Funded by the Michigan Economic Development Corporation Conducted by the International Business Center in the Eli Broad College of Business at Michigan State University



Preface

- The Market Potential Index (MPI) for specific industries intends to compare countries identified as having the highest Gross Domestic Product (GDP) globally based on several dimensions.
- In 2016, the number of countries used for these rankings was 89, but has increased to 97 for 2017. Countries removed from the MPI rankings include Iraq, Luxembourg, Malta, Myanmar, and Papua New Guinea, while those added are Angola, Bolivia, Cameroon, the Democratic Republic of the Congo, Côte d'Ivoire, Ethiopia, Ghana, Jordan, Kenya, Lebanon, Panama, Tanzania, and Uganda.
- The Index compares these 97 countries on six market dimensions: size, growth rate, capacity, openness, current logistics infrastructure, and country risk. In order to measure each of these dimensions, a different set of indicators has been identified for each industry. Secondary data that has been gathered from reputable sources is used for these indicators, as noted. The rankings of the countries are calculated by adding up the dimensions and weighing them based on relative importance.
- While the MPI is a very useful tool for companies in the process of researching new markets for export, it should not be used as the single source of information in the decision. MPIs are designed to support further market research and is intended to be used for verification purposes. The information in this report can be utilized as a foundation to help identify potential countries for which more detailed research should be conducted.
- The Market Potential Index is calculated with the most recent data that is available, so it is important to note that the results represent the current state of the identified 97 countries, not a forecast.
- Industry specific MPIs are updated annually, and can be accessed at: https://globaledge.msu.edu/mpi

International Business Center
Michigan State University
Eli Broad College of Business
East Lansing, MI
ciber@msu.edu
+1 (517) 353.4336





Market Overview

Asia

The agribusiness sector in Asia in 2017-2018 is expected to regain its strength following the El Niño weather phenomenon of 2015-2016 that brought dry weather and impacted production and consumption in South East Asian countries the most adversely. The return to more normal weather patterns coupled with slightly stronger global agricultural prices will prove beneficial to the region in the next coming years.¹ China remains the top ranked country in the world for the agricultural industry. With such a large population of nearly 1.4 billion people, the country is constantly looking for new ways to feed more people despite the shrinking availability of arable land.²

Traditionally, farmers in China are unable to own land and are instead allocated plots by their local governments, usually by decades-long leases. This method has created farms that are often too small to make use of machinery and new technology, which has hindered efficiency.³ As of December 2016, the Chinese government has also stated that increasing the size of domestic farms is a priority, hoping to increase the current average of farm size from 3.3 hectares to the range of 7 to 13 hectares. This may not be easily done, however, considering the consolidation of land has the potential to render millions of rural workers unemployed. When almost half of China's population lives in the countryside, the potential inability of many of them to find jobs in urban areas following farm consolidation raises the concern of social unrest.⁴

Environmental concerns that affect the agricultural sector in China have also garnered greater focus of the government, especially the water supply used for crop irrigation being polluted. To address this issue, clean water is being moved from the south of the country to the north through a massive network of dams and canals. While effective, it is costly and time consuming.⁵

Due to the shortage of adequate land for larger scale agriculture production, environmental concerns, and the complications that could potentially emerge following plot consolidation, the Chinese government will continue to rely on buying or leasing farms abroad; a project it has been implementing for decades. As a country with a growing middle class, China will continue to source a large amount of food from their overseas ventures because of the increased demand for quality and variety.⁶

¹ BMI Research: <u>Six Key Themes in Asia Agribusiness</u>

² AgWeb: China Spins a Worldwide Web of Food From Mozambique to Missouri

³ AgWeb: China's Agricultural Dilemma

⁴AgWeb: China's Agricultural Dilemma

⁵ AgWeb: China's Agricultural Dilemma

⁶ AgWeb: China Spins a Worldwide Web of Food From Mozambique to Missouri

- India remains the #2 ranked country for the agriculture sector. In May of 2017, the Ministry of Environment imposed a ban on the sale of cattle for slaughter at animal markets; acting as the newest edition to the stringent regulations of beef production in the country. Previously, water buffalo meat was exempt from these regulations, but will now be included in the ban.
- Nearly 80% of the population of India practices Hinduism, which greatly reveres cows and considers them sacred animals. This viewpoint has shaped much of the animal agriculture industry in the country, including the penalties for cow slaughter ranging from five times the price of the animal slaughtered to life in prison. 9
- Only the boneless meat of buffalo, goat, sheep, and bird is permitted for export; while the export of cow and calf meat is prohibited. The beef industry is estimated at \$4 billion each year, with buffalo meat export accounting for roughly 20% of global trade in the commodity. This large volume and value of buffalo meat coming from India will be adversely affected by this new legislation, considering that 90% of buffalo purchased for slaughter comes from animal markets. This legislation comes at a time when other large meat processors are facing scandals in Brazil, which combined will greatly affect and potentially restructure the global meat industry.

North America

- Canada is ranked among the top countries for the agricultural industry at #5 out of 97. Despite uncertainties regarding the renegotiations of the North American Free Trade Agreement (NAFTA) with Mexico and the United States, the creation of the Comprehensive Economic and Trade Agreement (CETA) between the European Union (EU) and Canada is expected to positively impact Canada's agri-food industry. Not only will the majority of produce, processed foods, and drinks become duty-free, but it will also be easier and more desirable for European firms to invest.
- CETA has pledged to remove barriers for potential investors in Canada and ensure that all European investors are treated equally and fairly. The investment climate is in turn expected to improve and offer more certainty, with promises to not discriminate between domestic and foreign players as well as no new restrictions being placed on foreign shareholdings.¹¹
- As for Canadian firms operating in EU member countries, the implementation of this agreement will offer farmers and food processors an advantage over other

⁷ AgWeb: India is About to Upend the Global Beef Trade

⁸ CIA-The World Factbook: India

⁹ AgWeb: India is About to Upend the Global Beef Trade

¹⁰ AgWeb: India is About to Upend the Global Beef Trade

¹¹ European Commission: <u>CETA Explained</u>

companies in countries without free trade agreements with the EU. CETA offers Canada access to the EU's 510 million consumers at an unprecedented level. 12

Like Canada, Mexico has and will be seeking to negotiate with the EU to improve their trade relations due to uncertainties with NAFTA. The renegotiations during the second half of 2017 will greatly affect the agriculture industry in Mexico, which dropped one ranking to #19. Sugar is an imported commodity that is limited by US regulators, which Mexican producers are seeking to change. The renegotiations have the potential to start a trade war if involved parties do not feel as though they have had certain demands met.

As an attempt to circumvent the risk associated with a potential negative outcome of NAFTA, Mexico has been negotiating with the European Union to upgrade their existing free trade agreement that has been in effect since 2000. Agriculture has and will continue to be featured prominently in this discussion between Mexico and the EU, with hopes to boost exports of Mexican beef, sugar, and bananas. Since Mexico imports the majority of its dairy from the United States, access to imports from the EU's dairy industry through their upgraded free trade agreement will provide a safety net in the event that the American supply becomes inaccessible.¹³

South America

While Brazil is only ranked #39 for the agricultural sector in 2017, the country operates as one of the world's top beef exporters and the current largest chicken producer. Concerns have been raised regarding these commodities, followed by a federal inquiry alleging that meat inspectors were bribed to overlook the processing and certification of rotten or tainted meat.¹⁴

JBS SA and BRF SA are among dozens of other Brazilian companies that have been caught up in the probe. JBS SA is the world's top meat packer, while BRF SA is the world's largest poultry producer. SA one of the world's largest meat exporters, companies trading with Brazil have become increasingly skeptical and protectionist against their beef industry. China, the European Union, and the United States are all among trade partners that have imposed import restrictions, further regulation, and even bans on Brazilian meat. SA

This scandal involving some of the world's largest meat processing companies have already had an impact on global trade for the commodity. Other competitors in different countries will move to fill the void that companies like JBS SA and BRF SA have created, which

¹² Agriculture and Agri-Food Canada: <u>Canada-European Union Comprehensive Economic and Trade Agreement</u> (CETA) for Agri-Food Exporters

¹³ Reuters: Mexico Says New EU Trade Deal is 'Paramount'

¹⁴ CNN Money: Brazil Raids Food Giants for Allegedly Selling Rotten Meat

¹⁵ Reuters: Brazil Scandal Test JBS, BRF Push for Overseas Units IPOs

¹⁶ AgWeb: Europe Raises 'Serious Concerns' Over Brazil Meat After Probe

will lead to a change in the market organization in the next year to come as supply is decreased.

Peru was greatly affected by the El Niño weather phenomenon of 2015-2016, dropping ten places to #27 in the 2017 MPI ranking. While most countries in Asia experienced severe drought during this period, Latin and South America became plagued by intense rainfall and subsequent flooding. This flooding led to the destruction of crops and infrastructure, as well as contributed to the loss of productivity and profits throughout the Peruvian agricultural sector.

Following the end of this recent El Niño season, the government and Ministry of Agriculture in Peru announced in May of 2017 that they plan to expand the country's Agricultural Catastrophe Insurance scheme in order to improve the insurance and reinsurance market protection available in the country. The expansion will encompass five regions in addition to the original eight, coupled with the government encouraging global insurance and reinsurance firms to develop partnerships with Peruvian companies. These partnerships have the potential to provide risk analysis, underwriting expertise and support, and capacity. 17

Europe

Moving up two places in the Agriculture MPI for 2017, the United Kingdom (UK) is now ranked #6. In 2016, the United Kingdom voted to leave the European Union trade group (Brexit); an unprecedented choice that has yet to produce or implement official and concrete policy negotiations thus far.

Considering the many uncertainties that this decision creates, the agri-food industry is expected to feel the greatest impact from Brexit. When official partnership ties between the UK and the EU are severed, UK agriculture is expected to experience lower subsidies, lower investment, higher trade costs with the EU, and higher labor costs. 18 Concerns over border security were front and center in the Brexit vote, with many of those in favor of the decision wishing to 're-take control' of the free flow of people between EU member countries. This will have implications for agriculture due to the subsequent decrease in labor supply. 19

The loss of UK's financial contribution to the EU's common agricultural policy (CAP) is expected to be manageable for other members to fill in their absence. The CAP typically manages the EU's agricultural markets through production quotas and subsidies, price controls, and enforcement of trade duties, and represents roughly 40% of their total budget between 2014 and 2020.²⁰

¹⁷ Artemis: Peru to Expand El Nino Agricultural Catastrophe Insurance Cover

¹⁸ BMI Research: Five Key Themes For Europe Agribusiness in 2017

¹⁹ Forbes: Britain Could Face Major Labor Shortages After Brexit

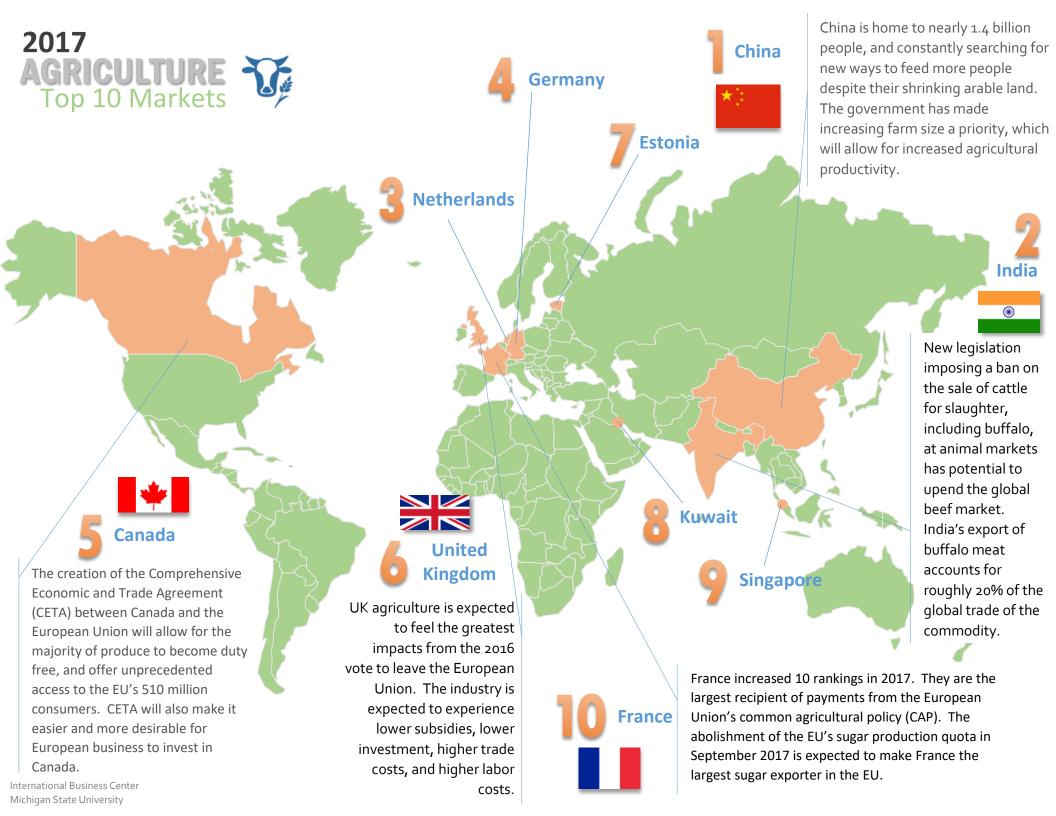
²⁰ BMI Research: <u>European Agriculture: The Future of The CAP</u>

- France serves as the largest recipient of CAP payments and increased ten rankings to #10 out of 97 for 2017. The agri-food industry is only a minor contributor to the overall French economy but remains one of the largest export categories, which is important to the overall success of the EU.²¹
- In September 2017, the abolishment of the EU's sugar production quota will allow for France to emerge as an even stronger regional and world agricultural leader. French sugar is derived from sugar beets, and they serve as the largest producer and refiner of the sugar beet variety globally. The removal of the sugar production quota is also expected to make France the largest sugar exporter in the EU.²²
- The European Union has many trade partnerships in development, including the aforementioned Comprehensive Economic and Trade Agreement (CETA) with Canada. CETA will offer European countries a better export and investment climate, as well as new access to Canada's market of high-income consumers. The EU will be able to export nearly 92% of its agricultural and food products through CETA duty-free.²³

²¹ BMI Research: Agribusiness Industry View-France-Q3 2017

²² BMI Research: Five Key Themes For Europe Agribusiness in 2017

²³ European Commission: CETA Explained



Results of the 2017 Agriculture MPI

	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)
	RANK	INDEX	INDEX	INDEX	INDEX	INDEX	INDEX
China	1	100	62	100	67	78	60
India	2	53	74	42	53	36	57
Netherlands	3	29	37	4	88	100	92
Germany	4	37	20	7	83	89	94
Canada	5	20	50	9	100	84	88
United Kingdom	6	24	51	6	87	89	87
Estonia	7	26	74	4	86	48	86
Kuwait	8	46	92	2	60	24	61
Singapore	9	18	59	1	94	81	88
France	10	25	35	9	83	79	88
Japan	11	27	26	10	86	67	92
Australia	12	17	48	34	85	35	91
Bahrain	13	40	70	1	77	42	48
Qatar	14	28	100	1	62	42	67
Sweden	15	14	41	4	85	78	96
Spain	16	21	36	7	83	80	77
Denmark	17	14	47	4	85	73	91
New Zealand	18	16	63	6	91	34	93
Mexico	19	25	50	18	90	57	51
Oman	20	23	97	5	76	40	55
Ireland	21	10	71	5	83	59	86
Belgium	22	15	22	4	84	92	89
Malaysia	23	24	47	8	83	56	69
Switzerland	24	13	33	4	85	68	100
Indonesia	25	36	61	24	72	9	54
Austria	26	15	38	5	84	62	94
Peru	27	26	58	15	80	37	57
Lithuania	28	21	52	6	81	47	73
Panama	29	14	57	8	85	77	58
Latvia	30	21	49	5	80	44	75
Norway	31	11	46	4	78	56	97
Vietnam	32	29	70	24	63	28	43
Tanzania	33	39	88	37	29	12	30
Finland	34	10	31	4	89	66	90

	OVERALL RANK	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)
Guatemala	35	25	60	16	82	35	41
Poland	36	18	36	9	80	49	76
Czech Republic	37	12	49	5	81	49	85
Portugal	38	13	36	6	84	62	77
Brazil	39	30	56	35	53	30	39
Chile	40	14	45	8	84	47	76
Italy	41	20	21	7	77	61	77
Morocco	42	21	51	16	62	49	57
Korea, Rep.	43	19	30	6	55	71	79
Uruguay	44	24	54	7	65	40	59
Turkey	45	29	60	16	42	48	44
Thailand	46	25	50	20	63	30	54
Israel	47	13	47	3	77	43	78
Dominican Rep.	48	21	50	7	86	45	42
Algeria	49	34	80	11	43	18	39
Slovakia	50	8	59	4	80	36	78
Costa Rica	51	18	51	7	83	28	59
Colombia	52	16	55	11	76	41	51
Paraguay	53	27	76	12	63	18	32
Russia	54	27	43	27	55	30	39
Uzbekistan	55	30	85	15	64	6	16
Honduras	56	15	57	13	85	38	35
Philippines	57	20	56	17	69	6	58
Jordan	58	22	59	5	76	29	39
Kenya	59	18	67	34	50	26	38
Cambodia	60	24	88	17	60	4	29
Slovenia	61	5	39	6	82	48	76
South Africa	62	20	43	13	63	43	49
United Arab E.	63	12	11	4	78	72	69
Hong Kong	64	2	1	1	97	77	84
Hungary	65	8	45	5	82	40	67
Saudi Arabia	66	14	34	17	63	44	60
Romania	67	10	47	13	77	29	59
Kazakhstan	68	20	45	25	80	12	31
Bolivia	69	23	58	19	66	4	34
Sri Lanka	70	18	57	12	60	24	38

	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)
	RANK	INDEX	INDEX	INDEX	INDEX	INDEX	INDEX
Azerbaijan	71	23	53	15	55	21	30
Ethiopia	72	26	75	31	35	1	20
Bulgaria	73	12	37	5	75	23	58
El Salvador	74	12	30	9	81	36	43
Bangladesh	75	28	61	18	37	7	28
Ecuador	76	16	38	12	66	47	27
Nicaragua	77	19	46	13	67	23	24
Ghana	78	18	50	18	47	20	36
Egypt, Arab Rep.	79	22	38	15	42	45	25
Argentina	80	16	56	16	44	32	32
Pakistan	81	22	52	25	38	26	21
Greece	82	6	23	8	78	47	50
Ukraine	83	21	46	14	68	24	12
Belarus	84	19	50	9	79	22	7
Cote d'Ivoire	85	7	38	30	57	35	28
Croatia	86	6	7	6	80	43	46
Cyprus	87	1	15	4	75	31	65
Angola	88	35	35	9	31	4	16
Tunisia	89	14	45	7	45	17	40
Uganda	90	10	30	37	52	7	28
Serbia	91	9	25	10	69	17	38
Cameroon	92	20	49	24	21	6	27
Cuba	93	16	44	8		34	1
Nigeria	94	22	27	22	38	15	15
Lebanon	95	7	56	5	52	26	20
Venezuela	96	18	34	8	22	18	1
Congo, Dem. Rep.	97	3	52	35	1	4	9

^{*} Overall Rank is calculated by weighting the six dimension values. For Index values, values of the countries are converted into a 1-100 scale based on their relative magnitudes in each of the six dimensions. An index value of 100 indicates a country with the largest (or most favorable) value in a dimension whereas an index value of 1 indicates the smallest (or least favorable). While both the overall rank and index values show the rank order of the countries, the index values also indicate the magnitude of each country in relation to others in that order.

Assumptions

1702

mixed with natural honey; caramel

The agriculture industry MPI aims to measure the import potential of countries for agricultural products (produce and livestock) and agricultural equipment. Therefore, indicators such as livestock and crop production, as well as agriculture value added are used for the measurement of the market size. Also, agricultural land, graduates in agriculture, and employment in agriculture are used as indicators to measure the market capacity dimension. Market growth rate is measured by calculating the Compounded Annual Growth Rate (CAGR) of each market size indicator for the last five available years.

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

HS7 Code	DEFINITION
0102	Live bovine animals
0103	Live swine
0104	Live sheep & goat
0105	Live poultry, that is to say, fowls of the species Gallus domesticus, ducks, geese, turkeys and guinea fowls
02	Meat and edible meat
03	Fish and crustaceans, mollusks and other aquatic invertebrates
04	Dairy produce; birds' eggs; natural honey; edible products of animal origin, not elsewhere specified or included
0504	Guts, bladders and stomachs of animals (other than fish), whole and pieces thereof, fresh, chilled, frozen, salted, in brine, dried or smoked
07	Edible vegetable and certain roots and tubers
08	Edible fruit and nuts; peel of citrus fruit or melons
09	Coffee, tea, mate and spices
10	Cereals
11	Products of the milling industry
12	Oil seeds and oleaginous fruits; miscellaneous grains, seeds and fruit; industrial or medicinal plants; straw and fodder
15	Animal or vegetable fats and oils and their cleavage products; prepared edible fats; animal or vegetable waxes
1701	Cane or beet sugar and chemically pure sucrose, in solid form
	Other sugars, including chemically pure lactose, maltose, glucose and fructose, in solid form;

sugar syrups not containing added flavoring or coloring matter; artificial honey, whether or not

HS7 Code	DEFINITION					
1801	Cocoa beans, whole or broken, raw or roasted					
2401	Unmanufactured tobacco; tobacco refuse					
52	Cotton					
8432	Agricultural, horticultural or forestry machinery for soil preparation or cultivation; lawn or sports- ground rollers					
8433	Harvesting or threshing machinery, including straw or fodder balers; grass or hay mowers; machines for cleaning, sorting or grading eggs, fruit or other agricultural produce, other than machinery of heading					
8434	Milking machines and dairy machinery					
8436	Other agricultural, horticultural, forestry, poultry-keeping or bee-keeping machinery, including germination plant fitted with mechanical or thermal equipment; poultry incubators and brooders					
870110	Pedestrian controlled tractors					
870190	Other tractor suitable for agriculture use					

Indicators & Resources

Dimension	Weight	Measures Used
Market Size	30	 Agriculture Value-Added (2015)² Crop Production Index (2014)¹ Imports of Livestock, Produce, and Equipment (2016)³ Livestock Production Index (2014)¹
Market Growth Rate	15	 CAGR of Agriculture Value-Added (2010-2015)² CAGR of Crop Production Index (2009-2014)¹ CAGR of Imports of Livestock, Produce, and Equipment (2011-2016)³ CAGR of Livestock Production Index (2009-2014)¹
Market Capacity	10	 Agricultural Land (2014) ² Employment in Agriculture (2016) ² Graduates in Agriculture (2016) ⁴

Market Openness	15	 Applied Tariff Rate on Produce, Livestock, Agriculture Equipment (2017) ⁵ Burden of Customs Procedure (2016) ² Cost to Import, Border Compliance (2016) ² Cost to Import, Documentary Compliance (2016) ² Imports of Produce, Livestock, Agriculture Equipment from US as a Share of Global Imports (2016) ³
Logistics Infrastructure	15	 Distance of Country from US ⁶ Logistics Performance Index (2016) ² Liner Shipping Connectivity Index (2016) ² Quality of Port Infrastructure Index (2015) ²
Country Risk	15	 Business Risk Rating (2016) ⁹ Economic Risk Rating (2016) ⁸ Intellectual Property Rights Protection (2017) ¹⁰ Political Risk Rating (2016) ⁷

Data used are those available for most recent year. All sources were accessed in May-June 2017.

- ¹ Food and Agriculture Organization of the United Nations, <u>Food and Agriculture Data</u>
- ² World Bank, World Development Indicators
- ³ UN Comtrade, <u>Commodity Trade Statistics Database</u>
- ⁴ Passport GMID, <u>Global Market Information Database</u>
- ⁵ World Trade Organization (WTO), <u>Tariff Database</u>
- ⁶ Happyzebra, <u>Distances</u>
- ⁷ Credendo, <u>Country Risk Ratings</u>
- ⁸ Coface, <u>Economic Studies</u>
- ⁹ Swiss Export Risk Insurance, <u>Cover Practice for Countries and Banks</u>
- ¹⁰ International Property Rights Index, <u>2016 IPRI Report</u>

Year To Year Comparison

	RANK		
Country	2017	2016	
China	1	1	
India	2	2	
Netherlands	3	6	
Germany	4	5	
Canada	5	4	
United Kingdom	6	8	
Estonia	7	14	
Kuwait	8	13	
Singapore	9	3	
France	10	20	
Japan	11	11	
Australia	12	7	
Bahrain	13	47	
Qatar	14	12	
Sweden	15	27	
Spain	16	23	
Denmark New Zealand	17	33 16	
Mexico	18	18	
Oman	19		
Ireland	20 21	25	
Belgium	22	29 22	
Malaysia	23	10	
Switzerland	24	40	
Indonesia	25	9	
Austria	26	44	
Peru	27	17	
Lithuania	28	37	
Panama	29	3/	
Latvia	30	57	
Norway	31	43	
Vietnam	32	28	
Tanzania	33		
Finland	34	32	
Guatemala	35	34	
Poland	36	51	
Czech Republic	37	63	
Portugal	38	45	
Brazil	39	36	
Chile	40	31	
Italy	41	61	
Morocco	42	19	
Korea, Rep.	43	42	
Uruguay	44	26	
Turkey	45	24	
Thailand	46	48	
Israel	47	50	
Dominican Republic	48	39	
Algeria	49	21	

	RA	NK
Country	2017	2016
Slovakia	50	65
Costa Rica	51	52
Colombia	52	56
Paraguay	53	46
Russian Federation	54	55
Uzbekistan	55	30
Honduras	56	60
Philippines	57	58
Jordan	58	
Кепуа	59	
Cambodia	60	49
Slovenia	61	78
South Africa	62	62
United Arab Emirates	63	35
Hong Kong SAR,	64	15
China	·	15
Hungary	65	71
Saudi Arabia	66	38
Romania	67	73
Kazakhstan	68	77
Bolivia	69	
Sri Lanka	70	53
Azerbaijan	71	75
Ethiopia	72	
Bulgaria	73	72
El Salvador	74	67
Bangladesh	75	69
Ecuador	76	79
Nicaragua	77	66
Ghana	78	
Egypt, Arab Rep.	79	59
Argentina	80	80
Pakistan	81	89
Greece	82	83
Ukraine	83	70
Belarus	84	87
Cote d'Ivoire	85	
Croatia	86	82
Cyprus	87	84
Angola	88	
Tunisia	89	76
Uganda	90	
Serbia	91	88
Cameroon	92	_
Cuba	93	85
Nigeria	94	68
Lebanon	95	
Venezuela	96	86
Congo, Dem. Rep.	97	

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 Yeniyurt, Industrial Marketing Management, October 2004, Volume 33, Issue 7, 607-617