# Introduction – Macquarie's risk management framework

The acceptance of risk is an integral part of Macquarie's businesses. Management of that risk is, therefore, critical to Macquarie's continuing profitability. Strong independent prudential management has been a key to Macquarie's success and stability over many years. Where risk is assumed it is within a calculated and controlled framework that assigns clear risk roles and responsibilities represented by 'three lines of defence'.

The primary responsibility for risk management lies at the business level, which forms the first line of defence. Part of the role of all business managers throughout the Macquarie business units is to ensure risks are managed appropriately. The risk management function forms the second line of defence and independently assesses all material risks. The third line, which includes internal audit, independently reviews and challenge the group's risk management controls, processes and systems.

Macquarie's core risk management principles have remained stable and continue to be highly effective. These are:

**Ownership of risk at the business level** – Operating Group Heads are responsible for identifying risks within their businesses and ensuring that they are managed appropriately. Before taking decisions, clear analysis of the risks is sought to ensure risks taken are consistent with the risk appetite and strategy of Macquarie. Business ownership of risk is an essential element in understanding and controlling risk.

Understanding worst case outcomes - Macquarie's risk management approach is based on examining the consequences of worst case outcomes and determining whether these are acceptable. This approach is adopted for all material risk types and is often achieved by stress testing. In particular, Macquarie's market risk framework is based primarily on the application of stress tests, rather than statistical models. The effectiveness of this approach was demonstrated over the recent past. Shocks observed in the markets generally remained within Macquarie's stress scenarios, resulting in very few of our worst case loss scenarios being exceeded. While Macquarie operates a number of sophisticated quantitative risk management processes, the foundation of its risk management approach is the informed consideration of both quantitative and qualitative inputs by highly experienced professionals.

Requirement for an independent signoff by risk management – Macquarie places significant importance on having a strong independent Risk Management Group (RMG) that is charged with signing off all material risk acceptance decisions. It is essential RMG has the capability to do this effectively and hence RMG has invested in recruiting skilled professionals, many with previous trading or investment banking experience. For all material proposals, RMG's opinion is sought at an early stage in the decision making process and independent input from RMG on risk and return is included in the approval document submitted to senior management.

## **Risk appetite setting**

Risk appetite is the nature and amount of risk that the Group is willing to accept. At Macquarie, this is expressed through the Board-approved risk appetite statement, aggregate and specific risk limits, relevant policies, and requirement to consider risk adjusted returns.

The Board reviews and endorses Macquarie's risk appetite as part of the annual corporate strategy review process.

### 1 Risk Appetite Statement

Macquarie's risk appetite statement is approved by the Board and sets out the degree of risk Macquarie is willing to take overall and for each material risk type. It also conveys the process for ensuring that risk limits (tolerances) are set at an appropriate level, monitored and reviewed. Macquarie determines its overall appetite for risk with reference to earnings and not just capital. Aggregate risk is expressed by setting a Global Risk Limit designed to ensure that in a prolonged and severe downturn, losses would be covered by earnings and surplus capital, and market confidence in Macquarie is maintained.

#### 2 Limits

These consist of specific risk limits given to various businesses and products or industry sectors as well as the Global Risk Limit that constrains Macquarie's aggregate level of risk.

In accordance with Macquarie's 'no limits, no dealing' approach, individual credit and equity exposures must also fit within approved counterparty limits. Market risk exposures are governed by a suite of individual and portfolio limits.

#### 3 Relevant policies

There are numerous Macquarie-wide policies that set out the principles that govern the acceptance and management of risks. A key policy is the *New Product and Business Approval Policy*, which is designed so that the proposed transaction or operation can be managed properly and does not create unknown or unwanted risks for Macquarie in the future.

#### 4 Requirement to consider risk-adjusted returns

At Macquarie, proposals for all significant new deals, products and businesses must contain an analysis of risk-adjusted returns.

Risk capacity is allocated to activities that earn an appropriate reward for the risk. This is a binding discipline on risk acceptance to ensure the risk-return trade-off does not deteriorate. The level of acceptable return for any proposal must also account for strategic fit and broader risk analysis (for example tail risk and concentration).

Existing businesses are subject to regular risk-return monitoring and reporting. Risk-adjusted performance metrics for each division are a significant input into performance based remuneration.