY1998, reached the peak in FY2000, and again sunk to the bottom in FY2001 (See Table2). However net profits had shown a more fluctuation in the recent time compared with the other kind of profits.

This was attributed to the development of extra-ordinary losses, which were caused by the change of accounting standards to a great extent. In fact in FY2001, the amount of extra-ordinary losses of all the companies capitalized at 1 billion yens or more excluding finance and insurance industry was 21,800.1 billion yens, on the other hand the amount of extra-ordinary losses caused only by retirement benefits accounting and fair value accounting of financial instruments were 8,375.3 billion yens. There are some possibilities that the new accounting standard might enlarge the size of fluctuation of business confidence.

(2) In the next place, the sum of companies' own reserves and depreciation is defined as a proxy of cash flow (See note2 below). The amount of own reserves held by companies capitalized at greater than 1 billion yens, decreased in both FY2001 and FY2002, but increased sharply in FY2003 (See Table16). Also the amount of depreciation showed a decrease in FY2002, but increased again in FY2003. As a whole the amount of cash flow of those companies increased by 80.1% in FY2003 compared with the previous fiscal year. In this contrast the amount of investment remained within the amount of depreciation, and the amount of the fund for acquisition of lands continued to be less than that of the fund by selling lands. The net amount of the fund by selling lands was 359.4 billion yens in FY2003. As a result the amount of portfolio investment showed a sharp increase in FY2003. Subsequently there has caused fund-surplus in private non-financial corporations' sector. This may lessen the effect of loose money policy.

(Note) In this paper for convenience I defined own reserves plus depreciation as a proxy of cash-flows. However this is one of the imperfect proxies to grasp the movement of cash-flows, because net incomes, one of the components for own reserves, are the figures calculated on tax consequences accounting and deducted from valuation losses.

IV.3. The effects of new accounting standards on corporate behaviors—New accounting standards prompted Japanese private companies to use their employees and assets on more efficient manner.

In analyzing the effects of new accounting standards on corporate behaviors, it may be theoretical to focus on the behaviors of an identical company before and after the changes of accounting standards. However in this paper for convenience I picked up the aggregate figures of Japanese companies capitalized at greater than 1 billion yens, and considered the changes in financial and operating ratios of such companies on aggregate level.

As explained earlier, they occupied about 60% of operating income, ordinary income, and cash flows, as well as more than 40% of tangible assets owned by all the Japanese companies excluding finance and insurance industry (See the reference of Table1). Also it is possible to assume that accounting standards are applied to most of them in consideration with the provisions of relevant laws. Concretely the following characteristics may be pointed out as the effects of new accounting standards.

IV.3.1. The direct effects of new accounting standards on corporate behaviors

(1) *The effects of the disclosure of consolidated financial statements on corporate behaviors*

After the introduction of consolidated financial statements, it has become meaningless for a parent company to transfer non-performing loans and excessive part of employment to its subsidiaries to clean up its financial statements on non-consolidated basis. I would like to consider the impacts of consolidated financial statements based on the result of 'Questionnaire survey on the impacts of new accounting standards on managements of enterprises' made by Ministry of Economy, Trade and Industry (May 2003) (See Table14 and its note). About the impacts of consolidated financial statements upon the managements of subsidiaries and affiliates, the sum of percentage of answers from 'great impact' to 'intermediate one' is 57.9% for companies excluding finance, securities and insurance industries and 69.4% for finance, securities and insurance industries. These figures are higher than the corresponding ones of the other accounting standards. Also the above figure of finance, securities and insurance companies is higher than that of the other companies.

(Note) The questionnaire of this survey was sent to the 2667 companies listed in the First Section, the Second Section of Tokyo Stock Exchange, Nasdaq Japan, and the Mothers of Tokyo Stock Exchange. The respondent ratio was 27.5%.

(2) *The effects of consolidated statements of cash-flows on corporate behaviors*

The effects made by the introduction of consolidated statements of cash-flows may be reflected to the movements of main financial and operating ratios of companies.

The purchase of fixed assets usually requires large amount of cash out-flow at the initial

stage. However under the former accounting standards in an income statement only depreciation cost allocated in every year in conformity with durable period of fixed assets needed to be reported and particularly in case of purchasing land there is no expense for depreciation. Therefore in an income statement only small amount of cost could be revealed in comparison with the size of the fund for purchasing fixed assets. As a result Japanese companies had tended to place little importance on cash flows and also on the efficiency of assets. But after the introduction of consolidated statements of cash flows, they have begun to focus on cash flows and efficiency of assets. Such tendency could be observed in the following examples.

- (i) Turnover of tangible assets (including land), which had fallen until FY2002, may be stop declining in FY2003. In particular turnover of tangible assets (excluding land) increased to 3.56 times in FY2003. This is due to not only the increase of sales, but also due to the decrease in the amount of tangible assets since FY2002. This decrease in the amount of tangible assets has been brought about by the change of management to restrain the purchase of assets and to raise the efficiency of assets. ROA may also indicate the same tendency.
- (ii) The amount of inventory stocks is supposed to be reported in a balance sheet, and it doesn't influence operating and ordinary income in an income statement. In this regard Japanese companies had tended to cut their inventory stocks from the view-point of minimizing production cost even before the changes of accounting standards. After the introduction of statements of cash flows, the turnover of inventories has shown a more decline from 1.36 month in FY1998 to 0.98 month in FY2003.
- (iii) By definition, bills receivable and accounts receivable are not included in cash flows and this is one of the reasons for the deference between the movement of net income and that of cash-flows. As companies have placed their importance on cash flows after the change of accounting standard, in FY2003 turnover of receivables declined to 2.13 months due to the increase in the amount of sales and also to the decrease in the amount of bills receivable (See Table15 and its notes).
- (iv) Because the amount of sales has shown just a gradual increase and could not be expected to increase rapidly in most industries, it has been necessary for companies to reduce their outstanding loans in order to raise interest coverage ratio (See the note of the next page) and increase the cash flows after the next business year. For this purpose they have pushed on with the reduction of outstanding loans. In FY2003 the amount of short-term and long-term loans has been reduced by 8,926.4 billion yens (See Table16).

(Note) Interest coverage ratio is defined as follows.

Interest coverage ratio = (Operating income + interest and dividends + equity in earnings of unconsolidated subsidiaries and affiliates) / interest expense.

- (3) The effects of retirement benefits accounting on corporate behaviors

As mentioned earlier, by introducing retirement benefits accounting many companies have faced the shortage of funds for their employees' retirement benefits and moreover they will have to deal with unrecognized obligation. Therefore it may be rational for them to take a cautious attitude towards the increase in the number of regular employees. Although the number of employees in the Financial Statements Statistics is not equal to the number of the regular employees on a strict manner (See the note in the next page), it could show the trend of the number of regular employees working for private companies.

According to Table17, the number of regular employees working for private companies capitalized at 1 billion yens or more has shown a decrease since FY1998 excluding in FY2002. Retirement benefits accounting may be one of the reasons for the above development of the number of regular employees working for big companies. Also the number of private companies, which have adopted defined-contribution pension plans, has been increasing (See the reference of Table17), because retirement benefits accounting need not be applied to the employees under defined contribution pension plans.

(Note) In this statistics the number of temporary workers or part-time workers, who are not eligible for receiving pension benefits from a corporate pension fund, are reflected into the number of regular employees by dividing their total working hours by the average working hours of regular employees.

(4) The effects of fair value accounting of financial instruments on corporate behaviors

By adopting this accounting standard, a fall of stock prices had produced unrealized losses in the value of stocks held by private companies. These losses should be reported in their financial statements. Therefore it has been getting difficult for private companies to maintain the volume of cross share holding stocks in particular, especially when the prices of such stocks should decline (See the below note). According to the result of the questionnaire survey conducted by the Ministry of Economy, Industry & Trade (See Table18), fair value accounting of financial instruments gave the biggest impact on the relationships among companies based on cross share holding stocks (See 4-3-2 (2) (ii)). Also according to the share ownership survey conducted by Tokyo Stock Exchange (Table19), the share of LTCB, City & Regional Banks declined from 11.5% in FY 2000 to 5.7% in FY2003. In this contrast the share of foreigners climbed from 13.2% in FY2000 up to 19.7% in FY2003.

IV.3.2. *The indirect effects of new accounting standards on corporate behaviors*

In this paper I picked up two kinds of effects as indirect ones. One is the effects made by the change of corporate governance, which could be prompted by the introduction of new accounting standards. The other one is the effects produced by guidelines and contracts, which are based on the figures of financial statements.

(1) The effects made by the change of corporate governance

The more emphasis in management of Japanese companies has been placed on the interest of shareholders particularly in accordance with the increase in the share of foreigners. This has been caused by the increasing flow of capital on global basis and the international harmonization of accounting standards. From the view-point of shareholders' interests, ROE, for example, has been pointed out as a more important indicator for management. In this paper to grasp the trend of companies to use their assets more efficiently, I dare to apply again the indicators to the discussion on an aggregate level, although such indicators should be used to analyze financial situation of an individual company. Concretely ROE of companies capitalized at greater than 1 billion yens, which are assumed to be under accounting standards, has exceeded the average level of all the companies since FY2002. Moreover in FY2003 ROE of companies capitalized at greater than 1 billion yens reached to 4.27%, the highest level since FY1995 (See Table20). ROE can be divided into the three components. One is ratio of net income to sales. Another one is turnover of total assets. The other is financial leverage. The increase in ROE of the big companies mentioned above since FY2002 has been brought by the rise of ratio of net income to sales and also the small improvement of turnover of total assets. The increase in ratio of net income to sales was attributed to the decrease in sales as well as to the increase in net income in FY2002, and it was exclusively due to the increase in net income in FY2003.

To raise ROE, companies are expected to increase the ratio of net income to sales not by increasing total assets, but by developing new products and using human resources more efficiently. If they should increase total assets to enlarge the amount of their sales, turnover of total assets would be deteriorated.

(2) The effects of guidelines and contracts based on the figures of financial statements

There are the guidelines and contracts based upon the figures of financial statements such as the capital adequacy guidelines under the system of Basel I , numerical criteria for listing of stock exchange, and covenants of contracts. Although the figures in financial statements in conformity with new accounting standards were generally different from those in conformity with the former accounting standards, in most cases the target indicators stipulated in these guidelines and contracts have been maintained. As a result it has been pointed out that these guidelines and contracts could influence corporate behaviors (See the below note).

(Note) Mr. Nomura, Senior Analyst of Financial Research Center of Nomura Securities Co. Ltd., indicated to that effect in the seminar held by Economic & Social Research Institute on April 24 2003.

(i) Numerical criteria for listing and delisting of stock exchange

One example is numerical criteria for delisting (Domestic) of Tokyo Stock Exchange. As of end of March 2004, there are 6 conditions for delisting established by Tokyo Stock Exchange. One of them is excess liabilities continued for last 2 business years (on the basis of consolidated balance sheets in principle). As mentioned earlier, for example, financial

situations of subsidiaries and affiliates have become important for a parent company also from this view-point.

(ii) The effects through the guidelines on capital adequacy ratio of banking institutions

Under the capital adequacy guidelines applicable to Japanese banking institutions with international operations conducted by foreign offices, for example, the minimum target capital ratio of 8.0% is required. This target ratio has been kept unchanged after the introduction of new accounting standards. Therefore the changes of accounting standards could give an impact on the behaviors of banking institutions, through the possible changes of the rating towards companies as borrowers. If a bank may downgrade its rating of borrowers, a bank may increase the amount of provision for allowance for such accounts and may subsequently face the decrease in its ordinary profits. Also in calculating capital adequacy ratio of banking institutions based on the guidelines, valuation losses on other securities should be calculated into Tier1 capital 100%, on the other hand only 45% of unrealized gains on other securities can be calculated into Tier2 capital. Additionally even if stock prices should rise or decline to the same extent, the absolute size of impact on capital adequacy ratio caused by a rise of stock prices is smaller than that of impact caused by a fall of stock prices.

Moreover the limitation on a bank's shareholding up to the amount equivalent to its Tier1, was scheduled to be effective in September 2004 initially (See the below note). These have been pointed out as the factors to induce banks to sell their other securities.

(Note) The effective date of this limitation was postponed to September 2006.

(iii) The effects through covenants of contracts on target financial indicators

Accounting-based covenants have also principally kept unchanged after the introduction of new accounting standards. Examples of accounting-based covenants are the maintenance of a certain amount of net assets, the maintenance of a certain level of capital adequacy ratio, and the maintenance of credit rating.

V. The relationships between the changes of accounting standards and Japanese economy

Based upon the above discussion on new accounting standards, it may be possible to say that the changes of accounting standards could affect the management or behaviors of particularly large companies. Finally I would like to consider possible implications of new accounting standards for Japanese economy through the changes of large companies.

V.1. *The international harmonization of accounting standards and business practices*

Since FY2000 new accounting standards consistent with IAS in principle have enabled investors at home and abroad to compare the size of returns and risks of investments to Japanese

companies with those of foreign companies on the basis of both financial statements. Additionally banks had sold the amount of their shareholdings, partly due to a law enacted in November 2001, which imposes the limitation on banks' share holdings (See the below note) as well as fair value accounting of financial instruments. Consequently 'MOCHIAI', or the cross shareholdings between companies and banking institutions have been greatly weakened and the share of foreign investors in ownership has been increased, as if they have compensated the decrease in the share of banking institutions. Particularly companies with high share of foreign investors in ownership have been assumed to change their policy on employment, investment, finance, and so on.

(Note) As regards the article3 and4, which impose the limitation on banks' shareholdings, will be put in force on September 30th 2006.

V.2. The recovery of rate of return and fixed investment

It has been pointed out that private investment has been increased in this expansionary phase of this business cycle from January–March period in 2002 on a more robust manner compared with the corresponding phase of the last business cycle from January–March period in 1999 to October–December period in 2000 (See Table3).

According to the paper, 'Excess Capacity and Prolonged Stagnation' written by Professor Miyagawa, and Mr. Ochiai, the stagnation of Japanese economy for 15 years could be explained by the movement of private investment. Moreover they argued that this stagnant movement of private investment had been attributed to the decline of rate of return, in other words, prolonged high real wage in the 1990's. The recovery of our economy starting from January–March period in 2002 has been brought by the recovery of private investment, which has been induced by the improvement of rate of return as a result of downsizing and restructuring. As shown earlier the downsizing and restructuring of Japanese companies have been promoted by new accounting standards. Moreover in spite of the increase of private investments, a rate of return of tangible assets seemed to rise in FY2002 and FY2003 (See Table21). Also the ratio of the amount of investments to that of depreciation expense by companies capitalized at 1 billion yens or more has been on the declining trend.

V.3. The reduction of the amount of loans and its effect on money flow

Companies have continued to repay their loans in order to reduce the amount of interest expenses as a step to restrain outflow of cash in the next term or later. As mentioned in the above, they have also continued to take a cautious attitude toward the acquisition of fixed assets from the viewpoint of the ratio of investments to depreciation expense. As a result the amount of funds financed from capital market and banks has continued to show a decline, although the

cost of debts on nominal basis has been historically low (See Table21). Particularly based on the theory of business administration, the necessary amount of cash for investment activities is supposed to be covered by net cash provided by operating activities. In this context the amount of loans from banking institutions is unlikely to show an increase and this may limit the effect of loose money policy to some extent. Subsequently money supply is likely to continue to show a stagnant movement (See Chart24), even after non-performing loans in our banking sector will be disposed to more extent.

This transition from fund-shortage to fund-surplus in private non-financial corporation's sector has another implication for our flow of funds in the future. According to Table22, non-financial corporations and financial institutions have continued to show a fund-surplus in the recent time. On the other hand the amount of fund-surplus in household sector has continued to decrease, and the amount of fund-shortage in overseas sector has continued to increase. In these circumstances we have to reduce the huge amount of fund-shortage in general government sector. If the certain amount of fund-surplus in private non-financial corporations' sector should be maintained, by definition, there may be only choices to decrease more the amount of fund-surplus in household sector or to increase more the amount of fund-shortage in overseas sector. However there seems to be a kind of limitation for either of the above two choices. In this context, as mentioned earlier, household sector can not be expected to see the big increase in compensation of employees. On the other hand we could observe that managements of Japanese companies have increased the amount of dividends as one of the steps to place the more importance on the interest of shareholders (See Table23). Therefore under these conditions it may be necessary to arrange the institutions more friendly to investments made by household sector rather than its saving.

V.4. *The monetary policy and its effects on corporate income*

Roughly speaking, retirement benefits obligation is the discounted value of severance indemnities and pension benefits for employees paid by a company. In this formula the discount rate should be determined on the yield of long-term bonds with high rating in consideration with their fluctuations in a certain period. With regard to the effects of discount rate, it has been said that depending on the level of discount rate, the decline of discount rate by 1% could approximately increase retirement benefits obligation by 2%(See the below note). If a long-term interest rate should show a rise, companies with amount of liabilities more than that of assets might have a negative impact through the increase in repayments of interests, although retirement benefits obligation should be decreased. Of course long-term interest rates may be the factors for the fluctuations of the other economic variables. However ceteris paribus companies with good financial situation could have a positive impact through the increase in yields of pension assets and the decrease in retirement benefits obligation. Therefore under

retirement benefits accounting, a rise in long-term interest rate could have two kinds of effects on companies depending on their financial situations.

(Note) Mr. Komiyama, managing partner of ASAHI Audit Corporation (at that time) indicated to such effect in the extension course of Hitotsubashi University on June 19th 2003.

VI. Concluding Remarks

There were two personal questions, which motivated me to write this paper. One was what kind of actual effects on companies have been created by new accounting standards. In fact I had often heard people of private companies saying 'Oh, yes, we have been much influenced by the changes of accounting standards', when I asked them about this issue. The other one was what kind of structural reform brought about the recovery of our economy since January 2002, based on the basic philosophy 'No recovery without reform'. About my first question, it may be possible to say that the new accounting standards have changed the management style of Japanese companies to shift their importance on from unrealized profits to cash flows, and so on. About my second question, it may be also possible to say that companies have been accommodated themselves to the new accounting standards and this has brought the recovery of our economy, accompanied by the export boom and strong demand for digital electronic devices. This would be one of the differences between this expansionary phase beginning in January 2002 and the previous corresponding phase from January 1999 to October 2000.

This paper is just a preliminary one. In fact there still remain tasks for myself to survey preceding relevant studies and demonstrate the effects of new accounting standards on our economy as well as on Japanese companies on more rigid and theoretical manner.

Table1 The main changes of accounting standards

effective timing	Item	Note
Business year beginning on April 1 1999 or later	The introduction of disclosure of consolidated financial statements as main audited documents	Consolidated financial statements had already been introduced since FY1977, however they were unaudited and only supplementary documents.
	The introduction of consolidated statements of cash flows	
	The introduction of tax consequence accounting	
Business year beginning on April 1 2000 or later	The introduction of fair value accounting of financial instruments (excluding other investment securities)	①The valuation differences of investment securities between at bookvalue and at market prices at the end of business year were required only to be annotated in financial statements. ②According to the old accounting standards financial instruments had been evaluated at aquisition cost, and derivatives had been treated as off-balance.
	The introduction of retirement benefits accounting	
Business year beginning on April 1 2001 or later	The introduction of fair value accounting of other securities	
Business year beginning on April 1 2005 or later	Accounting standards for impairment of fixed assets will be applied on a mandatory manner.	Since business year 2004 companies have already adopted accounting standards for impairment of value of fixed assets on a voluntary basis.

Source : Kunio Itoh,2004, 'Cash Flow Accounting & Corporate Valuation',
Japanese Bankers Association, 'How to read banks' financial statements'

(Reference)The share of enterprises on main items by the size of capital
(FY2003、 All industries excluding finance and insurance industry)

	Less than 2 million yens	2 million~5 million yens	5 million~10 million yens	10 million~50 million yens	50 million~100 million yens	100 million~1 billion yens	greater than 1 billion yens
Sales	0.1%	5.4%	2.3%	29.9%	8.5%	15.8%	38.1%
Operating income	▲ 0.0	0.5	0.7	16.4	6.4	15.7	60.4
Ordinary income	▲ 0.0	1.3	1.1	17.6	6.6	15.4	58.0
Net income	▲ 0.1	▲ 0.3	▲ 1.1	16.2	5.7	13.9	65.8
Cash flows (See note1)	0.0	4.0	1.2	18.7	7.1	12.4	56.6
Tangible fixed asset	0.1	5.6	2.4	26.7	6.9	12.5	45.9
Stocks classified as fixed assets (Note2)	0.0	0.3	0.2	6.3	2.8	6.8	83.5
The number of employees	0.2	12.2	4.5	42.3	9.0	13.3	18.4

Source : Financial Statement Statistics(FY2003);Ministry of Finance

Note1 : Cash flows in the above table are calculated by adding reserves to depreciation. However as net profits after tax are based on tax consequence accounting, these figures are only proxy of cash flows.

Note2 : In Financial Statement Statistics, stocks held by enterprises available for sale are classified as current assets and other stocks are classified as fixed assets.

Table2 The Performance of Japanese Enterprises capitalized at 1 billion yen or more
(All Industries excluding Finance & Insurance)

(in billions of yen)

Fiscal Year	1998	1999	2000	2001	2002	2003
Sales	512067.4	507257.7	526967.3	512537.1	500774.5	508531.2
Operating Profits	15700.7	18164.5	21639.1	17094.9	19979.2	22183.5
Ordinary Profits	12448.1	15344.5	19394.5	15333.7	18348.0	20991.9
Extra-Ordinary Gain	6052.8	7239.0	11165.6	5583.5	7365.4	7118.7
Extra-Ordinary Loss	12804.8	18648.9	21902.1	21800.1	15373.6	11936.1
Net Profits Before Tax	5696.1	3934.7	8658.0	▲ 882.9	10339.9	16174.5
Net Profits After Tax	215.4	414.0	3773.8	▲ 2470.2	4211.9	8654.3

(Reference) The Changes from the previous business year

Fiscal Year	1999	2000	2001	2002	2003
Sales	-0.9%	3.9%	-2.7%	-2.3%	1.5%
Operating Profits	15.7%	19.1%	-21.0%	16.9%	11.0%
Ordinary Profits	23.3%	26.4%	-20.9%	19.7%	14.4%
Extra-Ordinary Gain	19.6%	54.2%	-50.0%	31.9%	-3.3%
Extra-Ordinary Loss	45.6%	17.4%	-0.5%	-29.5%	-22.4%
Net Profits Before Tax	-30.9%	120.0%			56.4%
Net Profits After Tax	92.2%	811.5%			105.5%

Source : Financial Statement Statistics(FY2003);Ministry of Finance

Table 3 The Movement of Real GDP of Japanese Economy

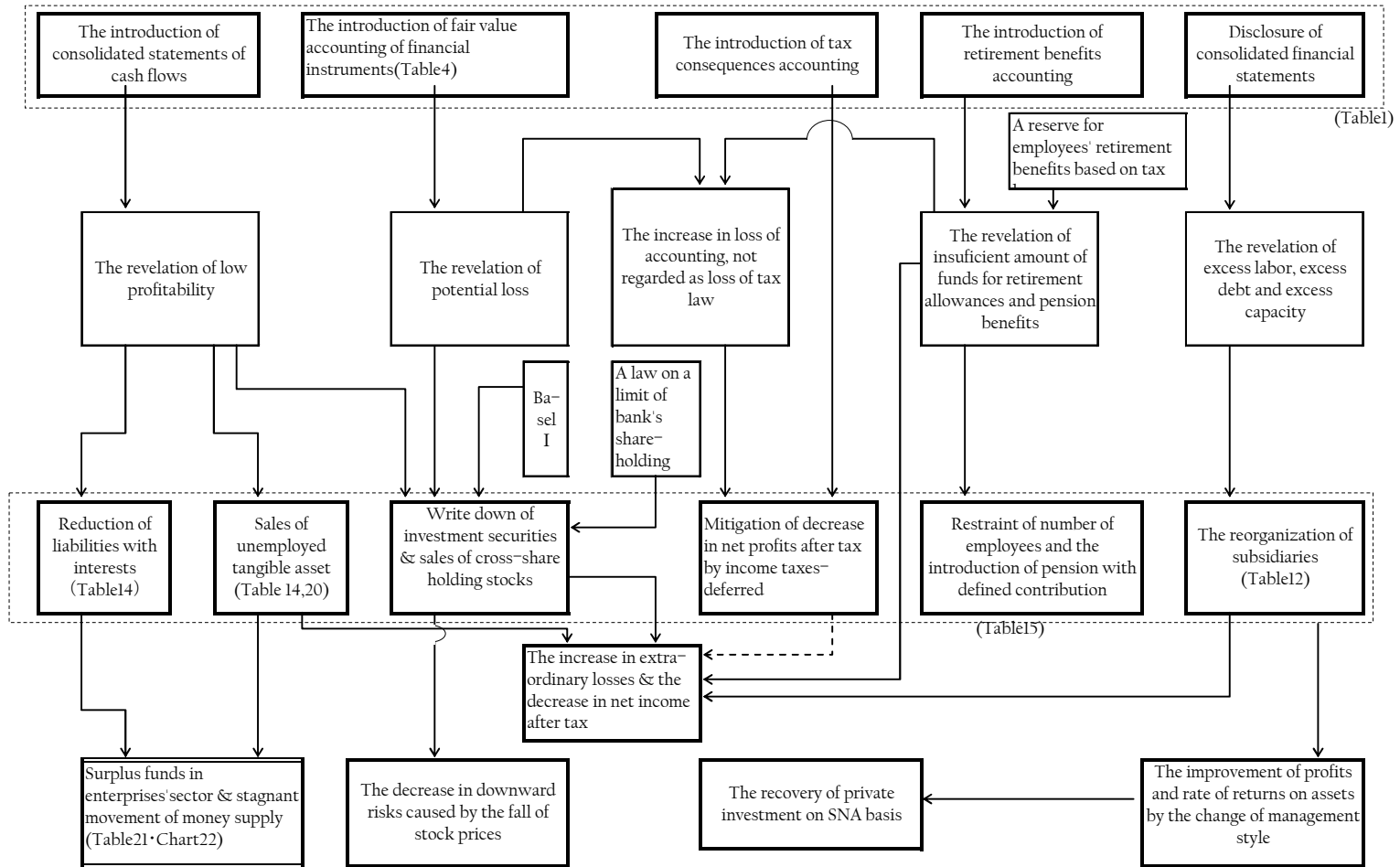
Changes from the previous year(%)

Fiscal year	Real GDP	Private Consumption	Private Residential Investment	Private Non-Residential Investment	Private Inventory	Government Consumption	Public Investment	Net Exports	Exports of Goods & Services	Imports of Goods & Services
1995	2.5	2.4	▲ 5.5	3.3	(0.4)	4.1	8.0	(▲0.7)	4.6	15.1
1996	3.6	2.6	13.4	9.2	(0.1)	2.6	▲ 2.9	(▲0.1)	7.7	10.1
1997	0.6	▲ 0.9	▲ 18.9	7.6	(0.1)	1.1	▲ 5.9	(1.1)	8.9	▲ 1.9
1998	▲ 0.9	0.6	▲ 10.7	▲ 5.0	(▲0.7)	3.0	2.1	(0.2)	▲ 3.7	▲ 6.5
1999	0.6	0.1	3.7	▲ 0.8	(▲0.2)	4.8	▲ 0.9	(0.0)	5.5	6.6
2000	2.5	0.5	▲ 0.3	8.8	(0.5)	4.7	▲ 8.1	(0.2)	9.3	8.2
2001	▲ 1.1	0.8	▲ 7.9	▲ 3.4	(▲0.4)	2.8	▲ 5.1	(▲0.4)	▲ 7.1	▲ 3.9
2002	0.8	0.7	▲ 2.3	▲ 3.7	(0.3)	2.4	▲ 5.1	(0.7)	11.0	5.0
2003	2.0	0.5	▲ 0.3	8.3	(0.1)	1.2	▲ 9.0	(0.8)	10.0	3.1
2004	1.9	1.2	2.1	5.3	(0.2)	2.7	▲ 15.1	(0.5)	11.9	9.3

Source : Quarterly Estimates of GDP:January-March 2005(The Second Preliminary),Cabinet Office

Note : The figures in the parenthesis in the above table is the contributions to changes in real GDP.

Chart 4 The total picture of the theme in this paper



(Note) This chart aims at showing the whole picture of the theme in this paper.

Table 5 The definition of consolidated subsidiary

The definition of subsidiary	(1) The standard from the amount of stocks held by a parent company Entities are consolidated if greater than 50% of ownership of their voting stock is kept by a parent company.
	(2) The standard from the extent of control by a parent company Entities are consolidated if a parent company has greater than 40% of their voting stock and can excise substantive control over them.
The definition of consolidated subsidiary	(1) On principle entities, which meet the above standards, are included in the consolidated financial statements. However entities can be unconsolidated if a parent company can excise substantive control only on a temporary basis or if stakeholders could misunderstand their situation on consolidated financial statements.
	(2) The consolidated financial statements should include the accounts of important subsidiaries from the viewpoint of a parent company's strategy.
	(3) Any subsidiary could be excluded in the consolidated financial statements, if they should meet the certain guidelines. One of them is that the size of assets, sales, profits, and retained earnings of a subsidiary is below 3~5% of the sum of figures of a parent company and its subsidiary respectively.
The reflection of business results of unconsolidated subsidiaries and affiliates by equity method of accounting	(1) Affiliates are defined as the companies whose greater than 20% but less than 50% of voting shares is owned by a parent company. In addition if a parent company should have less than 20% but greater than 15% of voting shares and can excise substantive control over its management and policies, such company should be an affiliated company.
	(2) By equity method of accounting, the business results of unconsolidated subsidiary and affiliates should be included in the consolidated financial statements.

Source : Akito Sawa & Akira Hamamoto, 2002, 'Accounting Breakthrough'

Note : The expression 'excise substantive control' in the above table is defined as the situation where the certain facts indicating the possession of the power to direct the management and policies of subsidiaries could be observed. The followings are examples of such facts.

- (1) Through the cooperative shareholders like affiliates, a parent company could get continuously the majority of votes in a general meeting of stockholders.
- (2) The present or former executives or employees of a parent company occupy the majority of members in the board of directors on a continuous manner.

Table 6 The method of valuation for the fair value of securities at the end of business year

The classification of securities		Price for evaluation	Treatment of unrealized gains & losses
1	Securities available for sale	at market prices	Unrealized gains and losses should be reported in statement of income
2	Securities being held to maturity	at acquisition cost on stocks & at amortized cost on bonds	The valuation differences at amortized cost on bonds are recognized as gains or losses in a statement of income.
	Stocks of subsidiaries and affiliated companies		
	The other non-marketable securities		
3	The other marketable securities	at market prices	① The net valuation differences are reflected into the value of assets, or ② valuation losses are treated as losses, and valuation gains are calculated into assets.

Source : Hisakatsu Sakurai, 'Analysis on financial statements' (2nd edition)

Note : Write down of Investment Securities

In addition to the above valuation, write down of investment securities has been stipulated in Commercial Code since 1962. Securities in the above 2nd and 3rd groups excluding non-marketable securities should be written down when a decline in the market value below the cost of the securities is substantial and unrecoverable. Also the value of non-marketable securities should be reduced, when their substantial value seriously declines by the deterioration of issuer's financial situation. The valuation differences are recognized as losses. Concretely such securities should be written down, when market value is 50% or more than acquisition cost and any reasonable proof for the possibility of recovery of their market value cannot be presented. When such securities should decline by between 30% and less than 50% compared with acquisition cost, the Japanese Institute of Certified Public Accountants provides the criteria for the possibility of recovery of their market value. Additionally whether such decline of their market value should be regarded as substantial or not depends on the reasonable criteria established by individual companies.

(Reference) The amount of securities held by private companies (FY2003, All the industries excluding finance and insurance)

(billion yens)

	Total	companies with the capital of 10 billion yens or more	Note
current assets	533,737.3	217,725.3	Securities classified as current assets are ones available for sale and bonds due in one year or less.
securities	11,655.8	6,546.0	
stocks	3,293.8	275.6	
bonds	3,397.1	2,720.4	
others	4,964.9	3,550.0	
fixed assets	691,894.2	364,383.5	
investment securities	112,488.8	89,496.6	
stocks	99,081.9	82,692.5	
bonds	5,979.8	4,285.7	
others	7,427.1	2,518.4	

Source : Financial Statement Statistics (FY2003); Ministry of Finance

Note : The above figures in this table are the average of figures at the beginning and end of business year.

Table 7 The number of companies adopting new accounting standards

	The size of capital (yens)	Before FY2000	In FY2001	In FY2002 (plan)	After FY2003 (plan)	No plan to adopt new accounting standards
Retirement benefits accounting	Total	50,920	13,521	12,818	38,744	2,494,753
	1 billion~	3,895	1,158	35	29	779
	100 million~1 billion	11,290	3,892	493	1,084	12,109
	50 million~100 million	6,173	2,187	592	2,153	39,289
	20 million~50 million	12,987	2,113	1,466	6,683	188,579
	10 million~20 million	13,028	4,171	2,616	14,668	879,086
Fair value accounting of financial instruments	Total	17,643	18,020	12,266	18,580	2,544,241
	1 billion~	3,108	1,623	104	32	1,021
	100 million~1 billion	7,020	5,032	574	971	15,266
	50 million~100 million	2,454	2,175	840	1,568	43,362
	20 million~50 million	3,077	2,489	2,730	4,895	198,641
	10 million~20 million	1,908	3,860	6,005	6,410	895,381
Tax consequences accounting		Before FY 1999	In FY 2000 (plan)	In FY 2001 (plan)	After FY2002 (plan)	No plan to adopt new accounting standards
	Total	56,190	237,032	37,973	57,145	2,131,519
	1 billion~	4,142	924	65	138	550
	100 million~1 billion	10,997	5,182	1,017	1,146	10,415
	50 million~100 million	4,847	6,896	1,759	2,519	31,073
	20 million~50 million	8,519	25,708	4,959	5,692	154,563
	10 million~20 million	12,759	85,570	17,008	22,195	767,058

Source : The Survey about the Effects of the Changes of Accounting Standards on the figures in Financial Statements Statistics, Ministry of Finance(FY2001)

Table 8 The number of companies introducing retirement benefits accounting

	Before FY2000	In FY2001	In FY2002 (plan)	After FY2003 (plan)	No plan to adopt retirement benefit accounting	The number of employees (FY2002)
All the industries	3,895	1,158	35	29	779	6,850,810
Manufacturing	1,730	400	8	9	133	3,123,089
Foods	144	56	2	3	13	281,364
Textile	38	10	0	0	4	28,524
Clothes	10	17	0	0	0	30,805
Wooden products	8	4	0	0	0	9,710
Pulp & paper	44	2	0	0	3	51,998
Publication & print	35	8	0	0	1	66,038
Chemicals	240	79	3	2	42	380,232
Oil & Coal	23	9	0	0	2	21,753
Ceramics	71	19	0	1	6	70,883
Iron & steel	70	2	0	0	4	105,297
Non-ferrous products	64	10	0	0	7	77,025
Metal products	86	17	0	0	0	91,651
General machinery	193	35	0	0	7	252,467
Electric machinery	345	63	1	2	27	800,886
Transportation machinery	157	17	1	0	6	524,675
Precision machinery	57	12	0	1	1	100,393
Shipbuilding	13	1	0	0	0	72,016
Other manufacturing	132	39	1	0	10	157,372
Non-manufacturing	2,165	758	27	20	646	3,727,721
Wholesale	379	139	5	0	47	421,911
Retail	244	198	2	6	25	1,120,611
Real estate	254	73	11	3	176	75,634
Transportation by land	128	8	1	1	6	567,104
Transportation by water	40	6	2	0	2	13,874
Other transportation & communication	149	35	1	1	23	214,655
Electricity	31	1	0	0	5	143,870
Gas	28	5	0	0	10	34,301
Services for enterprises	215	57	0	4	83	332,759
Hotels	91	38	0	0	30	65,185
Services for individuals	13	8	0	0	11	17,226
Film & recreation	69	54	1	1	38	67,559
Broadcasting	136	28	1	3	37	30,201
Agriculture, Forest & Fishery	9	0	0	0	8	7,164
Mining	18	18	0	0	68	4,663
Construction	241	51	2	0	9	411,864
Other non-manufacturing	120	39	1	1	68	199,140

Source : See the source of Table7.

Note : The Figures in the above table are the numbers of the companies capitalized at 1 billion yens or more.

Table 9 The number of companies adopting fair value accounting of financial instruments(See the note)

	Before FY2000	Within FY2001	In FY2002 (plan)	After FY2003 (plan)	No plan to adopt this standard
All the industries	3, 108	1, 623	104	32	1, 021
Manufacturing	1, 438	622	31	8	176
Foods	116	71	7	4	21
Textiles	23	24	1	0	2
Clothes	6	20	0	0	1
Wooden products	6	5	0	0	0
Pulp & paper	31	18	0	0	1
Publication & print	27	14	0	0	4
Chemicals	213	103	10	1	39
Oil & coal	18	13	0	0	2
Ceramics	63	26	2	1	4
Iron & steel	61	13	0	0	3
Non-ferrous	60	16	1	0	5
Metal products	67	29	2	0	4
General machinery	165	58	2	0	10
Electric machinery	279	102	2	2	51
Transportation machinery	127	37	3	0	12
Precision machinery	52	16	0	0	4
Shipbuilding	11	1	1	0	1
Other manufacturing	113	56	0	0	12
Non-manufacturing	1, 670	1, 001	73	24	845
Wholesale	312	210	13	2	32
Retail	205	210	14	4	43
Real estate	189	96	13	4	213
Transportation by land	79	37	2	0	26
Transportation by water	30	16	1	0	2
Other transportation & communication	120	40	4	0	47
Electricity	24	5	1	0	7
Gas	19	7	0	0	16
Services for enterprises	183	77	4	5	91
Hotels	54	46	7	4	48
Services for individuals	12	7	1	0	11
Film & recreation	46	42	3	1	71
Broadcasting	81	29	3	3	88
Agriculture, forest & fishery	4	1	0	0	11
Mining	17	36	1	0	50
Construction	207	85	2	1	9
Other non-manufacturing	88	57	4	0	80

Source : See the source of Table7.

Note : The figures in the above table are the numbers of the companies capitalized at 1 billion yens or more.

Table 10 The effect of retirement benefits obligation on corporate income in FY2001
(All the industries excluding finance & insurance industry)

(in billions of yens)

The size of capital	Item	The timing of adoption of retirement benefits accounting			(Reference) The companies not adopting retirement benefits accounting	
		Before FY 2000	In FY 2001	Total		
All the companies	Reserve for employees' retirement benefits under retirement benefits accounting	28,234.2	5,323.5	33,557.6	Reserve for employees' severance indemnities under corporate tax law	1,813.3
	Periodic benefits cost				Provision for the above reserve	
	Selling, general and administrative expenses	5,883.9	1,478.1	7,362.0	Selling, general and administrative expenses	339.1
	Extra-ordinary losses	▲1,609.5	▲2,032.7	▲3,642.3	Extra-ordinary losses	▲26.6
	Gains on placing trust for retirement benefits	365.1	266.2	631.3		
	Losses on placing trust for retirement benefits	▲2.1	▲4.0	▲6.1		
Greater than 1 billion yens	Reserve for employees' retirement benefits under retirement benefits accounting	21,637.6	2,616.8	24,254.4	Reserve for employees' severance indemnities under corporate tax law	35.5
	Periodic benefit cost				Provision for the above reserve	
	Selling, general and administrative expenses	4,461.7	521.8	4,983.4	Selling, general and administrative expenses	8.9
	Extra-ordinary losses	▲1,365.3	▲1,314.1	▲2,679.4	Extra-ordinary losses	▲1.1
Between 100 million yens and less than 1 billion yens	Reserve for employees' retirement benefits under retirement benefits accounting	5,324.6	1,465.0	6,789.5	Reserve for employees' severance indemnities under corporate tax law	722.0
	Periodic benefit cost				Provision for the above reserve	
	Selling, general and administrative expenses	1,044.5	324.8	1,369.3	Selling, general and administrative expenses	108.4
	Extra-ordinary losses	▲179.3	▲422.7	▲602.0	Extra-ordinary losses	▲21.5
Between 10 million yens and less than 100 million yens	Reserve for employees' retirement benefits under retirement benefits accounting	1,272.0	1,241.7	2,513.7	Reserve for employees' severance indemnities under corporate tax law	1,039.6
	Periodic benefit cost				Provisions for the above reserve	
	Selling, general and administrative expenses	377.7	631.6	1,009.2	Selling, general and administrative expenses	219.3
	Extra-ordinary losses	▲65.0	▲295.9	▲360.9	Extra-ordinary losses	▲4.0

Source : See the source of Table5.

(Reference1) The Effect of Retirement Benefits Accounting on Corporate Income before Tax
(billion yens)

FY1999	FY2000	FY2001
▲ 2, 125. 3	▲ 7, 579. 3	▲ 3, 017. 1

Source : See the source of Table7.

(Reference2) The average amount of retirement benefits obligations per a company in FY2001
(companies capitalized at greater than 1 billion yens)
(million yens)

Reserve for employees' retirement benefits under retirement benefits accounting	4, 800	Reserve for employees' severance indemnities under corporate tax law	40
Periodic benefit cost		Provisions for the above reserve	
Selling, general and administrative expenses	990	Selling, general and administrative expenses	10
Extra-ordinary losses	530	Extra-ordinary losses	0

Source : The figures in the above table have been calculated on those in Table10 and the following Reference3.

(Reference3) The number of the companies adopting retirement benefits accounting by the size of their capital

The size of capital	The timing of adoption of retirement benefits accounting			(Note) The number of companies not adopting retirement benefits accounting as of Business Year of 2001
	Before FY2000	In FY2001	Total	
All the companies	50, 920	13, 521	64, 441	
1 billion yens ~	3, 895	1, 158	5, 053	843
100 million ~ 1 billion yens	11, 290	3, 892	15, 182	13, 686
10 million ~ 100 million yens	32, 188	8, 471	40, 659	1, 135, 132

Source : See the source of Table7.

Table 11 Valuation gains or losses on financial instruments in FY2001
(All the industries excluding finance & insurance)

(in billions of yen)

		All the industries	Manufacturing	Non-manufacturing
All the companies	Valuation gains or losses on financial instruments in current assets	▲ 138.9	▲ 40.6	▲ 98.3
	Non-operating income	105.4	50.7	54.7
	Non-operating expenses	▲ 244.3	▲ 91.3	▲ 153.0
	Valuation gains or losses on financial instruments in current assets	▲ 556.6	717.9	▲ 1274.5
	Extra-ordinary losses	▲ 6257.6	▲ 2381.2	▲ 3876.4
	Retained earnings	5701.0	3099.1	2601.9
The companies with the size of capital of 1 billion yens or more	Valuation gains or losses on financial instruments in current assets	▲ 106.1	▲ 47.7	▲ 58.4
	Non-operating income	61.2	33.1	28.0
	Non-operating expenses	▲ 167.3	▲ 80.8	▲ 86.5
	Valuation gains or losses on financial instruments in fixed assets	▲ 1390.2	289.9	▲ 1680.1
	Extra-ordinary losses	▲ 5695.9	▲ 2249.5	▲ 3446.5
	Retained earnings	4305.8	2539.4	1766.4
The companies with the size of capital between 100 million and less than 1 billion yens	Valuation gains or losses on financial instruments in current assets	7.0	3.5	3.5
	Non-operating income	27.1	8.6	18.5
	Non-operating expenses	▲ 20.2	▲ 5.1	▲ 15.0
	Valuation gains or losses on financial instruments in fixed assets	748.8	435.0	313.7
	Extra-ordinary losses	▲ 456.5	▲ 122.7	▲ 333.8
	Retained earnings	1205.3	557.7	647.5

Source : See the source of Table7.

(Reference) Stock market & bonds yield

The end of year	TOPIX Jan.4,1968=100	Newly Issued Government Bonds Yield(10 years)
CY1999	1722.20	1.645
CY2000	1283.67	1.640
CY2001	1032.14	1.365
CY2002	843.29	0.900

Source : Bank of Japan, 'Financial and Economic Statistics Handbook', Sep.2004

Table 12 The effect of valuation of financial instruments at market prices on the statements of income (Business Year of 2001)

(in billions of yen)

	Actual results (A)	The effect of valuation of financial instruments at market prices(B)	(A)-(B)
Operating income	29,561.3		29,561.3
Non-operating income	17,195.0	105.4	17,089.6
Non-operating expenses	▲ 18,509.3	▲ 244.3	▲ 18,265.0
Ordinary income	28,246.9		28,385.9
Extra-ordinary income	10,926.4		10,926.4
Extra-ordinary losses	▲ 32,095.0	▲ 6,257.6	▲ 25,837.4
Income before tax	7,078.3		13,474.8

Source : See the source of Table7

Note : The effect of fair value accounting of financial instruments on ordinary income and income before tax of enterprises is calculated on the assumption that the adoption of this accounting standard has no impact on their activities.

Table 13 The effect of the adoption of retirement benefits accounting & fair value accounting of financial instruments on income before tax of corporations (FY2001)

(in billions of yen)

Net income before tax without retirement benefits accounting & fair value accounting of financial instruments	Net income before tax(actual)	Extra ordinary losses caused by the adoption of retirement benefits accounting	Net non-operating income & extra-ordinary income caused by fair value accounting of financial instruments
16491.9	7078.3	▲ 3017.1	▲ 6396.5

Source : See the source of Table7

Table 14 The changes of accounting standards and reviews of managements of subsidiaries & affiliates

The followings are the percentage distribution of answers by respondents about the question, 'Have you reviewed the management of your subsidiaries & affiliates in response with the new or revised accounting standards? Please answer the extent of the changes of accounting standards.'

(%)

		No impact	→	→	→	→	→	Great impact
Business Corporations	Disclosure of consolidated financial statements	23.7	7.4	11.0	21.4	17.6	11.2	7.7
	Consolidated statements of cash flows	42.8	9.0	9.9	21.2	9.4	4.9	2.9
	Tax consequences accounting	48.6	8.4	7.0	21.8	8.1	3.7	2.4
	Fair value accounting of financial instruments	52.2	10.3	6.6	19.9	6.4	2.6	2.0
	Accounting standard for foreign currency denominated assets & liabilities	68.2	6.1	3.9	18.4	2.0	1.3	0.0
	Write-down of real estate for sale	72.0	5.6	2.5	17.0	1.6	1.1	0.2
	Retirement benefits accounting	50.3	6.9	7.3	20.7	9.0	2.7	3.0
Finance, Securities & Insurance	Disclosure of consolidated financial statements	16.3	6.1	8.2	30.6	18.4	8.2	12.2
	Consolidated statements of cash flows	38.8	10.2	2.0	24.5	8.2	4.1	12.2
	Tax consequences accounting	34.7	10.2	8.2	22.4	10.2	2.0	12.2
	Fair value accounting of financial instruments	38.8	12.2	10.2	20.4	2.0	8.2	8.2
	Accounting standard for foreign currency denominated assets & liabilities	67.3	10.2	10.2	8.2	0.0	0.0	4.1
	Write-down of real estate for sale	72.9	16.7	6.3	4.2	0.0	0.0	0.0
	Retirement benefits accounting	49.0	10.2	4.1	12.2	14.3	0.0	10.2

Source : Ministry of Economy, Trade & Industry, 'Questionnaire survey on the impacts of the new accounting standards on managements of enterprises' (May 2003)

Table 15 Main financial & operating indicators of companies capitalized at 1 billion yens or more
(all industries excluding finance & insurance)

Fiscal Year	Turnover of inventories	Turnover of receivables	Turnover of tangible fixed assets		ROA	The rate of business income to sales	Turnover of total assets
			(including land)	(excluding land)			
	month	month	times	times	%	%	
1995	1.39	2.30	2.86	3.77	4.51	4.71	0.957
1996	1.36	2.33	2.87	3.80	4.64	4.80	0.967
1997	1.34	2.30	2.79	3.70	4.44	4.62	0.961
1998	1.36	2.36	2.56	3.41	3.96	4.40	0.900
1999	1.24	2.29	2.51	3.40	4.34	4.93	0.880
2000	1.13	2.26	2.60	3.60	4.82	5.38	0.896
2001	1.11	2.33	2.49	3.46	3.93	4.59	0.857
2002	1.04	2.17	2.47	3.47	4.47	5.17	0.865
2003	0.98	2.13	2.53	3.56	4.82	5.53	0.873

Source : Financial Statements Statistics, Ministry of Finance

Note : The definitions of figures in the above table are as follows.

1. Turnover of Inventories = Inventories / (Sales / 12) (See the note of the below reference)
2. Turnover of Receivables = (Bills receivable + Accounts receivable) / (Sales / 12) (See the note of the below reference)
3. Turnover of Tangible Fixed Assets = Sales / Tangible Fixed Assets (excluding construction in progress) (See the note of the below reference)
4. ROA = (Operating income + Non-operating income) / Total Assets (See the note of the below reference)
5. The Rate of Business Income to Sales = (Operating income + Non-operating income) / Sales
6. Turnover of Total Assets = Sales / Total Assets (See the note of the below reference)

(Reference) Background data for calculating the above indicators

(in billions of yens)

Fiscal Year	Sales (A)	Inventories (B)	Receivables			Tangible fixed assets	
			Bills receivable (D)	Accounts receivable (E)	(F) = (D) + (E)	(Excluding construction in progress) (G)	(Excluding construction in progress & land) (H)
1995	531011.5	61555.3	21961.5	79842.4	101803.9	185420.6	140831.8
1996	547823.0	62205.6	21732.3	84811.2	106543.5	190596.1	144130.7
1997	550675.5	61310.2	19477.9	86040.3	105518.2	197124.8	148867.1
1998	512067.4	58232.4	18261.9	82328.0	100589.9	200045.3	150047.7
1999	507257.7	52534.6	16324.9	80632.1	96957.0	201987.4	149074.9
2000	526967.3	49589.1	15790.4	83440.4	99230.8	202366.9	146521.2
2001	512537.1	47465.3	15672.9	83869.6	99542.5	205914.7	148158.9
2002	500774.5	43417.4	13095.4	77532.7	90628.1	203075.4	144359.0
2003	508531.2	41766.6	10349.0	79830.8	90179.8	200792.8	142714.1

Note : The figures of inventories, receivables & tangible fixed assets are the average of those at the beginning and the end of each fiscal year respectively.

Table 16 Finance & demand for funds of enterprises capitalized at 1 billion yens or more (all industries excluding finance and insurance industry)

(in billions of yen)

Fiscal Year Classification		2000		2001		2002		2003		
			(See Note)		(See Note)		(See Note)		(See Note)	
Finance of funds	Finance from market & banks	▲ 2136.9	2659.5	▲ 1155.5	981.4	▲ 9814.7	▲ 8659.2	▲ 8681.5	1133.2	
	Stocks	5363.3	1871.4	1486.9	▲ 3876.4	▲ 1884.7	▲ 3371.6	1403.8	3288.5	
	Bonds	▲ 3582.2	▲ 2644.3	▲ 2679.9	902.3	▲ 2161.1	518.8	▲ 1158.9	1002.2	
	Borrowed money	▲ 3918.0	3432.4	37.5	3955.5	▲ 5768.9	▲ 5806.4	▲ 8926.4	▲ 3157.5	
	Long-term	▲ 3161.4	▲ 146.5	▲ 248.6	2912.8	▲ 2213.7	▲ 1965.1	▲ 2545.3	▲ 331.6	
	Short-term	▲ 756.6	3578.9	286.1	1042.7	▲ 3555.2	▲ 3841.3	▲ 6381.1	▲ 2825.9	
	Finance from own funds	40867.1	5657.5	20825.8	▲ 20041.3	21084.9	259.1	37969.2	16884.3	
	Own reserves	18652.0	6098.7	▲ 2290.3	▲ 20942.3	▲ 1480.2	810.1	14268.4	15748.6	
	Depreciation	22215.1	▲ 441.2	23116.1	901.0	22565.1	▲ 551.0	23700.8	1135.7	
	The total sum of finance	38730.2	8317.0	19670.3	▲ 19059.9	11270.2	▲ 8400.1	29287.7	18017.5	
Demand for funds	Capital invest- ment	Fixed investment	24448.1	▲ 2164.2	23050.2	▲ 1397.9	17024.1	▲ 6026.1	18907.7	1883.6
		Equipment investment	21821.5	1357.6	20380.8	▲ 1440.7	17510.5	▲ 2870.3	18415.4	904.9
		Land	1686.8	▲ 1902.0	2504.0	817.2	▲ 473.4	▲ 2977.4	▲ 359.4	114.0
		Intangible fixed assets	939.8	▲ 1619.8	165.4	▲ 774.4	▲ 13.0	▲ 178.4	851.7	864.7
		Working capital	2497.4	4402.1	▲ 1145.7	▲ 3643.1	▲ 70.9	1074.8	248.8	319.7
		Inventory investment	▲ 771.8	4674.3	▲ 4221.6	▲ 3449.8	▲ 3206.3	1015.3	▲ 1631.3	1575.0
		Net account of credits & liabilities among enterprises	569.1		—		—		—	
		Others	2700.1	▲ 841.3	3075.9	375.8	3135.4	59.5	1880.1	▲ 1255.3
	Subtotal	26945.5	2237.9	21904.5	▲ 5041.0	16953.2	▲ 4951.3	19156.5	2203.3	
	Port- folio invest- ment	Cash & deposit	▲ 1869.2	▲ 941.6	▲ 1212.0	657.2	▲ 1674.9	▲ 462.9	1587.7	3262.6
		Securities	9887.4	6850.8	▲ 6873.0	▲ 16760.4	▲ 4496.3	2376.7	11510.3	16006.6
		Trading securities	▲ 11367.1	▲ 10388.0	▲ 3389.9	7977.2	▲ 923.6	2466.3	▲ 466.1	457.5
		Investment securities	21254.5	17238.8	▲ 3483.1	▲ 24737.6	▲ 3572.7	▲ 89.6	11976.4	15549.1
		Other investment	3766.5	169.9	5850.8	2084.3	488.2	▲ 5362.6	▲ 2966.8	▲ 3455.0
	Subtotal	11784.7	6079.1	▲ 2234.2	▲ 14018.9	▲ 5683.0	▲ 3448.8	10131.2	15814.2	

Source : See the source of Reference of Table I

Note : The figures in these columns in the above table are the amount of changes compared with the previous fiscal year.

Table 17 The number of employees of companies by size of capital

(The percentage change compared with the previous year)

Fiscal Year	All size of capital	Less than 10 million	10 million ~ 50 million	50 million ~ 100 million	100 million ~ 1 billion	1 billion yens or more
1996	▲ 3.0	▲ 10.3	▲ 3.8	7.0	0.9	0.4
1997	2.2	▲ 20.7	15.8	1.8	1.4	0.0
1998	1.1	▲ 4.7	3.4	0.0	3.6	▲ 0.3
1999	1.5	7.8	▲ 1.2	7.3	4.4	▲ 1.6
2000	1.7	1.4	6.3	1.5	▲ 6.5	▲ 3.1
2001	▲ 5.8	▲ 3.4	▲ 8.0	▲ 14.4	▲ 0.1	▲ 1.5
2002	▲ 1.9	▲ 3.9	▲ 4.3	3.5	1.8	0.6
2003	1.1	7.6	▲ 1.8	2.5	5.5	▲ 1.5

Source : See the source of Table5

(Reference) The number of pension funds

	The number of pension fund under Welfare Pension Insurance Law	The number of pension fund under the order of Corporate Tax Law	(Note1)	(Note3)
FY1996	1,883	90,239		
FY1997	1,874	88,312		
FY1998	1,858	85,047		
FY1999	1,835	81,605		
FY2000	1,801	77,555		
FY2001	1,737	73,582		
FY2002	1,656	66,741	(Note2)	
FY2003	1,357			
FY2004			959 (as of 2004/7/31)	802 (as of 2004/9/1)
FY2005			1180 (as of 2005/6/1)	822 (as of 2005/6/1)

Source : The Homepage of Pension Fund Association, Mizuho Bank, 'The present situation of defined contribution pension plan and responses of management organization of funds'

Note1 : The accumulated number of defined contribution pension funds established by enterprises.

Note2 : According to the law on defined benefits pension effective on April 1 2002, the pension funds under the order of Corporate Tax Law will lose tax preferences in 2012, and will also be permitted to be transferred to the other types of pension funds.

Note3 : The number of the pension funds, which have transferred the substitutional portion of Employee Pension Fund Liabilities to the government.

Table 18 The changes of accounting standards and reviews of cross share holdings

The followings are the percentage distribution of answers by respondents about the question, 'How much have the changes of accounting standards impacted on your company's cross share holdings?'

(%)

		No impact	→	→	→	→	→	Great impact
Business Corporations	Disclosure of consolidated financial statements	67.8	4.6	2.5	21.7	2.0	0.9	0.5
	Consolidated statements of cash flows	66.1	5.6	2.1	22.7	2.1	1.2	0.2
	Tax consequences accounting	68.3	4.2	1.7	23.4	1.7	0.6	0.2
	Fair value accounting of financial instruments	43.4	8.6	5.1	21.6	10.4	6.9	3.9
	Accounting standard for foreign currency denominated assets & liabilities	71.5	4.2	0.9	22.1	1.1	0.2	0.0
	Write-down of real estate for sale	72.6	3.3	0.5	22.1	1.1	0.2	0.2
	Retirement benefits accounting	64.3	4.4	2.9	23.3	2.7	1.4	1.1
Finance, Securities & Insurance	Disclosure of consolidated financial statements	70.2	14.9	6.4	4.3	0.0	4.3	0.0
	Consolidated statements of cash flows	76.6	12.8	2.1	6.4	0.0	2.1	0.0
	Tax consequences accounting	70.2	12.8	2.1	8.5	4.3	2.1	0.0
	Fair value accounting of financial instruments	38.3	17.0	17.0	14.9	4.3	4.3	4.3
	Accounting standard for foreign currency denominated assets & liabilities	78.7	12.8	2.1	4.3	2.1	0.0	0.0
	Write-down of real estate for sale	82.6	8.7	4.3	2.2	2.2	0.0	0.0
	Retirement benefits accounting	63.8	17.0	8.5	4.3	6.4	0.0	0.0

Source : See the source of Table14

Table 19 Distribution percent of Unit Shares of Type of Shareholders

Survey Year	Central & Local Government	Financial Institution						Business Corporations	Securities Companies	Individuals	Foreigners (%)	
			LTCB, City & Regional Banks	Trust Banks	Life Insurance	Non-life Insurance	Other Financial Institutions				(Corporations+individuals)	
1949	2.8	9.9	—	—	—	—	—	5.6	12.6	69.1	—	
1950	3.1	12.6	—	—	—	—	—	11.0	11.9	61.3	—	
1955	0.4	23.6	—	—	—	—	—	13.2	7.9	53.2	1.7	
1960	0.2	30.6	—	—	—	—	—	17.8	3.7	46.3	1.3	
1965	0.2	29.0	—	—	—	—	—	18.4	5.8	44.8	1.8	
1970	0.2	32.3	15.4	—	11.1	4.0	1.8	23.1	1.2	39.9	3.2	
1975	0.2	36.0	18.0	—	11.5	4.7	1.9	26.3	1.4	33.5	2.6	
1980	0.2	38.8	19.2	—	12.5	4.9	2.2	26.0	1.7	29.2	4.0	
1985	0.8	42.2	21.6	—	13.5	4.5	2.6	24.1	2.0	25.2	5.7	
1986	0.9	43.5	16.1	7.1	13.3	4.4	2.6	24.5	2.5	23.9	4.7	
1987	0.8	44.6	15.9	8.4	13.2	4.3	2.8	24.9	2.5	23.6	3.6	
1988	0.7	45.6	16.3	9.9	13.1	4.2	2.1	24.9	2.5	22.4	4.0	
1989	0.7	46.0	16.4	10.3	13.1	4.1	2.1	24.8	2.0	22.6	3.9	
1990	0.6	45.2	16.4	9.8	13.2	4.1	1.8	25.2	1.7	23.1	4.2	
1991	0.6	44.7	16.3	9.7	13.2	4.0	1.6	24.5	1.5	23.2	5.4	
1992	0.6	44.5	16.2	10.0	13.0	4.0	1.3	24.4	1.2	23.9	5.5	
1993	0.6	43.8	16.0	10.1	12.7	3.8	1.2	23.9	1.3	23.7	6.7	
1994	0.7	43.5	15.9	10.6	12.2	3.7	1.1	23.8	1.1	23.5	7.4	
1995	0.6	41.4	15.4	10.1	11.2	3.6	1.2	23.6	1.4	23.6	9.4	
1996	0.5	41.3	15.1	10.8	10.9	3.4	1.0	23.8	1.1	23.6	9.8	
1997	0.5	40.2	14.6	11.1	10.2	3.3	1.0	24.1	0.8	24.6	9.8	
1998	0.5	39.3	14.0	11.7	9.4	3.2	1.0	24.1	0.7	25.4	10.0	
1999	0.5	36.1	12.8	10.9	8.3	2.9	1.2	23.7	0.9	26.4	12.4	
2000	0.4	37.0	11.5	14.3	7.6	2.8	0.8	22.3	0.8	26.3	13.2	
2001	0.4	36.2	9.4	16.6	6.7	2.7	0.7	23.2	0.8	25.9	13.7	
2002	0.3	34.1	7.0	18.5	5.6	2.4	0.7	24.8	0.9	23.4	16.5	
2003	0.3	31.1	5.7	17.4	4.9	2.3	0.8	25.1	1.1	22.7	19.7	
High(Year)	3.1 (1950)	46.0 (1989)	21.6 (1985)	18.5 (2002)	13.5 (1985)	4.9 (1980)	2.8 (1987)	27.5 (1973)	12.6 (1949)	69.1 (1949)	19.7 (2003)	
Low(Year)	0.2 (1984)	9.9 (1949)	5.7 (2003)	7.1 (1986)	4.9 (2003)	2.3 (2003)	0.7 (2002)	5.6 (1949)	0.7 (1998)	22.4 (1988)	1.2 (1952)	

Source : Tokyo Stock Exchange, Shareownership Survey (2003)

Notel : The number of shares has been calculated on a 'Unit-of-Share' basis since 1985 Survey

Note2 : The number of Trust Banks are included in that of LTCB, City & Regional Banks in and before 1985 Survey.

Table 20 ROE of companies capitalized at 1 billion yens or more
(all industries excluding finance & insurance)

Fiscal Year	Rate of net income to sales	Turnover of total assets	Financial leverage	ROE	(Reference) ROE (all size of capital)
1995	0.97	0.957	3.58	3.31	3.06
1996	1.08	0.967	3.52	3.69	3.46
1997	0.70	0.961	3.45	2.31	3.19
1998	0.04	0.900	3.37	0.13	—
1999	0.08	0.880	3.23	0.23	0.77
2000	0.72	0.896	3.10	1.99	2.57
2001	—	0.857	3.04	—	—
2002	0.84	0.865	3.00	2.18	1.85
2003	1.70	0.873	2.87	4.27	3.88

Source : Financial Statement Statistics, Ministry of Finance

Note : In calculating the figures in the above table in accordance with Modified Du Pont formula, total amount of assets and stock capital are taken an average of the figures at the beginning and those at the end of each fiscal year respectively.

Table 21 The Relevent Data of Investment
(companies capitalized at 1 billion yens or more)(excluding finance & insurance)

Fiscal Year	The rate of return of tangible assets	The ratio of investment to depreciation	The cost of loans
1995	13.5%	1.117	1.27%
1996	13.8%	1.159	1.06%
1997	12.9%	1.134	1.02%
1998	11.3%	1.007	0.97%
1999	12.4%	0.907	0.88%
2000	14.0%	0.999	0.83%
2001	11.4%	0.886	0.72%
2002	12.8%	0.778	0.67%
2003	14.0%	0.780	0.65%

Source : See the source of Table20

Note : The cost of loans are calculated by multiplying the interest rate of loans and (1-0.4). 0.4 in the parenthesis is effective tax rate for corporations. Also the interest rate of loans is calculated to divide the amount of interest repayment by the amount of debts (the average of debts at the beginning and the end of a period).

Table 22 : Flow of funds by sectors

(Billions of yen)

Fiscal year	Financial institutions	Non-financial corporations		General government				House - holds	Private non-profit organizations serving households	Overseas	Nominal GDP
		Private	Public	Total	Central	Local	Social security fund				
1995	6,404.9	▲ 3,257.1	▲ 9,554.6	▲ 17,428.2	▲ 14,580.6	▲ 10,002.1	7,154.5	32,304.7	728.6	▲ 9,198.3	500,002.5
1996	796.8	7,624.6	▲ 7,670.3	▲ 22,184.6	▲ 23,166.9	▲ 10,009.0	10,991.3	27,768.3	539.4	▲ 6,874.2	514,268.9
1997	10,219.3	▲ 7,209.4	▲ 5,648.6	▲ 18,834.1	▲ 14,770.8	▲ 14,122.8	10,059.5	32,313.1	1,479.7	▲ 12,320.0	520,811.8
1998	6,719.5	7,072.1	23,277.0	▲ 57,004.7	▲ 53,267.6	▲ 9,779.2	6,042.1	37,057.0	▲ 4,038.4	▲ 13,082.5	512,784.0
1999	▲ 7,556.5	27,504.6	▲ 4,228.8	▲ 34,771.4	▲ 34,996.8	▲ 5,277.5	5,502.9	25,898.8	4,827.5	▲ 11,674.2	508,283.2
2000	6,180.8	28,436.1	▲ 4,406.1	▲ 32,642.5	▲ 27,391.9	▲ 5,995.1	744.5	17,190.7	▲ 3,011.6	▲ 11,747.4	513,478.0
2001	29,159.7	6,439.6	3,605.4	▲ 38,646.5	▲ 32,797.9	▲ 5,521.1	▲ 327.5	8,883.9	2,076.7	▲ 11,518.8	501,280.7
2002	10,557.8	29,435.3	▲ 3,604.9	▲ 33,262.1	▲ 28,284.0	▲ 6,938.8	1,960.7	9,356.9	541.3	▲ 13,024.3	497,532.2
2003	8,526.9	32,770.1	3,682.3	▲ 36,483.0	▲ 35,181.6	▲ 2,876.6	1,575.2	5,669.5	2,571.8	▲ 16,737.6	501,647.2
2004	26,514.6	15,304.3	697.6	▲ 30,279.9	▲ 26,116.2	▲ 2,830.5	▲ 1,333.2	5,023.4	616.0	▲ 17,876.0	505,489.5

(Reference) The ratio of supply-demand gap of fund to nominal GDP by sectors(%)

1995	1.3%	-0.7%	-1.9%	-3.5%	-2.9%	-2.0%	1.4%	6.5%	0.1%	-1.8%
1996	0.2%	1.5%	-1.5%	-4.3%	-4.5%	-1.9%	2.1%	5.4%	0.1%	-1.3%
1997	2.0%	-1.4%	-1.1%	-3.6%	-2.8%	-2.7%	1.9%	6.2%	0.3%	-2.4%
1998	1.3%	1.4%	4.5%	-11.1%	-10.4%	-1.9%	1.2%	7.2%	-0.8%	-2.6%
1999	-1.5%	5.4%	-0.8%	-6.8%	-6.9%	-1.0%	1.1%	5.1%	0.9%	-2.3%
2000	1.2%	5.5%	-0.9%	-6.4%	-5.3%	-1.2%	0.1%	3.3%	-0.6%	-2.3%
2001	5.8%	1.3%	0.7%	-7.7%	-6.5%	-1.1%	-0.1%	1.8%	0.4%	-2.3%
2002	2.1%	5.9%	-0.7%	-6.7%	-5.7%	-1.4%	0.4%	1.9%	0.1%	-2.6%
2003	1.7%	6.5%	0.7%	-7.3%	-7.0%	-0.6%	0.3%	1.1%	0.5%	-3.3%
2004	5.2%	3.0%	0.1%	-6.0%	-5.2%	-0.6%	-0.3%	1.0%	0.1%	-3.5%

Source : Flow of Funds Statistics; January-March 2005, Bank of Japan, Quarterly Estimates of GDP; January-March 2005 (The Second Preliminary), Cabinet Office

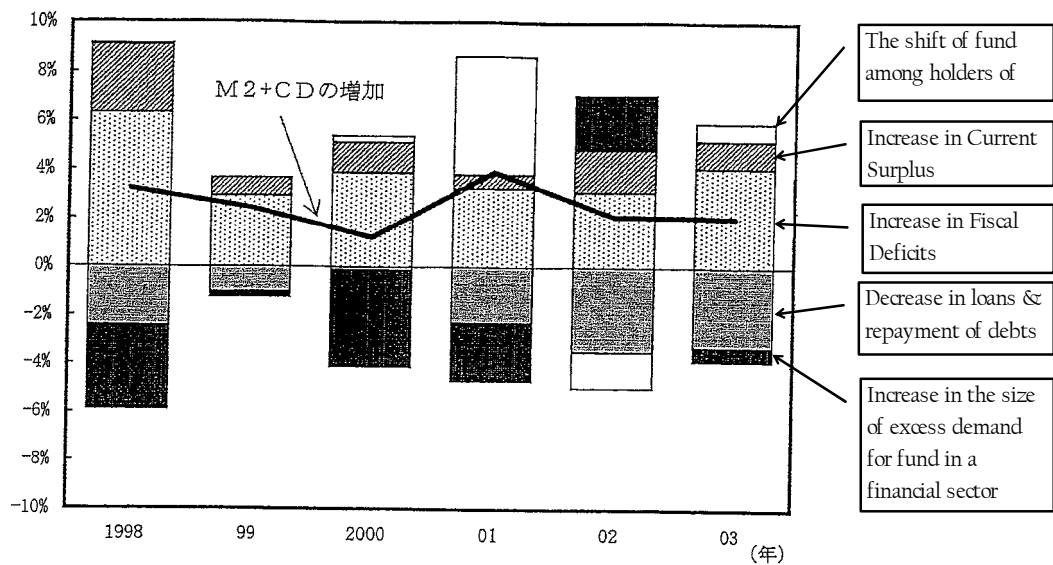
Table 23 : The Income of Household-sector by Main Components

(Percentage change compared with the previous year)

Fiscal Year	Compensation of Employees		Property Income			
		Pay		Interests	Dividends	Rents
1995	1.80%	0.80%	-13.50%	-24.70%	9.10%	-8.00%
1996	1.90%	2.40%	-7.50%	-11.50%	-12.70%	-0.40%
1997	2.20%	1.60%	-4.00%	-7.90%	-5.60%	-2.30%
1998	-1.70%	-1.90%	-6.90%	-12.70%	5.90%	2.40%
1999	-1.30%	-1.50%	-12.20%	-19.60%	-1.20%	-14.20%
2000	0.90%	0.80%	-0.70%	5.80%	30.40%	-7.20%
2001	-1.20%	-1.80%	-24.10%	-48.10%	-20.00%	12.50%
2002	-2.30%	-3.20%	3.50%	-12.30%	32.40%	7.90%
2003	-1.00%	-0.80%	-0.70%	1.50%	11.80%	-7.30%
2004						

Source : Quarterly E estimates of GDP:January-March 2005(The Second Preliminary) and National Accounts for 2003

Chart 24 The effect of domestic flow of funds on money supply



Source : Cabinet Office, 'Annual Report on Japanese Economy & Public Finance(2004)'

Note : 1. The data in 2003 are provisional.

2. M2+CD in the above chart is not precisely identical to the definition of that in statistics compiled by Bank of Japan.

References

- Ministry of Economy, Trade & Industry, 'Questionnaire survey on the impacts of the new accounting standards' (May 2003)
- Akito Sawa & Akira Hamamoto, 'Accounting Breakthrough' (2002)
- Hisakatsu Sakurai, 'Analysis on Financial Statements' (2nd edition)
- Kunio Itoh, Kenji Tanaka, Masao Iyanaga & Masaki Yoneyama, 'Fair Value Accounting and Impairment'
- Toshiki Takahashi, 'Loan Amortization of Banking Institutions based on Actual Cases' (2nd ed.)
- Tsutomu Miyagawa & Katsuaki Ochiai, 'Excess Capacity & Prolonged Stagnation', *Financial Review* 73 (September 2004), pp5-26.
- Shigeto Kashiwazaki, 'The Effects of Retirement of Baby Boomers on Severance Indemnities and Pension Benefits paid by Japanese companies', Study Report of Policy Research Institute of Ministry of Finance (June 2004), pp.125-142
- Bank of Japan, 'Overview of Japanese Banks; Observations from Financial Statements for Fiscal 2003'
- Mitsuru Yoshikawa, Masaharu Itoh, Kazuhiro Yoshii & Jun Yokoyama, 'Cross Shareholdings', *DIR Market Bulletin Vol.1* (July 2004), pp.4-77
- Kunio Itoh, Katsuhisa Sakurai, Yurikusa Yasuhiro & Toyohiko Minetani, 'Cash-flow Accounting and Corporate Valuation' (2004)
- Daisuke Abe, Naoki Katoh & Tetsuo Kitagawa, 'Corporate Analysis for Security Analysts' (3rd ed.)
- Japanese Bankers Association, 'How to read banks' financial statements'
- Mitsubishi Tokyo Financial Group, 'Annual Report 2004'