

# Global Opportunity Index: Methodology<sup>1</sup>

## What's the Purpose of the Global Opportunity Index?

The Milken Institute's 2016 Global Opportunity Index (GOI) answers a pressing need for information that's vital to a thriving global economy. What policies can governments pursue to attract capital flows (banking, foreign direct investment and portfolio flows), expand their economies and accelerate job creation? The GOI also provides useful background information for investors using globalization as an opportunity to diversify their investment strategies.

It is designed:

- to assist companies and countries as they explore capital investment opportunities (FDI and portfolio flows) and strategies;
- to fill gaps in information, which frequently discourage mutually beneficial transactions that spur development and job growth;
- to provide a baseline assessment for countries seeking to improve their business environments and attract foreign investors;
- as a guide for investors to factors that influence the deployment of capital.

The GOI is the only index that looks at factors that are relevant for both FDI and portfolio flows. In an environment where more and more governments and international institutions search for innovative funding solutions for projects and investors are looking for yield, the *GOI* provides a systematic, data-rich framework to shed light on nations' attractiveness to foreign investors.

## Methodology

The GOI considers economic and financial factors that influence investment activities as well as key business, legal and regulatory policies that governments can modify to support and often drive

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investments. Overall, the GOI tracks countries' performance on 54 variables aggregated in five categories, each measuring an aspect of the country's attractiveness for investors.

- **Economic Fundamentals (EF)** indicates the current economic strength of a country vis-à-vis the global economic outlook. The assessment focuses on the country's macro-performance, trade openness, quality and structure of the labor force, and modern infrastructure.
- **Financial Services (FS)** measures the size and access to financial services in a country by looking at the country's financial infrastructure and access to credit.
- **Business Perception (BP)** measures explicit and implicit costs associated with business operations such as tax burden, transparency, etc.
- **Institutional Framework (IF)** measures the extent to which an individual country's institutions provide a supportive network to businesses.
- **International Standards and Policy (ISP)** reflects the extent to which a country's institutions, policies and legal system facilitate international integration by following international standards.

The assigned composite index value is the average score of the five categories (called component scores). Each variable is normalized from 0 to 10. Within each category, the normalized variables are given equal weight and aggregated, resulting in a normalized category score between 10, indicating the most favorable conditions for investment and 0, signaling the least favorable. The index covers 136 countries which are ranked in Table 1.<sup>2</sup> The index methodology is reviewed for each publication to reflect changes in data sources or other relevant adjustments.

## Category Distributions Across Regions

The box plots presented in Figure 1 provide insight regarding the spread of the rankings across regions as well as global trends in 2016. These box plots allow for a visual comparison of the overall ranking and the sub-ranking, as well as a comparison between the composite score distribution across regions. Let us focus on the first diagram for all the regions to provide an illustration on how to read the information:

- While the composite score can range from 0 to 10, the rectangle, or box, shows that half of the countries considered, which rank between 30 and 90, report a value between 4.5 and 6.2.

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<sup>2</sup> The 2016 edition ranks 123 countries based on data availability. Some countries, such as Taiwan, could not be considered for this year's GOI due to lack of data availability.

- The whiskers represent the remaining 50 percent of the scores' distribution. The top 25 percent, which rank between 1 and 29, have a composite score ranging from 6.2 to 8 out of 10. The lowest 25 percent, which rank from 91 to 123, have a composite score ranging from 2.4 to 4.4.
- The median, represented by the black line in the box, shows that 61 countries have a composite score less than five.
- Finally, some boxplots have black dots that represent extreme scores or outliers whose value is very different from what would normally be expected in the group of countries considered, that is countries performing extremely well or extremely poorly when compared with the group.
- Institutional Framework is the category with the highest degree of heterogeneity across the countries and the one with greatest room for improvement given that most of the scores are lower than five.

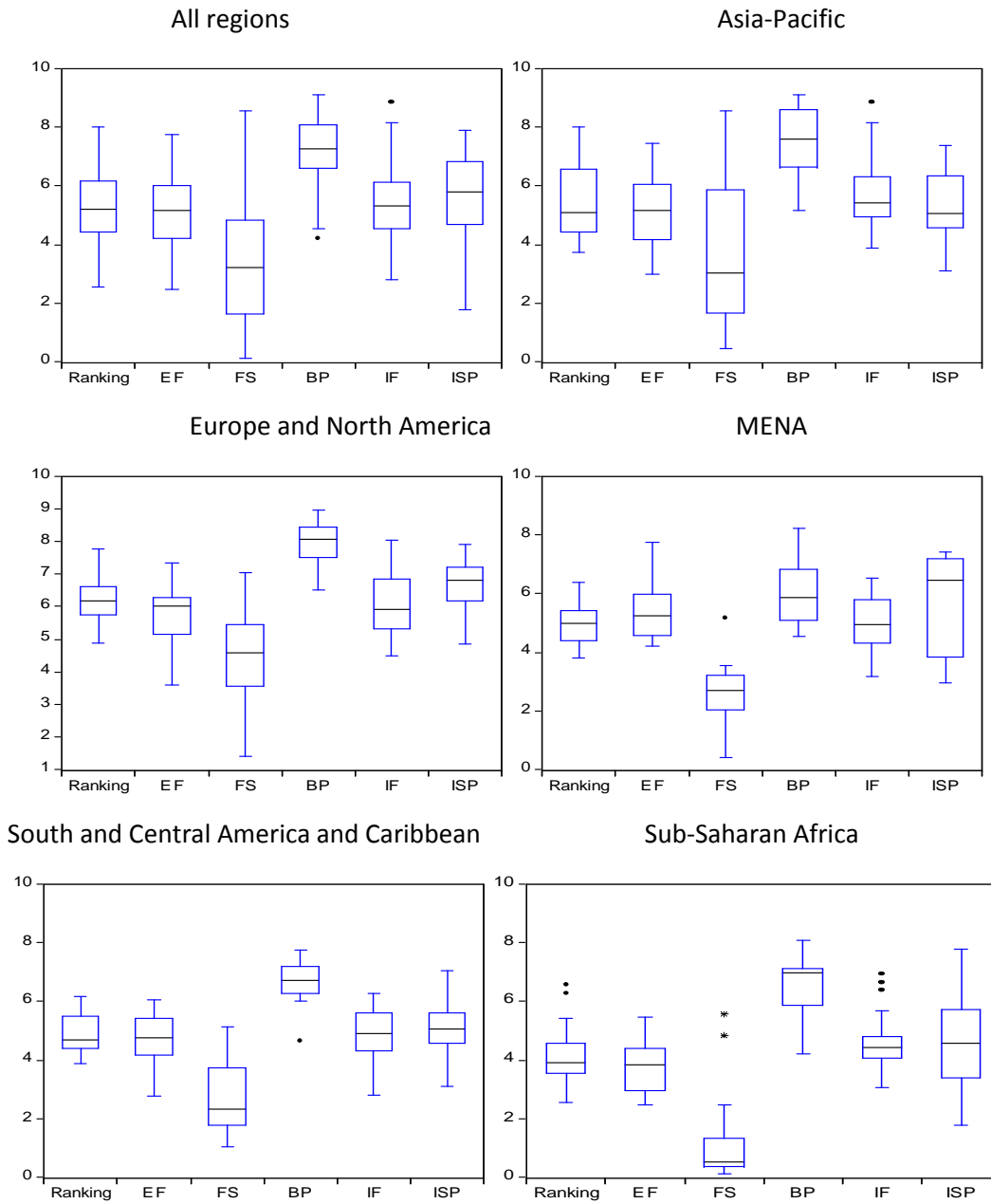
When comparing the overall ranking with its subcategories a few key points stand out.

- Business Perception is overall the strongest category with most of the scores higher than 6.5 on a scale of 10.
- Institutional Framework is the category with the highest degree of heterogeneity across countries and can be the most improved with most of the scores lower than 5, on a scale of 10. New Zealand performs extremely well in this category when compared to the rest of the world.

However, the notion of extreme performance is relative to the group of countries considered.

- New Zealand still performs extremely well, in terms of Institutional Framework, when compared solely to countries within the Asia-Pacific region
- Israel provides significantly better Financial Services than the rest of the MENA countries.
- Brazil is significantly lower in Business Perception than the rest of the South and Central America and Caribbean region.
- Mauritius and South Africa perform significantly better than the rest of the sub-Saharan region, overall but in particular when it comes to providing Financial Services to their populations. Botswana joins these two countries in providing an Institutional Framework much more developed than the rest of the region.

Figure 1: Distribution of the Ranking and Sub-Categories Scores



## Data Sources

| Component                          | Variable  | Source          |
|------------------------------------|---|-----------------|
| Institutional Framework            | Transparency of government policymaking                         | World Bank      |
|                                    | Credit depth of information                                     | World Bank      |
|                                    | Efficiency of legal framework in challenging regulations        | GCI             |
|                                    | Efficiency of legal framework in settling disputes              | GCI             |
|                                    | Extent of disclosure  | World Bank      |
|                                    | Judicial independence   | EF              |
|                                    | Political stability and absence of violence/terrorism: estimate | World Bank      |
|                                    | Protecting investors  | World Bank      |
|                                    | Protection of property rights                                   | EF              |
|                                    | Public trust in politicians                                     | GCI             |
|                                    | Start-up procedures to register a business                      | World Bank      |
|                                    | Strength of investor protection index                           | World Bank      |
|                                    | Strength of legal rights index                                  | World Bank      |
|                                    | Voice and accountability: estimate                              | World Bank      |
|                                    | Procedures required to enforce a contract                       | Thomson Reuters |
| International Standards and Policy | Bilateral trade agreements                                      | X               |
|                                    | Chinn-Ito   | CI              |
|                                    | Corporate tax rate (%)  | IEF             |
|                                    | Credit market regulations                                       | EFW             |
|                                    | Exchange rate regime  | IMF             |
|                                    | Income tax rate (%)   | IEF             |
|                                    | Labor market regulations  | EFW             |
|                                    | Regulation of securities exchanges                              | GCI             |
|                                    | Tariff rate, applied, weighted mean, all products (%)           | World Bank      |

|                             |  |                         |
|-----------------------------|--|-------------------------|
| Economic<br>Fundamentals    | Age dependency ratio (% of working-age population)                   | World Bank              |
|                             | Central government debt, total (% of GDP)                            | TRE                     |
|                             | GDP growth (annual %)  | World Bank              |
|                             | GDP per capita (current US\$)  | World Bank              |
|                             | Inflation, consumer prices (annual %)                                | World Bank              |
|                             | Internet users (per 100 people)                                      | World Bank              |
|                             | Labor force with secondary education (% of total)                    | BL                      |
|                             | Mobile phone subscribers (per 100 people)                            | World Bank              |
|                             | Exchange rate volatility   | IMF                     |
|                             | Real interest rate (%)   | TRE                     |
|                             | Total factor productivity  | Total Economy Database™ |
|                             | Trade (% of GDP)   | World Bank              |
|                             | Unemployment, total (% of total labor force)                         | World Bank              |
| Financial Services<br>(FS)  | Automated teller machines (ATMs) (per 100,000 adults)                | World Bank              |
|                             | Domestic credit to private sector (% of GDP)                         | Thomson Reuters         |
|                             | Market capitalization of listed companies (% of GDP)                 | World Bank              |
|                             | Credit coverage (% of adults)  | World Bank              |
|                             | Private credit by banks, percentage of GDP                           | World Bank              |
| Business<br>Perception (BP) | Cost to start a business (% of income per capita)                    | GCI                     |
|                             | Ease of shareholder suits index (0 to 10)                            | World Bank              |
|                             | Enforcing contracts, cost (% of claim)                               | World Bank              |
|                             | Percent of firms identifying corruption as a major constraint        | World Bank              |
|                             | Percent of firms identifying labor regulations as a major constraint | World Bank              |
|                             | Percent of firms identifying tax rates as a major constraint         | World Bank              |
|                             | Resolving insolvency: cost (% of estate)                             | World Bank              |
|                             | Resolving insolvency: recovery rate (cents on the dollar)            | World Bank              |
|                             | Time required to enforce a contract (days)                           | World Bank              |
|                             | Time required to start a business (days)                             | World Bank              |

|  |                                    |            |
|--|------------------------------------|------------|
|  | Time to resolve insolvency (years) | World Bank |
|--|------------------------------------|------------|

## About the Authors

Dr. Jonathon Adams-Kane is a research economist in international finance and macroeconomics at the Milken Institute. His main research focus at MI is international capital flows. Adams-Kane brings expertise and experience on several topics, including capital flows, financial contagion via international banking, and microeconomic effects of financial crises. His research has been published in highly ranked academic journals and policy reports, and presented at international conferences. Adams-Kane has worked as a consultant economist at the World Bank and has held teaching appointments at Humboldt State University and Pacific Lutheran University. Adam-Kane works at the Institute's Santa Monica office.

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## About the Milken Institute

The Milken Institute is a nonprofit, nonpartisan think tank determined to increase global prosperity by advancing collaborative solutions that widen access to capital, create jobs, and improve health. We do this through independent, data-driven research, action-oriented meetings and meaningful policy initiatives.

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