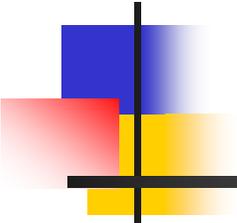


July 11, 2007

# ECM Challenges faced by Regional Banks



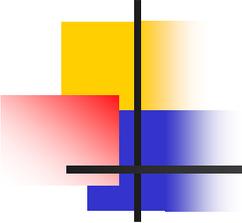
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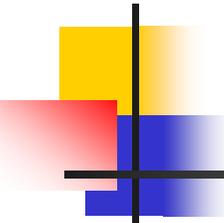
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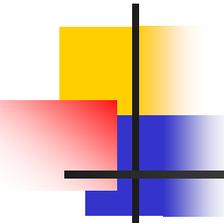
1. Development of Integrated Risk Management in Regional Banks
2. Problems in Economic Capital Management in Regional Banks
3. Challenges in Economic Capital Management for Regional Banks



# 1. Development of Integrated Risk Management in Regional Banks

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- Recent years have seen steady efforts by regional banks to move towards integrated risk management.
- Most banks say that they have already established frameworks for integrated risk management to secure capital adequacy through monitoring of amounts at risk, although with differing degrees of success.



## 2. Problems in Economic Capital Management in Regional Banks (1)

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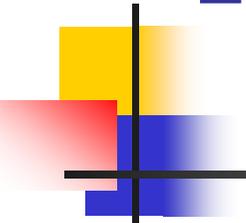
- **General framework for economic capital management utilizing integrated risk management**

(1) Securing capital adequacy by controlling economic capital (risk) within the level of equity capital

(2) Improving capital efficiency by increasing the return on economic capital (risk) allocated to business lines

Many banks have established frameworks for risk measurement/integration and capital allocation, albeit to different degrees.

→ **The question is how much importance is attached to economic capital and how effectively it is managed in actual business judgments.**



## 2. Problems in Economic Capital Management in Regional Banks (2)

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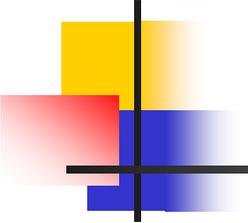
The “framework for economic capital management to secure capital adequacy” has been established to a certain degree in most banks.

**Many banks say that in order for management to value ECM more, it is necessary to narrow the gap between risk measurements and management’s perception of risk.**

This is especially the case with regard to credit risk and operational risk measures.

Credit Risk ··· Many banks feel that there is a gap between the current UL and their perceptions of risk when they compare the amount of current risk with that of the credit cost given at the disposal of bad debts in the past and or when they compare it with that amount of market risk.

Operational Risk ··· Many banks use regulatory capital (the risk amount using the Basel II basic/standard method) as economic capital for internal control (risk amount). However, a lot of managers feel that the measurements do not correspond to their perceptions of risk.

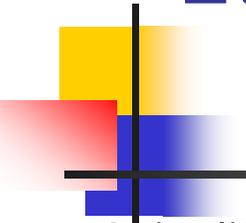


## 2.Problems in Economic Capital Management in Regional Banks(3)

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With regard to “establishing a framework for increasing returns on equity”, many banks think they still have much to do.

Some banks calculate risk-adjusted return indicators such as RAROC and SVA. However, they are **searching for better ways of utilizing risk-adjusted return indicators in management resource allocation, business line incentive schemes, etc. to improve risk/return characteristics.**

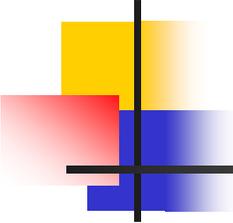


## 2.Problems in Economic Capital Management in Regional Banks(4)

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It is difficult for some regional banks to utilize risk-adjusted return indicators, because:

- (1) Some feel sound management and continuous service to the community are much more important and that they should not place too much emphasis on higher ROE.
- (2) Some feel the room for risk control is limited because their business regions are relatively small.
- (3) Some feel single-year risk-adjusted return indicators are inadequate for the assessment of risk/return characteristics because they have long-term business relationship with most customers.
- (4) Some feel some business lines are not given enough free hands in making decisions on resource utilization.
- (5) Some feel the ratios of risk-adjusted return are greatly different from business line to business line.



## 3.Challenges in Economic Capital Management for Regional Banks

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Followings are the challenges in economic capital management for regional banks.

- (1) To define management goals and determine how much weight should be given to the improvement of risk/return characteristics;**
- (2) To narrow the gap between risk measurements and the risk perceptions of management and business lines;**
- (3) To devise ways to assess long-term risk/return characteristics;**
- (4) To devise ways to control risk; and**
- (5) To devise ways to encourage business lines to act on the basis of risk/return characteristics.**

### 3.Challenges in Economic Capital Management for Regional Banks (1)

—To determine how much weight should be given to the improvement of risk/return characteristics (1)

Banks have various stakeholders with various interests and so may have various business goals. **The weights to be given to individual goals may differ according to the circumstances of the bank. But at least the business goals should be clearly defined.**

— **The improvement of ROE through risk/return management may be an important goal for a bank.**

Stakeholder	Business Goal	indicators
Shareholders	Shareholder value maximization	ROE, risk-adjusted return, etc.
Deposit Holders	Safe and secure services, sound management	Customer satisfaction, capital adequacy ratio, rating, economic capital, etc.
Community/ Local Government	Contribution to local economy growth	Amount of loans to local companies, etc.
Regulators	Sound management	Capital adequacy ratio, economic capital, amount of loans to small to medium-sized firms, etc.

### 3.Challenges in Economic Capital Management for Regional Banks(1)

— To determine how much weight should be given to the improvement of risk/return characteristics (2)

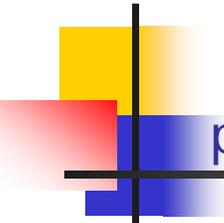
Stakeholders in a regional bank may focus on a different set of goals from those of a wholesale bank for larger corporations or an investment bank. Some banks could choose to place greater emphasis on soundness of management than on profitability.

— For instance, a regional bank could secure a high level of capital in order to cope with the uncertainty involved in taking long-term risks with local customers.

However, in order for a bank to survive a long time in its region, it is necessary to maintain a certain level of profitability and to generate sufficient cash flow. → Management without regard to risk/return is impossible.

**Risk-adjusted return indicators should be utilized in accordance with the priority of business goals.**

## 3.Challenges in Economic Capital Management for Regional Banks(2)



— To narrow the gap between risk measurements and the risk perceptions of management/business lines.

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Operational risk does not pose a great problem, with only a small weighting in economic capital.

What matters is how to narrow the gap between credit risk measurements and the credit risk perceptions of management/business lines.

### **Issues to be addressed**

- (1) Correlation setting ... How to accumulate and organize data on default correlations between different industries in the bank's business region.
- (2) Stress testing ... How to draw up scenarios for stress situations for management based on past examples. Compare the risk measurements with the stress perceptions of management/business lines to narrow the gap. (How to estimate PD, LGD, EAD, etc. under stress?)

### 3.Challenges in Economic Capital Management for Regional Banks(3)

— To devise ways to assess long-term risk/return characteristics (1)

**Most risk-adjusted return indicators (RAROC, SVA, etc.) are single-year indicators, and are not necessarily suited to the assessment of medium to long-term profitability.**

— In particular, assessments using only single-year return indicators cannot reflect the practical realities of regional banks because most of their customers are long-term customers.

<Important issues>

- (1) Do not make an assessment using only single-year risk-adjusted return. Watch time series data by business line and utilize them in reviewing management resource inputs (example on next page).
- (2) Devise risk-adjusted return calculation methods so that long-term risk/return can be assessed.

For example, the profitability of transactions with a customer should be assessed using risk and return for a period of longer than one year.

## 3.Challenges in Economic Capital Management for Regional Banks(3)

— To devise ways to assess long-term risk/return characteristics (2)

### **Example of assessment of time series risk-adjusted return**

- (1) Form medium-term estimates of RAROCs for divisions/businesses as part of the medium-term business plan.
  - Calculate estimated amounts of risk to be taken on the basis of estimated balances and investments in the medium-term business plan and use them as denominators. Calculate RAROCs by dividing estimated returns of divisions (numerators) by denominators.
- (2) Compare estimated RAROCs with track records for each period and check the background.
  - Compare RAROCs of different divisions and carry out an analysis of each business line's RAROC along the time series.
- (3) On the basis of (2), determine whether RAROC changes within business lines are temporary or continue over the medium to long-term.
- (4) Determine whether it is necessary to review the management resource input plan.

### 3.Challenges in Economic Capital Management for Regional Banks(4)

— To devise ways to control risk (1)

For regional banks, room for risk control is limited because their business regions are small.

**Under current conditions, it is difficult to drastically change the components of a credit portfolio, but it is possible to change them gradually over a long period of time.**

— According to questionnaire-based surveys in foreign countries, most banks regard new credit approvals and existing credit renewals as the most important means of credit portfolio management.

	Approval/Disapproval of New Business and Renewal/ Nonrenewal of Existing Business	Loans Sales and Trading	Single-Name Credit Default Swaps	Portfolio Credit Default Swaps	Securitizations
The Order of the importance (Average)	1.45	3.00	2.37	4.14	4.00

**(Note) Average of rank of importance given by banks on a scale of 1 to 5 ( the lower, the better)**

(Source)"2004 Excerpts from Rutter Associates Survey of Credit Portfolio Management Practices"

## 3.Challenges in Economic Capital Management for Regional Banks(4)

### — To devise ways to control risk (2)

Major banks and the CAFT conducted studies on credit portfolio management and published a report on the BOJ website in April 2007.

The printed version of the report was sent to regional banks (Regional Banks and Regional Banks II) with a questionnaire, to which banks can respond anonymously. As of the end of June, we had received 30 responses from 26 banks.

#### <Regional banks' opinions on CPM>

Many banks seem to think that regional banks need appropriate credit portfolio management focused on risk hedging in view of economic fluctuations. At the same time, many banks find it difficult to implement CPM for the following reasons:

- Contributing to the community by enhancing relationships with local customers is the most important mission of regional banks.
- Management will not understand the need for CPM.
- Most customers are smaller businesses with low liquidity.
- It is difficult to exchange credit information, etc.

→ It is necessary to further promote discussions among industry participants about problems and approaches related to CPM for regional banks.

### 3.Challenges in Economic Capital Management for Regional Banks(5)

— devise ways for business lines to act on the basis of risk/return characteristics (1)

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How to formulate a scheme whereby business lines can act on the basis of risk/return characteristics—each bank should find its own answer to this based on its strategy and circumstances.

Here we shall give some suggestions for a reference.

- **Prioritize performance evaluation items according to the priorities of different management goals.**

—— Give incentives to business lines on the basis of the relative priorities of different management goals.

### 3.Challenges in Economic Capital Management for Regional Banks(5)

— devise ways for business lines to act on the basis of risk/return characteristics (2)

- **Break down risk-adjusted return into components and use them as performance evaluation items for branches.**

—— In some cases to require branches simply to increase risk-adjusted return (RAROC, SVA, etc.) may be improper because they don't know how to increase it. If risk-adjusted return is broken down into more concrete indicators such as gross profit, EL, etc., branches will find them more useful and it will help evaluate branch performance.

- **Modify the weight attached to risk-adjusted return according to the characteristics of business lines/branches.**

—— For instance, more weight may be assigned to risk-adjusted return in the marketing division than in the sales division because risk is easier to control in the former. A different weight may be attached to risk-adjusted return between in a branch for corporate clients and in a branch for individual clients.

### 3.Challenges in Economic Capital Management for Regional Banks(5)

— devise ways for business lines to act on the basis of risk/return characteristics (3)

- **The size of unit of performance evaluation may be different according to discretionary power.**

—— Most branches of regional banks are not divided into three divisions (for corporate, individual and public customers). Therefore, risk-adjusted return may be easier to utilize for performance evaluation if it is applied on a branch-by-branch basis instead of by division.

- **Do not strive for too much accuracy in risk, cost and return. Emphasize simplicity and clarity in performance evaluation.**

—— For instance, risk amounts derived from the Basel II risk weighting functions may be used for performance evaluation purposes instead of internal control UL for the sake of simplicity and clarity at the branch level.

—— Unit prices of cost items used in multiple divisions/branches may be calculated using simple drivers controllable at divisions/branches.

### 3.Challenges in Economic Capital Management for Regional Banks(5)

— devise ways for business lines to act on the basis of risk/return characteristics (4)

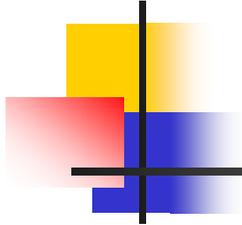
- **Allow an adequate period of time for preparation before introducing risk-adjusted return in performance evaluation. Make sure branches become familiar with it.**

— It may take some time before the front line understands the meaning of risk-adjusted return. Allow a period of time for preparation. Headquarters should provide a full explanation of its meaning before introducing it.

- **Use other incentives to help staffers act on the basis of risk/return characteristics.**

— Introduce risk-adjusted return to customer-based profit management. It will help managers to be more conscious of the risk-adjusted breakeven point for loan disbursements.

— Job rotations between risk control/planning divisions and business lines will help risk controllers understand line operations and help line operators to understand risks.



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