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Bank of Japan

Macroprudence and the Central Bank

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Introduction

It is my honor to speak today at the Securities Analysts Association of Japan.

I believe that most of you here today have been directly or indirectly involved in the securities market, and that, needless to say, efforts by many related parties are essential for the sound growth of the securities market. One critical element of such efforts is the expert provision of securities analysis, and in this, securities analysts have been playing an important role. The Securities Analysts Association of Japan was established in 1962 in order to train such securities analysts, and since then has consistently and greatly contributed to the development of Japan's securities market. So let me start by expressing herewith my sincere respect for the Association's many years of effort.

Sparked by the recent global financial crisis, there have been active discussions on how to prevent a recurrence of such a crisis. Those discussions cover securities market as well as financial markets more generally and the financial system. Last week, the Basel Committee on Banking Supervision (Basel Committee), for example, announced a package of proposals on capital adequacy rules and liquidity regulations and made this available for consultation until mid-April 2010.[1] Given that the recent crisis originated in the United States and Europe, there appear to be some mixed feelings at Japanese financial institutions about the discussions in progress. However, any instability in the global financial system inevitably affects Japanese financial institutions. Moreover, just as one of the causes of the recent crisis was that concerned parties in the United States and Europe had not sufficiently learned the lessons from the bubble and financial crisis in Japan and the Asian financial crisis, so Japanese financial institutions might face similar problems in the future if they fail to sufficiently learn the lessons from the recent financial crisis in the United States and Europe. For this reason, it is important for Japanese financial institutions to actively take part in these discussions.

Because discussions revolve around a large number of issues, it is difficult to summarize them in a few simple words. However, when it comes to lessons from the crisis and

[1] Basel Committee on Banking Supervision, "Strengthening the Resilience of the Banking Sector" and "International Framework for Liquidity Risk Measurement, Standards and Monitoring," Consultative Documents, December 2009.

measures to prevent a recurrence, the most important keywords in my view are "liquidity" and "macroprudence." Against this background, today I would like to focus on the role of "macroprudence" and discuss initiatives by the Bank as well as efforts that private market participants and public authorities should make to ensure the stability of the financial system.[2]

I. Microprudence and Macroprudence

I should start with an explanation of the concept of "macroprudence," but in order to do so, it is useful to first explain the concept of "microprudence," with which it contrasts. It could be said that microprudence describes the conventional ideas behind the policy approach to ensure financial system stability. Simplifying somewhat, microprudence consists of the idea that if the management of individual financial institutions is sound, the financial system, which is the aggregate of individual financial institutions, should be stable, and regulations and supervision should therefore focus on realizing soundness at such micro level. On the other hand, the idea underlying the concept of macroprudence is that stability of the financial system cannot be achieved solely by such micro-level efforts, and that it is necessary to assess risks in the financial system as a whole by taking account of the interconnectedness of economic activities, financial markets, and the behavior of financial institutions, and to take conscious steps to base institutional design and policy responses on such assessments. As I will discuss in detail later, relying on only one of the two approaches is not sufficient to ensure financial system stability. Rather, both approaches are necessary, and one of the key lessons from the recent global financial crisis is that we need to pay greater heed to the approach that incorporates what the term "macroprudence" seeks to capture. In order to see what this means specifically, let us consider the background of the recent financial crisis.

Background of the global financial crisis

The recent financial crisis may have reached a global scale and involved new financial

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[2] On the importance of the concept of liquidity in discussing the causes of and policy responses to the recent crisis, see Shirakawa, M.,"'Liquidity' and 'Payment and Settlement Systems'," speech given at the Center for Advanced Research in Finance, The University of Tokyo, November 2008, and Borio, C.,"Ten Propositions about Liquidity Crises," BIS Working Papers, No. 293, November 2009.

products and players, but essentially it is a classic example of the rise and collapse of an economic bubble.[3] In the period preceding the recent crisis, especially around the mid-2000s, the United States and some European economies experienced a large-scale credit bubble. It was the bursting of that credit bubble that triggered the financial crisis, which was further aggravated by the failure of Lehman Brothers in the autumn of 2008. During the bubble period, risk-taking was excessive. Looking at the behavior of financial institutions, for example, this involved the accumulation of excessive leverage and maturity mismatches between assets and liabilities. Typically, excessive leverage is taken to refer to an increase in debt beyond a point where there is an appropriate balance between capital and debt. More generally, however, excessive leverage can be taken to mean excessive risk-taking, including off-balance transactions, relative to the capital base. At a time of financial crisis, excessive leverage will show itself in capital shortages and solvency problems suffered by financial institutions. On the other hand, the term "maturity mismatch" refers to the financing of long-term assets using short-term debt, and in the run-up to the recent financial crisis, there was a considerable increase in such mismatches. A typical example of this is structured investment vehicles (SIVs). These SIVs invested in medium- to long-term securitized products related to subprime mortgages and raised funds by issuing short-term asset-backed commercial papers with those securitized products as underlying assets. However, once some kind of a shock occurs, funding becomes difficult, and such liquidity risks materialize not only in terms of the domestic currency but also in terms of foreign currencies. In the recent global financial crisis, apart from the United States, U.S. dollar liquidity risk was particularly serious for European financial institutions and, as you will know, Japanese financial institutions, too, faced shortages of U.S. dollar funds from the autumn of 2008 through the beginning of 2009. Once there is a liquidity shortage, financial institutions are forced to sell their assets, resulting in a fall in asset prices, and, for financial institutions as a whole, further intensifies liquidity shortages. Thus, during the financial crisis, the negative spiral intensified as capital shortages and liquidity shortages mutually affected each other.

[3] The extent of the financial crisis, however, has differed across regions, and financial systems in Asia, including Japan's, have proved to be relatively robust. For details, see Shirakawa, M., "Reforming the Framework of Financial Regulation and Supervision: An International and Asian Perspective," speech given at the Bank Negara Malaysia -- Bank for International Settlements High Level Seminar in Malaysia, December 2009.

Responses based on microprudence

Crises -- as I just discussed -- appear in the shape of capital and liquidity shortages suffered by financial institutions. Therefore, a natural regulatory and supervisory approach to prevent the recurrence of a crisis is to sufficiently raise the minimum levels of required capital and liquidity financial institutions should hold. This approach focuses on reducing the possibility that individual financial institutions fail and could therefore be described as a response based on microprudence.

With regard to capital shortages suffered by financial institutions, the recent crisis revealed a variety of issues. One of these is that the most remarkable increase in leverage took place not in the traditional banking business but outside the banking business. For example, financial institutions held securitized products on their trading books, for which risk weightings under capital adequacy regulations are small, although they later turned out to be highly risky financial products. While the size of trading books was less than 10 percent of total assets for Japanese financial institutions, for some financial institutions in the United States and Europe, it reached about 40 percent. Consequently, when risk-asset based capital ratios were used as a yardstick, major financial institutions' leverage, at least superficially, did not seem that excessive, and their capital bases appeared sufficient. Investments in securitized products by major financial institutions were carried out through SIVs they had set up, and the funding for these SIVs was provided through credit from their parent financial institutions. As a result, as later revealed, risks were shouldered by the parent financial institutions themselves. In a case such as this, the necessary regulatory and supervisory response would have been to accurately gauge the risks carried by financial institutions and the necessary capital, and to require individual financial institutions to hold more capital.

Can problems be solved through microprudence alone?

Such regulatory and supervisory responses based on microprudence are necessary and their importance should not be underestimated. As I will explain in detail later, the Bank also conducts on-site examinations and off-site monitoring of financial institutions, carrying out various examinations of financial institutions' capital, liquidity, and risk management, and giving necessary advice. However, I believe that the recent global financial crisis has shown that it is difficult to achieve financial system stability and to contribute to the sustainable growth of the economy, which is the ultimate aim of financial system stability, relying only on such regulation and supervision based on microprudential principles.

The first reason is that without considering the relationship between economic and financial activities, it is essentially impossible to determine the optimal level of capital and liquidity requirements. If absolute priority is given to financial system stability, then capital and liquidity requirements inevitably have to be raised significantly, but the inherent role expected of financial institutions is to engage in leveraging and maturity mismatches between assets and liabilities. Financial institutions carry out financial intermediary functions with a certain amount of capital, raising funds with short-term debt instruments and investing in long-term assets, and provide value added through the provision of liquidity and settlement services. If financial institutions cannot properly fulfill their financial functions, the economy will not grow. Of course, in reality, a capital adequacy ratio of 100 percent is not required, but as highlighted here, conventional regulation and supervision has also in fact been based on some sort of macroeconomic assessment of the relationship between the financial system and economic activity as well as the interaction between financial systems. However, I believe that efforts to take such a macroeconomic perspective into account in a more systematic manner have been insufficient.

The second reason why I think microprudence alone is insufficient is that financial institutions' incentives are greatly affected by macroeconomic factors. On this point, I recall the famous remark made before the surfacing of the subprime mortgage problem by the then CEO of a major financial institution that "while the music is playing, you have to dance." If, in the future, benign economic conditions similar to that time, namely high economic growth, low inflation, low interest rates, and low market volatility continue for a long time, would managers of financial institutions and investors choose different management and investment strategies? Moreover, even if one were to choose a different strategy oneself, what strategy would one expect competitors to take? Following this line of reasoning, it becomes clear that there will always be someone who takes on the risks. Ultimately, the risks in the financial system as a whole are affected not only by micro-level incentives but to a great extent also by macro-level incentives, that is, the economic and financial environment.

If we follow this line of reasoning, in order to ensure the stability of the financial system, microprudence, which secures the soundness of individual financial institutions, and macroprudence, which pays attention to risks to the financial system as a whole, are both equally necessary.

II. Macroprudential Perspectives

There are various ways in which to assess risks in the financial system as a whole from a macroprudential perspective, that is, from a perspective that pays attention to the interconnectedness between economic activity, financial markets, and financial institutions' behavior. Recently, two perspectives or "dimensions" have been recognized as important: the first concerns the cross-sectional risk at a particular point in time, while the second concerns the evolution of risk in the future.

The cross-sectional dimension

The "cross-sectional dimension" concerns risks in the financial system as a whole at a particular point in time and particularly focuses on the interconnectedness of the risks of each financial institution's portfolio and financial products. When the loans and investments of a financial institution are concentrated in a specific industry, the financial institution assumes a large risk. The concentration of loans to the real estate industry is a classic example. And what goes for a specific financial institution goes also for the financial system as a whole. Even if the exposure of each individual financial institution is not concentrated in a specific industry, if many financial institutions are taking similar positions, the financial system as a whole assumes a large risk. If there is a shock that affects the value of a specific type of exposure, for example, the value of real estate, financial institutions will try to reduce their exposure to such assets all at the same time, but when all financial institutions take the same action, such a reduction of exposure will be difficult. Under these circumstances, market liquidity of the assets in question and funding liquidity decline significantly, and that will further exacerbate losses. Such herding behavior is called "crowded trade" and can arise for a variety of reasons. While it typically arises through a convergence of market participants' view of economic prospects, it can also be spurred by a convergence of risk management methods. As financial techniques advance, the management of risk also becomes more complicated. In this situation, the incentive for financial institutions that do not have sufficient resources to develop their own risk management methods to adopt the risk management methods developed by other financial institutions increases. When this kind of situation becomes widespread, not only does financial institutions' exposure to types of assets become similar, but market swings also become volatile as the timing of transactions becomes more synchronized.

The time dimension

The second macroprudential dimension, the "time dimension," concerns dynamic changes in risks, focusing on how risks inherent in the financial system change over time. In the run-up to a crisis, as seen in the period prior to the recent crisis, benign economic conditions continue for some time, economic actors become too optimistic in their risk assessment, and their risk tolerance increases. As a result, as economic actors' risk-taking stance becomes more aggressive, asset prices rise and leverage increases, leading to even more aggressive risk-taking stances. Our understanding of such endogenous changes in the risk-taking stance, that is, the risk-taking channel, is extremely limited. What is clear, however, is that such changes are greatly influenced by the economic and financial environment, as I mentioned earlier.

Financial imbalances that accumulate in the process of risk-taking cannot be sustained indefinitely and eventually balance sheet adjustments will take place. Such adjustments proceed gradually in the beginning. However, triggered by some kind of a shock, a crisis will emerge in the form of funding liquidity shortages and become more severe as confidence among market participants in each other collapses. This phenomenon that the profit-seeking behavior of financial institutions amplifies the financial and economic cycle is referred to as "procyclicality" and is another important dimension of assessment apart from the aforementioned cross-sectional network perspective.

III. Approaches Taking Account of Macroprudence

With the importance of macroprudence having been recognized, what sort of approaches should central banks and regulatory and supervisory authorities take to protect the stability of the financial system?

Monetary policy

First, it is necessary for the central bank to take a macroprudential perspective in the conduct of monetary policy. Needless to say, the purpose of monetary policy is to contribute to sustainable growth through price stability. Looking back at price developments in the past quarter century, inflation gradually declined and it can be said that many central banks have been successful in terms of achieving price stability. However, in terms of financial system stability, the frequency of bubbles and financial crises has increased in the past quarter century, with major episodes including Japan's financial crisis following the burst of the bubble, the East Asian financial crisis, the credit bubble in the United States and Europe, and the recent global financial crisis. Moreover, ironically, all these bubbles arose in an environment of low inflation. While the causes of bubbles are complex, one major cause in all cases has been the emergence of a sense, amid continued benign economic conditions of high growth, low inflation, and low interest rates, that liquidity is always available at the drop of a hat. While I do not think that accommodative monetary conditions alone can lead to a bubble, it seems that it also cannot be denied that expectations of a prolonged accommodative monetary environment lead to excessive leverage and maturity mismatches, thereby accelerating the generation of a bubble. Price stability is an extremely important policy objective for a central bank, but if a central bank conducts monetary policy by just watching short-term price developments, this may induce large economic fluctuations and result in harming price stability in the medium- to long-term. Although a frequently used phrase in this context is that there is "a trade-off between price stability and financial system stability," this should in fact be understood in the sense that the true trade-off lies between "current economic stability and future economic stability." The intensified discussions following the recent financial crisis on the appropriate monetary policy framework, including discussions in countries that have adopted inflation targeting, reflect these considerations. Therefore, in the conduct of monetary policy, it is necessary to get into the habit of assessing the economy both through the lens of price developments and through the lens of financial imbalances. This is exactly what the Bank of Japan with its assessment of monetary policy from "two perspectives" aims at.

Financial supervision based on risk assessment of the financial system as a whole

Second, I would like to emphasize the importance of proper supervision. The experience of the recent crisis reconfirmed that the behavior of financial institutions sometimes becomes excessive, and proper supervision is necessary to prevent that from happening. In this context, it is of course important for supervisory authorities to assess the soundness of individual financial institutions by focusing on risks unique to those financial institutions and to provide the appropriate supervision. In addition, it is also important to assess, while noting the "dimensions" I have explained, the risk in the financial system as a whole and utilize the information gained to conduct supervision of individual institutions. This may be a typical example of "easier said than done," but it represents an unavoidable challenge.

Designing financial regulation and supervision

The third point concerns the design of financial regulation and supervision taking account of a macroprudential perspective. Various discussions on this issue are going on at the moment and one of them focuses on reviewing capital adequacy requirements from the perspective of mitigating procyclicality. Concerning capital adequacy ratios for banks, one issue that has been identified is the procyclicality caused by the decrease in credit risk during an economic boom and the increase in credit risk during a recession, but profits and losses related to financial market transactions show a similar procyclical tendency. When benign financial and economic conditions continue for a certain period, the market risk being estimated by using data obtained during that period is likely to underestimate the actual size of the risk. As a result, during an economic boom, financial institutions lend aggressively as their capital bases increase due to high profits, leading to further increases in lending through, for example, a further rise in asset prices. Similarly, the reverse occurs during a recession. Discussions are therefore underway on how to mitigate such procyclicality, with ideas including the lengthening of the period assets are included in risk accounting to avoid excessive fluctuation in risk-weighted assets and whether to introduce a framework for countercyclical capital buffers. The underlying idea of such a framework is to implement capital adequacy rules in a countercyclical manner by requiring financial institutions to build up capital when economic conditions are favorable, which could then be drawn down when economic conditions deteriorate.

I believe that proposals to use capital adequacy regulations to mitigate procyclicality and reinforce capital bases go in the right direction and are likely to contribute to financial system stability. However, from a macroeconomic perspective, it must be avoided that the strengthening of regulations impairs economic stability. For this reason, it is important to secure flexibility, for example, in the procedure and timing of the implementation of new capital adequacy rules by taking financial and economic conditions in countries around the world into account. In this regard, as also articulated in the consultative proposals for the review of rules recently released by the Basel Committee, the new rules should be implemented once financial conditions have improved and economic recovery is ensured.

The accounting system

The accounting system is also an element affecting the behavior of financial institutions in addition to monetary policy and financial regulation and supervision.

The accounting system directly affects the assessment and profitability of assets held by financial institutions. For instance, from autumn 2008, as the functioning of markets declined, prices of securitized products fell all at once, leading to concerns about capital shortages at financial institutions. This further paralyzed market functioning and intensified the downward spiral. This course of events illustrated once more that the method of assessing financial products and the accounting system overall affect financial institutions' behavior and the financial system. Therefore, various international discussions are taking place to design a system in the field of accounting that could contribute to financial system stability. For example, it was shown that when market liquidity appeared to have dried up, it was possible to value financial assets at prices calculated by models. There are also proposals regarding a revision of loan loss provisions. The reason is that current accrual basis accounting methods tend to reinforce procyclicality as banks' profits are rapidly squeezed when economic conditions deteriorate because banks have to increase provisions. While provisioning methods on the basis of expected losses, which allow for earlier recognition of future losses, are currently being discussed, my view is that it is necessary to consider such proposals from a variety of aspects, such as to what degree they would fulfill the intended goal of mitigating procyclicality, whether they can be put into practice, and whether they will be able to ensure transparency, which after all is the primary role of accounting.

IV. The Role of the Bank of Japan

Having explained the role of macroprudence, I would now like to explain the role of the Bank in ensuring stability of the financial system. I would like to emphasize the following five points in particular.

The first point is that the Bank of Japan not only aims at price stability but also financial system stability. The Bank of Japan Act clearly stipulates that one of the Bank's institutional objectives is "to ensure smooth settlement of funds among banks and other financial institutions, thereby contributing to the maintenance of stability of the financial system." The fact that the Bank of Japan during the recent financial crisis decided to implement measures that are extraordinary for a central bank, such as the purchase of stocks held by financial institutions and the provision of subordinated loans, was ultimately to achieve the objective stipulated in the Bank of Japan Act.

The second point is that the Bank plays the role of "lender of last resort." The Bank of Japan is "the bank of banks" and can contribute to ensuring financial system stability by providing funds as the lender of last resort when it judges this to be necessary to prevent the materialization of systemic risk. To avoid that the provision of funds gives rise to moral hazard, the Bank has clarified its basic thinking in the form of the so-called "four principles for special loans."

The third point is that the Bank collects various types of information from financial institutions to secure the objective of ensuring the stability of the financial system. While macroprudence is important, as a prerequisite for that, microprudence is also critical. As long as the Bank extends loans to financial institutions as the "lender of last resort," it needs to have sufficient knowledge of financial institutions' business performance and the quality of their assets. For this reason, the Bank of Japan Act grants the Bank the right to conduct on-site examinations of financial institutions that have deposit accounts with the Bank. Of course, it is conceivable that a situation arises where, by the time a financial institution comes to the Bank, it is already too late. Therefore, in conducting on-site examinations, the Bank not only carries out inspections but also provides various kinds of advice and guidance when the need arises. In addition to conducting such on-site examinations, the Bank also strives to gauge the business performance and risk management, such as the liquidity management, of a wide range of financial institutions, including securities companies, through daily off-site monitoring. At a time that financial markets are undergoing substantial changes, it is important to have a channel for obtaining information directly from financial institutions -- something that was strongly reaffirmed in the phase from the autumn of 2008 onward.

The fourth point is that the Bank conducts risk assessments of the financial system as a whole. The Bank analyzes and assesses the financial system as a whole from a macroprudential perspective by making use of information from individual financial institutions as well as information obtained through its daily monetary policy operations and operation of the payment and settlement system. At the same time, the Bank strives to use the macro-assessment obtained in this way to inform its on-site examinations and off-site monitoring. However, although everyone would agree that integrating macro and micro perspectives is an important task, to do this properly, research is indispensable. Because they are charged with the conduct of monetary policy, the necessary organizational culture to assess the economic situation based on macroeconomic analyses is well established within central banks. As for us at the Bank of Japan, we will continue to attach great importance to the information and insights we gather through on-site examinations, off-site monitoring, and the Bank's banking business, and to strive to accurately gauge the risks to the financial system as a whole through our macroeconomic analyses and research activities.

The fifth point is that the Bank is participating in the international discussions on regulation and supervision and is engaged in the review of such regulation and supervision. Reflecting the globalization of finance, there is a growing tendency for the broad framework of financial regulation and supervision to be determined in international discussions. The Bank, together with the Financial Services Agency (FSA), has been taking part in discussions on financial regulatory and supervisory reform at various international forums such as the Basel Committee on Banking Supervision and the Financial Stability Board, and I myself have been attending many of those forums. Given that a robust global financial system is in the common interest of all countries, I believe it is critical for each country to contribute to the construction of internationally consistent rules and to establish a regulatory and supervisory framework that properly reflects differences between countries, such as in their financial structure. The Bank will continue to make contributions in these areas.

When comparing systems to ensure financial system stability immediately before the recent crisis from a central bank's point of view, countries can be divided into two groups. In one, which includes the United States, Italy, the Netherlands, and many Asian countries, regulation and supervision was carried out by the central bank, either alone or in cooperation with other authorities. In the other group, which includes the United Kingdom and Australia, the central bank was not involved in regulation and supervision. Japan could be regarded as falling in between these two groups: the Bank of Japan does not have regulatory authority over financial institutions, but, as mentioned earlier, based on provisions in the Bank of Japan Act, it conducts on-site examinations of financial institutions and provides various kinds of advice and guidance when the need arises.

Financial regulatory and supervisory systems around the world have been decided upon reflecting differences in countries' financial structure, stage of economic development, and historical background, and thus there is no uniform set-up that is correct for all countries. Be that as it may, the recent crisis has shown clearly that it is indispensable for central banks to be involved in one form or another in ensuring the stability of the financial system and that central banks should play a significant role in the area of macroprudential supervision. Here in Japan, we have a system where the FSA, which is in charge of financial administration dealing with regulation and supervision, and the Bank of Japan, which is the central bank, cooperate with each other and each fulfills its respective functions to ensure the stability of the financial system. While it seems fair to say that Japan's financial system has remained relatively stable compared with those of the United States and Europe during the recent crisis, the Bank will, in cooperation with the FSA, continue to strive to ensure the stability of the financial system.

Closing Remarks

In closing, I would like to say a few words about the importance of information infrastructure in ensuring financial system stability. In order to analyze the financial system as a whole, it is essential to have information that is accessible to investors and other market participants. On this point, disclosure regarding risks inherent in individual financial institutions and specific financial products is critical. In addition, from a macroprudential perspective the importance of statistics that cover financial markets as a whole needs to be underscored. At the beginning, I pointed out as one of the causes of the recent global financial crisis the widening of maturity mismatches at financial institutions with regard to liquidity and the lack of a habit to check such developments on a macro basis. Although, with the crisis having erupted, we now have the benefit of hindsight, the locational banking statistics released quarterly by the Bank for International Settlements do show a remarkable increase in U.S. dollar maturity mismatches for financial institutions from advanced economies, and particularly European economies, in recent years.[4] Moreover, although the experience of past bubbles clearly shows that fluctuations in real estate prices have a great impact on the financial system, in Japan, for example, little price information on real estate transactions has been gathered and the statistics in this field are far from satisfactory. Although the compilation of such statistics places a burden on those providing the data, such data represents one critical part of the information necessary to ensure the stability of the financial system.

While I have pointed out the importance of disclosure information and statistics concerning financial institutions and financial products, it goes without saying that what is ultimately required is a proper analysis based on such information. During the recent crisis, trust in credit rating information declined. Regarding credit ratings, various problems have been highlighted.[5] But while these are indeed important issues, it would not be very balanced to

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[4] For a more detailed discussion of this issue, see the March 2009 issue of the Financial Markets Report.

[5] See, for example, "Stocktaking on the Use of Credit Ratings" by the Joint Forum under the aegis

criticize only credit ratings. I mentioned that when thinking about macroprudence, two dimensions are important, that is, the cross-sectional dimension and the time dimension, but to properly reflect these two dimensions in the analysis of securities seems like a particularly difficult challenge. However, if this challenge is not addressed, the value of micro analysis also declines. At any rate, it goes without saying that the role played by securities analysts, who are experts in this kind of analysis, is substantial. One major element that underpins liquidity in financial markets is variety, and in that regard the role of securities analysts who provide variety of analysis based on their independent judgment is quite important. Information is given meaning through the knowledge, experience, and philosophy of experts, and in this regard, too, we have high hopes and expectations of securities analysts.

Thank you.

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of the Basel Committee on Banking Supervision, the International Organisation of Securities Commissions, and the International Association of Insurance Supervisors, June 2009.