Shadow Financial Regulatory Committees of Asia, Australia-New Zealand, Europe, Japan, Latin America, and the United States

# Lessons from Recent Financial Turmoil

Joint Statement Copenhagen (Denmark), September 10, 2007

### Executive Summary

It was inevitable that global imbalances would eventually require an upward correction in the price of risk. As this occurred, it was similarly inevitable that the weakest borrowers would find themselves unable to pay some of their debt obligations.

In this statement the Shadow Financial Regulatory Committees of Asia, Australia-New Zealand, Europe, Japan, Latin America, and the United States identify some important weaknesses in the financial infrastructure and make the following recommendations:

1. A key weakness in the current period of financial turmoil is the linkage – through either explicit or implicit guarantees – between either conduits or special purpose investment vehicles and sponsoring investment banks and commercial banks. The activities of these conduits and vehicles are extremely complicated and opaque.

2. In many new forms of lending, responsibility for analyzing and pricing loan risk is shifted to credit scoring programs and outsourced to credit rating agencies. These agencies do not share in losses caused by misjudgement, however. To restore investor confidence in the securitization process, loan originators must track the long term performance of their underwriting staff and establish systems of deferred compensation that make loan officers share the losses generated by borrower defaults. The Shadow Committees urge regulators and industry study groups to immediately address the incentive problems caused by outsourcing of risk assessment.

3. The current toumoil on financial markets raises important questions with respect to the implementation of the Basel II capital adequacy framework for banks. The Basel Committee on Banking Supervision ought to re-evaluate the heavy reliance on ratings provided by credit rating agencies in the so-called Standardized Approach of Basel II. Moreover, the advanced Internal Ratings Based approach of Basel II, which allows large and sophisticated banks to use their internal risk models, needs to be re-examined. The recent turmoil revealed that these models performed poorly and underestimated the

degree of risk exposure. The Shadow Committees urge the Basel Committee to conduct another quantitative impact study (QIS) using observations from the recent turmoil.

#### Background of the recent turmoil

The current turmoil in world financial markets, triggered by defaults on subprime mortgages in the US, raises questions about macroeconomic policy, financial stability and the design of financial regulation. The formulation of an appropriate policy response to the uncertainty generated by the current turmoil requires an understanding of developments that have led to the situation today.

The global economy has enjoyed a long period of relatively low interest rates and an ample supply of liquidity. Underlying factors include high savings rates in China and other Asian economies, and low and stable inflation rates in Europe, the US and Japan. In addition, some key countries have maintained unsustainably low interest rates and undervalued currencies. In this macroeconomic environment, fading memories of previous turbulent periods and efforts to reach out for higher yields supported a relatively low risk-premium on credit.

The environment favored the development of innovative financial instruments for trading in credit risk. Vehicles for collective investments and structured securitization products have enabled credit risk to be allocated globally to new investor groups. Besides making markets in derivatives, banks and investment banks set up special investment vehicles (SIVs), which hold exotic instruments such as collateralised debt obligations (CDOs) and finance themselves by issuing commercial paper (CP) to investors such as hedge funds. Hedge funds and conduits--a form of SIV--have been important buyers and traders in the new instruments. Their ability to absorb risk efficiently has contributed to the low cost of credit and enhanced the ability of firms and households to carry more debt. Consequently, firms and households have become increasingly levered while asset prices, notably for residential real estate, have risen sharply.

It was inevitable that global imbalances would eventually require an upward correction in the price of risk. As this occurred, it was similarly inevitable that the weakest borrowers would find themselves unable to pay some of their debt obligations. Defaults on subprime mortgage loans in the US must be seen in this light. In principle, the transfer of credit risk inherent in credit-linked instruments should mute the consequences of the defaults by spreading them across many participants.

A threat to financial stability arises if failures in financial markets amplify the initial shock, with adverse consequences for growth and employment. There is indeed evidence of such amplification. Furthermore, with 40 percent of the bonds backed by subprime mortgages

held outside the US, the consequences of subprime mortgage defaults were felt around the world, especially in Europe. In the wake these defaults, a number of important financial-market failures have occurred. These include a few SIVs sponsored by two German banks. Some important hedge funds have rung up large losses as well.

It would be a mistake for policymakers to reflexively bail out distressed banks, investors and mortgage borrowers. Bailouts increase the beneficiaries' willingness to take risk in the future. Not only would taxpayers have to pay for the bailouts, but the global economy would become more crisis prone.

This statement identifies some important weaknesses in the financial infrastructure, and explains how they have contributed to the turmoil we have observed. We also analyze appropriate regulatory responses. The following issues are discussed:

- 1. Conduits and Special Investment Vehicles (SIVs)
- 2. Outsourcing of risk assessment and due diligence to rating agencies and credit scoring programs
- 3. The implications of recent turmoil in financial markets for Basel II
- 4. The drying up of the interbank market in Europe in particular
- 5. Impact on markets outside Western Europe and the US

### 1. Conduits and Special Investment Vehicles (SIVs)

A key weakness in the current period of financial turmoil is the linkage – through either explicit or implicit guarantees – between either conduits or special purpose investment vehicles and sponsoring investment banks and commercial banks. The activities of these conduits and vehicles are extremely complicated and opaque, which is a big part of the problem.

For some time these conduits functioned effectively as collateralized investment pools that collected pools of subprime mortgages or other risky financial assets (such as loans to buyout funds) and financed these holdings by issuing short-term commercial paper. The tranching of cash flows from asset-based securities is carried out by investment banks using quality ratings provided by rating agencies based on models that could not be time-tested due to the newness of the instruments. The conduits are in most cases highly leveraged. Putting little or no equity in a conduit constitutes a way of circumventing equity requirements that would be applicable to the sponsoring banks. Moreover, the debt funding of these positions was often much shorter in duration than the assets. This mismatch creates rollover risk.

Conduit debt was typically distributed to investors including pension funds, insurance companies and hedge funds. Linkage between a sponsoring bank and the conduit was established either by using puts, guarantees or other mechanisms that transfer residual risks in the conduit back to the commercial or investment bank if and when the value of assets declined significantly.

Current regulatory and accounting standards, such as Basel I, fail to recognize sufficiently the degree of risk to the residual risk holders. Uncertainty about the value of assets in the conduits has dried up temporary and permanent sources of funding for the conduits. In Europe, where substantial proportions of the structured securities have been placed in commercial banks, the declining value of subprime mortgages has engendered uncertainty about the quality of bank assets and contributed to problems in the interbank credit market.

This suggests that regulators and supervisors must be concerned not only about the quality and transparency of assets in the conduits, but also about the nature of the obligations and risks that the conduits pass on to banks and banking systems. In particular, they must make sure that bank managers and board members take their responsibility of having a reliable risk management system in place.

# 2. Outsourcing of risk assessment and due diligence to rating agencies and credit scoring programs

In traditional lending, the ability of individual loan officers to analyze and price risk is monitored by senior management and subjected to reputational and career disciplines. Officers that originate a disproportionate number of bad loans are invited to leave the banking business.

In many new forms of lending, responsibility for analyzing and pricing loan risk is shifted to credit scoring programs and outsourced to credit rating agencies. Because data on loan defaults develops slowly, loan officers are rewarded more for the quantity than the quality of the loans they originate. This reward structure is particularly inappropriate for low-quality loans such as subprime mortgages. The ways in which outsourcing due diligence misaligns lenders' incentives at the origination stage explain many of the problems that are surfacing in structured securitizations. Except in unusual cases when defaults surface early in the life of a loan, investors rather than originators absorb the losses generated by the underwriting mistakes.

To restore investor confidence and discipline in the securitization process, loan originators must accept the responsibility for tracking the long-term performance of their underwriting

staff and establishing systems of deferred compensation that make loan officers share in the losses generated by borrower defaults. The committee urges regulators and industry study groups to address the incentive realignment issue immediately.

### 3. The implications for the Basel Capital Accords

Basel II comes into force in many industrialized countries in 2007-2008. Basel II aims to address weaknesses in the Basel I capital adequacy framework for banks by incorporating more detailed calibration of credit risk and by requiring the pricing of other forms of risk. It assigns more responsibility to bankers to implement proper risk governance.

Despite these intentions and the meticulous preparation over a decade, including a series of quantitative impact studies (QIS), recent events challenge the accuracy and usefulness of important elements in Basel II. The standardized ratings approach makes heavy use of debt ratings assigned by credit rating agencies. The wisdom of relying on these ratings is thrown into doubt by the numerous delays credit rating agencies have shown in making appropriate downward revisions in recent months. In one notable example of delay, the senior tranche of a Special Purpose Vehicle was downgraded 17 notches overnight from a triple A rating when the credit rating agency covering the security finally acted. Such delays are consistent with the research evidence that ratings changes lag increases in market assessments of risk.

Using agencies' credit ratings for borrowers to set regulatory capital requirements for banks represents an outsourcing of bank supervisors' responsibilities. As noted above, the outsourcing of due diligence places the risk assessment task with agents who have no financial responsibility to cover losses from their mistakes. This tells us that the Basel Committee ought to reevaluate the heavy reliance on credit rating agencies in the Standardized Approach and insist that supervisors conscientiously introduce their own supplementary assessments into the process. It is also important that the Basel Committee and supervisors recognize the incentive conflict between them and the credit rating agencies. The current incentive structure entails the rating agency being paid by the issuer of the securities, which may dampen the agencies enthusiasm to highlight weaknesses in the client's financial condition.

The turmoil also reveals that the internal risk models of many banks performed poorly and underestimated the degree of risk exposure. To some extent, this reflects failure to estimate these models with observations from previous crisis periods and, thus, the difficulties of capturing low probability events in internal models created by large banks under Basel II. On these grounds the Committee urges the Basel Committee to conduct another quantitative impact study using observations from the recent turmoil.

## 4. The drying up of the interbank market in Europe in particular

Serious problems have developed in the interbank market in the Euro area and the UK. Spreads on interbank loans have increased and are higher than in the USA despite large injections of liquidity by the ECB in particular. In addition, quantity rationing has been observed.

The reasons for the differences between the US and Europe are still unclear. One possible explanation is institutional. More of the liquidity pressure has been felt in the US by the commercial paper market, whereas in the Euro zone it has affected rates in the interbank market. Liquidity shortages in the US focused on hedge-fund efforts to roll over assetbacked commercial paper rather than bank loans. As of September 6, 2007 the US commercial paper market had declined by some 300 billion dollars from its peak of 2.225 trillion in July. Most of this decline has been in the segment of the commercial paper market used to fund the subprime mortgage conduits. In the Euro area, data on the quantitative impacts and substitute sources of funding are not available, but spreads have remained persistently high despite the injection of significant funds by the ECB.

A second explanation for the persistently high interbank rates is that the European banks may have good reason to suspect that some of their number are in poor shape and must be charged correspondingly higher premiums.

A related explanation is that safety-net managers in the Euro zone have no experience in resolving cross-border bank insolvencies. Their ability to handle problem banks fairly and efficiently may end up being tested for the first time. Uncertainty will remain high until the condition of individual banks can be clarified, and authorities set out the policy guidelines they will follow.

The ECB has made significant injections of liquidity, nearly EUR 100 billion on August 9<sup>th</sup> alone, but lending indefinitely to potentially insolvent banks is likely to be a source of moral hazard problems in cross-border operations in particular.

### 5. Impact on Markets outside Western Europe and the US

Although the impact of the recent turmoil on countries outside the US and Europe has shown limited real effects to date, a sustained increase in global risk premia is bound to affect countries whose debt has been regarded as risky. In other crises, global shocks have had serious repercussions in those countries through substantial interruptions in capital flows. Although this has not occurred yet, sudden stops in capital flows could occur if European liquidity shortages persist. Authorities should recognize this possibility and strive to reduce potential vulnerabilities.

Specifically, outside of the US and Europe, increased uncertainty has led to increased exchange rate and stock price volatility in many countries and credit spreads have generally increased. There has been fewer problems observed in interbank markets than in Europe, although Central Banks have had to monitor conditions and stand ready to meet increased demand for short term liquidity which may arise.

In developing countries, like Indonesia, there is a fear that capital flow shocks could destabilize markets for foreign exchange and sovereign debt, and indirectly output and employment. Such an impact could also slow down capital account liberalization in these countries.

In Latin America spreads on sovereign debt have increased by as much as 200-300 basis points in Argentina and Venezuela but substantially less in Mexico and Brazil. Generally the stronger fiscal positions, current account surpluses and accumulated official international reserves have helped markets adjust to the increased uncertainty. Also, domestic banking systems have limited exposures to the affected foreign markets. Risks from structured products and exposures to highly leveraged institutions, such as hedge funds and private equity, are relatively low.

In Japan, interbank and commercial paper markets have operated smoothly, reflecting the abundant liquidity of the Japanese Banking system. However, the general increase in uncertainty and nervousness has contributed to the unwinding of the Yen carry trade, and significant declines in Japanese stock prices.

The unwinding of the yen carry trade has also contributed to the significant decline observed recently in the values of Australasian currencies. Also, in Australia, where securitization, structured products and hedge funds are significant, uncertainty about exposures and increased demand for liquidity have been reflected in upward pressure on interest rates in interbank markets. Several banks have shifted assets from conduits back onto balance sheets. Injection of liquidity by the Reserve Bank via its repurchase agreements (and widening the range of eligible securities) has so far smoothed the adjustment process in credit markets.