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

Date : July 12, 2007 16:20 - 18:00

Venue : Bank of Japan Head Office, 9th Floor Conference Hall A

Panelists: Mr. Bob Allen, Senior Advisor, Australian Prudential

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Ms. Corinne Neale, Managing Director, Algorithmics

Mr. Magnus Agustsson, Managing Director, Depfa Bank

Mr. Brian Dvorak, Managing Director, Moody's KMV

Mr. David Wright, Group Vice President, Federal Reserve

Bank of San Francisco

Mr. Gary Wilhite, Senior Vice President, Wachovia Bank

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. Regulatory Capital and Economic Capital

(Mr. Oyama, BOJ) How should we bridge the gap between regulatory capital and economic capital?

(Mr. Bob Allen, APRA) Regulatory capital is for the protection of depositor interests, while economic capital is for the avoidance of bank business failures. They are two different concepts. You cannot simply compare the two and say that economic capital is of greater significance. In order for us to speak in a common language, it is necessary to make some adjustments so we can represent the two in a manner that makes comparison possible.

(Mr. Magnus Agustsson, Depfa) The authorities require individual banks to maintain regulatory capital for the purpose of maintaining the stability of the financial system. However, it is not sufficient for an individual bank to secure a minimum level of

regulatory capital. An individual bank secures its capital adequacy by means of economic capital.

(Mr. David Wright, Fed San Francisco) Regulatory capital is used to secure a minimum level of capital for bank solvency and financial stability, but since it needs to apply to a broad spectrum of banks it has its own limitations. Under the second pillar of Basel II, bank's more precisely evaluate capital adequacy through ICAAP (Internal Capital Adequacy Assessment Process), which often incorporates a number of economic capital concepts and techniques. The supervisory authorities expect financial institutions to manage the amount of capital they hold both on the basis of regulatory capital required by pillar one and on a more tailored view of economic risks identified under pillar two. Economic capital management should be tailor-made for individual banks. The management of a bank can ascertain risks and shareholder needs through economic capital management. In my opinion, many years from now under a new Basel III capital accord, the pillar two approach might become the next generation standard.

(Mr. Gary Wilhite, Wachovia) We must understand that economic capital and regulatory capital are quite different, because the former is measured by banks using sophisticated methods, while the latter is rather simple. It is not easy to reconcile them.

(Mr. Oyama, BOJ) Basel II requires the so-called "use test" - utilization of the concept of regulatory capital in economic capital management. I would like you to give some examples of how regulatory capital is utilized in the management of internal economic capital by overseas banks.

(Ms. Corinne Neale, Algorithmics) As far as banks in the Asia-Pacific region are concerned, some of them have already implemented Basel II internal ratings methods and calculate PD and LGD based on the internal ratings verification process/framework. Since Pillar 1 regulatory capital only covers a portion of the risks taken by the bank, it would not be wise to base management decisions on this incomplete picture of risk. Our market surveys show that at the current juncture very few banks actively manage their capital resources based on their credit economic capital estimate in Asia Pacific. Similarly to what we have heard during the workshop, banks in Asia Pacific are starting to produce credit economic capital estimates but they are not using them. This is largely caused by the lack of thorough validation of internal credit economic capital models. Banks only relate and compare regulatory and economic capital in their discussions with Regulators to quantify the impact on capital requirements of the risks that are not covered in Pillar 1.

(Mr. Brian Dvorak, Moody's KMV) Some customers that I have given support to convert PD for calculating Basel II regulatory capital into PD for internal control and utilize it. PD is calculated on a TTC (through-the-cycle) basis for regulatory capital, and then it is converted into PD on a PIT (point-in-time) basis for economic capital. For instance, an AA-rated company may have an average PD of 0.05%, but the PD will vary, say, from 0.01% to 0.11% with business fluctuations. A UL with a 99.95% confidence level will be more stable with TTC but will fluctuate substantially with PIT. On the other hand, PD on a TTC basis may bring about wrong results when used for the pricing of credits in the market, unless it is converted into PD on a PIT basis. PD on a TTC basis should be used for ascertaining the average risk for a defined period of time. The same bank should use PD on a TTC basis and PD on a PIT basis for different purposes. PD on a TTC basis may be used for regulatory and economic capital purposes, while PD on a PIT basis should be used for pricing, loss provisioning, portfolio management, and possibly economic capital purposes.

2. Effects of the Introduction of Economic Capital Management

(Mr. Oyama, BOJ) I would like you to give some successful examples of the introduction of economic capital management.

(Mr. Magnus Agustsson, Depfa) As for Depfa, the introduction of economic capital management has made management aware of how much risk the whole bank is taking. Furthermore, lending rates have come to be determined reflecting risk amounts on the basis of economic capital. A future task is how to utilize it for capital planning.

(Mr. Gary Wilhite, Wachovia) The important thing is that economic capital has come to be actually utilized for business line operations. At Wachovia, economic capital management has helped credit departments realize what is needed for higher lending profitability. Tools that help business lines act with consideration for economic capital are important. Also important is the process by which to evaluate and improve returns on economic capital. The bank has become able to make important decisions about exiting low profitability businesses and starting new businesses with lower risks and higher returns.

(Mr. Brian Dvorak, Moody's KMV) At Moody's KMV, we have accumulated default rate track records. Corporate default rates were higher during the latest downturn period of 2001 to 2003 than during the early 1990s, but financial institution default rates were not as high. I believe this is related to the better diversification of credit risk from active credit portfolio management that financial institutions began to undertake in the 1990s.

3. Risk Control Using Economic Capital Management and the Orientation of Market Value Accounting

(Auditor) Am I right in assuming that accounting practices will change and that market value accounting will prevail with the spread of economic capital management and the assessment of risk inherent in balance sheet assets on the basis of economic value?

(Mr. Brian Dvorak, Moody's KMV) Risk means the possibility of a change in economic value within a certain period of time. For the purpose of credit portfolio management, banks want to mark loan values to market. This is because banks hedge against risk by evaluating loan values (at what prices they sell in the market). For accounting recognition of hedging effects, it is necessary to evaluate hedged loans to fair value, for which purpose the fair value option¹ is used. I think that the spread of portfolio management will further the adoption by banks of market value accounting.

(Mr. Gary Wilhite, Wachovia) I am of the same opinion as Mr. Dvorak. If you mark the position to market in credit portfolio management, accounting will be easier on a market value basis. Marking to market is not a necessary requirement for securing Basel II regulatory capital, but it is an important condition for promoting economic capital management.

(Mr. Bob Allen, APRA) In market value accounting, you evaluate values including unrealized profit/loss, which is inherently uncertain. For this reason, market value accounting may sometimes involve rather difficult problems.

(Mr. David Wright, San Francisco Fed) In adopting market value accounting, we must take into account the possibility of the market overreacting and creating extreme but temporary declines in market value. Banks that fair value their loans and other assets may lose management flexibility as a result of market overreaction. Also, a full scale shift to market value accounting will require marking to market not only loans but also liabilities. For instance, the value of the spread a bank may earn on household deposits that have no maturities and no contractual interest rate adjustments must be assessed, but it is very difficult value and involves forecasting future customer behavior. In other words, a shift to market value accounting creates valuation challenges for both sides of the balance sheet and may produce misleading figures.

4. Methods of Economic Capital Management -- Convergence or Divergence

(Mr. Oyama, BOJ) Will methods of risk assessment in economic capital management

¹ An accounting procedure in which financial assets/liabilities specified by the company can be valued at fair value and the profit/loss can be recognized in the income statement.

converge or diverge in the future? Convergence may be preferable from the standpoint of securing a common language, in terms of supervision by the authorities, for example. On the other hand, divergence may be conducive to innovation in risk management technology. What are your opinions about this?

(Mr. Magnus Agustsson, Depfa) There may be a common set of guidelines, but the parameters to be adopted vary from bank to bank according to their risk profiles. So, risk management methods will become diversified by necessity. Commercial financial institutions are always competing with each other for better methods. I don't think we should standardize risk management methods.

(Mr. Gary Wilhite, Wachovia) In our business there is no single best practice because of constant changes. Everybody tries to find the best of the best, but even that will be found within a range of some width. Of course, a common language will gradually emerge as a result of mutual communication between banks, ratings agencies and the authorities. But I don't think that economic capital management methods will converge into one.

(Mr. Bob Allen, APRA) Methods of economic capital management may vary according to risk profiles. However, there should be a common set of rules. I expect that progress in disclosure, the second pillar, will gradually provide an orientation for risk expression etc. There are too many models at present, and I want some degree of convergence. Of course, there need not be a one size fits all method.

(Ms. Corinne Neale, Algorithmics) There already is a large degree of convergence in the methodologies underlying existing credit economic capital models. Models currently only diverge in their assumptions, their level of flexibility to incorporate new risk drivers and their transparency.. Good ideas tend to be copied. However how model results are used will vary from bank to bank.

(Mr. Brian Dvorak, Moody's KMV) This problem can be expressed in many ways. There may be a convergence to a good model, while there will be a divergence with the emergence of better models. Risk management has two sides: art and science. The problem is which part is art and which part is science. Science may bring about a convergence, and art a divergence.

(Mr. David Wright, San Francisco Fed) The supervisory authorities will allow a fair degree of flexibility in the risk management methods that banks may adopt. Basel II, pillar two is based on such a spirit. If you force one method on banks, innovation will be hindered. At the Fed, we frequently discuss what risk management methods are sound

for banks to adopt, but we take every care to avoid unnecessary prescriptiveness. We believe a dialog with the industry on sound practices is the most productive way forward in this area.

5. Economic Capital Management in 5 Years' Time

(Mr. Oyama, BOJ) What will economic capital management be like in the next 5 years? Are you optimistic or pessimistic? What will be the most important points?

(Mr. Bob Allen, APRA) It is difficult to forecast how sophisticated economic capital management will be. But at least I expect that the relationship between loss distributions and confidence levels will become clearer. In addition, the handling of liquidity risk and strategic risk will be discussed in a more concrete manner. As for operational risk, types of operational risk other than those defined by Basel II may become a focus of discussion.

(Ms. Corinne Neale, Algorithmics) More and more banks in the Asia-Pacific region will introduce Basel II internal ratings methods to benefit from better risk information. Banks will also introduce more sophisticated credit economic capital models that will allow them to model portfolio risk at various points in the future, for many different possible states of the world, and at many different confidence interval. There is a great need for further education on credit risk management and there is plenty of room for the FSI and BIS to continue contributing to improving the credit risk management practices of banks in the region.

(Mr. Magnus Agustsson, Depfa) At present, the integration of market and credit risks is not sufficient. I hope they will be integrated in the future. In addition, I hope that all types of risk including operational risk will be assessed in an integrated manner.

(Mr. David Wright, San Francisco Fed) We must observe how industry practice evolves over time and identify sound practices, before issuing further supervisory guidance in this area. I am very optimistic that banks will have made significant progress in economic capital management in 5 years' time.

(Mr. Brian Dvorak, Moody's KMV) We are now in a global upturn phase, when risk management tends to slacken. How to cope with the coming down cycle is important.

(Mr. Gary Wilhite, Wachovia) In 5 years' time the boundary between market and credit risks will become unclear and they will become integrated. The same type of risk may be called market risk by some people, credit risk by others.