

## **Heng Swee Keat: Advances in risk management – theory and practice**

Opening address by Mr Heng Swee Keat, Managing Director of the Monetary Authority of Singapore, at the Symposium to mark the opening of RMI's new facilities, Singapore, 2 October 2009.

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Prof Tan Chorh Chuan  
Prof Tan Eng Chye  
Prof Duan Jin-Chuan  
Distinguished speakers, guests, ladies and gentlemen  
Good morning

### **Introduction**

It gives me great pleasure to join you today at the symposium which marks the opening of Risk Management Institute's (RMI) new facilities.

RMI is Singapore's first full-fledged research centre dedicated to risk management. RMI was set up three years ago. The timing could not have been more appropriate. Given the spotlight in the current financial crisis on risk management, the shift of economic weight to Asia, and NUS' standing as a global university in the heart of Asia, RMI has a major opportunity to play a prominent role in research and education on this critical topic.

### **Emerging from the current crisis**

In recent weeks, confidence has returned to financial markets. More recent forecasts for global economic growth have been revised upwards, including that for Asia.

There is palpable relief that the global economy has avoided the abyss. But some players seem to have forgotten that we have just gone through the worst financial crisis since the post-war period. The clean-up of the wreckage will take time. For example, the International Monetary Fund (IMF) recently revised its estimate of the write-downs on expected losses by financial institutions on bad assets to \$3.4 trillion.<sup>1</sup> The scale of these losses remains significant. Further, several weaknesses in the global economy continue to present risks to the sustainability of the recovery. These include the continued deleveraging by banks and households, rising unemployment, weak fiscal positions in certain economies, and a reduced buffer for further decisive intervention.

In addition, with the revival in investor confidence and generally conducive global liquidity conditions, authorities have been keeping a close watch on the asset markets. In Singapore, MAS recently decided to disallow the Interest Absorption Scheme and Interest-Only Housing Loans for private residential property lending. We will closely monitor developments in the property market and the broader economy. Our upcoming Monetary Policy review in October will continue to focus on MAS' objective of maintaining overall price stability for the medium-term.

In this climate of relief and confidence, it is also easy to lose the sense of urgency to address lessons that can be learnt from the crisis. Much remains to be done, especially in

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<sup>1</sup> IMF Global Financial Stability Report (GFSR) - Navigating the financial Challenges Ahead dated October 2009.

strengthening risk management. Each of us, as regulators, as industry participants, as research institutes, academics and researchers, has an important part to play.

### **Role of regulators**

First, there is need for global regulatory reforms. MAS is involved in discussions at the Financial Stability Board, the Basel Committee on Banking Supervision and other fora to consider proposals to strengthen the regulatory framework. Let me highlight two key areas of focus: regulatory capital framework and liquidity risk management standards.

The crisis occurred on the back of aggressive risk taking and leveraging. Risks had been under-estimated and in many cases, financial institutions were over-reliant on external credit ratings and on quantitative models. Risks were built up both on and off the balance sheets of banks. When these started to materialise, the de-leveraging effects and the steep fall in asset prices resulted in liquidity seizures in asset and funding markets. This caused major losses and writedowns of bank capital. In many cases, costly government intervention was needed to keep the financial institutions from failing.

To improve the resilience of banks, global regulators have agreed to raise the levels and quality of bank capital. Additional capital for trading book and for securitisation risks will be needed. There are on-going discussions on establishing a framework for countercyclical capital buffers and raising the quality, consistency and transparency of the Tier 1 Capital base. Other supplementary tools to contain the riskiness of banks, such as a leverage ratio are also being developed.

To address liquidity concerns, regulators are considering the introduction of a minimum global liquidity standard that includes a stressed liquidity coverage requirement underpinned by a longer term structural liquidity ratio.

MAS is involved in the discussions on both the capital and liquidity proposals and supports the broad thrust of these initiatives. As MAS' regulatory framework has generally been regarded as conservative, we are in a good position to comfortably adopt these more stringent standards.

However, we are aware that more regulation on its own is not a panacea. It would be undesirable for the regulatory pendulum to swing towards extreme conservatism and for over-prescriptive rules to severely restrict financial innovation. MAS will adopt a balanced approach and will work closely with and consult all stakeholders in implementing the new regulatory standards.

### **Role of industry participants**

Supervision has to work in concert with effective risk governance in the financial institutions. The Boards and senior management of financial institutions must take ownership and responsibility to manage risks. A report issued by the Senior Supervisors Group<sup>2</sup> in March 2008, on observations on risk management practices highlighted many risk management practices that improved the resilience of financial institutions during a crisis. Let me highlight three areas.

First, effective capital planning. Banks need to conduct a thorough and comprehensive assessment of their levels of capital. These have to be "forward-looking", taking into account the nature and level of the bank's risk, not only under "normal" business conditions, but also

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<sup>2</sup> The Senior Supervisors Group comprises senior financial supervisors from seven countries (United States, Canada, France, Germany, Japan, Switzerland, United Kingdom). It is chaired by William L. Rutledge from the Federal Reserve Bank of New York.

under conditions of stress. The level of capital has an important “signalling” effect in a crisis. Hence, banks need to develop funding strategies and contingency plans, ahead of crisis, to ensure there is adequate capital to maintain market confidence.

A second related area is stress testing. Globally, the financial industry has acknowledged that stress testing practices were insufficiently comprehensive or rigorous. Robust stress testing helps the financial institution to identify the impact of adverse events and shocks, outside of the normal environment. However, let me caution that the techniques for integrated firm-wide stress testing remain in the early stages of development and need to be further refined. Tipping points, correlations between risks, feedback loops, behaviours and interactions of market participants are difficult to anticipate and quantify. New approaches to stress tests are being considered, such as reverse stress testing, which requires a financial institution to identify scenarios of which the impact could threaten its survival. If done well, such an approach can help question assumptions, and uncover hidden risks and inter-linkages between risk factors.

Capital planning and stress testing rely heavily on quantitative techniques to measure risks. The crisis shows the limitations of Value-at-Risk (VAR) models and other quantitative techniques. Going forward, financial practitioners will have to be more critical of the assumptions behind the models, and be more prepared to apply sound judgment and reality checks. MAS will, as part of its supervisory review process, continue to engage the banks on their capital planning processes, and to evaluate whether the framework is sufficiently robust and comprehensive.

The third area that financial institutions need to do is to establish firm-wide risk management and foster an appropriate risk management culture. In this crisis, several institutions that failed were managing risks within “silos”, by organisational structure or by risk types. In terms of culture, the focus on expanding earnings needs to be matched with an equal focus on risk and control. Senior management and staff at the business lines need to comprehend, and be accountable, for the risks which emanate from their activities. Risk managers have to be empowered to call a stop to the dance even while the music is still playing. It is in this context that the recent Financial Stability Board principles on compensation have been formulated, to align compensation to prudent risk taking.

So far, I have highlighted some of the challenges facing regulators and industry participants. Academics, researchers and institutes such as RMI, play important roles in supporting the financial industry in its journey to improve risk management practices. Let me now touch on the role that RMI can play.

### **RMI's role in the aftermath of the crisis**

As a knowledge centre in financial risk management, RMI acts as the link between theory and application, bringing together researchers, risk managers and regulators to share experiences and views on risk management. I believe RMI can do more to facilitate this. Let me suggest three broad areas.

First, as researchers are removed from the fray of day-to-day action, you can step back and ask fundamental questions about risk management practices, identify gaps, and facilitate innovation in risk management techniques. I am pleased to learn about your credit rating project, which aims to provide rigour and transparency to the financial assessment of regional corporates. The value of such work is that it is grounded on sound empirical and theoretical work, with a clear focus on solving practical, impactful problems. In the same vein, RMI's regular workshops and lecture series serve as useful platforms to present findings to the industry, and to encourage two-way discussions. MAS fully supports RMI's initiatives to deepen its collaboration with the industry.

Second, as a repository of knowledge on risk management, RMI plays an important role in education. RMI has been appointed as the lead provider on risk management under the

Financial Industry Competency Standards (FICS). You have launched 50 accredited programmes across seven Risk Management job families over the past year. To support the role of Boards and senior management in risk management, I hope that RMI would consider appropriate executive programmes for Board members and senior management of financial institutions. I believe RMI can make an impact in enhancing the knowledge and capability of practitioners.

Finally, I hope RMI can provide a focal point to bring in global thought leaders and practitioners on risk management, through your flagship RMI Annual Conference. This conference has been a success. This conference will also allow RMI to showcase its contribution. This year's Annual Conference attracted over 300 local and regional participants, registering an increase in the industry's participation over the previous year. I am optimistic that you can grow this conference into a premier event on risk management in the region and globally.

## **Conclusion**

RMI's growth would not be possible without strong support from the university. I appreciate the efforts of Prof Tan Chorh Chuan and Prof Tan Eng Chye in championing the growth of RMI. RMI's new facilities is a visible commitment of this support. Equally, if not more important, is your support for cross-disciplinary research. Just as we remind financial institutions not to manage risks in silos, research efforts are more productive through inter-disciplinary collaboration. By encouraging faculty members from different parts of the universities to work together, and with industry professionals, you do much to advance RMI's leadership in financial risk management.

I congratulate RMI on the opening of its new facilities and wish Prof Duan and your colleagues every success. I wish you a fruitful symposium. Thank you.