

Emmanuel Tumusiime-Mutebile: Advanced risk management and modeling for foreign exchange reserves

Opening remarks by Prof Emmanuel Tumusiime-Mutebile, Governor of the Bank of Uganda, at the Macroeconomic and Financial Management Institute of Eastern and Southern Africa (MEFMI) regional workshop, Kampala, 19–30 April 2010.

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The Programme Officer, Financial Sector Management
MEFMI

Distinguished resource persons

Workshop participants

Ladies and gentlemen

Good morning,

On behalf of the Bank of Uganda, it is my pleasure to welcome you all to this workshop on Advanced Risk Management and Modeling for Foreign Exchange Reserves. I wish to extend an especially warm welcome to all of the participants who have come here from outside Uganda and to wish you a productive and enjoyable stay in our country.

It is befitting at the start of this workshop to pay tribute to the outstanding work of MEFMI in building capacity for macro-economic and financial management in Eastern and Southern Africa. Many of my staff in the Bank of Uganda have benefitted from MEFMI's programmes to the extent that the Institute has made a major contribution to the building of technical capacities in the Bank. An especially valuable feature of MEFMI's programmes is that they are designed through close collaboration with the Institute's members specifically to meet their requirements for capacity building. Hence MEFMI's capacity building is genuinely demand driven; a feature which distinguishes it from the technical assistance programmes offered by many other agencies. MEFMI also provides an excellent example of the benefits to be gained from building up indigenous institutions at the regional level in Africa to serve the needs of their clients and members for technical assistance, instead of relying on the traditional donors.

The subject of this workshop is risk management and the modeling of risk. Risk is an inherent feature of human endeavours and has been since humans first walked on the earth. For much of human history, risk was simply accepted as fate: something arbitrary and inevitable in the face of which human society was helpless. Arguably, risk management began in the second half of the 17th century, when London merchants meeting in a coffee house made small contributions to a pool with which to ensure themselves against the possible loss of their vessels on the high seas, thus creating an embryonic insurance industry. Subsequent efforts to understand the nature of risk, to quantify it, however imperfectly, and to manage it, using scientific theory and empirical observation, have been integral to the growth of modern economies. This is because managing risk is essential for a rational allocation of capital among competing investment projects, which is essential for economic growth. Although the strategic objectives of management in the public sector are often different from those in the private sector, effective risk management is essential in both sectors.

The timing of the workshop is especially opportune, coming in the wake of the most severe global financial crisis in more than 50 years. The global financial crisis has provided salutary lessons for risk managers in financial institutions all over the world. Risk managers have begun to understand that financial risk is a much more complex phenomenon than had hitherto been realized, prior to the crisis, not least because risk can be generated endogenously within the financial system, rather than being simply the consequence of exogenous shocks to the financial system. The global financial crisis has demonstrated that

even those assets and financial institutions regarded as relatively risk free – investment grade securities for example – can suffer substantial losses. We now know that tail risks, the low probability risk of very large losses – sometimes referred to as “Black Swans” – occur much more often than is predicted by many statistical models. Risk managers have also learned that the liquidity of financial assets and institutions is much more fragile than they had previously thought, especially in transactions based financial systems, and that a drying up of liquidity can generate large losses in asset values.

The value of rating agencies and the ratings that they provide have also become the subject of critical review as a result of their performance in the run up to the global financial crisis. Reputable rating agencies issued Panglossian ratings for securities, such as collateralised debt obligations, the risks of which they did not properly understand. Investors who purchased these securities in the belief that they carried negligible risk suffered serious losses.

Looking ahead, it is difficult to be sanguine about the prospects for stability in global financial markets. The large structural imbalances which characterize the global economy will eventually have to be rectified; a process which could generate further volatility in asset prices, such as the exchange rates of the major international currencies. The global economic crisis itself has severely damaged public finances in many of the industrialized economies and this is bound to have consequences for the price of government debt and possibly also exchange rates in the medium to long term. As a result, the type of assets which traditionally comprise the bulk of central bank foreign exchange reserves may become much more volatile in the future.

In such circumstances the task of investment managers and risk managers will be very challenging. They need to re-evaluate their strategies for risk management and strengthen their tools and capacities for modeling risk. This workshop has been designed to contribute to building capacity to meet these challenges. The workshop will also provide regional and international experts with an opportunity to exchange views, ideas and their own experiences of managing risk.

A major focus of the workshop is the use of modeling techniques to guide risk management. Statistical models have become integral to risk management in financial institutions and among financial investors. Such models have made a crucial contribution to the development of risk management; providing it with a more rigorous, scientific foundation. But, for the reasons that I have already mentioned, some of these models are now attracting critical scrutiny from policy makers, regulators, investment managers and academics.

Notable among the statistical models is the value-at-risk model, which has become the principal tool for the management of market risk, and to some extent, the management of credit risk in many financial institutions. If this model is such a powerful tool, as its proponents claim, why did financial institutions make losses which were many times greater than the amount which value at risk models estimated was possible? Risk models and risk management in general are based on the assumption of normal market conditions, where willing buyers and sellers exist, with adequate market liquidity to enable assets to be priced in the market. What happens when the market collapses? It is clear that risk management models perform poorly in such circumstances.

Nevertheless, statistical models will continue to play an important role in risk management, despite their shortcomings, but practitioners must be wary of placing too much faith in the results of models alone. Sound judgement, based on a comprehensive knowledge of markets and a thorough understanding of economic and financial theory is an essential complement to the use of statistical models.

MEFMI has assembled an impressive line-up of international and regional resource persons to conduct this workshop. They bring a huge amount of experience and expertise in the various issues will be covered here in the next two weeks. I am confident that the workshop will help all of you who are participating to master the statistical modeling techniques which

are essential for risk management and to improve your understanding of the concepts and theories of risk management.

With these few words, I declare the workshop open. I wish you fruitful deliberations.