3.B Capitalisation and indebtedness

Not applicable.

3.C Reasons for the offer and use of proceeds

Not applicable.

3.D Risk factors

Risk management

Effective management of risk provides confidence to all our stakeholders in the Group’s ability to meet strategic objectives in alignment with our values - Safety, Teamwork, Respect, Integrity and Excellence.

Emerging risks
As we enter a new era of complexity, we expect to experience increasing uncertainty from the interplay of three global forces; geopolitics, technology and society.

There remain significant implications for the Group that arise from ever-growing geopolitical tensions impacting market sentiment. Rising trade tensions between global centres of demand and supply, geopolitical frictions such as the Hong Kong crisis, and deteriorating corporate balance sheets have the potential to slow global growth and impact demand for our products. This in turn could affect Group earnings. Additionally, as not all societies have benefited equally from globalisation, there is an increasing focus on resource nationalism. Global economic conditions remained uncertain throughout 2019 due to escalated trade tensions and heightened geopolitical instability. This combination created market volatility.

Advances in technology bring both opportunities and threats in the medium term. Digital connectivity, and intelligent systems supported by advanced analytics and artificial intelligence, are expected to drive the fourth stage of industrialisation. We are acutely aware that with increasing reliance on technology comes a necessity to continue to enhance our cyber security.

In the longer term, we see societal expectations around the impact of our business on the local economy, communities and environment continuing to rise. There has also been an increase in focus by investment firms on environmental, social and governance (ESG) issues when considering their investment criteria. Climate change constitutes an important part of the ESG framework. Climate risks and opportunities have formed part of our strategic thinking and investment decisions for over two decades. Our climate change report explains our approach to governance and risk management in this area and sets out our 2030 targets and our ambition to reach net zero emissions by 2050 across our operations.

There remain certain threats, such as natural disasters and pandemics where there is limited capacity in the international insurance markets to transfer such risks. We monitor closely such threats, and develop business resilience plans. We are currently closely monitoring the potential short and medium-term impacts of the Covid-19 virus, including for example supply-chain, mobility, workforce, market and trade flow impacts, as well as the resilience of global financial markets to support recovery. Any longer term impacts will also be considered and monitored, as appropriate.

How we manage risk

Our risk policy and standards commit us to manage risks in a proactive and effective manner. At Rio Tinto, effective risk management requires:

- Identifying and evaluating risks that matter most in achieving strategic objectives, so resources can be prioritised in the most efficient and effective way
- Effective communication of risk management information to decision makers across the Group, so we can respond at the right level of the organisation
- Embedding risk awareness into all decision-making processes to support leaders in managing risks proactively and effectively to improve business performance by either creating or protecting value
- Clearly defined roles and responsibilities for risk management.

Our process for identifying, evaluating, planning, communicating, and managing material business risks is designed to manage uncertainty and, where appropriate, to accept a degree of risk to generate returns. We have an enterprise-wide risk management information system where all material risks, controls and actions are documented and kept current for managing and reporting purposes.

All of our employees and business leaders are responsible for identifying, evaluating and managing risks. Risk management is a key accountability and performance area for our leaders. Our Risk team supports the understanding and management of risks, at all levels of the business. They provide a framework for managing and reporting material risks and support the Risk Management Committee in escalating key issues to the Executive Committee or to the Board, if appropriate.

Roles and responsibilities for risk management in Rio Tinto		
Oversight	**Board**	• Determines the nature and extent of risks that the organisation is willing to take in order to meet our strategic objectives. • Oversees the risk management process and confirms that management's strategies are within the Board's risk appetite and tolerances.
	Board committees	• Monitor and review the maturity and effectiveness of our risk management framework. • Review management reports on the strategies and controls applied to any material business risks identified within the committees' scope.
Third line	**Group Internal Audit**	• Provides independent and objective assurance of the effectiveness of the risk management framework.
Second line (Group level)	**Executive Committee**	• Sets and reviews risk management strategies for risks to the Group's business strategy, planning and investment decisions. • Defines the Group's risk tolerances around key business objectives and seeks Board endorsement of those tolerances. • Reviews the Group-level risks at least three times per year and approves material provided to the Board and its committees. • Approves new or revised Group-level controls (policies, standards and procedures) that support the management of material risks.
	Risk Management Committee	• Monitors and reviews the effectiveness of the risk management framework across the Group's operations and functions on behalf of the Executive Committee and Board. • Provides oversight for the management of material Group-level risks and associated management responses.
	Risk function	• Coordinates and supports Group-level risk management activity and reporting. • Embeds risk management into core business processes, such as planning and capital allocation. • Builds risk management capability and a risk-aware culture throughout the Group.
	Group's standard-setters	• Develop, maintain and communicate Group-level controls, including policies, standards and procedures. • Assure management's (product groups and Group functions) compliance to Group-level controls and the control effectiveness in managing risk.
First line (Operational level)	**Senior leadership in product groups and functions**	• Manage material risks and critical controls within their business activities, escalating when appropriate. • Embed risk analysis and management into their business strategy, planning and investment decisions. • Provide oversight of performance in their area of accountability through Risk, Assurance and Compliance forums.
	Operational management	• Identifies, assesses and manages risks in areas in which management is accountable. • Executes line and functional management responsibilities for implementing and monitoring performance of actions and controls.
	Risk community of practice	• Supports alignment, consistency and continuous improvement of risk management.

Our risk management framework sets out the organisational foundations for designing, implementing, monitoring, reviewing and continually improving risk management throughout the organisation.

A key element of this framework is our Risk Management Standard. Together with the Group's Risk Policy, the standard outlines the expected outcomes from risk management, the roles and responsibilities associated with implementing risk analysis and management effectively, and the minimum requirements that must be met.

The framework also defines the oversight responsibilities of the Board and the Executive Committee, supported by Group Internal Audit, the Risk Management Committee and central support functions across our business.

The risk management framework lays out a three tier approach to managing risks and controls:

- First line assurance is the role of risk owners and business leaders. Oversight by senior leadership teams through the Risk, Assurance and Compliance forums chaired by product group chief executives and heads of functions.
- Second line assurance is provided by our central support functions and technical Centre of Excellence teams eg Underground Mining. As our Group standard-setters, their assurance activities are planned and managed by the Integrated Assurance Office (IAO). Management oversight of this assurance over material Group-level risks is supported by a quarterly Risk Management Committee meeting chaired by the Rio Tinto Group Chief Executive.
- Third line assurance is conducted by Group Internal Audit (GIA) to provide independent assurance that the risk management and internal controls are effective to the Board and its sub-committees.

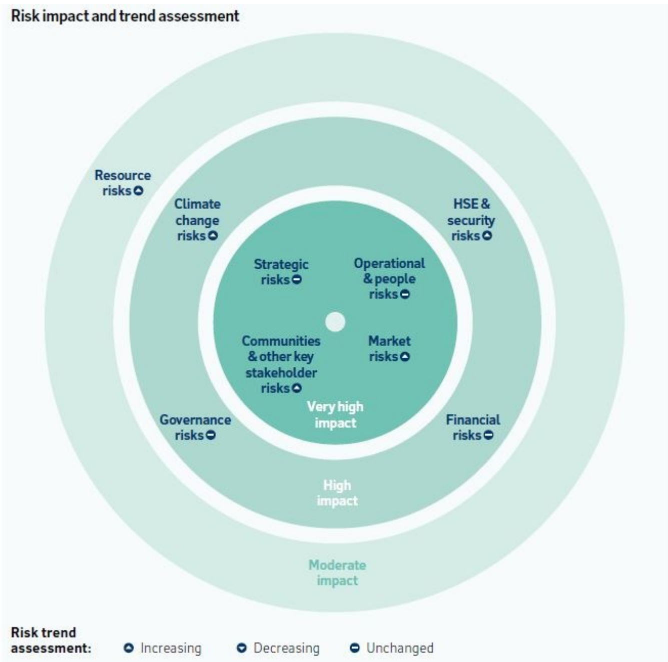
Principal risks and uncertainties

The principal risks and uncertainties outlined in this section reflect the risks that could materially affect Rio Tinto or its ability to meet its strategic objectives, either directly or by triggering a succession of events that in aggregate become material to the Group.

Our business units and functions assess the potential economic and non-economic consequences of their respective risks using the framework defined by the Group’s Risk Management Standard. Once identified, each principal risk is reviewed and monitored by the relevant internal experts and by the Risk Management Committee and, as appropriate, by the relevant Board committees and the Board.

We deliver our strategy through *The way we work* which focuses on the "4Ps": portfolio, people, performance and partners. The principal risks, uncertainties and trends outlined in this report, should be considered as forward-looking statements and are made subject to the cautionary statement on page 300 of the Annual Report 2019.

Risk impact and trend assessment



Market risks

Commodity prices: risk and uncertainty Commodity prices, driven by demand for and supply of the Group's products, vary and may not be as expected over time. Exchange rate variations and geopolitical issues may offset or exacerbate this risk. **Strategic delivery:** **PortfolioPeople**	**Threats** Falling commodity prices, or adverse exchange rate movements, reduce cash flow, limiting profitability and shareholder returns. These may trigger impairments and/or impact rating agency metrics. Extended subdued prices may reflect a longer-term fall in demand for the Group's products, and the reduced earnings and cash flow streams resulting from this may limit investment and/or growth opportunities. Failure to deliver planned returns from commercial insights would negatively impact cash flows for the Group.
China development pathway: risk and uncertainty China's growth pathway could impact demand for the Group's products outside of expectations. China is the largest market for our products. **Strategic delivery:** **PortfolioPeople**	**Threats** An economic slowdown in China, and/or a material change in policy, could result in a slowdown in demand for our products and reduced earnings and cash flow for the Group.

Strategic risks

Execution of acquisitions and divestments: risk and uncertainty Our ability to secure planned value by successfully executing divestments and acquisitions may vary. **Strategic delivery:** **PortfolioPeoplePartners**	**Threats** Divestment and acquisition activity incurs transaction costs that cannot be recouped. They may result in value destruction by realising less than fair value for divestments, or paying more than fair value or failing to integrate successfully acquisitions. The Group may also be liable for the past acts or omissions of assets it has acquired that were unforeseen or greater than anticipated at the time of acquisition. The Group may also face liabilities for divested entities if the buyer fails to honour commitments or the Group agrees to retain certain liabilities.
Capital project development: risk and uncertainty Large capital investments require multi-year execution plans and are complex. The Group's ability to deliver projects to baseline plan, principally in terms of safety, cost and schedule, may vary due to changes in technical requirements, law and regulation, government or community expectations, or through commercial or economic assumptions proving inaccurate through the execution phase. **Strategic delivery:** **PortfolioPerformance**	**Threats** A delay or overrun in a project schedule and/or a significant safety or process safety incident could negatively impact the Group's profitability, cash flows, ability to repay project-specific debt, asset carrying values, growth aspirations and relationships with key stakeholders.
Strategic partnerships: risk and uncertainty Strategic partnerships play a material role in delivering the Group's growth, production, cash and market positioning, and these may not always develop as planned. **Strategic delivery:** **PortfolioPerformancePartners**	**Threats** The capacity or financial circumstance or business disposition of our joint venture partners may present barriers to investment decisions and/or to the realisation of full value for the joint venture(s). For non-managed operations, the decisions of the controlling partners may cause adverse impacts to the value of the Group's interest in the operation, or to its reputation, and may expose it to unexpected financial liability.

Financial risk

Liquidity: risk and uncertainty	Threats
External events and internal capital discipline may impact Group liquidity. **Strategic delivery:** Performance	The Group's ability to raise sufficient funds for planned expenditure, such as capital growth and/or mergers and acquisitions, as well as the ability to weather a major economic downturn, could be compromised by a weak balance sheet and/or inadequate access to liquidity.

Resources risks

Exploration and resources: risk and uncertainty	Threats
The success of the Group's exploration activity and estimates of Ore reserves and resources may vary. **Strategic delivery:** PortfolioPerformance	A failure to discover new viable orebodies could undermine future growth prospects. If new information comes to light, or operating conditions change, the economic viability of some Ore reserves and mine plans can be restated downwards. As a result, projects may be less successful and of shorter duration than initially anticipated, and/or the asset value may be impaired.

Health, safety, environment and security risks

Health, safety, environment and security: risk and uncertainty	Threats
Our operations and projects are inherently hazardous, with the potential to cause illness or injury, damage to the environment, disruption to a community or a threat to personal security. **Strategic delivery:** PortfolioPeoplePerformancePartners	Failure to manage our health, safety, environment or community risks could result in a catastrophic event or other long-term damage that could in turn harm the Group's financial performance and licence to operate.

Climate change

Climate change: risk and uncertainty	Threats
Climate change is a systemic challenge and will require coordinated actions between nations, between industries and by society at large. It requires a long-term perspective to address both physical climate change and low-carbon transition risks and uncertainties. **Strategic delivery:** PortfolioPartners	Current and emerging climate regulations have the potential to result in increased costs, change supply and demand dynamics for our products and create legal compliance issues and litigation, all of which could impact the Group's financial performance and reputation. Our operations also face risk due to physical impacts of climate change, including extreme weather.