

Developing An Integrated Investment Risk Appetite framework

Issues and Challenges

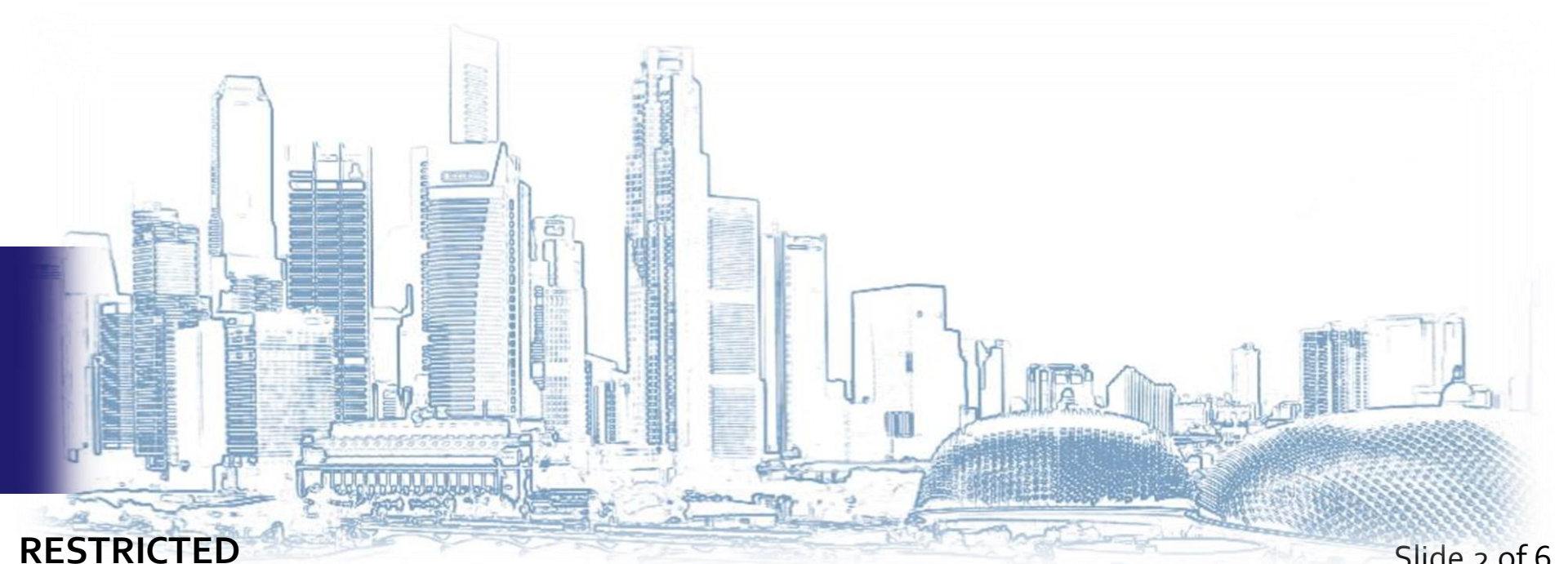
12th Central Bank Risk Managers' Conference



Monetary Authority of Singapore



- **Define the objectives**
- **Identify risks**
- **Determine appropriate risk measures**
- **Formulate risk appetite**



Define the objectives

- ***Establish the objective(s) of holding reserves***
 - ❖ *Defend currency, BOP needs, provide financial system liquidity, meet international commitments, generate returns, etc.*
 - ❖ *Specific to national context and exchange rate framework*

- ***Are the objectives aligned?***
 - ❖ *Competing interests to be prioritised*
 - ❖ *Factors to consider*



Identify risks

- ***Identify risk neutral currency position***

- ❖ *Local currency/currency of obligations as default, but other considerations (and currency choices) may apply*

- ***Identify the types of risk that can detract from your objectives***

- ❖ *Comprehensive yet relevant*
- ❖ *Legal, operational and reputational risks matter*

- ***The “curious” case of Op Risk***

- ❖ *Quantifiable to some extent, but loss data dependent*
- ❖ *Internal modelling, enhancing control culture, automation – a tradeoff or part of the same solution*
- ❖ *What is indispensable – robust, top management-supported Enterprise (and Business Continuity) Risk Management Framework*



Formulate Risk Appetite

- ***Quantify, limit, measure and monitor the risks***
 - ❖ *Limits, VaR, stress tests, risk charges, sensitivity analysis, etc.*
 - ❖ *Identify appropriate horizon for risk measures*
- ***Determine risk tolerance - more art than science***
 - ❖ *Engage key stakeholders early and often – Board, Investment and Risk Comm*
 - ❖ *Comfort level – reputation risk, public confidence, etc.*
 - ❖ *Actual hard limits*



Concluding thoughts

- *Build an investment risk appetite framework by having very clear definition of objectives*
- *Complement this with a robust enterprise-wide operational risk culture*
- *Context matters*
- *Key Stakeholder engagement is essential*

