Economic Capital Management Workshop
Panel Discussion (Day One) Summary Record

Date : July 11, 2007 17:00 - 18:30
Venue : Bank of Japan Head Office, 9th Floor Conference Hall A
Panelists : Mr. Shinsuke Kume, Deputy Chief, Corporate Risk Management Department, Sumitomo Trust Bank
Mr. Junya Wakabayashi, Deputy Chief, Business Planning Department, Chiba Bank
Mr. Shigeru Yoshifuji, Deputy Chief, Planning Department, Bank of Tokyo-Mitsubishi UFJ
Moderator: Mr. Tsuyoshi Oyama, Deputy Director-General, Bank of Japan

Note: The purpose of the panel discussion was to freely discuss economic capital management. The views expressed by the panelists do not necessarily reflect the views of their respective organizations.

1. Risks to Be Covered by Japanese Banks

(Mr. Oyama: Bank of Japan): Considering the risks affecting financial institutions, what specific risks should Japanese banks measure and include in their economic capital management systems?

(Mr. Kume, Sumitomo Trust Bank): Sumitomo Trust Bank measures market, credit, and operational risks. We are considering some other risks, such as business risk, but have not attempted to measure these. The important thing is to clarify what measured risks correspond to what capital. If you assume that corporate value is the aggregate of assets (at book value), then the best approach is to measure those risks that correspond to Tier I. On the other hand, if you consider corporate value to be based on economic value and not the value of assets (at book value), then you should measure those risks that correspond to economic capital. Corporate values measured in accounting terms and on a going-concern basis are not the same. Therefore, I believe that the risks to be measured and definitions of capital should be adjusted to match the management targets that are chosen.

(Mr. Oyama, Bank of Japan): Can the interpretation of capital be extended to include good will and other factors that would correspond to business risk?

(Mr. Kume, Sumitomo Trust Bank): Suppose you have fully amortized assets that remain operational. It would be possible to approximate capital meeting business risk if we recognize such assets on the balance sheet on the grounds that they remained operational. However, I do not think that it is realistic to make out other financial statements besides ones for accounting and ones for taxation.

(Mr. Wakabayashi, Chiba Bank): At Chiba Bank, we measure market, credit, and operational risks. For operational risk, all we actually do is to multiply gross earnings by a certain coefficient. If possible, we would like to introduce more precise measurement methodologies for market and credit risks. But for operational risk, we believe the present method is sufficient for now. As a regional bank, our businesses are mostly concentrated in Chiba Prefecture, and there is a tendency to lend heavily to real estate. Recognizing the risk that comes from our operations being concentrated in Chiba Prefecture and its environs is a challenge for the future.

(Mr. Shigeru Yoshifuji, Bank of Tokyo-Mitsubishi UFJ): On the subject of relationship lending, main-bank bailout risks can be expressed in terms of the subordination of claims. Therefore, to some extent the issue can be handled by treating it as a form of mezzanine financing or as equity. From a business planning perspective, when focusing on risk/return characteristics, it is very important to measure the bank's exposure to interest rate risk. In this context, it is particularly important to measure the outstanding balances of core deposits and housing loans. It is necessary to apply stress tests and/or scenario simulations when we assess the impact of changes in the behavior of customers who are facing the resume shift of interest rates. Basically, I believe that stress testing and heuristic[1] measurement methods should be used whenever we are not confident of the precision of our measurements. Furthermore, attention should be paid to preventing the measurement results from taking on a life of their own. Another risk to consider is that sagging earnings will impact share prices. Although this is not a risk that can be covered with capital, it does merit careful monitoring. It depends on how you look at it, but this may be considered to be a form of business risk.

(Mr. Tsuyoshi Oyama, Bank of Japan): What specific measurement methods can be used to treat main-bank bailout risks?

(Mr. Shigeru Yoshifuji, Bank of Tokyo-Mitsubishi UFJ): The logic of the problem can be expressed in terms of the analogy of preferred versus subordinated debt. But once you actually start designing a measure, the problem is how to treat matters that are not explicitly stated in the contract. The issue is not so simple that you can say that it is measurable.

2. Management Awareness and Risk Measurement

(Mr. Tsuyoshi Oyama, Bank of Japan): The senior management and risk management departments of Japanese banks probably have their own image of the types and scale of risks they face. How consistent or inconsistent are these images with the risk measurements obtained through stress tests and other measurement methodologies?

(Mr. Shinsuke Kume, Sumitomo Trust Bank): The image obtained from involvement in routine operations is not consistent with risk measurement results. Tail-risk events that

[1] Problem-solving method based on discovery and experiential approaches.

destroy large amounts of capital are certainly important. But on a day-to-day basis, we are far more concerned with the case where we are in deficit though not in immediate danger of bankruptcy. Current thinking on risk measurement is too focused on tail-risk events. I think it would be sufficient to approach the issue from the perspective of what losses can be covered with earnings from the current year.

(Mr. Junya Wakabayashi, Chiba Bank): Looking at present conditions, I believe that large credit-risk related losses will not materialize for some time to come. Interest rate hikes contribute to bank earnings. However, interest rate risks are worrisome due to the increase in long-term fixed-rate housing loans. Our bank may have become too fixated on 99 percent in the sense that too much attention is going to tail risks. Discussions of where interest rates may be a year from now do not lead us to any clear conclusions. That uncertainty is always going to be there. The important point is deciding how much of this to bring into our calculations. To cover for these uncertainties, at Chiba Bank we have created a framework for calculating EaR and using the results in verifying our overall operations.

(Mr. Shigeru Yoshifuji, Bank of Tokyo-Mitsubishi UFJ): The introduction of JSOX and the Financial Instruments and Exchange Law means that a much higher line of vision must be maintained regarding compliance. In this environment, I believe the key point will be how to treat business risks including compliance. Measurement of market risk has a long history and can be put into practice with relative ease. But it is difficult to transform market risk into economic capital. Difficulty lies in how to reflect business situations including the framework of the risk management. As for credit risk, the numbers inevitably go up and down, but we are gaining a pretty clear line of vision. In the case of policy-based stockholdings, the overall risk is large, but measurement of this risk is not that difficult. On the other hand, we do not even have a picture of what the figures look like for operational risk, including business risk. This creates the feeling that risks may be looming.

(Mr. Tsuyoshi Oyama, Bank of Japan): What does it imply to keep an eye on both the tail and body portions? Does it mean maintaining a parallel and simultaneous awareness of economic capital and regulatory capital?

(Mr. Shigeru Yoshifuji, Bank of Tokyo-Mitsubishi UFJ): The type of risk that the authorities and creditors are most interested in is the risk of bank insolvency. On the other hand, management and shareholders are interested in the body portion. Hence, the concerns and interests of the two groups are not necessarily the same. In this sense, there are two aspects to consider. As an extreme case, consider a financial institution that loses billions but manages to avert collapse. As far as management is concerned, this is still an unsuccessful case.

3. Correlation among Risk Categories

(Mr. Tsuyoshi Oyama, Bank of Japan): How should correlation among risk categories be considered?

(Mr. Shinsuke Kume, Sumitomo Trust Bank): The treatment of correlation is a challenge that we must now begin to take on. The simple aggregation of risks by risk categories is not the same as implementing integrated risk management for the entire business. For this reason, at Sumitomo Trust Bank, we do take correlations into account in our integrated risk management, albeit the methodology should be refined furthermore. The only area in which the methodology is working well is in correlating interest rates and stock prices. Regarding subsidiaries that we have acquired, about all that we do is to look at correlations for the individual subsidiaries while taking into account the beta value of the industry to which the subsidiary belongs. We would like to find some good ideas in this area to actively improve the situation.

(Mr. Junya Wakabayashi, Chiba Bank): We also look at the correlation between interest rates and stock prices, but we are not looking at correlations in market, credit, and operational risks. In the case of Chiba Bank, when we are verifying management efficiency, we use correlations to indicate to the senior management whether risk/return is positioned on the efficient frontier. We are not using correlations for any purpose beyond that. Regarding the asset correlation of credit risk, there is a discrepancy between the correlation derived from our internal models and the Basel II correlations. I feel that we need to clarify the conceptual foundations of this discrepancy.

(Mr. Tsuyoshi Oyama, Bank of Japan): What rules should apply to the use of capital that has been freed up by diversification? This is a difficult question to answer. Extrapolating from this problem, it is also necessary to clarify who should provide the additional capital that becomes necessary when portfolio diversification effects vanish at times of stress.

(Mr. Shigeru Yoshifuji, Bank of Tokyo-Mitsubishi UFJ): The authorities place strong demands on us being able to explain our diversification effects. For this reason, the truth is that we adopt a very conservative stance on the matter. Nevertheless, because we believe portfolio diversification is the source of earnings for banks, we intend to actively pursue diversification. Of course, we need to conduct stress tests for situations in which correlations collapse.

4. Specific Measures for Improving Risk-Adjusted Profitability

(From the floor): What are some effective measures for improving risk-adjusted return on capital? For example, in what detail should RAROC be monitored? Also, what are some effective measures for coping with RAROC of differing levels?

(Mr. Shinsuke Kume, Sumitomo Trust Bank): In the case of Sumitomo Trust Bank, we compute RAROC and SVA for each sector, but we do not go into any further detail. Measuring profitability for small business units can lead to competition among operating staff, which often does not contribute to improving the total profitability of the business. We believe it is better to look at the performance of portfolios that exceed a certain size. For example, consider the following two cases. In the first case, ten new contracts are bundled into a single portfolio where they are managed and monitored for profit performance. In the second case, each individual contract is managed and monitored separately. In the latter case, the bank's operating staff will rush to get the most advantageous contracts. It is highly probable that the resulting competition will not be productive from the perspective of the bank as a whole.

(Mr. Junya Wakabayashi, Chiba Bank): Capital allocations are made to domestic businesses, market, ALM, and policy-based stockholdings. Allocations are not made to smaller operational units. In domestic businesses, risk measurements based on Basel II risk weight coefficients are used to compute SVA for individual branches of the bank. The corporate sector is currently showing good performance, but that does not mean that we will automatically act to strengthen the corporate sector. On the other hand, the market sector has not been performing well, and recently we have been trying to keep a cap on net investments.

(Mr. Shigeru Yoshifuji, Bank of Tokyo-Mitsubishi UFJ): There are two points to keep in mind. First, in the case of large customers, it is meaningful to monitor risk/return characteristics for each individual company. Second, it is necessary to observe a number of indicators in a well-balanced manner. In the case of our bank, capital is assigned to sectors. However, if asked what constitutes best practices, my honest reply would be that we do not have an answer. For example, the concurrent indicators for a certain sector may look very good. Does this mean that we should go ahead and concentrate our resources in this sector? We don't have a definitive answer to this query. We know that in the long run, risk diversification contributes to stable earnings. In other words, it is not enough to focus only on the indicators from a single year.

5. How to Set Confidence Levels

(Mr. Tsuyoshi Oyama, Bank of Japan): What should be our perspective on confidence levels?

(Mr. Shinsuke Kume, Sumitomo Trust Bank): Obviously, we want to emphasize the body portion of the distribution curve. But certainly the tail portion needs to be thoroughly monitored. For example, if the confidence level is lowered to 99 percent for operational risk, we may lose sight of risks for low-frequency large losses. In other words, the confidence level must not be lowered to 99 percent when real problems exist in the tail portion. In the past, Sumitomo Trust Bank adopted a confidence level of 99.97 percent. But my impression is that operating at this confidence level is difficult. As Basel II has opted for 99.9 percent, it is convenient to adopt 99.9 percent for purposes of comparing regulatory capital and economic capital.

(Mr. Junya Wakabayashi, Chiba Bank): For market risk, we have adopted a confidence level of 99 percent. However, we feel that we have to first resolve some of the immediate challenges that we face. These include examining the need to conduct back tests other than those contained in the Financial Inspection Manual, and developing tools for determining the shape of the tail in profit/loss distributions. Given these priority issues, the fact of the matter is that we have postponed the examination of confidence levels for later.

(Mr. Shigeru Yoshifuji, Bank of Tokyo-Mitsubishi UFJ): Various views exist within our bank, but personally, I am of the opinion that lower confidence levels are acceptable. In considering where to set the level of confidence, due attention must be paid to the balance between soundness and capital adequacy. Beyond that, I believe the following four factors should be taken into account. First, we want to improve our profitability and stand on par with overseas financial institutions as soon as possible. Second, we need to devise control systems that correspond to the unique features of Japanese banks, such as the treatment of policy-based stockholdings. Third, raising the confidence level leads to remarkable increase of credit risks and makes it more difficult to take on credit risks and easier to take on market risks. Attention must be paid to the fact that the portfolio will change if confidence levels are raised based solely on the measurement of tail risks. Fourth, imagine two types of societies. In the first, banks adopt high confidence levels and never fail. In the second, banks occasionally fail, but the society has effective risk-response mechanisms in place. It is unclear which society will enjoy a higher level of social welfare. On this final point, my personal view is that the latter society is preferable.

6. Toward Better Management Tools

(Mr. Tsuyoshi Oyama, Bank of Japan): Finally, I would like you to comment on the question of what constitutes a good framework for the utilization of management tools.

(Mr. Shinsuke Kume, Sumitomo Trust Bank): I believe that tools that contribute to increased corporate value are good tools. In this sense, I feel that as a management tool, the current framework is being effectively utilized up to some degree. If the question is whether the pursuit of efficient capital utilization in and by itself will result in higher corporate values, I do not think it is so simple in case of banks. It is necessary to analyze the mechanism through which the value of banks increases. A good tool is a tool that takes the following two aspects into consideration. First, it allows a bank to appeal to depositors saying that the bank will never fail. Second, it promotes thorough portfolio diversification.

(Mr. Junya Wakabayashi, Chiba Bank): Tools for management decisions are maturing. For the future, it is desirable for such tools to mature in two directions. First, people on the frontlines of operations should be able to understand the tools without difficulty. Second, the tools should be able to communicate the management messages to the frontlines.

(Mr. Shigeru Yoshifuji, Bank of Tokyo-Mitsubishi UFJ): In my personal opinion, for the time being, the frontlines should remain first and foremost aware of SVA.