# Risk factors



The following describes some of the risks that could affect Rio Tinto. There may be additional risks unknown to Rio Tinto and other risks, currently believed to be immaterial, could turn out to be material. These risks, whether they materialise individually or simultaneously, could significantly affect the Group's business and financial results. They should also be considered in connection with any forward looking statements in this document and the cautionary statement on page 13.

Rio Tinto's overriding corporate objective is to maximise long term shareholder value through responsible and sustainable investment in mining and related assets. The directors recognise that creating shareholder value is the reward for taking and accepting risk.

The directors have established a process for identifying, evaluating and managing the significant risks faced by the Group.

The following highlight the Group's exposure to risk without explaining how these exposures are managed and mitigated or how some risks are also potential opportunities.

## Acquisitions

The Group has grown partly through the acquisition of other businesses and most notably through the acquisition of Alcan Inc. for US$38 billion during 2007. Business combinations commonly entail a number of risks and Rio Tinto cannot be sure that management will be able to effectively integrate businesses acquired or generate the cost savings and synergies anticipated. Failure to do so could have a material and adverse impact on the Group's costs, earnings and cash flows. Furthermore, the Group may, under the terms of the acquisition, be liable for the past acts or omissions of the acquired businesses in circumstances where the price paid does not adequately reflect the eventual cost of these liabilities.

## Divestments

Following the acquisition of Alcan the Group undertook a strategic review which has highlighted approximately US$30 billion of potential divestments and has announced a target of US$15 billion. The Group intends to explore options for the sale of a shortlist of assets but any sales would be value driven and dependent on price. The amount and timing of sale proceeds that might eventually be realised is subject to considerable uncertainty and the Group cannot anticipate by when and by how much its borrowings might be reduced.

## Economic conditions

Commodity prices, and demand for the Group's products, are cyclical and influenced strongly by world economic growth, particularly that in the US and Asia. The Group's normal policy is to sell its products at prevailing market prices. Commodity prices can fluctuate widely and could have a material and adverse impact on the Group's asset values, revenues, earnings and cash flows.

The strong underlying economic conditions and commodity prices have led to a rapid growth in demand for technical skills in mining, metallurgy and geological sciences, and for materials and supplies related to the mining industry, causing skills and materials shortages. The retention of skilled employees, the recruitment of new staff and the purchasing of materials and supplies may lead to increased costs, interruptions to existing operations and to delays in new projects.

Further discussion can be found on page 14, Business environment, markets and regulations, and on page 55, commodity prices.

## Exchange rates

The Group's asset values, earnings and cash flows are influenced by a wide variety of currencies due to the geographic diversity of the Group's sales and areas of operation. The majority of the Group's sales are denominated in US dollars. The Australian, Canadian and US dollars are the most important currencies influencing costs. The relative value of currencies can fluctuate widely and could have a material and adverse impact on the Group's asset values, costs, earnings and cash flows. Further discussion can be found under, Exchange rates, reporting currencies and currency exposure on page 54.

## Exploration and new projects

The Group seeks to identify new mining properties through an active exploration programme. The Group has also undertaken the development or expansion of other major operations. There is no guarantee, however, that such expenditure will be recouped or that existing ore reserves will be replaced. Failure to do so could have a material and adverse impact on the Group's financial results and prospects. In particular, Rio Tinto has commenced or recommenced exploration for and development of new projects in a number of new countries which may increase risks around land and resource tenure.

The Group develops new mining properties and expands its existing operations as a means of generating shareholder value. Unanticipated delays and project execution complications along with increasing regulatory, environmental and social approvals can result in significant increases in construction costs and/or significant delays in construction. These increases could materially and adversely affect the economics of a project and, consequently, the Group's asset values, costs, earnings and cash flows.

## Energy cost and supply

The Group's operations are energy intensive and, as a result, the Group's costs and earnings could be adversely affected by rising energy costs or by energy supply interruptions. The following factors could materially adversely affect the Group's energy position: the unavailability of energy or fuel due to a variety of reasons including fluctuations in climate, significant increases in costs of supplied electricity or fuel, interruptions in energy supply due to equipment failure or other causes, and the inability to extend contracts for the supply of energy on economical terms.

## Greenhouse gas emissions

Rio Tinto's smelting and mineral processing operations are energy intensive and depend heavily on coal, oil, diesel and gas. Increasing regulation of greenhouse gas emissions, including the progressive introduction of carbon emissions trading mechanisms, in numerous jurisdictions in which the Group operates could adversely impact access to, and cost of, the Group's energy supply. Regulation of greenhouse gas emissions in the jurisdictions of the Group's major customers could also have an adverse effect on the demand for the Group's products.

## Interest rate fluctuations

Increases in benchmark interest rates will likely increase the interest cost associated with the Group's debt and will increase the cost of future borrowings, which could harm the Group's earnings and financial condition.

## Ore reserve estimates

There are numerous uncertainties inherent in estimating ore reserves and assumptions that are valid at the time of estimation may change significantly when new information becomes available.

Changes in the forecast prices of commodities, exchange rates, production costs or recovery rates may change the economic status of reserves and may, ultimately, result in the reserves being restated. Such changes in reserves could impact on depreciation and amortisation rates, asset carrying values, deferred stripping calculations and provisions for close down, restoration and environmental clean up costs. Further discussion can be found under Ore reserve estimates on page 57.

## Political and community

The Group has operations in jurisdictions having varying degrees of political and commercial instability. Political instability can result in civil unrest, expropriation, nationalisation, renegotiation or nullification of existing agreements, mining leases and permits, changes in laws, taxation policies or currency restrictions.

Commercial instability caused by bribery and corruption in their various guises can lead to similar consequences. Any of these can have a material adverse effect on the profitability or, in extreme cases, the viability of an operation.

Some of the Group's current and potential operations are located in or near communities that may now, or in the future, regard such an operation as having a detrimental effect on their economic and social circumstances. Should this occur, it may have a material adverse impact on the profitability or, in extreme cases, the viability of an operation. In addition, such an event may adversely affect the Group's ability to enter into new operations in the country.

## Defined benefit pension plans

Certain of the Group's businesses sponsor defined benefit pension plans. If the assets of these pension plans do not achieve expected investment returns for any fiscal year, such deficiency would result in one or more charges against the Group's earnings. In addition, changing economic conditions, poor pension investment returns or other factors may require the Group to make substantial cash contributions to these pension plans in the future, preventing the use of such cash for other purposes.

## Unions and labour disputes

Some of the Group's employees are represented by labour unions under various collective labour agreements. The Group may not be able to satisfactorily renegotiate its collective labour agreements when they expire. In addition, existing labour agreements may not prevent a strike or work stoppage at its facilities in the future, and any such work stoppage could have a material adverse effect on the Group's earnings and financial condition.

## Technology

The Group has invested in and implemented information system and operational initiatives. Several technical aspects of these initiatives are still unproven and the eventual operational outcome or viability cannot be assessed with certainty. Accordingly, the costs and benefits from these initiatives and the consequent effects on the Group's future earnings and financial results may vary widely from present expectations.

## Land and resource tenure

The Group operates in several countries where title to land and rights in respect of land and resources (including indigenous title) may be unclear and may lead to disputes over resource development. Such disputes could disrupt relevant mining projects and/or impede the Group's ability to develop new mining properties.

## Health, safety and environment

Rio Tinto operates in an industry that is subject to numerous health, safety and environmental laws and regulations as well as community expectations. Evolving regulatory standards and expectations can result in increased litigation and/or increased costs all of which can have a material and adverse effect on earnings and cash flows.

## Mining operations

Mining operations are vulnerable to a number of circumstances beyond the Group's control, including natural disasters and unexpected geological variations. These can affect costs at particular mines for varying periods. Mining, smelting and refining processes also rely on mining inputs. Appropriate insurance can provide protection from some, but not all, of the costs that may arise from unforeseen events. Disruption to the supply of key inputs, or changes in their pricing, may have a material and adverse impact on the Group's asset values, costs, earnings and cash flows.

## Rehabilitation

Costs associated with rehabilitating land disturbed during the mining process and addressing environmental, health and community issues are estimated and provided for based on the most current information available. Estimates may, however, be insufficient and/or further issues may be identified. Any underestimated or unidentified rehabilitation costs will reduce earnings and could materially and adversely affect the Group's asset values, earnings and cash flows.

## Non managed projects and operations

Where projects and operations are controlled and managed by the Group's partners, the Group may provide expertise and advice, but it cannot guarantee compliance with its standards and objectives. Improper management or ineffective policies, procedures or controls could not only adversely affect the value of the related non managed projects and operations but could also, by association, harm the Group's other operations and future access to new assets.

## Regulation

The Group is subject to extensive governmental regulations in all jurisdictions in which it operates. Operations are subject to general and specific regulations governing mining and processing, land tenure and use, environmental regulations (including site specific environmental licences, permits and statutory authorisations), workplace health and safety, trade and export, corporations, competition, access to infrastructure, foreign investment and taxation. Some operations are conducted under specific agreements with respective governments and associated acts of parliament. Changes to any regulation or agreement may have an adverse effect on the profitability and viability of an operation.