BMI
a FitchSolutions Company

Medical Devices Risk/Reward Index

Our Medical Devices Risk/Reward Index (RRI) quantifies and ranks a market's attractiveness within the context of the Medical Devices 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.

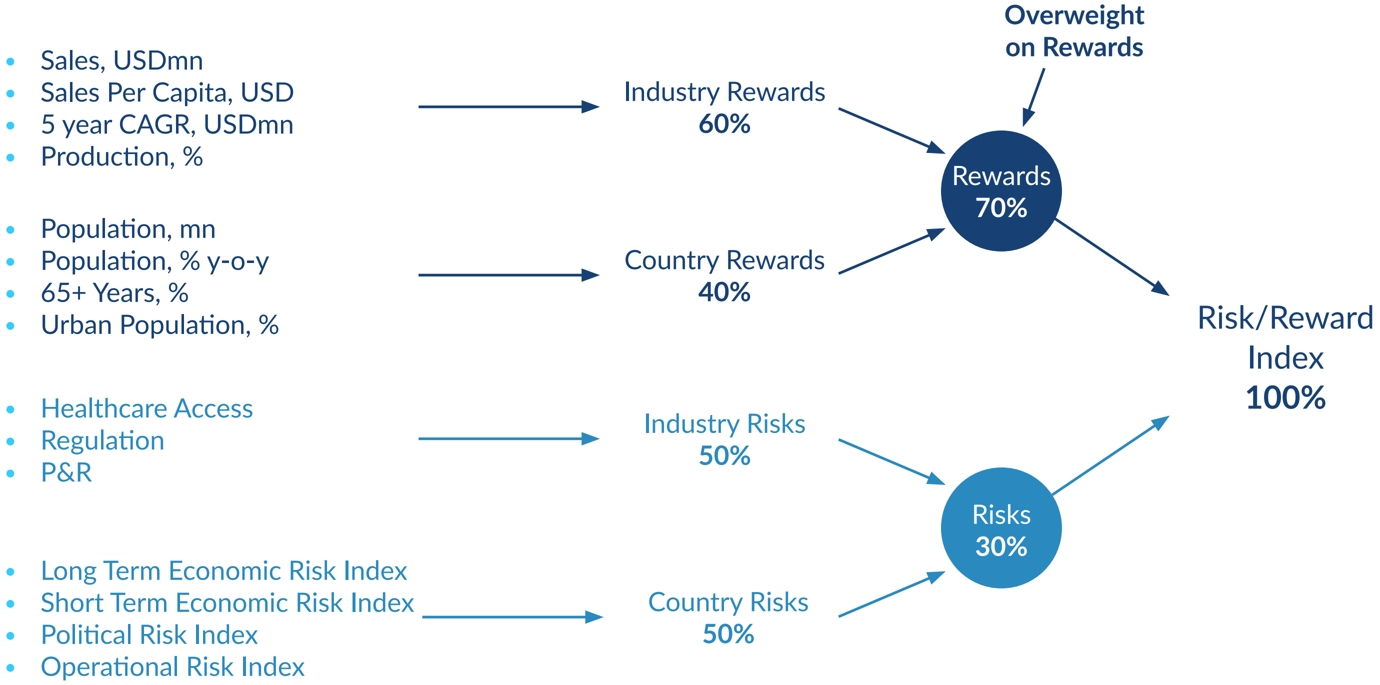
The Medical Devices Risk/Reward Index universe comprises **75 markets**.

Benefits of using BMI's Medical Devices RRI

- **Global Index:** One global table, ranking all the markets in BMI's universe for Medical Devices 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 profiles.
- **Comparability:** Identical methodology across 75 markets for Medical Devices 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 Medical Devices 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 Medical Devices 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.

Weightings of Categories and Indicators

Medical Devices 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** (70% 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 availability) 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 (in USD terms) as in developed markets, but where we know there is a strong desire to invest.

Indicators, Rationale and Sources

Table: Medical Devices Reward Index, Indicators

Indicator	Source	Rationale
REWARDS		
Industry Rewards		
Sales, USDmn	BMI Forecast	Denotes breadth of the medical device market. Larger markets score better than smaller ones.
Sales Per Capita, USD	BMI Forecast	Denotes depth of the medical device market. High value markets score better than low value ones.
5 Year CAGR, USDmn	BMI Forecast	Denotes the anticipated performance of the medical device market. Markets with higher CAGRs score better than those with lower CAGRs.
Production, %	BMI Forecast	Denotes medical device production within the medical device market. Markets with larger production capabilities score better than those with lower production capabilities.
Country Rewards		
Population, mn	BMI Forecast	Evaluates medical device demand associated to population size. Markets with larger populations score better.
Population, % y-o-y	BMI Forecast	Evaluates long-term prospects associated to population growth. Fast-growing markets suggest better long-term growth across the medical device industry.
65+ Years, %	BMI Forecast	Evaluates proportion of the population 65+ as an expenditure ratio. Markets with ageing populations tend to have higher per capita medical device expenditure and score better.
Urban Population, %	BMI Forecast	Evaluates urbanisation as a proxy for development of medical facilities. Predominantly urban countries score better than rural countries.

Source: BMI

Indicators – Explanation and Sources

Table: Medical Devices Risk Index, Indicators

Indicator	Source	Rationale
RISKS		
Industry Risks		
Healthcare Access	BMI Subjective Indicator	Evaluates health policies, health insurance coverage, health expenditure and access to health resources, activity and personnel. Markets with a good healthcare access score better.
Regulation	BMI Subjective Indicator	Evaluates the strength of the competent authority, national regulations and regulations aligned regionally, if existing. Markets with a strong regulation score better.
P&R	BMI Subjective Indicator	Evaluates the level of government spending on medical devices and the attractiveness of P&R policies. Markets with good government spending and friendly P&R policies score better.
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: Education & Labour, Trade & Investment, Logistics & Freight Transport and Crime, Defence & Security.

Source: BMI

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**

Client Services

A dedicated team of client services professionals based in New York, London, Hong Kong, Singapore and Tokyo provide client support. You can contact this team by the following email **fscustomersupport@fitchsolutions.com** or the phone numbers below:

LONDON
+44 20 3530 2400

NEW YORK
+1 212 908 0800

HONG KONG
+852 2263 9999

SINGAPORE
+65 6796 7231

TOKYO
+81 3 6897 8986