

The International Regulations Governing the Capital Adequacy of Banks and Its Influence on Japanese Banks Management

丑山, 優

<https://doi.org/10.15017/4491812>

出版情報：経済學研究. 55 (1/2), pp.145-155, 1989-10-10. 九州大学経済学会
バージョン：
権利関係：

The International Regulations Governing the Capital Adequacy of Banks and Its Influence on Japanese Banks Management

Masaru Ushiyama

- 1 Introduction
- 2 Background of Basel Agreement
 - (1) Increasing Financial Risk
 - (2) Developing on a Financially Global Scale
 - (3) Claim of Level Playing Field
- 3 Basic Framework
 - (1) Risk Asset Ratio versus Gearing Ratio
 - (2) Consolidated Account System Basis
 - (3) The Constituent of Capital
 - (4) A Target Standard Ratio by 1992
- 4 The Influence to Japanese Bank Management
 - (1) Intensity of ROA (Return on Asset) Management
 - (2) Increase of Off-Balance Sheet Transaction
 - (3) Differentiation between Financially Solid Banks and Financially Weak Banks

1. Introduction :

This agreement was concluded on July 11, 1988, by the committee on Banking Regulations and Supervisory practices⁽¹⁾, and this presents the outcome of that Committee's work over several years to secure international convergence of supervisory regulations governing the capital adequacy of international banks.

This sets out the details of the agreed framework for measuring capital adequacy and the minimum standard to be achieved which national supervisory authorities intend to implement in their respective countries.

(1) This committee comprises representatives of the central bank and supervisory authorities of the group of eleven countries. (Belgium, Canada, France, West Germany, Italy, Japan, Netherland, Sweden, Switzerland, the United Kingdom, and the United States) and Luxembourg. The Committee had been met at BIS, Basel, Switzerland.

The capital market in Tokyo is growing into one of the largest capital markets in the world with New York, London. Tokyo Stock Exchange is the largest in the world judged by the sum of the listed stock prices from last year⁽²⁾. And our country is obligate also to maintain fair competition in the capital market.

Our country, however, has many hard problems to achieve the standard of this Basel agreement.

2. Background of Basel Agreement

The national supervisory authorities represented on the committee arrived at a common view point to make the international standards⁽³⁾, as follows :

(1) Increasing Financial Risk

At first the liberalization of the financial system and the problem of the accumulated debts for the developing countries are rapidly increasing financial risk threat for maintaining the bank management systems and for securing the total financial system in the world.

The liberalization of the financial transactions have a chance to get a desirable income gain, but on the other hand, liberalization increases and diversifies financial risk. Increasing the accumulated debts for the developing countries may raise anxiety for the world economy and strike seriously at a lot of countries' bank management and international financial systems.

The several national supervisory authorities contended that Japan has been endeavoring to correspond to this unstable situation, especially through intensifying bank capital equity ratio.

Japanese big city banks should make efforts to realize bank capital adequacy and to inspect the quality of bank assets. The national supervisory authorities intend to realize these matters.

To realize capital adequacy as measured by this agreement, though important, is only one of a number of factors to be taken into account when assessing the strength of banks. Furthermore, and more generally, capital equity ratio, judged in isolation, may provide a misleading guide to relative strength. We must take into consideration the view point of credit risk, notable interest rate risk and investment risk on securities and provisions-disclosed or hidden ones, and so on.

In Japan, the Research Commission of the Financial System proposed on May, 1985, the following :

The basic equity portion to sum of assets should achieve, 4 percent by 1990. If a bank has overseas branches, it should achieve 6 percent by the same time, which is 4 percent of basic equity

(2) The sum of the listed stock prices amounted to about 2590 billion dollar at the NYSE, and about 3160 billion dollar at the Tokyo stock Exchange at the end of last year.

(3) cf. The Report of the Research Commission on Financial System on May 1985 and on May 1986.

plus 70 percent of securities current value.

(2) Developing on a financially global scale :

Recently financial global development has been growing rapidly, and as the result of its development, as soon as one country falls an unstable financial situation arise. A lot of other countries fall into unstable financial situation at the same time and then financial global system is endenged of a break down. It is now very true that each country should endeavor to stabilize its financial system.

And each national supervisory authority needs too cooperate closely for carrying out financial practices.

Furthermore each country needs to secure international convergence of supervising methods and standards.

(3) Claim of Level playing field :

Maintenance among each bank in all countries, especially the United States, U. K., West Germany, and Japan.

In order to maintain international level playing field, we need to harmonize the regulation by each national supervisory authority. Japanese capital market scale is growing into one of the biggest three worldwide, and Japanese banks ought to practise suitable and responsible behavior according to the current position of the world. The Japanese national supervisory authority recognizes that Japanese financial regulation is looser than that of serveral main countries, and that Japanese banks have been able to develop rapidly in the worldwide capital market. As the result of its development several main countries demand that naturally to Japan maintain a level playing field or harmonize its behavior, especially on the regulation of capital ratio.

3. Basic Framework :

(1) Risk asset ratio versus Gearing ratio :

The regulation of the bank capital ratio in our country is the gearing ratio. The gearing ratio is the sum of equity based on numerator and the sum of all assets based on denominator. The committee considers that a weighted risk in capital is related to different categories of asset or off-balance-sheet exposure, weighted according to broad categories of relative risk, and is the preferred method for assessing the capital adequacy of banks. It is generally said that a risk ratio has the following advantages over the gearing ratio approach, (a) it provides a fair basis for making international comparisons between banking systems whose structures may differ, (b) it allows off-balance-sheet exposures to be incorporated more easily into the measure, (c) it does not deter banks from holding liquid or other assets which carry low risk.

For example, if the sums of assets and the sums of equity between A bank and B bank are equal, then the assets of a bank has a smaller risk than of B bank, and capital ratio of A bank is higher than that of B bank.

(2) Consolidated Account System Basis :

The regulation of capital ratio is applied to the bank its branches and all subsidiary companies, that is, consolidated account system basis. Up to this time in Japan the regulation of capital ratio need not be applied to all subsidiary companies.

(3) The constituent of capital :

Capital elements :

The key element of capital could be placed in equity capital, that is, in issued and fully paid common stock and non-cumulative perpetual preferred stock, and disclosed reserves. This key element of capital is the only element common to all countries' banking systems. It is wholly in the published accounts and is the basis on which most market judgments of capital adequacy are made, and it has a crucial bearing on profit margins and a bank's ability to compete.

There are, however, a number of other important and legitimate constituents of a bank's capital base, for example, undisclosed reserves, revaluation reserves, general provisions, general loan-loss reserves, hybrid debt capital instruments and subordinated term debt, and so on.

The committee has proposed to classify capital and debts into two Tiers, that is, Tier I consists of equity capital and disclosed reserves, and Tier II consists of the other elements of capital, that is, supplementary capital.

1) Limits and restrictions

The total of Tier I and II elements will be eligible for inclusion in the capital base. The total of Tier II elements is limited to a maximum of 100% of the total of Tier I elements. Undisclosed reserves may exist in various ways according to differing legal accounting systems in member countries. Under this heading are included only reserves which though unpublished, have been passed through the profit and loss account and which are accepted by the bank's supervisory authorities.

Though almost Japanese banks hold very substantial amount of securities, especially it is said that big city banks hold amount about 30%. On the balance sheet, these have been valued as historical cost.

Big city banks are able to add to Tier I capital of the revaluation reserve which arise from the practice of holding securities in the balance sheet valued at historical cost.

General provisions or general loan-loss reserves are created against the possibility of future losses, where they are not ascribed to particular assets and do not reflect a reduction in the valuation of particular assets. These reserves qualify for inclusion in capital.

It is said that subordinated term debt instruments have significant deficiencies as constituents of capital because of their fixed maturity and inability to absorb losses except in a liquidation. These deficiencies justify an additional restriction on the amount of such debt capital which is eligible for inclusion within the capital base. Consequently, it has been concluded that subordinated term debt instruments with a minimum original term to maturity of over five years may be included within the supplementary elements of capital but only to a maximum of 50%.

In the short run, many Japanese banks seek a profit by issuing a few kinds of subordinated term debts, for example unsecured subordinated debt capital instruments and limited life redeemable preference shares, which the Japanese supervisory authority has recently informally permitted.

2) Risk Weights

The classification of the risk weights has been kept as simple as possible and only five ranks are used — 0, 10, 20, 50 and 100%.

The risk weights by category of on-balance-sheet assets are as follows :

The case of 0%

- (a) Cash
- (b) Claims on central governments and central banks denominated in national currency and funded in that currency
- (c) Other claims on OECD central governments and central banks
- (d) Claims collateralized by cash or OECD central-government securities or guaranteed by OECD central governments

The case of 0, 10, 20 (at national discretion)

- (a) Claims on domestic public-sector entities, excluding central government, and loans guaranteed by such entities.

The case of 20%

- (a) Claims on multilateral development banks (IBRD, IADB, AsDB, AfDB, EIB) and claims guaranteed by, or collateralized by securities issued by such bank.
- (b) Claims on banks incorporated in the OECD and loans guaranteed by OECD incorporated banks
- (c) Claims on banks incorporated in countries outside the OECD with a residual maturity of up to one year guaranteed by banks incorporated in countries outside the OECD
- (d) Claims on non-domestic OECD public-sector entities, excluding central govern-

ment, and loans guaranteed by such entities

- (e) Cash items in process of collection

The case of 50%

- (a) Loans fully secured by mortgage on residential property that is or will be occupied by the borrower or that is rented

The case of 100%

- (a) Claims on the private sector
- (b) Claims on banks incorporated outside the OECD with a residual maturity of over one year
- (c) Claims on central governments outside the OECD (unless denominated in national currency and funded in the currency)
- (d) Claims on commercial companies owned by the public sector
- (e) Premises, plant and equipment and other fixed assets
- (f) Real estate and other investment (including non-consolidated investment participations in other companies)
- (g) Capital instruments issued by other banks (unless deducted from capital)
- (h) All other assets

Credit conversion factors for off-balance-sheet items are as follows :

| | Credit conversion factors |
|--|------------------------------|
| 1. Direct credit substitutes, e, g., general guarantees of indebtedness (including standby letters of credit serving as financial guarantees for loans and securities) and acceptances (including endorsements with the character of acceptance) | 100% |
| 2. Certain transaction-related contingent items (e. g., performance bonds, bid bonds, warranties and standby letters of credit related to particular transactions) | 50% |
| 3. Short-term self-liquidating traderelated contingencies (such as documentary credits collateralized by the underlying shipments) | 20% |
| 4. Sale and repurchase agreements and asset sales with recours, where the credit risk remains with the bank | 100% |
| 5. Forward asset purchases, forward deposits and party-paid shares and securities, which represent commitents with certain drawdown | 100% |
| 6. Note issuance facilities and revolving underwriting facilities | 50% |

The international regulations governing the capital adequacy of banks
and Its influence on Japanese banks management

Table I Transitional arrangements

| | Initial | End-1990 | End-1992 |
|---|--------------------------------------|---|--|
| 1. Minimum standard | The level prevailing at end-1987. | 7.25% | 8.0% |
| 2. Measurement formula | Core elements plus 100% | Core elements plus 100% (3.625% plus 3.625%) | Core elements plus 100% (4% plus 4%) |
| 3. Supplementary elements included in core | Maximum 25% of total core | Maximum 10% of total core (i. e. 0.36%) | None |
| 4. Limit on general loan loss reserves in supplementary elements* | Nolimit | 1.5 percentage points, or exceptionally up to 2.0 percentage points | 1.25 percentage points, or exceptionally and temporarily up to 2.0 percentage points |
| 5. Limit on term subordinated debt in supplementary elements | No limit (at discretion) | No limit (at discretion) | Maximum of 50% of Tier 1 |
| 6. Deduction for goodwill | Deducted from Tier 1 (at discretion) | Deducted from Tier 1 (at discretion) | Deducted from Tier 1 |

* This limit would only apply in the event that no agreement is reached on a consistent basis for including unencumbered provisions or reserves in capital.

7. Other commitments (e. g., formal standby facilities and credit lines)
with an original maturity of over one year 50%
8. Similar commitments with an original maturity of up to one year, or
which can be unconditionally canceled at any time 0%

(4) A Target Standard-Ratio by 1992

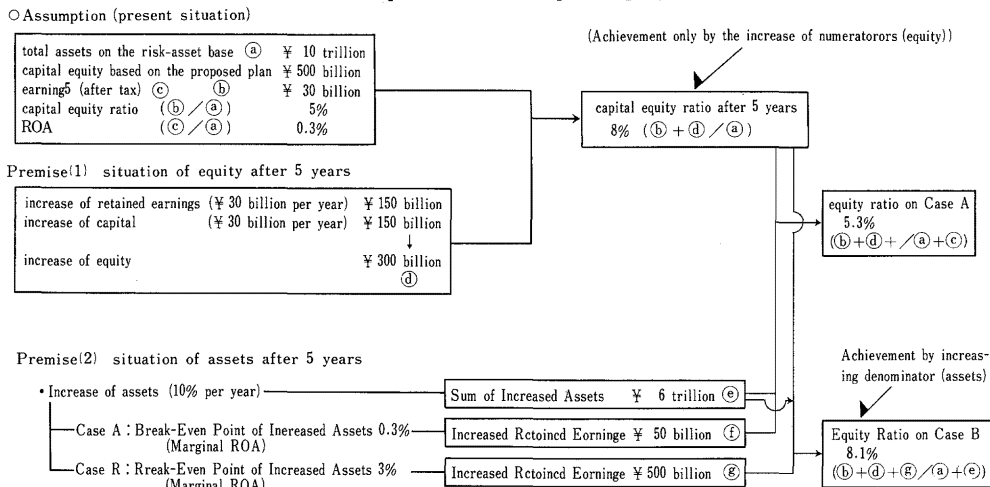
The committee confirmed that the target standard ratio of capital to weighted risk assets should be set at 8% (of which that core capital element will be at least 4%). This is expressed as a common minimum standard which international banks in member countries will be expected to observe by the end of 1992.

4. The Influence to Japanese Bank Management

(1) Intensity of ROA (Return on Asset) Management

ROA is a kind of profit index. It indicates the ratio of earnings after tax on all periodic assets and is used widely to mean the earning ratio or profitability. ROA deals with the issue of how to realize the earnings rather than the earnings itself. Attention must be paid to the risks on each assets, for if the figure between the earnings and the high risk ratio of investment assets is wrong and the bank takes settled earnings, the estimation will not be good. Then the right implication of ROA is pointed out by suitable balancing between invested assets and suitable realized earnings.

Figure 1 Scenario of Achieving the Capital Equity Ratio Basis
—Relationship between the capital equity ratio and ROA—



Source : cf. Kinyuzaiseijijyō, March 21 1988, p. 19.

The international agreement makes it necessary to realize suitable ratio on equity capital and to make incentive of holding lower assets. In addition to the aforementioned points, several countries, especially the United States and the United Kingdom, may emphasize that the Japanese banks make it a practice to give loans to developing countries at a very low interest through its overseas branches. As the result of this practice, many of the main members' banks' earning ratios are not in a good situation and are forced to reduce loan in the world market due to the large Japanese banks. It has been pointed out to the Japanese banks and to the Japanese supervisory authorities to transact according to the international regulations and standards. It is, however, unlikely that the Japanese banks will clear the targeted standard ratio by 1992 (see Figure 1). According to this figure, if a bank is going to obtain 30 million yen every year, that bank must keep the earnings of 3% against the increasing assets every year for five years. (In this model, there is a 10% growing assets every year.) This situation seems very difficult for Japanese banks because the recent marginal loan spread rate by their overseas branches is under 1%. On the other hand, the Japanese big city banks already have projects to realize the target standard ratio. (See three cases in Table II. 5%, 8%, and 10% of increasing total assets.) The item of balance means the required equity increases by March 1993, and the Japanese big city banks have reached at present about 3% of equity capital ratio. (See Table III). The regular rule is almost equivalent to Tier I, but supplemental rule contains all hidden values; therefore, not equivalent to Tier II. Concerning the required finance means, all Japanese banks hold enormous hidden value, and if a bank reached 4% of Tier I, it would seem that the bank would be able to realize 8% of the target standard ratio. Thus it would indicate that the required finance is not too

The international regulations governing the capital adequacy of banks
and Its influence on Japanese banks management

Table II Required finance for the equity adequacy on the BIS basis (billion yen)
Case I : Growth of total assets=10%

| Bank | Required Equity (Mar., 1993) | Present Equity (Sept., 1987) | Balance | Required finance |
|-------------------|---------------------------------|---------------------------------|---------|------------------|
| Daiichikangin | 2,218.2 | 885.0 | 1,333.1 | 888.7 |
| Fuji | 2,026.7 | 854.4 | 1,172.2 | 781.4 |
| Sumitomo | 2,034.7 | 887.2 | 1,147.5 | 765.0 |
| Mitsubishi | 1,962.1 | 876.0 | 1,086.0 | 724.0 |
| Sanwa | 1,809.9 | 793.9 | 1,016.0 | 677.3 |
| Tokai | 1,266.4 | 449.1 | 817.3 | 544.8 |
| Mitsui | 1,200.5 | 450.1 | 750.4 | 500.2 |
| Tokyo | 977.5 | 429.9 | 547.5 | 365.0 |
| Kyowa | 644.9 | 285.3 | 359.5 | 211.9 |
| Daiwa | 630.6 | 312.8 | 317.8 | 211.9 |
| Saitama | 560.3 | 246.1 | 314.2 | 209.4 |
| Hokkaidoshokutaku | 479.9 | 180.8 | 299.1 | 199.4 |

Case II : Growth of total assets=8%

| Bank | Required Equity (Mar., 1993) | Present Equity (Sept., 1987) | Balance | Required finance |
|-------------------|---------------------------------|---------------------------------|---------|------------------|
| Daiichikangin | 2,023.7 | 855.0 | 1,138.6 | 759.1 |
| Fuji | 1,849.0 | 854.4 | 994.5 | 663.0 |
| Sumitomo | 1,856.3 | 887.2 | 969.1 | 646.0 |
| Mitsubishi | 1,790.1 | 876.0 | 914.0 | 609.3 |
| Sanwa | 1,651.3 | 793.9 | 857.3 | 571.5 |
| Tokai | 1,155.4 | 449.1 | 706.2 | 470.8 |
| Mitsui | 1,095.3 | 450.1 | 645.1 | 430.1 |
| Tokyo | 891.8 | 429.9 | 461.8 | 307.9 |
| Kyowa | 588.4 | 285.3 | 303.0 | 202.0 |
| Daiwa | 575.4 | 312.8 | 262.5 | 175.0 |
| Saitama | 511.2 | 246.1 | 265.1 | 176.7 |
| Hokkaidoshokutaku | 437.8 | 180.8 | 257.0 | 171.3 |

Case II : Growth of total assets=5%

| Bank | Required Equity (Mar., 1993) | Present Equity (Sept., 1987) | Balance | Required finance |
|-------------------|---------------------------------|---------------------------------|---------|------------------|
| Daiicikangin | 1,757.8 | 885.0 | 872.8 | 581.8 |
| Fuji | 1,606.1 | 854.4 | 751.6 | 501.0 |
| Sumitomo | 1,612.4 | 887.2 | 725.2 | 483.4 |
| Mitsubishi | 1,554.9 | 876.0 | 678.8 | 452.5 |
| Sanwa | 1,434.3 | 793.9 | 640.3 | 426.9 |
| Tokai | 1,003.6 | 449.1 | 554.4 | 369.6 |
| Mitsui | 951.4 | 450.1 | 501.2 | 334.1 |
| Tokyo | 774.6 | 429.9 | 344.6 | 229.7 |
| Kyowa | 511.1 | 285.3 | 225.7 | 150.4 |
| Daiwa | 499.8 | 312.8 | 186.9 | 124.6 |
| Saitama | 444.0 | 246.1 | 197.9 | 131.9 |
| Hokkaidoshokutaku | 380.3 | 180.8 | 199.4 | 132.9 |

Source : Kinyubusiness, May 1988, pp.12-14.

Table III Hidden Value of the securities hold by listed banks

| Bank | Equity Ratio | | Hidden Valuc (billion yen) |
|-------------------|----------------|---------------------|-------------------------------|
| | (Regular Rule) | (Supplemental Rule) | |
| Daiichikangin | 2.98% | 9.99% | 4,047.2 |
| Fuji | 3.06% | 9.91% | 3,626.0 |
| Sumitomo | 3.00% | 9.10% | 3,436.7 |
| Mitsubishi | 3.20% | 11.00% | 3,994.5 |
| Sanwa | 3.10% | 9.70% | 3,197.5 |
| Tokai | 2.65% | 9.91% | 2,437.7 |
| Mitsui | 2.71% | 10.79% | 2,598.4 |
| Tokyo | 3.26% | 9.22% | 1,654.6 |
| Kyowa | 3.15% | 11.85% | 1,461.8 |
| Daiwa | 3.46% | 11.92% | 1,359.0 |
| Saitama | 2.95% | 8.78% | 849.1 |
| Hokkaidoshokutaku | 2.75% | 9.37% | 839.9 |

source: cf. Kinyu Business, May 1988. p. 15.

difficult to realize the target standard ratio with considering the financial power of the Japanese big city banks.

(2) Increase of off-balance Sheet Transaction

In order to improve the earning ratio by ROA, banks must endeavor to get as much high return as possible and also to reduce as much increasing asset ratios as possible. A method to reduce ratio of increasing assets is the off-balance sheet transactions. Japanese banks have been behind the American and European banks in housing loans securities and corporate loan securities. The reason for this was that the Japanese bank not only restrain loan, but they also restrain to realize trust of housing loan credit and to liquidate general loan credit for corporation, and sell them to a third party or person. Then the sum of bank assets is reduced directly on the housing loan credits. A financial commissioner of the Japanese Ministry of Finance said recently that considerations will be taken to detach from the current situation and to make a system of off-balance sheet. A few banks have already begun to translate the housing loan credits to securitization. It is easy to image that this situation will increase rapidly.

On the general loan credit for corporation, especially for big corporation with lower interest rate, big city banks intend to change rapidly from general loan credits to Commercial Paper (CP). They are planning to sell CP to institutional investors who does not apply to the agreement of BIS; this is, middle level banks, insurance companies, investment trusts, so called non-bank financial companies and so on. If the banks asks for equal footing and strong regulations due to competition, the accepted organizations (institutions) may fall into difficult times. It is indeed difficult to create harmony. Big city banks, however, are trying to use their affiliated security companies (usually not a large scale company) to solve this difficult problem. Their techniques

are fairly complexed and it may be worthwhile to give attention to their behaviors.

(3) Differentiation between financially Solid Banks and Financially Weak Banks

This is difficult problem to tackle, but the banks are divided into financially solid and weak banks. The financially solid banks are ; for example, Daiichi, Sumitomo, Fuji, Mitsubishi, Sanwa, Daiwa, Tokyo, Kyowa, and long-term credit banks like Kogin and Chogin. The financially weak banks are ; for example, Mitsui⁽⁴⁾, Taiyo-Kobe, Saitama, Takugin, and Nisaigin (long-term credit bank). However, Daiwa, Tokyo, Kyowa, and Mitsui may change the group in which they belong to. It is generally said the banks, that are related closely with Zaibatsu (Japanese cartel), are comparatively strong for institutional changes and changing circumstances. It is clear that zaibatsu has strong power arising from total group finance, except for Mitsui group which consists of coal, shipbuilding and fiber companies. Finally, the financially strong banks are able to exceed the 8% target standard ratios, the financially weak banks may reach this percentage, but there are some doubts.

(4) It made known publicly newspaper on September 10, 1989 that both Mitsui and Taiyo-Kobe will merge next March.