

**BMI**

a FitchSolutions Company

Mining Risk/Reward Index

Please note: BMI is enhancing its risk analysis with a new scoring system following acquisition of GeoQuant, a market-leading provider of political risk data. From March 27 2024, risk scores are inverted: zero now represents the lowest risk and 100 the highest, for clearer, industry-standard assessments. This methodology document has been updated accordingly.

Our Mining Risk/Reward Index (RRI) quantifies and ranks a market's attractiveness within the context of the Mining industry, based on the balance between the **Risks and Rewards** of entering and operating in different markets.

We combine industry-specific characteristics with broader economic, political and operational market characteristics. We weight these inputs in terms of their importance to investor decision making in a given Industry. The result is a nuanced and accurate reflection of the realities facing investors in terms of: 1) the balance between opportunities and risks; and 2) between sector-specific and broader market traits. This enables users of the Index to assess a market's attractiveness in a regional and global context.

The Index uses a combination of our proprietary forecasts and analyst assessment of the regulatory climate. As regulations evolve and forecasts change, so the Index scores change providing a highly dynamic and forward-looking result.

The Mining Risk/Reward Index universe comprises **62 markets**.

Benefits of using BMI's Mining RRI

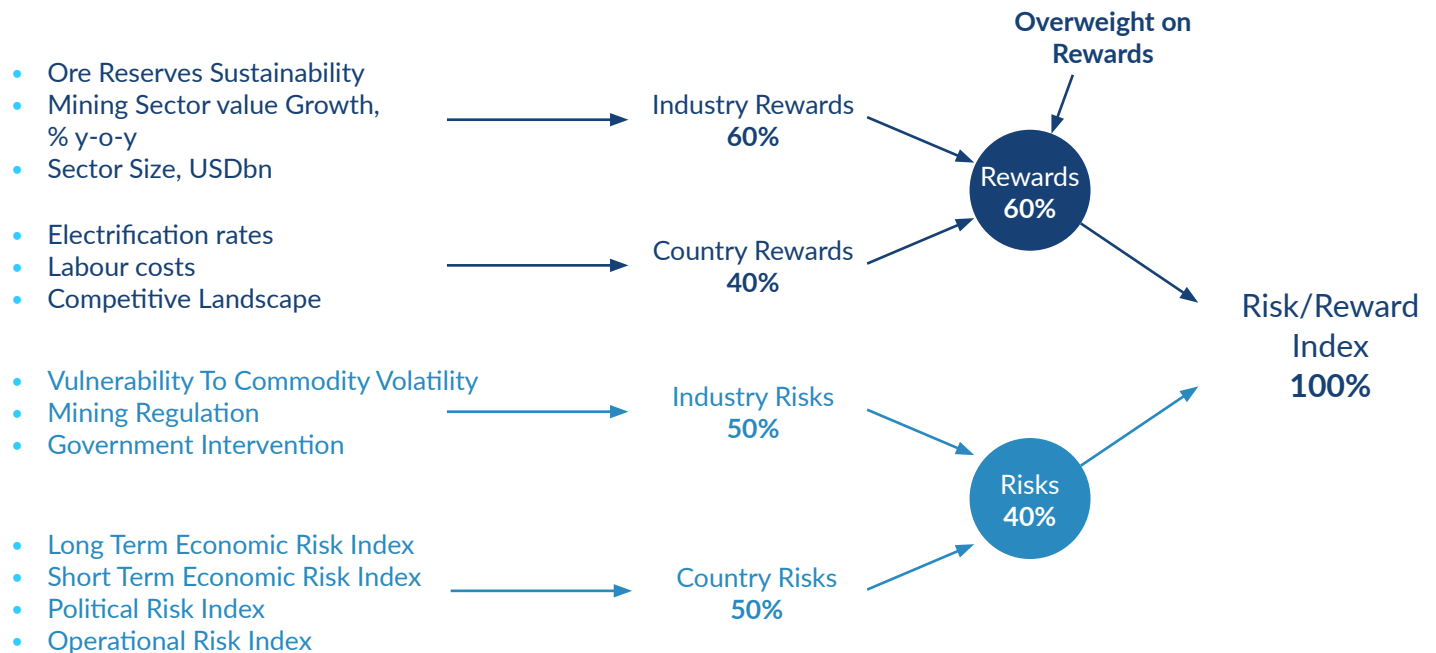
- **Global Index:** One global table, ranking all the markets in BMI's universe for Mining from most attractive (closest to zero) to most risk (closest to 100).
- **Accessibility:** Easily accessible, top down view of the global, regional or sub-regional Risk/Reward profile.
- **Comparability:** Identical methodology across 62 markets for Mining allows users to build lists of markets they wish to compare, beyond the confines of a global or regional grouping.
- **Scoring:** Scores out of 100 with a wide distribution provide nuanced investment comparisons. The higher the score, the less favourable the profile.
- **Quantification:** Quantifies the Rewards and Risks of doing business in the Mining sector in different markets around the world and helps identify specific flashpoints in the overall business environment.
- **Comprehensiveness:** Comprehensive set of indicators, assessing industry-specific Rewards and Risks alongside political, economic and operating risks.
- **Entry Point:** A starting point to assess the outlook for the Mining sector, from which users can dive into more granular forecasts and analysis to gain a deeper understanding of the market.
- **Balance:** Multi-indicator structure prevents outliers and extremes from distorting final scores and rankings.
- **Methodology:** The Index is created using a combination of proprietary BMI forecasts, analyst insights and globally acceptable benchmark indicators.

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Weightings of Categories and Indicators

Mining Risk/Reward Index



The RRI matrix divides into two distinct categories:

- **Rewards:** Evaluation of an Industry's size and growth potential (**Industry Rewards**), and also macro industry and/or market characteristics that directly impact the size of business opportunities in a specific sector (**Country Rewards**).
- **Risks:** Evaluation of micro, industry-specific characteristics, crucial for an industry to develop to its potential (**Industry Risks**) and a quantifiable assessment of the market's political, economic and operational profile (**Country Risks**).

Assessing our weightings

Our matrix is deliberately overweight on **Rewards** (60% of the final RRI score for a market) and within that, the **Industry Rewards** segment (60% of final **Rewards** score). This is to reflect the fact that when it comes to long term investment potential, industry size and growth potential carry the most weight in indicating opportunities, with other structural factors (demographic, labour statistics and infrastructure quality) weighing in, but to a slightly lesser extent. In addition, our focus and expertise in Emerging and Frontier Markets has dictated this bias towards industry size and growth to ensure we are able to identify opportunities in markets where regulatory frameworks are not as developed and industry sizes not as big as in developed markets, but where we know there is a strong desire to invest.

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Indicators, Rationale and Sources

Table: Mining Reward Index, Indicators

Indicator	Source	Rationale
REWARDS		
Industry Rewards		
Ore Reserves Sustainability	BMI Data	Denotes the size of the market's current ore reserves relative to production.
Mining Sector Value Growth	BMI Forecast	Indicates sector dynamism. Scores based on annual average growth over five-year forecast period.
Sector Size	BMI Forecast	Denotes scope of the mining sector, in USDbn over five-year forecast period. Large markets score better than smaller ones.
Country Rewards		
Electrification rates	World Bank data	High electrification rates favours mining operations and encourages long term growth in the sector.
Labour costs	BMI Operational Risk Index	Low labour costs favour the mining sector and suggest stronger long term growth trends.
Competitive Landscape	BMI Subjective Indicator	Assesses the openness of the mining competitive landscape. An open, diversified market structure with little barriers to private and international companies favours investment and warrants a better score.

Source: BMI

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Indicators – Explanation and Sources

Table: Mining Risk Index, Indicators

Indicator	Source	Rationale
RISKS		
Industry Risks		
Vulnerability To Commodity Volatility	BMI Calculation	This measures the exposure of a market to price volatility of the commodities it produces. Markets mining less volatile commodities will score better.
Mining Regulation	BMI Subjective Indicator	Measures factors around the mining regulatory framework, including policy, certainty, taxation, mining rights, environmental regulations. Indicates the risk of investing and operating in the market, based purely on mining regulation.
Government Intervention	BMI Operational Risk Index	Measures risks stemming from the market's overall fiscal, trade and legal barriers in terms of the market's receptiveness to business operations.
Country Risks		
Long Term Economic Risk Index	BMI Country Risk Index	The LT ERI takes into account the structural characteristics of economic growth, the labour market, price stability, exchange rate stability and the sustainability of the balance of payments, as well as fiscal and external debt outlooks for the coming decade.
Short Term Economic Risk Index	BMI Country Risk Index	The ST ERI seeks to define current vulnerabilities and assess real GDP growth, inflation, unemployment, exchange rate fluctuation, balance of payments dynamics, as well as fiscal and external debt credentials over the coming two years.
Political Risk Index	BMI Country Risk Index	The Political Risk Index is a score made up of the mean average across three distinct pillars: Governance Risk, Society Risk, and Security Risk that are aggregated into an overall assessment of 'Political Risk'.
Operational Risk Index	BMI Operational Risk Index	The ORI focuses on existing conditions relating to four main risk areas: Labour Market, Trade and Investment, Logistics, and Crime and Security.

Source: BMI

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About BMI

In an uncertain macroeconomic environment, BMI's systematic, independent and data-driven market insights, analysis and forecasts enable you to recognize and assess risks and opportunities across 200+ markets and 20+ industries.

For more than 40 years, we have provided impartial and transparent analytics, data and research across themes,

countries and sectors, with deep insight into emerging markets. Our detailed intelligence is frequent, consistent and systematic, enabling you to easily make comparisons and interrogate data to support your strategic plans and investment decisions.

Learn more at fitchsolutions.com/bmi

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