

**BMI**

a FitchSolutions Company

Autos Sales Risk/Reward Index

Our Autos Sales 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 entering and operating vehicle retailing activities 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 Sales Risk/Reward Index universe comprises **125 markets**.

Benefits of using BMI's Autos Sales RRI

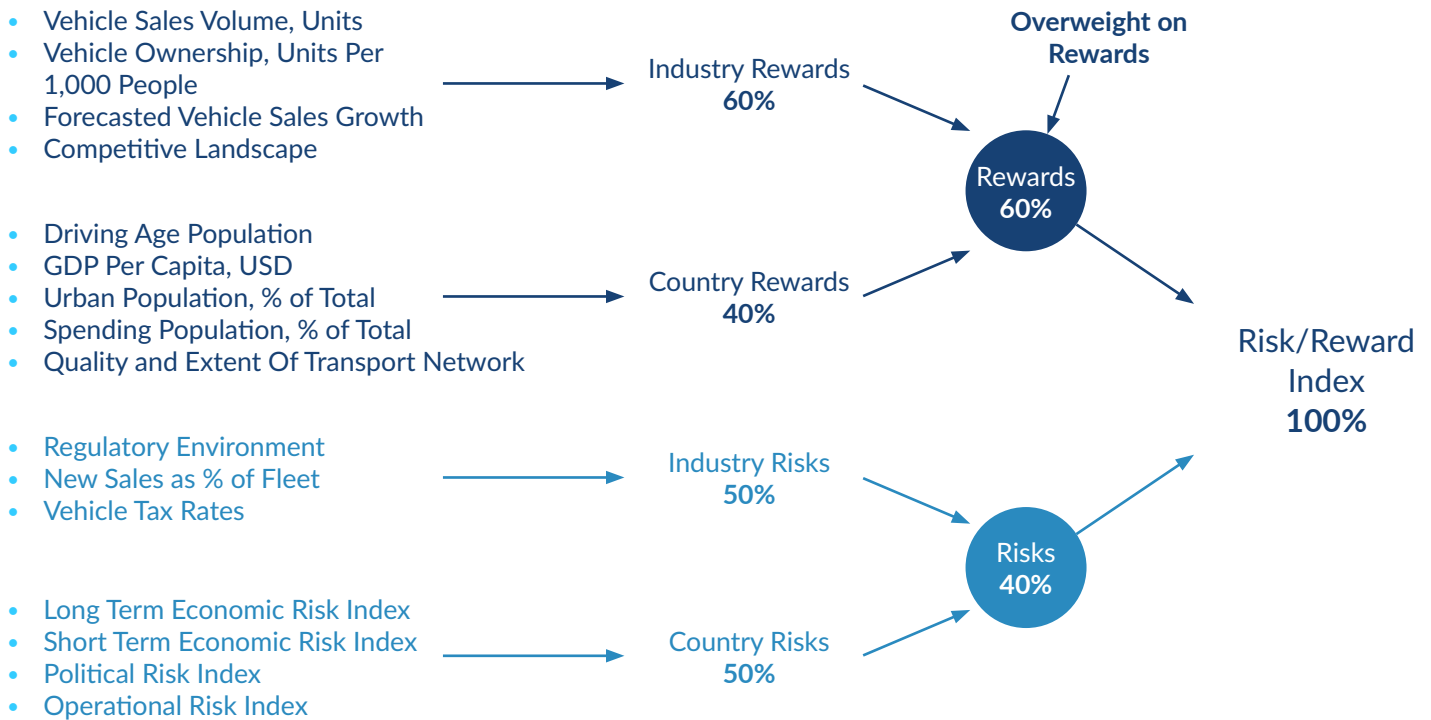
- **Global Rankings:** One global table, ranking all the markets in BMI's universe for Autos Sales from most attractive (closest to zero) to most risk (closest to 100).
- **Accessibility:** Easily accessible, top down view of the global, regional or sub-regional Risk/Reward profiles.
- **Comparability:** Identical methodology across 125 markets for Autos sales 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: Assessing our weightings

- 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**).

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

Table: Autos Sales Reward Index, Indicators

Indicator	Source	Rationale
REWARDS		
Industry Rewards		
Vehicle Sales Volume, Units (five-year average)	BMI Forecast	Size of the overall vehicle market indicates potential for opportunities and scale of operations.
Vehicle Ownership, Registered Vehicles per 1,000 population	BMI Forecast	Ownership rates indicate market development/maturity and strength of consumer needs/desires for vehicle ownership.
Vehicle Sales Growth, % chg y-o-y (five-year average)	BMI Forecast	Forecasted growth in sales indicates growth opportunities for new/existing entrants.
Competitive Landscape	BMI Calculation	Market concentration based on the number of brands in a market indicates the ease of entering and competing in the market.
Country Rewards		
Driving Age Population	BMI Forecast	The size of the population eligible to drive indicates underlying potential market size.
GDP Per Capita, USD	BMI Forecast	GDP Per Capita identifies the purchasing power of consumers.
Urban Population, % Of Total	BMI Forecast	High and growing concentration of population in urban areas indicates greater pressure for vehicle ownership and road-based public transport.
Spending Population, % Of Total	BMI Forecast	Growth of spending population identifies the relative strength/influence of household decision makers who are ultimately responsible for vehicle purchase decisions.
Quality and Extent of Transport Network	BMI Operational Risk Index	Road quality highlights strength of road infrastructure and ability to cater for more developed vehicle fleets.

Source: BMI

**BMI**

a FitchSolutions Company

Indicators – Explanation and Sources

Table: Autos Sales Risk Index, Indicators

Indicator	Source	Rationale
RISKS		
Industry Risks		
Regulatory Environment	BMI Operational Risk Index	Regulatory environment for businesses is captured in the Operational Risk indicator for 'Economic Openness'. It assesses a country's openness to investment and trade, especially by new market entrants.
New Sales, As % Of Fleet	BMI Forecast	Measures the maturity of the new vehicle market and proxies for the rate of vehicle replacement.
Vehicle Tax Rates	BMI Subjective Indicator	Measures the tax burden incurred by an imported new vehicle including MFN tariff rates, excise and special taxes and VAT/GST. It is a strong determinant of how competitively priced a new market entrant would be.
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