Risk is an integral part of the Macquarie Group's businesses. Management of that risk is therefore critical to Macquarie's continuing profitability. Strong independent prudential management has been a key to the Group's success over many years. Where risk is assumed, it is within a calculated and controlled framework.

Risk is owned at the business level with business heads responsible for identifying risks within their businesses and ensuring that they are managed appropriately. The aim is to give business heads a high level of entrepreneurial freedom to develop and implement business unit strategy, new products and services, new market initiatives and domestic and international alliances. However, boundaries exist in relation to credit, market, operational, regulatory and reputation risks. These areas have implications outside the businesses and are tightly controlled by the Risk Management Group (RMG). This is referred to as the "Freedom within Boundaries" philosophy.

RMG exercises centralised prudential management and ensures risks are assessed consistently from a Macquariewide perspective. RMG is mandated with identifying, quantifying and assessing all risks and setting appropriate prudential limits. RMG's authority is required for all material risk acceptance decisions.

The Head of RMG is a member of the Group's Executive Committee and reports directly to the Managing Director of the Group and the Board.

## Risk Governance Structure

Risk management is sponsored by the Board, and is a top priority for senior managers, starting with the CEO.

The Board oversees the risk appetite and profile of Macquarie and ensures that business developments are consistent with the risk appetite and goals of the Group.

There are 3 board committees that assist the Board in ensuring the appropriate focus is placed on the risk management framework.

- The Board Risk Committee ("BRC") has responsibility for ensuring an appropriate risk management framework - including the establishment of policies for the control of risk - is in place. The BRC receives information on the risk profile of Macquarie, breaches of the policy framework and external developments which may have some impact on the effectiveness of the risk management framework. It also approves significant changes to Risk Management policies and Framework.
- The Board Audit and Compliance Committee has responsibility for monitoring compliance with the risk management framework approved by the BRC for operational risk and compliance matters. In this role, the Board Audit and Compliance Committee oversees plans for the undertakings of the Internal Audit, Compliance and Credit Assurance functions.

 The Board Corporate Governance Committee has responsibility for any ethical and governance matters.

Committees exist at the executive management level to ensure the necessary elements of expertise are focused on specific risk areas. **Executive Committees** operate at both the Bank and the Group level and focus on strategic issues, operational issues and review the performance of the Group on a monthly basis. Beneath this level, other committees exist where senior specialists focus on specific risks as appropriate (e.g. Market Risk Committee, Asset and Liability Committee).

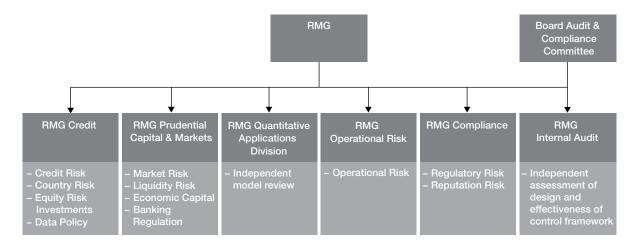
#### Risk Management Framework

The risk management framework is based on the following 5 principles:

- Independence RMG, which is responsible for assessing and monitoring risks across Macquarie, is independent of the operating areas of Macquarie, reporting directly to the Managing Director and the Board. RMG authority is required for material risk acceptance decisions;
- Centralised Prudential Management RMG's responsibility covers the whole of Macquarie.
   Therefore, it can assess risks from a Macquarie-wide perspective and provide a consistent approach across all operating areas;
- -Approval of all new business activities Operating areas cannot undertake new businesses or activities, offer new products, or enter new markets without first consulting RMG. RMG reviews and assesses risk and sets prudential limits. Where appropriate, these limits are approved by the Executive Committee and the Board;
- Continuous assessment RMG continually reviews risks to account for changes in market circumstances and Macquarie's operating areas; and
- Frequent monitoring Centralised systems exist to allow RMG to monitor credit and market risks daily. RMG staff liaise closely with operating and support divisions.

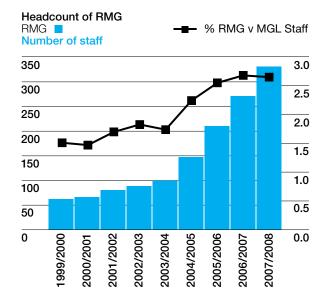
#### RMG structure and resourcing

RMG is structured into specialised teams who deal with specific risks. The Divisional split of RMG is detailed below.



Effective risk management is not only a function of disciplined processes but also of imaginative analysis by talented individuals. RMG attracts high calibre candidates. RMG recruits experienced individuals from within Macquarie and is a source of talent for Macquarie's business units when recruiting.

Growth in RMG has been consistent with overall Macquarie Group growth over the past few years. Over the last year, RMG has grown 22 per cent to 331 full-time equivalent staff whilst headcount Macquarie wide increased 24 per cent.



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As Macquarie's international offices have expanded, so have RMG staff levels based outside Australia. 36 per cent of total RMG staff (as at March 2008) were based internationally to ensure that the risks are managed and growth occurs in a controlled manner. Macquarie's international offices are subject to the same risk management controls that apply in Australia. Before an international office can be set up or undertake new activities, RMG analyses the proposed activities, infrastructure, resourcing and procedures to ensure appropriate risk management controls are in place. RMG staff monitor and routinely visit international offices to ensure compliance with prudential controls.

Consistent with the concept of business units owning risk, certain day to day operations are more appropriately discharged and embedded within the business units. The majority of operational risk and compliance functions are discharged within the business units. Divisional compliance staff ensure that day to day legal and compliance obligations are discharged at the business level whilst Business Operational Risk Managers (BORMs) are appointed by the Group Heads to be their representative on operational risk management matters, and act as their delegate in ensuring that operational risk is addressed appropriately within their business units. As at the end of March 2008, there were approximately 450 staff performing such functions within the business units. RMG provides a risk oversight role in relation to these staff members ensuring appropriate standards are adhered to. These divisional staff members have functional reporting lines to the relevant RMG divisional head.

### **New Business**

The level of innovation across Macquarie tends to be high. Therefore, it is important that all elements of the new business initiatives are well understood (particularly in terms of new risks which they involve) before commencement.

All new business initiatives must be signed off by RMG prior to commencement. The new business approval process is a formal process whereby all relevant risks (e.g. market, credit, legal, compliance, taxation, accounting, operational and systems issues) are reviewed, to ensure that the transaction or operation can be handled properly and will not create unknown or unwanted risks for Macquarie in the future. The approval of RMG, the Finance Division, the Taxation Division and other stakeholders within Macquarie are obtained prior to commencement.

The Operational Risk function within RMG oversees the process and ensures the necessary approvals are obtained.

#### Risk Management and Monitoring

The risk management framework incorporates active management and monitoring of market, credit, equity, liquidity, operational, compliance, legal and regulatory risks. It is designed to ensure policies and procedures are in place to manage the risks arising within each business unit. Application varies in detail from one part of the Group to another, however, the same risk management framework applies across all business activities without exception.

### **Equity Risk**

Risks arise on non-trading equity-like exposures, including:

- holdings in specialised funds managed by Macquarie Capital
- principal exposures taken by Macquarie Capital, including direct investments in entities external to Macquarie and seed assets for funds
- property equity, including property trusts and direct property investments
- other equity, including lease residuals and investments in resource companies.

### Equity Risk Limit

All of the above positions are subject to an aggregate Equity Risk Limit (ERL). The ERL is set by the Board with reference to the Risk Appetite Test which is described further in the Economic Capital section. In setting the limit, consideration is also given to the level of earnings, capital and market conditions. The limit is reviewed on a semi-annual basis by RMG and the results of the review are reported to Executive Committee and the Board.

Concentrations within the equity portfolio are managed by a number of additional limits approved by the Executive Committee and/or the Board. These include limits on:

- property equity investments
- -investments in the resources sector
- -lease residuals (by type of leased asset)
- acquisition of seed assets by Macquarie Capital.

### Transaction Review and Approval Process

The business unit executing the transaction is responsible for due diligence and risk analysis of each equity investment. For material deals, RMG undertakes a shadow due diligence and a comprehensive analysis of all risks and potential losses associated with the acquisition such as:

- market and credit risks
- -regulatory, capital, liquidity and compliance requirements
- -business, operational and reputation risks.

All material equity risk positions are subject to approval by RMG and by the Managing Director, Executive Committee and the Board, depending on the size and nature of the risk. RMG ensures that the transaction is correctly represented to the relevant approvers.

#### Credit Risk

Credit risk is the risk of financial loss as a result of failure by a client or counterparty to meet its contractual obligations. Credit risk arises from both lending and trading activities. In the case of trading activity, credit risk reflects the possibility that the trading counterparty will not be in a position to complete the contract once the settlement becomes due. In that situation, the credit exposure is a function of the movement of prices over the period of the contract.

Macquarie has a comprehensive and robust framework for the identification, analysis and monitoring of its credit risk exposure. This framework is maintained by the Credit team in RMG to ensure that all credit risks arising within each business are identified and analysed.

Key aspects of this framework include:

### Analysis and Approval of Exposures

MGL and MBL Boards are responsible for establishing the framework for approving credit exposures. The Boards delegate discretions to approve credit exposure to designated individuals within the Group whose capacity to exercise authority prudently has been adequately assessed.

Business units are assigned modest levels of credit discretions. Credit exposures above those levels are assessed independently by RMG and approved by senior Group and RMG staff, the Managing Director and the Boards as required.

Macquarie enforces a strict "no limit, no dealing" rule; all proposed transactions are analysed and approved by designated individuals before they can proceed.

All credit exposures are subject to annual review.

#### Independent Analysis

Specialist credit teams in RMG (e.g. geologists and engineers for Mining and Metals) provide independent analysis of credit risk exposure. The teams work closely with the business units to identify the risks inherent in Macquarie's businesses, and apply analysis appropriate to the level and nature of risks.

Macquarie has an independent Credit Assurance Function within RMG to provide assurance over the effectiveness of credit risk management throughout Macquarie. The role of the Credit Assurance Function is to liaise closely with all business units to ensure credit risks are understood and properly managed and that credit discretions are being utilised appropriately.

#### Macquarie Group Ratings

Macquarie has established a proprietary internal credit rating framework to assess counterparty credit risk. Macquarie Group (MG) ratings are used to estimate the likelihood of the rated entity defaulting on financial obligations. The MG ratings system ensures a consistent assessment of borrower and transaction characteristics across the Group and provides the mechanism for meaningful differentiation of credit risk. External ratings from rating agencies are used as supplementary analysis.

All limits and exposures are allocated a Macquarie Group (MG) rating on a 1–13 scale which broadly correspond with S&P credit ratings. Each MG rating is assigned a Probability of Default (PD) estimate. Credit limits and exposures are also allocated a Loss Given Default (LGD) ratio reflecting the estimated economic loss in the event of default occurring.

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#### Measuring and Monitoring Exposures

Credit exposures are evaluated at either their full face value (e.g. loans) or their assessed credit exposure (e.g. derivatives).

Credit exposures for derivatives are a function of market movements and are assessed by assuming that low probability (i.e. worst case) stressed market movements occur and that Macquarie has to go to the market to replace a defaulting deal at the worst possible time during the term of the transaction. The level of stress that is applied to individual markets is reviewed and approved by RMG at least every two years or when volatility or market conditions dictate.

Where trading gives rise to settlement risk, this risk is assessed at full face value of the settlement amount.

All credit exposures are monitored regularly against limits. Credit exposures which fluctuate through time are monitored daily. These include off-balance sheet exposures such as swaps, forward contracts and options, which are assessed using sophisticated valuation techniques.

To mitigate credit risk, Macquarie makes increasing use of margining and other forms of collateral or credit enhancement techniques (including guarantees and letters of credit) where appropriate.

On and off-balance sheet exposures are considered together and treated identically for approval, monitoring and reporting purposes.

A review of the Credit Portfolio analysing credit concentrations by counterparty, country, risk type, industry and credit quality is carried out and reported to Macquarie's Executive Committee quarterly and Boards semi annually.

Macquarie's policies to control credit risk include avoidance of unacceptable concentrations of risk either to any economic sector or to an individual counterparty. Policies are in place to regulate large exposures to single counterparties or groups of counterparties.

#### Loan Impairment Review

All loan assets are subject to recurring review and assessment for possible impairment. Provisions for loan losses are based on an incurred loss model, which recognises a provision where there is objective evidence of impairment at each balance date, and is calculated based on the discounted values of expected future cash flows.

Specific provisions are recognised where specific impairment is identified. The rest of the loans are placed into pools of assets with similar risk profiles and collectively assessed for losses that have been incurred but not yet identified.

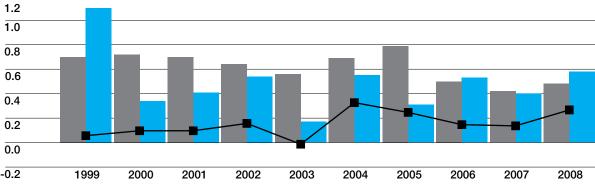
## Country Risk

Policies are in place to assist in the management of Macquarie's country risk. Countries are grouped into categories based on the country's risk profile. Before any exposure is taken in a country which is considered to be higher risk, a full review of the economic, political and operating environment is undertaken to determine the level of exposure that is considered to be acceptable.

# Ratio of provisions and impaired assets to loans, advances and leases

Collective provision to loans, advances and leases (Balance sheet) 
Net credit losses to loans, advances and leases (Income statement)
Net impaired assets to loans, advances and leases (Balance sheet)





Note: Loans assets excludes securitised mortgages, securitised Macquarie Capital loans/leases and segregated futures funds. Net impaired assets and net credit losses includes loan assets, derivatives, trading and other assets, but excludes investment securities. Please refer to note 13 of the Financial Report for further information on impaired assets.

#### Operational Risk

Macquarie defines Operational Risk as the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events. Macquarie has established procedures and controls to manage market, credit, reputation and strategic risks. The potential for failure or inadequacy in these procedures and controls would be classified as an operational risk. Operational Risk failures could lead to reputation damage, financial loss or regulatory consequences.

RMG is responsible for ensuring an appropriate framework exists to identify, assess and manage operational risk, and that resources are available to support it. It is also responsible for Macquarie's operational risk capital measurement methodology.

In general, change in Macquarie's operational risk profile is the net result of greater innovation and growth and this is offset by constant gradual adaptation and matching of the control environment to the new risks.

#### Operational Risk Management Framework

Macquarie's Operational Risk Management Framework "ORMF" is designed to identify, assess and manage operational risks within the organisation. The key objectives of the framework are as follows:

- -risk identification, analysis and acceptance;
- execution and monitoring of risk management practices; and
- -reporting and escalation of risk information on a routine and exception basis.

Businesses carry out elements of the ORMF in a manner that is tailored to their specific operational risk profile. However, to ensure consistency and minimum standards the framework includes the following mandatory elements:

- a robust change management process to ensure operational risks in new activities or products are identified, addressed and managed prior to implementation;
- a semi annual operational risk self assessment (ORSA) process to identify operational risks at the business level, assess controls and develop action plans to address deficiencies;
- recording of operational risk incidents into a centralised reporting system. Incidents are analysed to identify trends and establish lessons learnt on the effectiveness of controls;
- allocation of operational risk capital to all Macquarie businesses as a tool to further encourage positive behaviour in Macquarie's day to day management of operational risk;

- Macquarie-wide policies which require a consistent approach and minimum standards on specific operational risk matters; and
- embedded operational risk representatives in business units who act as delegates of the business manager.
   They ensure operational risks are addressed appropriately and that the ORMF is executed within their area.

Macquarie's Operational Risk Capital Framework Macquarie's framework for operational risk capital has two main elements:

- an annual scenario approach for modelling operational risk losses and to determine operational risk capital; and
- a quarterly scorecard analysis which is used to update operational risk capital between scenario analyses and as a basis for updating the allocation of capital to businesses.

Operational risk scenarios identify keys risks that, while very low in probability, may result in very high impact losses. In identifying the potential for such losses consideration is given to individual statistical distribution for each scenario, external loss data, internal loss data, risk and control factors determined by the operational risk self assessments, and the contribution of expert opinion from businesses. Results are then modelled to determine the operational risk component of regulatory capital required to be held by Macquarie at the 99.9th percentile level. Monte Carlo techniques are used to aggregate these individual distributions to determine a group-wide operational risk loss distribution.

Over time new business activity, business growth, and significant change in activity are reflected in:

- new or increased loss scenarios and/or;
- an increased loss probability.

Macquarie allocates capital to individual businesses. The capital allocation effectively rewards positive risk behaviour, and penalises increased risks. This is done using scorecards which measure changes in a number of key factors such as the size and complexity of the business, risk and control assessments, incident and exception management and governance. Quantitative statistics on detailed metrics are applied to predefined weightings and formulas to calculate a quarterly percentage change in that business's capital charge.

The quarterly change in the sum of divisional capital is also used as an estimate to update the group level capital requirement between annual assessments.

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#### Market Risk

Market risk is the exposure to adverse changes in the value of Macquarie's trading portfolios as a result of changes in market prices or volatility. Macquarie is exposed to the following risks in each of the major markets in which it trades:

- foreign exchange: changes in spot and forward exchange rates and the volatility of exchange rates;
- interest rates: changes in the level, shape and volatility
  of yield curves, the basis between different interest rate
  securities and derivatives and credit margins;
- -equities: changes in the price and volatility of individual equities, equity baskets and equity indices, including the risks arising from equity underwriting activity;
- -commodities: changes in the price and volatility of gold, silver and base metals, agricultural commodities and energy products;

and to the correlation of market prices and rates within and across markets.

It is recognised that all trading activities contain calculated elements of risk taking. The Group is prepared to accept such risks provided they are independently and correctly identified, calculated and monitored by RMG, and reported to senior management on a daily basis.

#### Trading Market Risk

RMG monitors positions within Macquarie according to a limit structure which sets limits for all exposures in all markets. Limits are for both individual trading desks and divisions as well as in aggregate, so that the risk profile approved for each business remains within Macquarie's aggregate level of risk. Limits are approved by members of management with appropriate authority for the size and nature of the risk, and remain the ultimate responsibility of the business. Macquarie adheres to a "No Limits, No Trading" policy. If a product or position has not been authorised by RMG, that product or position cannot be traded. Material breaches of the approved limit structure, for both businesses and in aggregate, are communicated monthly to the Boards.

RMG sets three complementary limit structures:

- Contingent Loss Limits: a wide range of price and volatility scenarios, including comprehensive worst case, or stress, scenarios. Worst case scenarios include market movements larger than have occurred historically. Multiple scenarios are set for each market to capture the non-linearity and complexity of exposures arising from derivatives;
- Position Limits: volume, maturity and open position limits are set on a large number of market instruments and securities in order to constrain concentration risk and to avoid the accumulation of risky, illiquid positions;

 Value at Risk (VaR) Limits: statistical measure that determines the potential loss in trading value at both a business and aggregate level.

The risk of loss from incorrect or inappropriate pricing and hedging models is mitigated by the requirement for all new pricing models to be independently tested by the specialist Quantitative Applications Division within RMG.

### Aggregate Measures of Market Risk

Aggregate market risk is constrained by two risk measures, Value at Risk (VaR) and the Macro-Economic-Linkages (MEL) scenario. The VaR model predicts the maximum likely loss in Macquarie's trading portfolio due to adverse movements in global markets over holding periods of one and ten days. The MEL scenario captures simultaneous, worst case contingent loss movements across all major markets. Whereas MEL focuses on extremely large price movements which are considered worst case, VaR focuses on unexceptional price movements so that it does not account for losses that could occur beyond the 99 per cent level of confidence.

#### Macro-Economic-Linkages (MEL)

MEL calculates Macquarie's total market risk exposure to simultaneous stresses across global markets. MEL utilises the contingent loss limit structure to model several scenarios extrapolated from historical crisis events and global market correlations. Each scenario includes a primary shock to either equity, foreign exchange or interest rate markets as well as cross-market effects in corporate margins, metals and commodities. MEL is Macquarie's preferred internal measure of aggregate market risk because of the severity of the shocks applied and the ability for scenarios to develop with changing market dynamics. MEL is monitored and reported to senior management daily and regularly reviewed by RMG to ensure the measure remains appropriate for changing market conditions and the risks to which Macquarie is exposed

The period beginning July 2007 has been characterised by large market disruptions. Credit market turbulence was accompanied by significant volatility and diminished liquidity in foreign exchange, equity, precious metal and energy markets. The MEL approach described above already emphasised the cross-market effects of major market movements. In response to the recent market conditions RMG has expanded the scenarios to include a "Market Contagion" scenario.

The "Market Contagion" scenario considers the impact of a stock market crash, with simultaneous effects in global foreign exchange, interest rates and corporate margins. Downward shocks of up to 30 per cent are applied to equity markets and hedge fund values, foreign exchange and precious metals are moved by 5 per cent, interest rates are shifted by up to 200 basis points, corporate margins are shocked by 50 to 500 basis points and energy, agricultural commodities and base metals are shocked by up to 20 per cent. With associated moves in implied volatilities and correlations, the "Market Contagion" scenario accounts for all the significant markets to which Macquarie is exposed. The assumptions in this scenario are considerably more severe than the conditions that have prevailed in the recent period of market volatility. Although the new 'Market Contagion' scenario is very conservative, exposure to the MEL scenarios remained only a small percentage of the Group's capital throughout the financial year.

### Value at Risk (VaR)

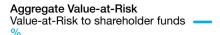
VaR provides a statistically based summary of overall market risk in the Group. The VaR model uses a Monte Carlo simulation to generate normally distributed price and volatility paths for approximately 1000 benchmarks, based on three to ten years of historical data. Each benchmark represents an asset at a specific maturity, for example one year crude oil futures or spot gold. The benchmarks provide a high level of granularity in assessing risk, covering a range of points on yield curves and forward price curves, and distinguishing between similar but distinct assets; for example crude oil as opposed to heating oil, or energy products traded at different locations. Exposures to

individual equities within a national market are captured by specific risk modelling incorporated into the VaR model. The benchmarks are correlated based on the same historical data

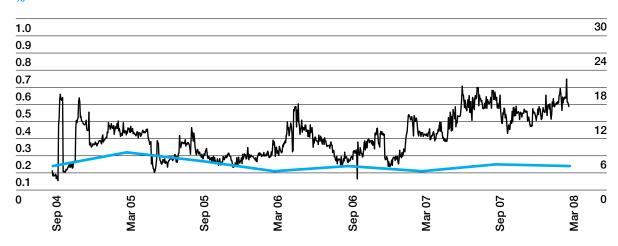
The integrity of the VaR model is tested against daily profit or loss and reported to APRA quarterly. At the group level, the one day loss has never exceeded the one day VaR result.

Over a long period of time, market risk, as measured by VaR, has been modest in comparison to capital and earnings. VaR increased during the current financial year, reflecting a general increase in the range of activity and the volume of trading undertaken by all businesses. In particular, business activity has expanded internationally, as Macquarie entered new energy markets throughout North America and capitalised on equity market conditions in Asia. However, VaR as a percentage of shareholder funds has been stable over recent years. The graph below shows the daily VaR and the six month average VaR as a percentage of the six month average shareholder funds.

Although VaR remains concentrated in the equities market, the past year has seen an increase in Macquarie's exposure to the commodities sector. In addition to new energy businesses, there was increased trading in oil, freight and agricultural commodities as trading businesses capitalised on market conditions and serviced large client trades. Trading in debt and structured securities has historically not been a large business for Macquarie and this continued in the past year. The reported VaR is also affected by changes in market volatility and correlations, and by ongoing enhancements to the VaR model.



— Value-at-Risk (1-day 99%)



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#### Value-at-Risk (VaR) figures for year ended 31 March

( , 3						
	2008	2008	2008	2007	2007	2007
	Average	Maximum	Minimum	Average	Maximum	Minimum
	\$m	\$m	\$m	\$m	\$m	\$m
Equities	7. 45	15. 30	4. 37	7. 91	13. 67	3. 39
Interest rates	3. 22	5. 51	2. 12	2. 13	3. 33	1. 26
Foreign exchange and bullion	3. 15	7. 77	1. 25	2. 19	4. 72	1. 39
Commodities	10. 80	17. 70	3. 73	3. 50	8.00	1. 43
Aggregate	13. 55	19. 54	8. 69	8. 44	15. 22	2. 18

#### Trading Revenue

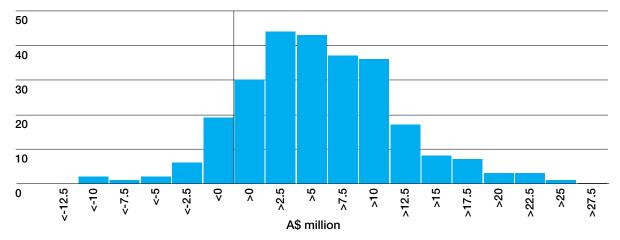
The effectiveness of Macquarie's risk management methodology can be measured by the Group's daily trading results. Particularly during periods of highly volatile market activity, as witnessed from August 2007 onwards; the small quantity and magnitude of daily losses incurred by Macquarie is indicative both of an effective risk management framework and business operations. Macquarie derives the majority of its trading revenue from servicing customer deal flow rather than proprietary position taking. The focus on customer flow has shown consistent profits and low volatility in trading results whilst allowing growth in those markets where significant gains can be realised. This is evident in the histogram below which shows that Macquarie made profit on 228 out of the 257 trading days.

### Non-Trading Market Risk

Macquarie also has exposure to non-traded interest rate risk, generated by banking products such as loans and deposits. Interest rate exposures, where possible, are transferred into the trading books of Group Treasury and managed under market risk limits. However, some residual interest rate risks remain in the banking book due to factors outside the interest rate market, or due to timing differences in accumulating exposures large enough to hedge. These residual risks in the banking book are not material but are nevertheless monitored and controlled by RMG and reported to senior management regularly.

## Daily trading profit and loss

Number of days



#### **Economic Capital**

Macquarie has developed an economic capital model that is used to quantify the Group's aggregate level of risk. The economic capital framework complements the management of specific risk types such as equity, credit, market and operational risk by providing an aggregate view of the risk profile of the Group.

The economic capital model is used to support business decision-making, and has three main applications:

- capital adequacy assessment
- risk appetite setting
- risk-adjusted performance measurement.

## Capital Adequacy Assessment

Macquarie assesses capital adequacy for both MGL – the Group overall – and MBL – the Banking Group. In each case, capital adequacy is assessed on a regulatory basis and on an economic basis, with capital requirements assessed as follows:

	Economic	Regulatory
MBL	Internal model, covering just exposures of the Banking Group	Capital to cover risk- weighted assets and regulatory deductions, according to APRA's banking prudential standards
MGL	Internal model, covering all exposures of the Group	Bank regulatory capital requirement as above plus economic capital requirement of the Non-Banking entities.

Economic capital adequacy means an internal assessment of capital adequacy, designed to ensure Macquarie has sufficient capital to absorb all but the most extreme losses, thereby providing creditors with the required degree of protection.

Potential losses are quantified using the Economic Capital Adequacy Model (ECAM). These potential losses are compared to the capital resources available to absorb loss, consisting of book equity and eligible hybrid equity. Earnings are also available to absorb losses, however only a fraction of potential earnings is recognised as a buffer against losses.

The ECAM quantifies the following types of risk:

- -equity risk
- credit risk
- operational risk
- traded market risk
- non-traded market risk (i.e. interest rate risk in the banking book)
- liquidity risk.

It also measures the risk of decline in value of assets held as part of business operations, e.g. fixed assets, goodwill, capitalised expenses and certain minority stakes in associated companies or stakes in joint ventures.

The overall *regulatory* capital requirement of the non banking entities within the Macquarie Group agreed with APRA, is determined by the ECAM, as noted in the table to the left. The regulatory capital adequacy of MGL as at March 2008 is set out below.

Macquarie Group Limited – Regulatory capital position 31 March 2008
Banking Group ■ Non-Banking Group ■

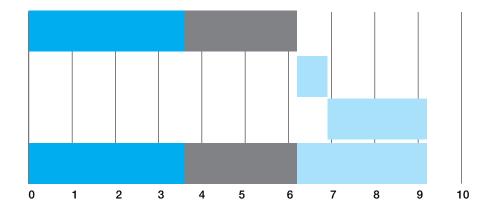
\$ billion

Minimum capital requirement

Buffer for volatility

Growth and strategic flexibility

Regulatory capital position



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MGL is currently well capitalised – a substantial regulatory capital surplus exists. An element of this surplus is set aside as a buffer against volatility in the drivers of capital adequacy – for example volatility in foreign exchange rates may alter the capital requirement by changing the Australian Dollar value of assets. The remaining surplus is available to support growth and provide strategic flexibility. Capital raisings in 2006 and 2007, significant retained earnings and the contributions of dividend reinvestment plans and other schemes have contributed to the strong capital position.

The Tier 1 and total capital ratios for the Banking Group as at 31 March 2008 were 12.4 per cent and 17.7 per cent respectively.

The capital adequacy results are reported to Board and senior management on a regular basis, together with projections of capital adequacy under a range of scenarios.

#### Risk Appetite Setting

Macquarie's risk appetite is expressed through the risk limit framework. This consists of the specific risk limits given to various businesses and products or industry sectors and also a Global Risk Limit which constrains the aggregate level of risk. The Global Risk Limit is set to protect earnings and ensure we emerge from a downturn with sufficient capital to operate.

Aggregate risk is broken down into two categories:

- Business risk, meaning decline in earnings through deterioration in volumes and margins due to market conditions; and
- Potential losses, meaning potential credit losses, writedowns of equity investments, operational risk losses and losses on trading positions.

Potential losses are quantified using a version of the economic capital model.

Business risk is captured via a group-wide scenario analysis process that produces an assessment of earnings capacity in a severe downturn scenario.

Aggregate risk is compared to the anticipated level of earnings plus surplus regulatory capital in the Risk Appetite Test.

A principal use of the risk appetite test is in setting the *Equity Risk Limit (ERL)*. This limit constrains Macquarie's aggregate level of risk arising from principal equity positions, managed fund holdings, property equity investments, lease residuals and other equity investments. Any increases in the ERL are sized to ensure that even under full utilisation of this limit, and allowing for growth in other risk types, the requirements of the Risk Appetite Test will be met.

#### Risk-adjusted Performance Measurement

At Macquarie, proposals for all significant new deals, products and businesses must contain an analysis of risk-adjusted returns, using methodology set out by RMG. These returns are considered together with other relevant factors by Executive Committee and Board in assessing these proposals and thus are one element of discipline in the risk acceptance process.

Risk-adjusted performance metrics for each business unit are prepared on a regular basis and distributed to Operations Review Committee and the Board as well as to business units. Risk-adjusted performance metrics for each business unit are a significant input into performance based remuneration.

#### Liquidity Risk

Liquidity risk is the risk that the Group is unable to meet its financial obligations as they fall due, which could arise due to mismatches in cash flows. Macquarie's liquidity risk management framework ensures that both MBL and MGL are able to meet their funding requirements as they fall due under a range of market conditions. The primary liquidity objective is to fund in a way that will facilitate growth (and income) in core businesses under a wide range of market conditions.

The Group Asset and Liability Committee (ALCO) assists the Executive Committees with oversight of asset and liability management (including liquidity risk management). The Group's liquidity policies are approved by Board after endorsement by ALCO and the Executive Committee.

Funding and liquidity management is performed centrally by Group Treasury, with oversight from the Asset and Liability Committee (ALCO). Group Treasury manage liquidity on a daily basis and provides regular reports to ALCO, the Executive Committees and Boards.

RMG provides independent prudential oversight of liquidity risk management, including the independent validation of liquidity scenario assumptions, liquidity policies, and the required funding maturity profile.

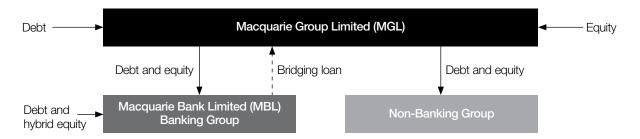
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#### Liquidity Management

The Group is primarily funded through two entities – MBL and MGL:

- -MGL provides funding to the Non-Banking Group and limited funding to some MBL Group Subsidiaries. Any funding provided by MGL to the MBL Group is subject to internal limits and is transacted on commercial terms.
- $-\mathsf{MBL}\ \mathsf{provides}\ \mathsf{funding}\ \mathsf{to}\ \mathsf{the}\ \mathsf{MBL}\ \mathsf{Group}\ \mathsf{and}\ \mathsf{as}\ \mathsf{part}\ \mathsf{of}\ \mathsf{the}\ \mathsf{restructure}\ \mathsf{provided}\ \mathsf{a}\ \mathsf{bridge}\ \mathsf{loan}\ \mathsf{to}\ \mathsf{MGL}.$

The high level funding relationships in the Group are shown below:



Macquarie Group Limited ("MGL")

The MGL liquidity policy outlines the requirements for the entire Group excluding Macquarie Bank Limited (see below for details). The policy requires MGL to meet all of its repayment obligations for the next twelve months with no access to wholesale funding markets.

Reflecting the longer term nature of the asset profile, MGL is funded with a mixture of capital and long term wholesale funding. The funding profile allows MGL to meet all repayment obligations for 12 months with no access to funding markets.

Macquarie Bank Limited ("MBL")

The MBL liquidity policy outlines the liquidity requirements for Macquarie Bank only. The policy requires that core assets and liquidity buffers are funded with deposits and core borrowings. Specified percentages of borrowings must have maturities beyond six and twelve months and a limit is set on the maximum percentage of borrowings maturing within the next three months and in any given month.

The Bank models liquidity scenarios over a twelve month timeframe displaying various degrees of constrained capital markets access. The objective of this modelling is to determine MBL's capacity for asset growth whilst meeting all repayment obligations over the next twelve months. The modelling includes twelve month liquidity scenarios significantly more drastic than the conditions that have prevailed since August 2007.

## continued

Group Treasury maintains portfolios of highly liquid assets in both MBL and MGL to ensure adequate funding is available under all conditions. These liquid assets are held to cover both known and contingent sources of funding outflows. The assets are predominantly held in the most liquid asset classes – short dated interbank deposits and stock eligible for repurchase with Central Banks.

Group Treasury and RMG undertake regular reviews of the liquidity characteristics of the Group's balance sheet. This provides an understanding of the liquidity characteristics of assets and liabilities against a backdrop of changing market conditions. The analysis ensures that the balance sheet is able to be appropriately funded and the liquidity ramifications of market moves are clearly understood.

In response to the current funding market disruption, the Group has increased its level of liquid asset holdings to \$18.3 billion as at 31 March 2008 (31 March 2007: \$6 billion). In addition to the liquid asset holdings, MBL has other trading assets, many of which are liquefiable at short notice.

As at 31 March 2008, Macquarie's credit ratings were as follows:

#### Macquarie Group Limited

#### Macquarie Bank Limited

	·			•		
	Short-term	Long-term	Outlook	Short-term	Long-term	Outlook
Fitch Ratings	F-1	А	Stable	F-1	A+	Stable
Moody's Investors Service	P-1	A2	Stable	P-1	A1	Positive
Standard & Poor's	A-2	A-	Stable	A-1	А	Stable

### Legal & Compliance Risk

Macquarie actively manages legal and compliance risks to its businesses. Legal and compliance risks include the risk of breaches of applicable laws and regulatory requirements, actual or perceived breaches of obligations to clients and counterparties, unenforceability of counterparty obligations and the inappropriate documentation of contractual relationships.

Each of the Group's businesses is responsible for developing and implementing its own legal risk management and compliance procedures. RMG assesses compliance risk from a Group-wide perspective and works closely with legal, compliance and prudential teams throughout Macquarie to ensure compliance risks are identified and appropriate standards are applied consistently to manage these compliance risks. The development of new businesses and regulatory changes, domestically and internationally, are key areas of focus within this role.

RMG performs an oversight role to the divisional compliance staff to ensure appropriate standards are adhered to.

#### Reputational Risk

All activities have elements of reputation risk embedded. Managing reputation risk is an essential role of senior management as it has the potential to impact earnings and access to capital. Macquarie seeks to manage and minimise reputation risk through its corporate governance structure and risk management framework.

Macquarie operates under a strong corporate governance structure consistent with the regulatory requirements of various regulators including ASIC and APRA. Goals and Values incorporating a clear code of ethics are communicated to all staff and Integrity Officers are in place to deal with potential issues of integrity.

Business units take ownership of risk, including reputation risk. In addition, a robust, independent risk management framework incorporates active management and monitoring of risks arising within the Group. The implementation of this framework by RMG is a major mitigant to reputation risk.

The various policies, procedures and practices in place aim to minimise reputation risk and regular reporting to the Executive Committees and Boards includes detail on reputational risk issues as appropriate.

The direct losses arising from reputational risk (such as loss of mandates and regulatory fines) are taken into account in the operational risk capital model.

## Internal Audit

Internal Audit provides independent assurance to senior management and the Board on the adequacy and effectiveness of Macquarie's financial and risk management framework. Internal Audit forms an independent and objective assessment as to whether risks have been adequately identified, adequate internal controls are in place to manage those risks and those controls are working effectively. Internal Audit is independent of business management and of the activities it reviews. The Head of Internal Audit is jointly accountable to the Board Audit and Compliance Committee (BACC) and the Head of RMG and has free access at all times to the BACC.

#### Basel II

In December 2007, Macquarie Bank Ltd sought, and was accredited by APRA to operate as an advanced bank for credit (Foundational Internal Ratings Based approach) and operational risk (Advanced Measurement Approach). These advanced approaches place a higher reliance on a bank's internal capital measures and therefore require a more sophisticated level of risk management and risk measurement practices.