

# Risk Management Report

## Introduction – Macquarie's risk management framework

Macquarie's risk management framework is well established and proven. Some refinements have been made to the framework as Macquarie's businesses have evolved over the past years. However, 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. This approach was tested 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. Whilst 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) which 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.

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 will be covered by earnings and surplus capital and market confidence in Macquarie is maintained.

**Macquarie's risk culture is well established** – Macquarie recognises that an effective risk management framework involves more than just robust controls. Macquarie's risk culture, which is less tangible, is equally as important and at Macquarie the risk culture remains strong, and controls are respected by staff. Key aspects supporting this culture include:

- **Macquarie's businesses are fundamentally client based.** Therefore, across Macquarie, greater emphasis is placed on fostering long-term relationships with our clients and building franchise businesses as opposed to short-term profits from proprietary trading.
- **Consideration of worst-case scenarios is part of everyday risk controls rather than supplementary to them.** Even though the worst case scenarios are often in excess of what has been historically observed, they play a major role in influencing and limiting positions particularly for extreme loss events.

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**We apply limits to contingent losses from a 40 per cent gap move in stock prices. This effectively constrains trading divisions from issuing well out of the money options and encourages hedging of extreme loss events. We have over 13,000 contingent loss limits that consider a variety of worst case scenarios.**

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- **The role of risk management staff is one of active engagement in risk-taking decisions.** In accordance with the principle of risk ownership, the primary risk analysis and initial decisions to reject or accept a transaction are taken by Operating Groups. In its review of a new proposal, RMG provides an independent confirmation of the risk acceptance decision. RMG works closely with the deal team and shares the goal of making the transaction successful by requiring improvements to the transaction terms where applicable. Strong emphasis is placed on transferring knowledge to transaction teams so that the same risk management principles are applied to future proposals from an early stage.
- **Macquarie's remuneration policy for senior management encourages a long-term view in decision making.** It discourages excessive risk taking as incentives are aligned with the long-term profitability of the firm through retention of remuneration and equity participation. The principles behind our current remuneration structure have been in place for many years.