

**BMI**

a FitchSolutions Company

Autos Production 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 Autos Production Risk/Reward Index (RRI) quantifies and ranks a market's attractiveness within the context of the Automotive industry, based on the balance between the **Risks** and **Rewards** of beginning or maintaining Autos manufacturing operations 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 risk; 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 Autos Production Risk/Reward Index universe comprises **57 markets**.

Benefits of using BMI's Autos Production RRI

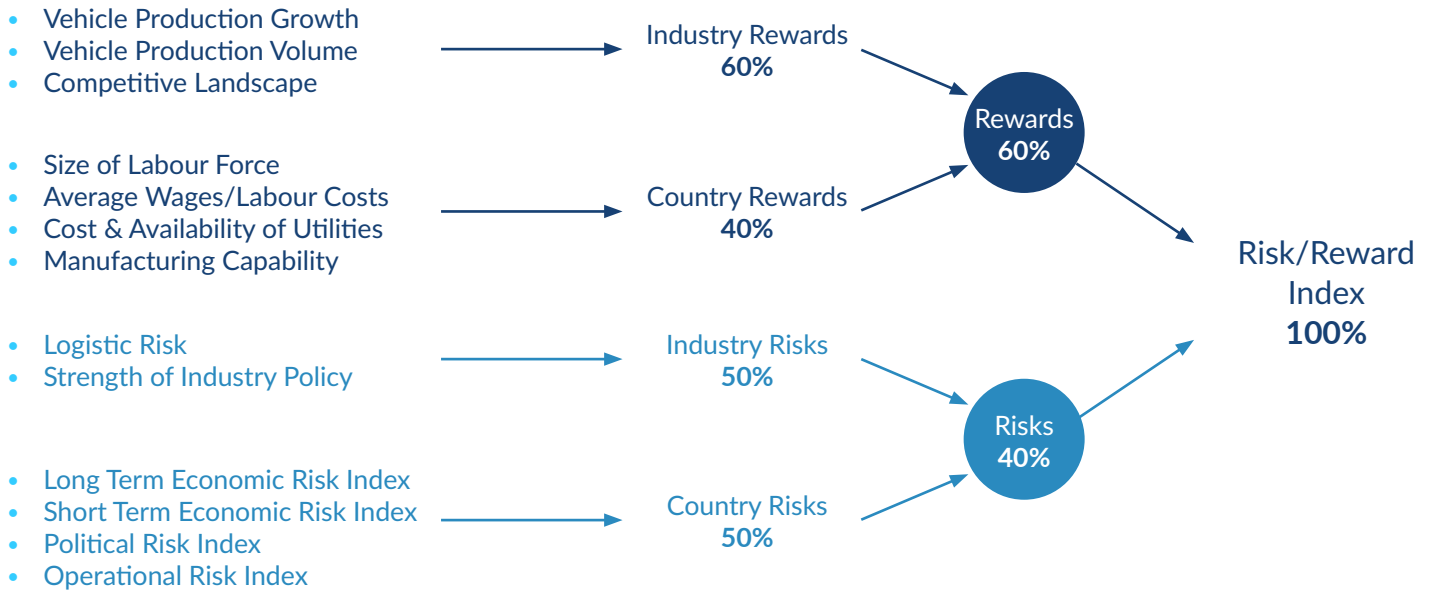
- **Global Rankings:** One global table, ranking all the markets in BMI's universe for Autos Production from most attractive (closest to zero) to most risk (closest to 100).
- **Accessibility:** Easily accessible, top down view of the global, regional or sub-regional Risk/Reward profiles.
- **Comparability:** Identical methodology across 57 markets 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.
- **Quantifiable:** Quantifies the Rewards and Risks of doing business in the Autos sector in different markets around the world and helps identify specific flashpoints in the overall business environment.
- **Comprehensive:** Comprehensive set of indicators, assessing industry-specific risks and rewards alongside political, economic and operating risks.
- **Entry Point:** A starting point to assess the outlook for the Autos sector, from which users can dive into more granular forecasts and analysis to gain a deeper understanding of the market.
- **Balanced:** 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.

**BMI**

a FitchSolutions Company

Weightings of Categories and Indicators

Autos Production 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 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.

**BMI**

a FitchSolutions Company

Indicators, Rationale and Sources

Autos Production Reward Index, Indicators

Indicator	Source	Rationale
REWARDS		
Industry Rewards		
Vehicle Production Growth, % Chg y-o-y (five-year average)	BMI Forecast	Forecasted growth in production indicates growth opportunities and future speed of industry development.
Vehicle Production Volume, Units (five-year average)	BMI Forecast	Volume indicates size and development stage of local production industry
Competitive Landscape	BMI Subjective Indicator	Indicates competition for productive resources and industry concentration using the number of vehicle brands being produced/ assembled domestically.
Country Rewards		
Size Of Labour Force	BMI Forecast	The size of the working population indicates broad availability of labour.
Average Wages/ Labour Costs	BMI Operational Risk Indicator	Indicator of the cost of labour, a major input in autos manufacturing.
Cost & Availability of Utilities	BMI Operational Risk Index	Assesses risk based on cost and availability of key utilities required to operate a business using data from our Operational Risk Index
Manufacturing Capability	BMI Forecast	Indicates ability of a market to produce value added complex goods

Source: BMI

**BMI**

a FitchSolutions Company

Indicators – Explanation and Sources

Autos Production Risk Index, Indicators

Indicator	Source	Rationale
RISKS		
Industry Risks		
Logistics Risk	BMI Operational Risk Index	Evaluates the ability of producers to maintain production supply chains by assessing the quality and extent of transport infrastructure, the availability and reliability of utilities networks, and the ease of cross-border trading.
Strength Of Industry Policy	BMI Subjective Indicator	Identifies if local autos-related industrial policies are present and their respective strength.
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

**BMI**

a FitchSolutions Company

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