Marzunisham Omar: Statistical science for a better tomorrow

Welcoming remarks by Mr Marzunisham Omar, Assistant Governor of the Central Bank of Malaysia (Bank Negara Malaysia), at the International Statistical Institute Regional Statistics Conference 2014 "Statistical Science for a Better Tomorrow", Kuala Lumpur, 17 November 2014.

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Good morning, distinguished guests, ladies and gentlemen.

I am pleased to welcome you to this inaugural ISI Regional Statistics Conference 2014 on "Statistical Science for a Better Tomorrow". Bank Negara Malaysia is most honoured to jointly host this event, together with the International Statistical Institute and its South East Asia Regional Network, the Department of Statistics Malaysia, and the Malaysia Institute of Statistics.

Today, we have more than 500 statistical researchers, practitioners, policymakers and users of statistics from around 40 countries. With such diversity of participants, I believe the conference provides an excellent platform for the participants to share insights on the application of statistical science for knowledge discovery, innovation and policy.

The importance of statistics *cannot* be overstated. The formulation of decisions – by individuals, businesses and especially policymakers – is as good as the statistics collected and the capacity to interpret the data. While the need for accurate and reliable statistics is common across all fields of study, two other requirements for the compilation and analysis of economic and finance-related statistics can be considered to be rather unique.

The first is timeliness, given the rapid pace in which economic and financial developments can change. For example, while policymakers were aware that trade activity had *deteriorated* during the height of the global financial crisis around October to November 2008, it was not until January 2009 that the extent in which global economic activity had *fallen off the cliff* was realised. Indeed, as financial conditions are often vulnerable to sudden shifts in sentiments and herd behaviour, the window of opportunity to take decisive policy action is often very small – potentially, just a matter of hours during periods of crisis. This is where availability of statistics on a timely manner does make a difference.

The second is the continuous re-evaluation of underlying relationships. Beyond errors in reporting and limitations in aggregation, statistical estimates of economic variables are also subject to movements in relationships amongst variables across time (the so called "structural breaks"). As a consequence, in the words of former Governor Duvvuri Subbarao of the Reserve Bank of India, *"the chance of being fooled by randomness is much higher in the assessment of economic events".* Why is this so? It is because, in the field of economics and finance, outcomes are shaped by human behaviour – which, contrary to fundamental assumptions, is not always rational. In addition, economic systems are reflexive, in the sense that beliefs about what will happen often influence what does happen.

Going forward, as the global landscape and expectations of economic agents adjust to, as yet, an unknown new normal, the demands on the timeliness and quality of data and analysis will only increase further. In addition, an economic or financial crisis often would prompt a rethink of our approach to policy-making and of relevance, a re-evaluation of the statistics we use as the basis for our decisions. In this regard, the recent Global Financial Crisis is no different. Allow me to highlight two lessons from the recent financial crisis.

First, the crisis highlighted that our understanding of the financial system was insufficient. Financial innovation had resulted in a significant increase in financial intermediation taking place outside the regulated banking sector – what is today known as shadow banking. Excessive risk-taking and leverage, by both regulated and shadow financial institutions, had significantly increased the vulnerabilities in the financial system. Focus on the stability of individual institutions alone was not sufficient. Instead, attention is required on the stability of the financial system as a whole. These underscore the importance of improving data coverage to keep pace with the constantly evolving economic and financial landscape.

Second, the unprecedented scale and scope of the crisis demonstrated that the interplay between exposures in the regulated financial system, the unregulated shadow banking system and the real economy can have interrelated implications. Financial imbalances – in the form of excessive leverage and asset price bubbles – had built up amid stable inflation prior to the crisis. Consequently, the long drawn out process of deleveraging and balance sheet repair by financial institutions, households and governments have suppressed aggregate demand amid less effective expansionary policies. In hindsight, more micro-data would have detected increasing systemic vulnerabilities in the residential property market, as well as increasing exposures among economic agents throughout the economy. To this end, more granular data would overcome the limitations of aggregated data in detecting vulnerabilities that are concentrated in selected segments of the economy and financial system.

While these challenges in totality may appear to be rather daunting, I strongly believe they are surmountable, especially with greater collaboration amongst statisticians, compilers and end-users of data. It is with this in mind that the Regional Statistics Conference was envisioned, organised and realised.

On behalf of the Local Organising Committee, I would like to take this opportunity to thank all our key partners in making this conference a reality. Special thanks to the ISI and its SEA Regional Network for choosing to have this inaugural regional conference in Kuala Lumpur. I would also like to thank Tan Sri Andrew Sheng; Professor Dr. Pedro Silva; and Mr. Agus Sudjianto, as well as all paper presenters for sharing their thoughts and experiences at the conference.

As part of our effort to encourage more involvement of young statisticians in statistical conferences and to recognise their participation in this conference, we will confer the Young Statistician's Award of the ISI-RSC 2014 at the end of this conference. There are 26 entries for 4 prizes under this award. The winners will be announced at the closing ceremony on Wednesday afternoon.

I look forward to the productive and engaging discussions during this conference, and wish you a pleasant stay in Kuala Lumpur. I shall now invite the ISI President, Professor Vijay Nair to deliver his Opening Remarks.