

Industry Specific Market Potential Index

2016

Automotive Electronics
& Composites /
Lightweight Materials

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Insights and Rankings

Preface

The Industry Specific Market Potential Index (MPI) compares the 89 countries that globally have the highest Gross Domestic Product (GDP) on several dimensions to rank them according to their market potential for different industries.

The Index compares these countries on six dimensions: size, growth rate, capacity, market openness, existing logistics infrastructure and risk (political, economic and business) of the country. To measure each dimension, a different set of indicators is identified for every industry. Secondary data that have been gathered from various reputable sources are used for these indicators, as noted. Ranking scores are calculated by adding up the dimensions, weighted by relative importance.

While the MPI is a very useful tool for companies in the process of researching new markets for export, it shouldn't be used as the single information source in decision making. MPI is designed to support other detailed market research and to be used for verification purposes. It can be utilized as the first step in market research, to help identify the focus countries for which more detailed market research should be conducted.

Since MPI is calculated with the most recent data available, it is also important to remember that it represents the current state of the countries, and it does not aim to forecast their future states.

Industry specific MPIs are updated annually.

All the industry specific MPIs can also be found at: <http://globaledge.msu.edu/medc>

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Up and Coming Markets for Future Growth Opportunities

China, Mexico

The automotive industry in China shows promises in its large market size and growing population, which ultimately creates a hefty market capacity. The market is continuing to see significant growth but is beginning to plateau and stabilize its position in the industry. China shows opportunity for new companies to enter, while it has been proven substantial for U.S. companies such as Ford and GM. Bordering the US, Mexico has seen growth in the automotive industry since U.S. companies have shifted business across the border following the establishment of the North American Free Trade Agreement.

Established Countries

Canada, Belgium, France, Germany, Japan, Korea Rep., UK

Similar to Mexico, Canada is thriving off the North American Free Trade Agreement, which paired with good market size, and market capacity creates opportunity. Japan has also established itself with great market size and capacity, having been at the top of the industry for some time with top car companies such as Honda, Toyota, and Nissan based here. As far as the European countries go, they all show good market sizes, market capacity, and logistics infrastructure. The UK, in particular, has high R&D expenditure providing an opportunity for new development. Germany has been long established in the industry with multiple large car companies being stationed here and a large number of vehicles in use on the streets.

Export Countries

Hong Kong, Singapore, United Arab Emirates

Hong Kong is in an optimal position for entering the surrounding Asian markets with its good market size, good market capacity, and low country risk. Singapore, on the other hand, shows great opportunity for manufacturing with looser ties to the Chinese market. As a country, they are trying to cut back on CO₂, resulting in fewer cars on the road, but their market size and logistics infrastructure create a good environment for headquarters and manufacturing in the automotive industry. United Arab Emirates is taking a different role in the industry with the highest growth rate of all countries reported; mainly because of the

significant increase in its imports of automotive parts in the last five years. Although there are very few cars that are actually in use, United Arab Emirates is making its business by importing used cars, and even re-exporting these goods. Having a high level of market openness, a good logistics infrastructure and low country risk, UAE is becoming an attractive market for the automotive parts exporters every other year.

Results of the Automotive Parts Industry Market Potential Index 2016

<i>Automotive Parts</i>	OVERALL	Market Size (30/100)	Market Growth Rate (15/100)	Market Capacity (10/100)	Market Openness (15/100)	Logistics Infrastructure (15/100)	Country Risk (15/100)
Country	RANK	RANK	RANK	RANK	RANK	RANK	RANK
China	1	1	2	1	49	10	30
Hong Kong SAR, China	2	4	31	5	4	7	2
Japan	3	2	71	2	10	17	11
Germany	4	3	52	6	30	3	7
Canada	5	15	50	10	1	5	12
Singapore	6	11	67	9	3	8	1
United Kingdom	7	12	55	7	19	4	15
Korea, Rep.	8	7	42	17	32	13	22
France	9	10	65	14	40	9	21
Mexico	10	6	25	34	23	25	48
Netherlands	11	25	70	13	16	1	12
United Arab Emirates	12	38	19	20	6	15	20
Switzerland	13	29	62	4	18	16	4
Norway	14	43	57	11	13	21	3
Belgium	15	26	63	21	36	2	17
India	16	8	9	29	65	62	43
Austria	17	33	27	22	33	27	7
Spain	18	13	68	23	48	6	37
Luxembourg	19	75	61	16	26	14	4
Sweden	20	37	73	18	20	11	6
Qatar	21	67	32	3	17	39	23
Australia	22	22	58	8	15	51	15
Saudi Arabia	23	19	14	31	28	36	34
Denmark	24	44	66	19	25	12	12
Malaysia	25	17	53	46	14	23	27
New Zealand	26	48	49	27	7	43	10
Ireland	27	51	72	12	9	22	19
Israel	28	41	26	26	5	54	35
Poland	29	18	48	35	46	30	28
Italy	30	14	69	25	52	24	49
Dominican Republic	31	58	7	71	2	32	65
Finland	32	54	76	24	8	20	9
Brazil	33	5	37	15	79	67	60
Peru	34	49	6	59	22	53	39
Chile	35	53	23	33	35	33	32
Estonia	36	70	43	45	21	31	24
Czech Republic	37	23	47	39	45	37	25
Portugal	38	40	64	32	29	18	31
Morocco	39	56	8	70	70	19	43
Bahrain	40	69	4	37	24	48	54
Lithuania	41	62	22	51	38	45	26
Russian Federation	42	9	18	30	74	60	68
Oman	43	63	12	54	37	52	41
Turkey	44	21	41	38	57	29	59
Slovakia	45	31	35	48	55	57	28
Uruguay	46	80	3	47	68	55	46
Vietnam	47	30	1	77	59	68	64
Indonesia	48	20	16	44	56	81	53

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Country	RANK	RANK	RANK	RANK	RANK	RANK	RANK
Thailand	49	16	40	60	66	56	56
Costa Rica	50			55	47	66	38
El Salvador	51	74	36	75	11	44	61
Hungary	52	35	54	42	34	42	47
Latvia	53	72	51	57	31	34	50
Guatemala	54	60	29	73	39	49	58
Malta	55	76	77	40	42	26	18
Kuwait	56	57	45	28	61	73	33
Slovenia	57	65	74	36	27	28	45
Romania	58	32	46	56	60	58	42
Bulgaria	59	45	28	62	58	63	51
South Africa	60	27	44	58	69	47	52
Colombia	61	50	34	50	67	50	57
Philippines	62	28	59	65	44	82	36
Sri Lanka	63	64	13	76	64	74	66
Honduras	64	71	30	83	54	46	74
Croatia	65	61	75	53	50	41	55
Nicaragua	66	78	5	86	62	71	77
Paraguay	67	73	10	74	72	75	67
Ecuador	68	66	24	64	63	38	81
Egypt, Arab Rep.	69	42	56	63	43	40	78
Cyprus	70	77	78	49	41	61	40
Serbia	71	68	11	69	75	77	70
Algeria	72	39	38	82	71	80	62
Greece	73	34	80	41	53	35	71
Argentina	74	24	33	43	84	59	80
Azerbaijan	75	79	17	61	83	78	75
Papua New Guinea	76			87	12	88	72
Pakistan	77	55	20	78	80	72	82
Ukraine	78	36	39	79	73	69	85
Belarus	79	59	21	66	77	65	86
Kazakhstan	80	52	15	52	85	83	73
Nigeria	81	46	79	81	76	76	79
Tunisia	82			72	82	79	63
Cambodia	83			88	78	84	69
Myanmar	84			80	51	89	84
Cuba	85			68		64	86
Bangladesh	86			85	81	85	76
Venezuela	87	47	60		86	70	89
Uzbekistan	88			84		86	83
Iraq	89			67		87	86

Assumptions

Since the automotive parts industry has a big aftermarket segment, the Automotive Electronics & Composites / Lightweight Materials MPI has been calculated with a focus on both segments of the industry:

- 1) Auto parts used for manufacturing
- 2) Auto parts used for aftermarket (maintenance and wholesale)

Thus for the market size, both the number of cars and commercial vehicles manufactured and the number of cars and commercial vehicles already in use are used as variables. Also the values of Automotive Electronics

& Composites / Lightweight Materials manufactured and imported are integrated in the market size calculations. Market growth rate is measured by calculating the Compounded Annual Growth Rate (CAGR) of each market size indicator for the last 5 years (where data is available).

Trade and tariff data for the following Harmonized System (HS) codes is used for the measurement of the market openness dimension as well as other generic export-related indicators.

HS7 Code	DEFINITION
390950	Polyurethanes
392099	Of other plastics
392630	Fittings for furniture, coachwork or the like
392690	Other (articles of plastics and articles of other materials of headings 39.01 to 39.14)
732690	Other (articles of iron or steel)
852610	Radar apparatus
853120	Indicator panels incorporating liquid crystal devices (LCD) or light emitting diodes (LED)
853650	Other switches (Electrical apparatus for switching or protecting electrical circuits, or for making connections to or in electrical circuits (for example, switches, relays, fuses, surge suppressors, plugs, sockets, lamp-holders and other connectors, junction boxes), for a voltage not exceeding 1,000 volts; connectors for optical fibers, optical fiber bundles or cables)
853710	For a voltage not exceeding 1,000 V (Boards, panels, consoles, desks, cabinets and other bases, equipped with two or more apparatus of heading 85.35 or 85.36, for electric control or the distribution of electricity, including those incorporating instruments or apparatus of Chapter 90, and numerical control apparatus, other than switching apparatus of heading 85.17)
853890	Other (Parts suitable for use solely or principally with the apparatus of heading 85.35, 85.36 or 85.37)
854370	Other machines and apparatus
8542	Electronic integrated circuits.
854449	Other (Insulated (including enameled or anodized) wire, cable (including co-axial cable) and other insulated electric conductors, whether or not fitted with connectors; optical fiber cables, made up of individually sheathed fibers, whether or not assembled with electric conductors or fitted with connectors.
870810	Bumpers and parts thereof
870829	Other (Parts and accessories of the motor vehicles of headings 87.01 to 87.05)
870899	Other (Parts and accessories of the motor vehicles of headings 87.01 to 87.05)
9033	Parts and accessories (not specified or included elsewhere in this Chapter) for machines, appliances, instruments or apparatus of Chapter 90.
940540	Other electric lamps and lighting fittings

Indicators & Resources

Dimension	Weight	Measures Used
Market Size	30	<ul style="list-style-type: none"> Imports of Parts and Accessories (2015)² Number of Cars & Commercial Vehicles in Use (2015)¹ Number of Cars & Commercial Vehicles Manufactured (2015)¹
Market Growth Rate	15	<ul style="list-style-type: none"> Growth Rate of Imports of Parts and Accessories (2010-2015)² Growth Rate of Number of Cars & Commercial Vehicles in Use (2010-2015)¹ Growth Rate of Number of Cars & Commercial Vehicles Manufactured (2010-2015)¹
Market Capacity	10	<ul style="list-style-type: none"> Foreign Direct Investment, Net Inflows (2014)³ GNI Per Capita (2015)³ R&D Expenditure (2015)¹
Market Openness	15	<ul style="list-style-type: none"> Applied Tariff Rate on Auto Parts (2015)⁴ Burden of Customs Procedure (2015)³ Cost to Import (2014)³ Imports of Auto Parts and Accessories from US as a Share of Global Imports (2015)²
Logistics Infrastructure	15	<ul style="list-style-type: none"> Distance of Country from US⁵ Liner Shipping Connectivity Index (2015)³ Logistics Performance Index (2014)³ Quality of Port Infrastructure Index (2015)³
Country Risk	15	<ul style="list-style-type: none"> Business Risk Rating (2016)⁸ Economic Risk Rating (2016)⁷ Intellectual Property Rights Protection (2015)⁹ Political Risk Rating (2016)⁶

Data used are those available for most recent year. All sources were accessed in June-August 2016.

¹ Passport GMID, [Global Market Information Database](#)

² UN Comtrade, [Commodity Trade Statistics Database](#)

³ World Bank, [World Development Indicators](#)

⁴ World Trade Organization (WTO), [Tariff Database](#)

⁵ Happyzebra, [Distances](#)

⁶ Credimundi, [Country Risks](#)

⁷ Coface, [Economic Studies](#)

⁸ Swiss Export Risk Insurance, [Cover Practice for Countries and Banks](#)

⁹ International Property Rights Index, [IPRI Report](#)

For More Information

For the indexing methodology, please refer to:

"Measuring the Potential of Emerging Markets: An Indexing Approach" - S. Tamer Cavusgil,
[Business Horizons, January-February 1997, Vol. 40 Number 1, 87-91](#)

"Complementary Approaches to Preliminary Foreign Market Opportunity Assessment: Country Clustering and Country Ranking" - S. Tamer Cavusgil, Tunga Kiyak and Sengun Yenyurt,
[Industrial Marketing Management, October 2004, Volume 33, Issue 7, 607-617](#)