

Workshop on the Definition of Capital and Capital Management: Summary and Q&A

The Bank of Japan held a workshop on "The Definition of Capital and Capital Management" on October 29, 2008. Presentations were given on the following topics. At the conclusion of the workshop, Mr. Koza, Head of the Bank of Japan's Center for Advanced Financial Technology, led a general question and answer session on the presentations. This paper summarizes the course of the discussions.

1. "Discussions on Regulatory Capital: Work in the Basel Committee's Subgroup on the Definition of Capital"

Yoshinori Nakata, Director, Head of International Affairs Section, Financial Systems and
Bank Examination Department, Bank of Japan
2. "The Use of Hybrid Capital Instruments by Banks in Asia"

Michele Barlow, Senior Director, Merrill Lynch (Hong Kong)
3. "The Role of Capital in Bank Rating"

Yuri Yoshida, Senior Analyst, Standard & Poor's
4. "Discussions on the Definition of Capital and Economic Capital Management"

Yuji Morimoto, President, Capitas Consulting Corporation

(Koza)

To start with, Mr. Nakata of the Bank of Japan provided an overview of the debate on the "definition of capital" taking place in the Basel Committee on Banking Supervision. He explained that the Committee was studying the "quantity" and "quality" of the numerator (capital) in regulatory capital adequacy with a particular focus on ability to withstand periods of stress. I have three questions.

First, I would like to hear regulators' views on the relationship between risk-taking capacity under periods of stress and under normal conditions, when they are trying to define the "quality" and "quantity" of capital in terms of ability to withstand periods of stress. For example, do they

envisage a major stress of the kind that occurs once every several decades and require banks to maintain a "quantity" and "quality" of capital during this entire period which can withstand such severe stress? If that is the case, then banks would find themselves with a considerably diminished capacity to take risk.

My second question concerns the debate on the definition of capital and its economic rationality. The presentation noted the discussion of the definition of capital in the EU. The approach used by the EU for including hybrid products in capital (capital instruments) is to establish predetermined limits of, for example, 50% and 35%, depending upon the degree to which the products satisfies specific conditions. This is a somewhat different approach from the idea of measuring the denominator (risk quantity) in regulatory capital adequacy in a manner that it captures reality as closely as possible. It seems to me that it obscures the economic rationality of determining what kind of capital is required for what kind of events.

The third point concerns the assessing "publicly injected capital" from the perspective of capital "quality," which is a timely topic given the large number of public capital injections that have been seen in countries around the world.

(Nakata)

On the first point, from a regulatory perspective, the tendency is to think that, when it comes to capital, the greater the "quantity" and the higher the "quality," the better. The debate has not progressed to a point where it is possible to answer the question regarding the most desirable quantity and quality of capital in light of the current nature of the banking business. However, I can elaborate a bit on the discussions of capital quantity and quality.

First, regarding the "quantity" of capital, the current financial crisis has shown national regulators that risks in the trading book -- particularly the risks associated with complex, credit instruments and market liquidity -- cannot be accurately measured. As a result, there is a perception that the quantity of capital has been inadequate in comparison to the actual risks. That is not, however, to say that regulators have arrived at an answer regarding what "adequate" levels of capital would be. Rather, they are seeking information from the markets and attempting to respond to what the markets demand.

Next, on the "quality" of capital, the debate is on the potential for improving the quality of capital during ordinary times so as to increase the capital-raising options available to financial institutions during times of stress -- for instance, not just issuance of common stock but also hybrid instruments (capital instruments).

With respect to the second question, my personal opinion is that we are not "starting from a blank slate." First, the reality is that any reworking of the definition of the numerator (capital) would have an extremely large impact. Given the fact that countries have traditionally allowed a wide range of hybrid products (capital instruments) to be counted towards capital, it is in some respects unrealistic to try to introduce completely different concepts. On the other hand, there is also an aspect of wanting to put in place common rules wherever possible and ensure that they can to some extent be satisfied by each country. In trying to balance these concerns and to improve the quality of capital, the judgment appears to have been that the realistic choice is to establish predetermined limits for the inclusion of hybrid products (capital instruments) depending upon the degree to which they satisfy requirements.

On the third point of how to assess the quality of public capital, to be frank, I am somewhat surprised by the differing policy measures taken by different countries and at the same time have the impression that national regulators are struggling to find the correct answer in deciding on the form of capital injection. Going forward, capital injection will continued to be conducted in different ways reflecting each countries' underlying policies and regulators' approaches. At the current point in time there is no common international definition of how one injects public capital or how such capital should be treated.

(Kozu)

The presentation by Ms. Barlow of Merrill Lynch (Hong Kong) concerned recent trends in the market for hybrid products (capital instruments). While the market is currently for all purposes at a standstill, my impression is that there will be a considerable amount of funding that can be raised once things return to normal. I have two questions. First, I would like to hear from you once again on what you consider to be the strong points of these instruments from your position as a person who handles hybrid products (capital instruments) in the market. Second, I would like to ask about the process by which the market returns to normal and, assuming that investors have ordinary risk preferences in un-stressed times, the extent to which you think it will be possible to use hybrid products (capital instruments) to raise funds.

(Barlow)

On the first point of the attractions of hybrid products (capital instruments), I should point out that these instruments normally allow the bank (issuer) to raise funds more cheaply than equity while also providing the investor with higher returns. Another benefit of these instruments is that they come with debt characteristics that allow tax deductibility for interest payments. Yet another attraction to these instruments is that they provide more flexibility in fund-raising because issuers

can raise funds in foreign currencies, unlike common stock issues, which are ordinarily denominated in the home currency only. This allows them to diversify their funding sources. Meanwhile, from the perspective of shareholders, these instruments are attractive because they do not have voting rights so there will be no dilution of existing shares.

On the second question, the problem is in what you consider to be "normal." I am not sure that we can really call the past few years "normal." Over the past several years, we have seen a wide variety of structured instruments issued while the use of ever higher leverage and other factors resulted in extremely tight spreads in the credit markets. I do not think we will return to a similar situation once the current crisis is past. At the current point in time, there has been a very large widening in spreads of hybrid products (capital instruments), and injections of capital by governments have reduced the need for the issue of these instruments, making it difficult to measure the potential for fund-raising. So with respect to how we return to normal, I think that we will probably see strong banks with high credit ratings and excellent management slowly begin issuing these instruments and investors slowly come back to the market. Anyway, at present, there is an extremely large supply of credit instruments trading at low cash prices with virtually no demand, so I think that it makes it difficult to predict how soon this market will return to normal (and what the new normal will be).

(Kozu)

The presentation by Mr. Morimoto of Capitas Consulting focused on "economic value" to rethink the relationship between risk and capital. His ideas reinforced the importance of the concept of economic value, but also raised questions about how we understand "economic value" itself and how this concept is recently being discussed.

In other words, we have recently seen a number of discussions regarding the concept of "value." For example, there are at times clear divergences between notional economic value measured in terms of discount cash flow and the traded prices observed in actual markets. We tend to use "fair value" as a catchall term, but some people are concerned with "fair value as calculated by some form of model" and others with "fair value as the price observed in the market regardless of what that price actually reflects." Fair value may also be different depending upon the time horizon used to assess it. To give you an example, for an investor engaged in short-term trading, the fair value of an asset would probably be the price at which it can be traded in the market, while information on short-term price trends would probably not have that much importance to an investor considering the longer-term value of a company. There is also an argument that economic values calculated by firms based on their own time horizons, which

cannot be supported by investors and markets, would not be accepted as true economic value. I think this view also has merit.

(Morimoto)

As you say, just being able to measure economic value is probably not a guarantee that all will go well. What is important is to continue to make the effort of measuring economic value so as to approximate the truth as much as possible.

First, when it comes to value, there is always the question of whether the market is functioning properly. To give an example from the insurance industry, the reinsurance market is extremely small in scale, and when a typhoon or some other event occurs, it tends to become a "soft market" (a market that is unable to arrive at a price [reinsurance premium]). Having experienced this situation a number of times, the industry pooled its funding to create a reinsurance company so that there would be a new risk taker.

On the capital markets, we have a vague idea that we can continue to be "price takers." However, when there is a high degree of leverage and instruments are intertwined, pulling out any one of the strings may cause the whole to collapse.

So when you consider situation such as this, the question of "what is the value of an object" becomes extremely difficult to answer. Nonetheless, from a practical standpoint it is necessary to decide on some methodology for assessing value, and my personal opinion is that it is necessary to engage in a repeated process of trial and error in order to refine it. During this process you have to consider what kinds of approaches and methods will allow market participants to trade financial instruments with confidence. This may ultimately be a question of what conditions must be satisfied in order for people to have confidence in the buying and selling of goods in a world in which money is fully and stably available, unlike the world of direct barter. Anyway, it is necessary to create a mechanism for appropriately valuing financial instruments and work together to solve the issues and concerns that are raised.

I would like to point out that there is a discussion of placing a freeze on mark-to-market accounting in light of the extreme instability in current markets. On this point, my personal opinion is that there is a fundamental need to appropriately value the goods that one possesses. In this context, "appropriately value" means discovering the price at which the goods are valued in the market. I believe that it is incumbent on owners to face up to reality and then take such measures as may be required.

(Participant)

I have two comments. The first concerns economic value or economic capital (EC). Individual banks determine this on their own, but the third pillar of Basel II requires that it be disclosed, and I am worried that doing so may trigger further confusion. In other words, even if banks disclose the economic value and EC that they have calculated according to their own concepts and methods, there is no single "correct" methodology to this calculation. The figures are based on different rationale, but if banks all disclose them in the same manner, there is potential to cause confusion among the recipients of the information.

My second comment is the need for the accounting side and the regulatory side to be on the same line with respect to the discussion of banks' capital policies. Within banks, various people are involved from different angles such as regulatory capital adequacy, internal EC management, business planning and financial accounting. They are required to conform to different systems and frameworks depending upon their function within the institution. One of the results of this is that it is extremely difficult for a single financial institution to arrive at a coherent and consistent capital management framework. On this point, Mr. Morimoto noted in his presentation that the insurance industry was attempting to create a system that would adopt a uniform approach of asking regulators and accountants to "assess all economic values, including insurance liabilities." I think the banking industry needs something similar and would like to see capital adequacy rules, regulations, and accounting rules all on the same line.

(Morimoto)

I would like to add a bit of supplementary information regarding your first comment on disclosure. I think the concerns you have raised are understandable. The discussion of risk and value becomes extremely difficult when you add in the perspective of comparability. However, I think it should also be understood that there are examples of efforts to rise above this debate by defining underlying principles.

In my presentation, I discussed the disclosure of "embedded value" by insurance companies. These figures have actually been disclosed since around 1990 and have a history of nearly 20 years. There were all sorts of problems when embedded value was initially calculated, and differences in the calculation approaches used by individual companies made it difficult if not impossible to compare the numbers. In response to this, "European Embedded Value" (EEV) principles were published in 2004, but the publication of EEV figures by companies resulted in even more divergence and greater difficulties in comparison. This led to the publication of "Market-Consistent Embedded Value" (MCEV) principles in June 2008. This process is an

example of how the insurance industry has adapted to the concerns you raised regarding disclosure. When you impose "one-size-fits-all" standards for embedded value, it raises difficulties at companies for whom the standards are not a good fit, and if the market lacks confidence in the numbers then it will not trust the figures being disclosed by anyone. This led to numerous discussions at the CFO forum and among actuaries, European regulatory agencies, and international accounting standards experts and, in a process of compromise, they decided upon certain basic principles in order to identify appropriate standards. If these basic principles fail to function appropriately, there is a possibility to revise them in two years time, so it is still very much a process of trial and error.

(Participant)

I would like to comment on risk measurement and capital management. It is probably possible to improve the precision of risk measurement, but if you look at the actual capital policies of banks, they are not necessarily based on quantified risk numbers. The introduction of Basel II will make the management of economic capital, especially the second pillar, more important to the banking industry, and according to this concept, banks should determine desirable capital levels on the basis of economic value reflecting their individual risk profiles. However, the two are not necessarily well linked in actual practices at financial institutions. The denominator (risk) in capital adequacy calculations is conducted "bottom up" from data, while the numerator (capital) tends to be more of a "top down" process, making it difficult to connect the two.

(Kozu)

Japan was one of the first to introduce Basel II, but we are still only in our second year. Perhaps, as you say, the links between bottom-up economic capital management requirements and top-down capital policies are still inadequate. However, I think the direction will be one where through interaction between the two elements, banks will arrive at capital structures that fit their business models and risk profiles. The economic capital management and integrated risk management processes are ultimately questions of governance, and as organizations gain more experience and understanding I think we will see changes in capital structures along with economic capital considerations. This will then influence risk-taking and that will again be reflected in the capital structure, creating a feedback loop.

We have seen that in extremely stressed situations such as the current crisis some CEOs have raised doubts regarding the effectiveness of risk management. There may be some risk management units who are asked by their top management how meaningful current risk management (or economic capital management) approaches really are given the circumstances at

European and North American financial institutions, the very institutions that are supposed to be the leaders in this area. However, that does not mean that institutions should be managed without quantitative information. Indeed, it is precisely in these kinds of circumstances that all levels of the organization need to reconfirm the importance of risk management and seek more effective risk management frameworks.