

# METHODOLOGY

The *Index of Economic Freedom* focuses on four key aspects of the economic and entrepreneurial environment:

- **Rule of law,**
- **Government size,**
- **Regulatory efficiency,** and
- **Market openness.**

In assessing conditions in these four categories, the *Index* measures 12 specific components of economic freedom, each of which is graded on a scale from 0 to 100. Scores on these 12 components of economic freedom are calculated from a number of sub-variables and then equally weighted and averaged to produce an overall economic freedom score for each economy.

The following sections explain the formulas and methodology used to compute the scores for each of the 12 components of economic freedom.

## RULE OF LAW

### Property Rights

The property rights component assesses the extent to which a country's legal framework allows individuals to acquire, hold, and utilize private property and the extent to which these rights are secured by applicable laws that the government enforces effectively. Relying on a mix of survey data and independent assessments, it provides a quantifiable measure of the degree to which a country's laws protect private property rights and the extent to which those laws are respected. It also assesses the level of state expropriation of private property. The more effective the legal protection of property is, the higher a country's score will be, and the greater the chances of government expropriation of property are, the lower a country's score will be.

The score for this component is derived by averaging scores for three equally weighted sub-factors:

- Risk of expropriation,
- Respect for intellectual property rights, and
- Quality of contract enforcement, property rights, and law enforcement.

Each sub-factor is converted to a scale of 0 to 100 using the following equation:

$$\text{Sub-factor Score}_i = 100 \times (\text{Sub-factor}_{\text{Max}} - \text{Sub-factor}_i) / (\text{Sub-factor}_{\text{Max}} - \text{Sub-factor}_{\text{Min}})^1$$

where  $\text{Sub-factor}_i$  represents the original data for country  $i$ ,  $\text{Sub-factor}_{\text{Max}}$  and  $\text{Sub-factor}_{\text{Min}}$  represent the upper and lower bounds for the corresponding data set, and  $\text{Sub-factor Score}_i$  represents the computed sub-factor score for country  $i$ .

**Sources.** The *Index* relies on the most recent available versions of the following sources in assessing property rights: Credendo, *Country Risk and Insights*; U.S. Chamber of Commerce, Global Innovation Policy Center, *International IP Index*; and World Bank, *Worldwide Governance Indicators*.

### Judicial Effectiveness

Properly functioning legal frameworks are essential for protecting the rights of all citizens against unlawful acts by others, including governments and powerful private parties. Judicial effectiveness requires efficient and fair judicial systems to ensure that laws are fully respected and appropriate legal actions are taken against violations.

The score for the judicial effectiveness component is derived by averaging scores for three equally weighted sub-factors:

- Judicial independence,
- Quality of the judicial process, and
- Perceptions of the quality of public services and the independence of the civil service.

Each sub-factor is converted to a scale of 0 to 100 using the following equation:

$$\text{Sub-factor Score}_i = 100 \times (\text{Sub-factor}_i - \text{Sub-factor}_{\text{Min}}) / (\text{Sub-factor}_{\text{Max}} - \text{Sub-factor}_{\text{Min}})$$

where  $\text{Sub-factor}_i$  represents the original data for country  $i$ ,  $\text{Sub-factor}_{\text{Max}}$  and  $\text{Sub-factor}_{\text{Min}}$  represent the upper and lower bounds for the corresponding data set, and  $\text{Sub-factor Score}_i$  represents the computed sub-factor score for country  $i$ .

**Sources.** The *Index* relies on the most recent available versions of the following sources in assessing judicial effectiveness: Freedom House, *Freedom in the World*, and World Bank, *Worldwide Governance Indicators*.

### Government Integrity

Corruption erodes economic freedom by introducing insecurity and coercion into economic relations. Of greatest concern is the systemic corruption of government institutions and decision-making by such practices as bribery, extortion, nepotism, cronyism, patronage, embezzlement, and graft. The lack of government integrity that such practices cause reduces public trust and economic vitality by increasing the costs of economic activity.

The score for this component is derived by averaging scores for three equally weighted sub-factors:

- Perceptions of corruption,
- Bribery risk, and
- Control of corruption including “capture” of the state by elites and private interests.

Each sub-factor is converted to a scale of 0 to 100 using the following equation:

$$\text{Sub-factor Score}_i = 100 \times (\text{Sub-factor}_{\text{Max}} - \text{Sub-factor}_i) / (\text{Sub-factor}_{\text{Max}} - \text{Sub-factor}_{\text{Min}})^2$$

where  $\text{Sub-factor}_i$  represents the original data for country  $i$ ,  $\text{Sub-factor}_{\text{Max}}$  and  $\text{Sub-factor}_{\text{Min}}$  represent the upper and lower bounds for the corresponding data set, and  $\text{Sub-factor Score}_i$  represents the computed sub-factor score for country  $i$ .

**Sources.** The *Index* relies on the most recent versions of the following sources in assessing government integrity: Transparency International, *Corruption Perceptions Index*; TRACE International, *Trace Bribery Risk Matrix*®; and World Bank, *Worldwide Governance Indicators*.

## GOVERNMENT SIZE

### Tax Burden

Tax burden is a composite measure that reflects marginal tax rates on both personal and corporate income and the overall level of taxation (including direct and indirect taxes imposed by all levels of government) as a percentage of gross domestic product (GDP).

The component score is derived from three equally weighted quantitative sub-factors:

- The top marginal tax rate on individual income,
- The top marginal tax rate on corporate income, and
- The total tax burden as a percentage of GDP.

The equal weighting of these numerical variables allows a country to achieve a score as high as 67 based on two of the sub-factors even if it receives a score of zero on the third.

Tax burden scores are calculated with a quadratic cost function to reflect the diminishing revenue returns from very high rates of taxation. The data for each sub-factor are converted to a 100-point scale using the following equation:

$$\text{Tax Burden}_{ij} = 100 - \alpha (\text{Sub-factor}_{ij})^2$$

where  $\text{Tax Burden}_{ij}$  represents the tax burden in country  $i$  for Sub-factor  $j$ ;  $\text{Sub-factor}_{ij}$  represents the value (a percentage expressed on a scale of 0 to 100) in country  $i$  for Sub-factor  $j$ ; and  $\alpha$  is a coefficient set equal to 0.03. The minimum score for each sub-factor is zero, which is not represented in the printed equation but is used because it means that no single high tax burden will make the other two sub-factors irrelevant.

**Sources.** The *Index* relies on the most recent available data from the following sources for information on tax rates, in order of priority: KPMG International; Deloitte, *Tax Guides and Highlights*; International Monetary Fund, *Staff Country Report*, “Selected Issues and Statistical Appendix,” and *Staff Country Report*, “Article IV Consultation”; PricewaterhouseCoopers, *Worldwide Tax Summaries*; countries’ investment agencies; and other government authorities (embassy confirmations and/or the country’s treasury or tax authority).

For information on the tax burden as a percentage of GDP, the primary sources are World Bank, *World Development Indicators*; Organisation for Economic Co-operation and Development data; Eurostat, Government Finance Statistics; African Development Bank Group, *African Economic Outlook*; International Monetary Fund, *Government Finance Statistics (GFS)* database, *Staff Country Report*, “Selected Issues,” and *Staff Country Report*, “Article IV Consultation”; Asian Development Bank, *Key Indicators for Asia and the Pacific*; and United Nations Economic Commission for Latin America, *Economic Survey of Latin America and the Caribbean*.

### Government Spending

The government spending component captures the burden imposed by government expenditures, which includes consumption by the state and all transfer payments related to various entitlement programs.

The *Index* does not identify an optimal level of government spending. The ideal level will vary from country to country, depending on factors that range from culture to geography to level of economic development. At some point, however, government spending becomes an unavoidable burden as growth in the public sector’s size and scope leads inevitably to misallocation of resources and loss of economic efficiency. As volumes of research have shown, excessive government spending that causes chronic budget deficits and the accumulation of public debt is one of the most serious drags on economic dynamism.

The *Index* methodology treats zero government spending as the benchmark. As a result, underdeveloped countries—especially those with little government capacity—may receive artificially high scores. However, such governments can provide few if any public goods and will probably receive low scores on some of the other components of economic freedom (such as property rights, financial freedom, and investment freedom) that measure aspects of government effectiveness.

Government spending has a major impact on economic freedom, but it is just one of many important components. The scale for scoring government spending is nonlinear, which means that spending that is close to zero is lightly penalized and spending that exceeds 30 percent of GDP leads to much worse scores in a quadratic fashion (for example, twice as much spending yields four times less freedom). Only extraordinarily high levels of government spending (for example, more than 58 percent of GDP) receive a score of zero.

The equation used to compute a country’s government spending score is:

$$GE_i = 100 - \alpha (\text{Expenditures}_i)^2$$

where  $GE_i$  represents the government expenditure score in country  $i$ ;  $\text{Expenditures}_i$  represents the average total government spending at all levels as a percentage of GDP for the most recent three years; and  $\alpha$  is a coefficient to control for variation among scores (set at 0.03). The minimum component score is zero.

For most countries, the *Index* uses general government expenditure data for all levels of government, from national to local. In cases where data on general government spending are not available, data on central government expenditures are used.

For several countries—and especially for developing countries—statistics related to government spending as a percentage of GDP are subject to frequent revisions by such data sources as the International Monetary Fund (IMF).

**Sources.** The *Index* relies on the most recent versions of the following sources for information on government intervention in the economy, in order of priority: Organisation for Economic Co-operation and Development data; Eurostat data; African Development Bank Group, *African Economic Outlook*; International Monetary Fund, *Staff Country Report*, “Selected Issues and Statistical Appendix,” *Staff Country Report*, “Article IV Consultation,” and *World Economic Outlook* database; Asian Development Bank, *Key Indicators for Asia and the Pacific*; African Development Bank, *AfDB Statistics Pocketbook*; official government publications of each country; and United Nations Economic Commission for Latin America, *Economic Survey of Latin America and the Caribbean*.

## Fiscal Health

Widening deficits and a growing debt burden, both of which are caused by poor government budget management, lead to the erosion of a country’s overall fiscal health, and deteriorating fiscal health is associated with macroeconomic instability and economic uncertainty.

Debt is an accumulation of budget deficits over time. In theory, debt financing of public spending could contribute to productive investment and ultimately to economic growth. However, mounting public debt driven by persistent budget deficits—and especially by spending that merely boosts government consumption or transfer payments—often undermines overall productivity growth and leads ultimately to economic stagnation rather than growth.

The score for the fiscal health component is based on two sub-factors, which are weighted as follows in calculating the overall component score:

- Average deficits as a percentage of GDP for the most recent three years (80 percent of score)<sup>3</sup> and
- Debt as a percentage of GDP (20 percent of score).

The equation used to compute a country’s fiscal health score is:

$$\text{Sub-factor Score}_i = 100 - \alpha (\text{Sub-factor}_i)^2$$

where  $\text{Sub-factor Score}_i$  represents the deficit or debt score in country  $i$ ;  $\text{Sub-factor}_i$  represents the factor value as a portion of GDP; and  $\alpha$  is a coefficient to control for variation among scores (set at 2 for deficit and 0.01 for debt). The minimum sub-factor score is zero.

For most countries, the *Index* uses general government deficit and debt data for all levels of government, from national to local. In cases where such general government data are not available, data on central government expenditures are used.

For several countries, particularly developing countries, statistics related to budget balance as a percentage of GDP are subject to frequent revisions by such data sources as the IMF.

**Sources.** The *Index* relies on the most recent available versions of the following sources for information on government intervention in the economy, in order of priority: International Monetary Fund, *World Economic Outlook* database, *Staff Country Report*, “Selected Issues and Statistical Appendix,” and *Staff Country Report*, “Article IV Consultation”; Asian Development Bank, *Key Indicators for Asia and the Pacific*; African Development Bank, *AfDB Statistics Pocketbook*; and official government publications of each country.

## REGULATORY EFFICIENCY

### Business Freedom

The business freedom component measures the extent to which a country’s regulatory and infrastructure environments constrain the efficient operation of businesses. The quantitative score is derived from an array of factors that affect the ease of starting, operating, and closing a business.

The business freedom score for each country is a number between 0 and 100, with 100 indicating the freest business environment, and is based on four equally weighted sub-factors:

- Access to electricity,
- Business environment risk,
- Regulatory quality, and
- Women’s economic inclusion.

Except for the women’s economic inclusion variable, which is readily available in a scale of 0 to 100, each sub-factor is converted to a scale of 0 to 100 using the following equation:

$$\text{Sub-factor Score } i = 100 \times (\text{Sub-factor}_{i} - \text{Sub-factor}_{\text{Min}}) / (\text{Sub-factor}_{\text{Max}} - \text{Sub-factor}_{\text{Min}})$$

where Sub-factor<sub>*i*</sub> represents the original data for country *i*, Sub-factor<sub>Max</sub> and Sub-factor<sub>Min</sub> represent the upper and lower bounds for the corresponding data set, and Sub-factor Score *i* represents the computed sub-factor score for country *i*.

**Sources.** The *Index* relies on the most recent available versions of the following sources in determining business freedom scores: World Bank, *Worldwide Governance Indicators*; World Bank, *World Development Indicators*; Credendo, *Country Risk and Insights*; and World Bank, *Women, Business and the Law*.

### Labor Freedom

The labor freedom component is a quantitative measure that considers various aspects of the legal and regulatory framework of a country’s labor market, including regulations concerning minimum wages, associational rights, laws inhibiting layoffs, severance requirements, and measurable regulatory restraints on hiring and hours worked, in addition to the labor force participation rate and labor productivity as an indicative measure of employment opportunities in the labor market.

The score for the labor freedom component is based on nine equally weighted sub-factors:

- Minimum wage,
- Associational right,
- Paid annual leave,
- Notice period for redundancy dismissal,

- Severance pay for redundancy dismissal,
- Labor productivity,
- Labor force participation rate,
- Restrictions on overtime work, and
- Redundancy dismissal permitted by law.

In constructing the labor freedom score, the first seven of the nine sub-factors are converted to a scale of 0 to 100 based on the following equation:

$$\text{Sub-factor Score}_i = 50 \times (\text{Sub-factor}_{\text{average}} / \text{Sub-factor}_i)$$

where country  $i$  data are calculated relative to the world average and then multiplied by 50. The seven sub-factor scores are then averaged for each country, yielding a labor freedom score in comparison to scores for other countries.

For the existence of overtime restrictions, 100 is assigned to a country whose value is No, and 0 is assigned to a country whose value is Yes. For the question of redundancy dismissal permitted by law, 100 is assigned to a country whose value is Yes, and 0 is assigned to a country whose value is No.

The simple average of the converted values for the nine sub-factors is computed to obtain the country's overall labor freedom score.

**Sources.** The *Index* relies on the most recent data available from the following sources for data on labor freedom: World Bank, *Worldwide Governance Indicators*; World Bank, *World Development Indicators*; Freedom House, *Freedom in the World*; International Labour Organization, statistics and databases; and World Bank, Employing Workers project.

## Monetary Freedom

Monetary freedom combines a measure of inflation with an assessment of various government activities that distort prices. Price stability without microeconomic intervention is the ideal state for the free market.

The score for the monetary freedom component is based on two sub-factors:

- The weighted average rate of inflation for the most recent three years and
- A qualitative judgement about the extent of government manipulation of prices through direct controls or subsidies.

The weighted average rate of inflation for the most recent three years serves as the primary input into an equation that generates the base score for monetary freedom. The extent of price controls is then assessed as a penalty deduction of 0–20 points from the base score. The two equations used to convert rates of inflation into the final monetary freedom score are:

$$\text{Weighted Avg. Inflation}_i = \theta_1 \text{Inflation}_{it} + \theta_2 \text{Inflation}_{it-1} + \theta_3 \text{Inflation}_{it-2}$$

$$\text{Monetary Freedom}_i = 100 - \alpha \sqrt{\text{Weighted Avg. Inflation}_i} - \text{PC penalty}_i$$

where  $\theta_1$  through  $\theta_3$  (thetas 1–3) represent three numbers that sum to 1 and are exponentially smaller in sequence (in this case, values of 0.665, 0.245, and 0.090, respectively);  $\text{Inflation}_{it}$  is the absolute value of the annual rate of inflation in country  $i$  during year  $t$  as measured by the Consumer Price Index;  $\alpha$  represents a coefficient that stabilizes the variance of scores; and the price control (PC) penalty is an assigned value of 0–20 penalty points based on the extent of price controls.

The convex (square root) functional form was chosen to create separation among countries with low rates of inflation. A concave functional form would essentially treat all hyperinflations as equally bad, whether they were price increases of 100 percent annually or 100,000 percent annually, whereas the square root

provides much more gradation. The  $\alpha$  coefficient is set to equal 6.333, which converts a 10 percent inflation rate into a monetary freedom score of 80.0 and a 2 percent inflation rate into a score of 91.0.

**Sources.** The *Index* relies on the most recent versions of the following sources for data on monetary policy, in order of priority: International Monetary Fund, *International Financial Statistics Online*; International Monetary Fund, *World Economic Outlook* database and *Staff Country Report*, “Article IV Consultation”; various World Bank country reports; various news and magazine articles; and official government publications of each country.

## OPEN MARKETS

### Trade Freedom

Trade freedom is a composite measure of the extent of tariff and nontariff barriers that affect imports and exports of goods and services. The trade freedom score is based on two inputs:

- The trade-weighted average tariff rate and
- A qualitative evaluation of nontariff barriers (NTBs).

Different imports entering a country can be (and often are) subject to different tariff rates. The weighted average tariff uses weights for each tariff based on the share of imports for each good. Weighted average tariffs are a purely quantitative measure and account for the calculation of the base trade freedom score using the following equation:

$$\text{Trade Freedom}_i = 100(\text{Tariff}_{\max} - \text{Tariff}_i) / (\text{Tariff}_{\max} - \text{Tariff}_{\min}) - \text{NTB}_i$$

where  $\text{Trade Freedom}_i$  represents the trade freedom in country  $i$ ;  $\text{Tariff}_{\max}$  and  $\text{Tariff}_{\min}$  represent the upper and lower bounds for tariff rates (%); and  $\text{Tariff}_i$  represents the weighted average tariff rate (%) in country  $i$ . The minimum tariff is naturally 0 percent, and the upper bound was set at 50 percent.

We determine the extent of NTBs in a country’s trade policy regime using both qualitative and quantitative information. Restrictive rules that hinder trade vary widely, and their overlapping and shifting nature makes their complexity hard to measure. The types of NTBs considered in our scoring include:

- **Quantity restrictions:** import quotas; export limitations; voluntary export restraints; import–export embargoes and bans; countertrade; etc.
- **Regulatory restrictions:** licensing; domestic content and mixing requirements; sanitary and phytosanitary standards (SPSs); safety and industrial standards regulations; packaging, labeling, and trademark regulations; advertising and media regulations.
- **Customs restrictions:** advance deposit requirements; customs valuation procedures; customs classification procedures; customs clearance procedures.
- **Direct government intervention:** subsidies and other aid; government industrial policies; government-financed research and other technology policies; competition policies; government procurement policies; state trading, government monopolies, and exclusive franchises.
- In addition, where possible, we consider and report the number of nontariff measures in force as calculated by the World Trade Organization (WTO).

Gathering tariff statistics to make a consistent cross-country comparison is a challenging task. Unlike data on inflation, for instance, some countries do not report their weighted average tariff rate or simple average tariff rate every year.

To preserve consistency in grading the trade freedom component, the *Index* uses a country’s most recently reported most favored nation (MFN)<sup>5</sup> trade-weighted average tariff rate from our primary source.

The most comprehensive and consistent information on MFN trade-weighted average tariff rates is published by the WTO. When the MFN trade-weighted average applied tariff rate is not available, the *Index*

uses the country's simple average of MFN tariff rates; when the country's simple average MFN tariff rate is not available, the weighted average or the simple average of applied tariff rates is used. In the very few cases for which tariff rates are not available from the WTO or the World Bank, data on international trade taxes or an estimated effective tariff rate are used.

**Sources.** The *Index* relies on the most recent versions of the following sources in determining scores for trade policy, in order of priority: World Trade Organization, *World Tariff Profiles*; World Bank, *World Development Indicators*; World Trade Organization, *Trade Policy Review*; Office of the U.S. Trade Representative, *National Trade Estimate Report on Foreign Trade Barriers*; U.S. Department of Commerce, *Country Commercial Guide*; and official government publications of each country.

## Investment Freedom

In an economically free country, there would be no constraints on the flow of investment capital. Individuals and firms would be able to move their resources into and out of specific activities, both internally and across the country's borders, without restriction. Such an ideal country would receive a score of 100 on the *Index's* investment freedom component.

In practice, however, most countries impose a variety of restrictions on investment. Some have different rules for foreign and domestic investment. Some restrict access to foreign exchange. Some impose restrictions on payments, transfers, and capital transactions. In some, certain industries are closed to foreign investment.

The *Index* evaluates a variety of regulatory restrictions that typically are imposed on investment. Points, as indicated below, are deducted from the ideal score of 100 for each of the restrictions in a country's investment regime. It is not necessary for a government to impose all of the listed restrictions at the maximum level to eliminate investment freedom. The scores for the few governments that impose so many restrictions that they total more than 100 points in deductions are set at zero.

## Investment Restrictions

### *National treatment of foreign investment*

- No national treatment; investment prescreened 25 points deducted
- Some national treatment and some prescreening 15 points deducted
- Some national treatment or prescreening 5 points deducted

### *Foreign investment code*

- Burdensome bureaucracy and no transparency 20 points deducted
- Inefficient policy implementation and bureaucracy 10 points deducted
- Some investment laws and practices nontransparent or inefficiently implemented 5 points deducted

### *Restrictions on land ownership*

- All real estate purchases restricted 15 points deducted
- No foreign purchases of real estate 10 points deducted
- Some restrictions on purchases of real estate 5 points deducted

### *Sectoral investment restrictions*

- Multiple sectors restricted 20 points deducted
- Few sectors restricted 10 points deducted
- One or two sectors restricted 5 points deducted

### *Expropriation of investments without fair compensation*

- Common with no legal recourse 25 points deducted
- Common with some legal recourse 15 points deducted
- Uncommon but does occur 5 points deducted



#### *Foreign exchange controls*

- No access by foreigners or residents 25 points deducted
- Access available but heavily restricted 15 points deducted
- Access available with few restrictions 5 points deducted

#### *Capital controls*

- No repatriation of profits; all transactions require government approval 25 points deducted
- Inward and outward capital movements require approval and are subject to some restrictions 15 points deducted
- Most transfers approved with some restrictions 5 points deducted

As many as 20 additional points may be deducted for security problems, a lack of basic investment infrastructure, or other government policies that inject a considerable degree of uncertainty and indirectly burden the investment process and limit investment freedom.

**Sources.** The *Index* relies on the most recent versions of the following sources for data on capital flows and foreign investment, in order of priority: official government publications of each country; U.S. Department of State, *Investment Climate Statements*; Office of the U.S. Trade Representative, *National Trade Estimate Report on Foreign Trade Barriers*; World Bank, *Investing Across Borders*; Organisation for Economic Co-operation and Development, *Services Trade Restrictiveness Index*; and U.S. Department of Commerce, *Country Commercial Guide*.

### Financial Freedom

Financial freedom is both an indicator of banking efficiency and a measure of independence from government control and interference in the financial sector. State ownership of banks and other financial institutions such as insurers and capital markets reduces competition and generally lowers the level of access to credit.

In an ideal banking and financing environment characterized by a minimum level of government interference, independent central bank supervision and regulation of financial institutions are limited to enforcing contractual obligations and preventing fraud; credit is allocated on market terms; the government does not own financial institutions; financial institutions provide various types of financial services to individuals and companies; banks are free to extend credit, accept deposits, and conduct operations in foreign currencies; and foreign financial institutions operate freely and are treated the same as domestic institutions.

To assess the overall level of financial freedom that ensures easy and effective access to financing opportunities for people and businesses in a country's economy, the *Index* takes account of five broad areas:

- The extent of government regulation of financial services,
- The degree of state intervention in banks and other financial firms through direct and indirect ownership,
- Government influence on the allocation of credit,
- The extent of financial and capital market development, and
- Openness to foreign competition.

Based on this assessment, an economy receives an overall financial freedom score on a scale of 0 to 100 according to the following criteria:

- **100—No government interference.** Government oversight is limited solely to the enforcement of contractual obligations and prevention of fraud.
- **90—Minimal government interference.** Regulation of financial institutions is minimal but may extend beyond the enforcement of contractual obligations and prevention of fraud to capitalization or reserve requirements.

- **80—Nominal government interference.** Government ownership of financial institutions represents a small share of overall sector assets. Financial institutions face almost no restrictions on their ability to offer financial services.
- **70—Limited government interference.** The government influences the allocation of credit, but private allocation of credit is subject to almost no restrictions. Government ownership of financial institutions is sizeable. Foreign financial institutions are subject to few restrictions.
- **60—Moderate government interference.** Banking and financial regulations are somewhat burdensome. The government exercises ownership and control of financial institutions with a significant share of overall sector assets. The ability of financial institutions to offer financial services is subject to some restrictions.
- **50—Considerable government interference.** The government significantly influences the allocation of credit, and private allocation of credit faces significant barriers. The ability of financial institutions to offer financial services is subject to significant restrictions. Foreign financial institutions are subject to some restrictions.
- **40—Strong government interference.** The central bank is subject to government influence, its supervision of financial institutions is heavy-handed, and its ability to enforce contracts and prevent fraud is weak. The government exercises active ownership and control of financial institutions with a large minority share of overall sector assets.
- **30—Extensive government interference.** The government influences the allocation of credit extensively. The government owns or controls a majority of financial institutions or is in a dominant position. Financial institutions are heavily restricted, and bank formation faces significant barriers. Foreign financial institutions are subject to significant restrictions.
- **20—Heavy government interference.** The central bank is not independent, and its supervision of financial institutions is repressive. Foreign financial institutions are discouraged or highly constrained.
- **10—Near-repressive.** The government controls the allocation of credit. Bank formation is restricted. Foreign financial institutions are prohibited.
- **0—Repressive.** Supervision and regulation are designed to prevent private financial institutions from functioning. Private financial institutions are nonexistent.

**Sources.** The *Index* relies on the most recent versions of the following sources for data on banking and finance, in order of priority: International Monetary Fund, *Staff Country Report*, “Selected Issues,” and *Staff Country Report*, “Article IV Consultation”; Organisation for Economic Co-operation and Development, *Economic Surveys*; official government publications of each country; U.S. Department of Commerce, *Country Commercial Guide*; Office of the U.S. Trade Representative, *National Trade Estimate Report on Foreign Trade Barriers*; U.S. Department of State, *Investment Climate Statements*; World Bank, *World Development Indicators*; and various news and magazine articles on banking and finance.

## GENERAL METHODOLOGICAL PARAMETERS

**Period of Study.** Scores for the *2024 Index of Economic Freedom* are generally based on data for the period covering the second half of 2022 through the first half of 2023. To the extent possible, the information considered for each variable was current as of June 30, 2023. It should be noted, however, that some component scores are based on historical information. For example, the monetary freedom component uses a three-year weighted average rate of inflation from January 1, 2020, through December 31, 2022.

**Equal Weight.** In the *Index of Economic Freedom*, the 12 components of economic freedom are weighted equally so that the overall score will not be biased in favor of any one component or policy direction. The 12 economic freedoms obviously interact, but the exact mechanisms of this interaction are not clearly definable: Is a minimum threshold for each one essential? Is it possible for one to maximize if others are minimized? Are they dependent or exclusive, complementary or supplementary?

These questions, while valid, are beyond the scope of our fundamental mission. The *Index of Economic Freedom* is designed to reflect the economic and entrepreneurial environment in every country studied in

as balanced a way as possible, not specifically to explain economic growth or any other dependent variable; that is ably done by researchers elsewhere. The raw data for each component are provided so that others can study, weight, and integrate as they see fit.

**Most Recent Available Information.** By analyzing economic freedom annually, the *Index* can include the most recent information as it becomes available country by country. Using a data cutoff date ensures that all countries are treated fairly. As described above, each year's *Index* considers all information as of the last day of June of the previous year (in this case, June 30, 2023). Any new legislative changes or policy actions that take effect after that date have no positive or negative impact on scores or rankings.<sup>6</sup>

## DEFINING THE COUNTRY PAGES' "QUICK FACTS"

The "Quick Facts" section of each country page is a statistical profile that includes the country's principal economic and demographic indicators. To facilitate comparisons among countries, the GDP and GDP per capita figures in the "Quick Facts" section are adjusted to reflect purchasing power parity (PPP). Caution should be used in interpreting changes in these figures over time because PPP conversion rates are subject to regular revision by the International Monetary Fund and the World Bank. To provide accurate estimates of annual and five-year GDP growth rates, these figures have been calculated using constant U.S. dollars for the most recent available years.

Exact definitions and sources for each category of data reported are as follows:

**Population:** 2022 data from World Bank, *World Development Indicators* database midyear estimates, which count all residents regardless of legal status or citizenship. In some cases, other sources include the country's statistical agency and/or central bank.

**GDP:** Gross domestic product (total production of goods and services) adjusted to reflect PPP. The primary source is International Monetary Fund, *World Economic Outlook* database, October 2023. Other sources include a country's statistical agency and/or central bank.

**GDP growth rate:** Annual percentage growth rate of real GDP derived from constant currency units. Annual percentage changes are year over year. The primary source is International Monetary Fund, *World Economic Outlook* database, October 2023. Secondary sources include U.S. Central Intelligence Agency, *The World Factbook 2022*, and a country's statistical agency and/or central bank.

**GDP five-year average annual growth:** Average growth rate measured over a specified period of time. The five-year annual growth rate is measured using data from 2018 through 2022 based on real GDP growth rates. The primary source is International Monetary Fund, *World Economic Outlook* database, October 2023. Secondary sources are U.S. Central Intelligence Agency, *The World Factbook 2022*, and a country's statistical agency and/or central bank.

**GDP per capita:** Gross domestic product (adjusted for PPP) divided by total population. The sources for these data are International Monetary Fund, *World Economic Outlook* database, October 2023; U.S. Central Intelligence Agency, *The World Factbook 2023*; and a country's statistical agency and/or central bank.

**Unemployment rate:** A measure of the portion of the workforce that is not employed but is actively seeking work. Data are from International Labour Organization, *World Employment and Social Outlook: Trends 2023*.

**Inflation:** Annual percentage change in consumer prices as measured for 2022 (or the most recent available year). The primary source for 2022 data is International Monetary Fund, *World Economic Outlook* database, October 2023. The secondary source is a country's statistical agency and/or central bank.

**Foreign direct investment (FDI) inward flow:** Total annual inward flow of FDI in current 2020 U.S. dollars, reported in millions. FDI flows are defined as investments that acquire a lasting management interest (10 percent or more of voting stock) in a local enterprise by an investor operating in another country. Such investment is the sum of equity capital, reinvestment of earnings, other long-term capital, and short-term capital as shown in the balance of payments and both short-term and long-term international loans. Data are from United Nations Conference on Trade and Development, *World Investment Report 2023: International Tax Reforms and Sustainable Investment*.

**Public debt:** Gross government debt as a percentage of GDP, which indicates the cumulative total of all government borrowings less repayments that are denominated in a country’s currency. Public debt is different from external debt, which reflects the foreign currency liabilities of both the private and public sectors and must be financed out of foreign exchange earnings. The primary sources for 2022 data are the International Monetary Fund and the IMF DataMapper.

## COMMONLY USED ABBREVIATIONS

**EU:** European Union, founded in 1963 and self-described as “a unique economic and political union between 27 European countries.”<sup>7</sup> Its 27 member countries currently include Austria, Belgium, Bulgaria, Cyprus, Croatia, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, and Sweden. (The United Kingdom completed its withdrawal from the EU on January 31, 2020.)

**IMF:** International Monetary Fund, established in 1945 and self-described as “an organization of 190 countries, working to foster global monetary cooperation, secure financial stability, facilitate international trade, promote high employment and sustainable economic growth, and reduce poverty around the world.”<sup>8</sup>

**WTO:** World Trade Organization, founded in 1995 and self-described as “the only global international organization dealing with the rules of trade between nations.”<sup>9</sup> Specifically, it “is an organization for trade opening,” “is a forum for governments to negotiate trade agreements,” “is a place for them to settle trade disputes,” “operates a system of trade rules,” and “[e]ssentially...is a place where member governments try to sort out the trade problems they face with each other.” As of the time this edition of the *Index* was being prepared, the WTO included 164 member economies.<sup>10</sup>

## ENDNOTES

1. The following equation is used where values of sub-factor data are ranked in ascending order:  $\text{Sub-factor Score } i = 100 \times (\text{Sub-factor}_i - \text{Sub-factor}_{\text{Min}}) / (\text{Sub-factor}_{\text{Max}} - \text{Sub-factor}_{\text{Min}})$ .
2. The following equation is used where values of sub-factor data are ranked in ascending order:  $\text{Sub-factor Score } i = 100 \times (\text{Sub-factor}_i - \text{Sub-factor}_{\text{Min}}) / (\text{Sub-factor}_{\text{Max}} - \text{Sub-factor}_{\text{Min}})$ .
3. The maximum sub-factor score of 100 is assigned to balanced budgets or budget surpluses.
4. The following equation is used where values of sub-factor data are ranked in ascending order:  $\text{Sub-factor Score } i = 100 \times (\text{Sub-factor}_i - \text{Sub-factor}_{\text{Min}}) / (\text{Sub-factor}_{\text{Max}} - \text{Sub-factor}_{\text{Min}})$ .
5. Known since 1998 as permanent normal trade relations (PNTR).
6. Because the *Index* is published several months after the cutoff date for evaluation, more recent events cannot be factored into the scores. As in past editions, however, such events may be noted in the text. The impact of policy changes and macroeconomic statistics available in the second half of 2022 has not affected the rankings for the 2023 *Index* but almost certainly will affect scores in the next edition.
7. European Commission, *The European Union: What It Is and What It Does* (Luxembourg: Publications Office of the European Union, 2022), p. 7, <https://op.europa.eu/en/publication-detail/-/publication/ac0a88a6-4369-11ea-b81b-01aa75ed71a1/language-en/> (accessed January 4, 2024).
8. International Monetary Fund, "IMF Country Information," <https://www.imf.org/en/Countries> (accessed January 4, 2024). This source also includes a list of the IMF's 190 member countries.
9. World Trade Organization, "What Is the WTO?" [https://www.wto.org/english/thewto\\_e/whatis\\_e/whatis\\_e.htm](https://www.wto.org/english/thewto_e/whatis_e/whatis_e.htm) (accessed January 4, 2024).
10. For a list of the WTO's 164 member countries, see World Trade Organization, "Members and Observers," [https://www.wto.org/english/thewto\\_e/whatis\\_e/tif\\_e/org6\\_e.htm](https://www.wto.org/english/thewto_e/whatis_e/tif_e/org6_e.htm) (accessed January 4, 2024).