

Chapter 1 Economic Freedom of the World in 2014

This year is the thirtieth anniversary of the first of a series of Fraser Institute conferences, hosted by Michael Walker along with Milton and Rose Friedman, that focused on the development of a clearly defined measurement of economic freedom. In addition to the Friedmans, several of the world's leading economists including Douglass North, Gary Becker, William Niskanen, and Gordon Tullock participated in the conferences. These conferences held from 1986 to 1994 culminated with the initial publication of *Economic Freedom of the World* (Gwartney, Lawson, and Block, 1996).

From the beginning, conference participants sought to carefully define economic freedom and develop an accurate measure for a large set of countries. Moreover, we wanted the measure to be fully transparent and as objective as possible. We did not want our subjective views to influence the rating of any country.

Conceptually, economic freedom is present when economic activity is coordinated by personal choice, voluntary exchange, open markets, and clearly defined and enforced property rights. People are economically free when they are permitted to choose for themselves and engage in voluntary transactions as long as they do not harm the person or property of others. The *Economic Freedom of the World* (EFW) measure might be thought of as an effort to identify how closely the institutions and policies of a country correspond with the ideal of limited government, where the government protects property rights and arranges for the provision of a limited set of “public goods” such as national defense and access to money of sound value, but little beyond these core functions. To a large degree, a country's EFW summary rating is a measure of how closely its institutions and policies compare with the idealized structure implied by standard textbook analysis of microeconomics.

The *Economic Freedom of the World* index for 2014

The EFW data set provides a comprehensive measure of the degree to which countries rely on voluntary exchange and market institutions to allocate resources. This year's index provides a measure of economic freedom for 159 countries. The data are available for approximately 100 countries back to 1980. This data set makes it possible for scholars to analyze the impact of both cross-country differences in economic freedom and changes in that freedom across a time frame of three and a half decades.¹ The EFW measure will also help scholars examine the contribution

1 Four and a half decades are available online.

of economic institutions more thoroughly and better disentangle it from political, climatic, locational, cultural, and historical factors as determinants of growth and development.

Construction of the index published in *Economic Freedom of the World* is based on three important methodological principles. First, objective components are always preferred to those that involve surveys or value judgments. Given the multi-dimensional nature of economic freedom and the importance of legal and regulatory elements, it is sometimes necessary to use data based on surveys, expert panels, and generic case studies. To the fullest extent possible, however, the index uses objective components. Second, the data used to construct the index ratings are from external sources such as the International Monetary Fund, World Bank, and World Economic Forum that provide data for a large number of countries. Data provided directly from a source within a country are rarely used. Importantly, the value judgments of the authors or others in the Economic Freedom Network are never used to alter the raw data or the rating of any country. Third, transparency is present throughout. The report provides information about the data sources, the methodology used to transform raw data into component ratings, and how the component ratings are used to construct both the area and summary ratings. Methodological details can be found in the Appendix: Explanatory Notes and Data Sources (p. 273) of this report. The entire data set used in the construction of the index is freely available to researchers at www.freetheworld.com.

Structure of the EFW index

Exhibit 1.1 indicates the structure of the EFW index. The index measures the degree of economic freedom present in five major areas: [1] Size of Government; [2] Legal System and Security of Property Rights; [3] Sound Money; [4] Freedom to Trade Internationally; [5] Regulation.

Within the five major areas, there are 24 components in the index. Many of those components are themselves made up of several sub-components. In total, the index incorporates 42 distinct variables. Each component and sub-component is placed on a scale from 0 to 10 that reflects the distribution of the underlying data. When sub-components are present, the sub-component ratings are averaged to derive the component rating. The component ratings within each area are then averaged to derive ratings for each of the five areas. In turn, the five area ratings are averaged to derive the summary rating for each country. The following section provides an overview of the five major areas.

1 *Size of Government*

The four components of Area 1 indicate the extent to which countries rely on the political process to allocate resources and goods and services. When government spending increases relative to spending by individuals, households, and businesses, political decision-making is substituted for personal choice and economic freedom is reduced. The first two components address this issue. Government consumption as a share of total consumption (1A) and transfers and subsidies as a share of GDP (1B) are indicators of the size of government. When government consumption is a larger share of the total, political choice is substituted for personal choice. Similarly, when governments tax some people in order to provide transfers to others, they reduce the freedom of individuals to keep what they earn.

Exhibit 1.1: Areas, Components, and Sub-components of the EFW Index

1. Size of Government

- | | |
|--|---|
| A. Government consumption | D. Top marginal tax rate |
| B. Transfers and subsidies | (i) Top marginal income tax rate |
| C. Government enterprises and investment | (ii) Top marginal income and payroll tax rate |
-

2. Legal System and Property Rights

- | | |
|--|--|
| A. Judicial independence | F. Legal enforcement of contracts |
| B. Impartial courts | G. Regulatory costs of the sale of real property |
| C. Protection of property rights | H. Reliability of police |
| D. Military interference in rule of law and politics | I. Business costs of crime |
| E. Integrity of the legal system | |
-

3. Sound Money

- | | |
|------------------------------------|--|
| A. Money growth | C. Inflation: most recent year |
| B. Standard deviation of inflation | D. Freedom to own foreign currency bank accounts |
-

4. Freedom to Trade Internationally

- | | |
|--|---|
| A. Tariffs | C. Black-market exchange rates |
| (i) Revenue from trade taxes (% of trade sector) | D. Controls of the movement of capital and people |
| (ii) Mean tariff rate | (i) Foreign ownership / investment restrictions |
| (iii) Standard deviation of tariff rates | (ii) Capital controls |
| B. Regulatory trade barriers | (iii) Freedom of foreigners to visit |
| (i) Non-tariff trade barriers | |
| (ii) Compliance costs of importing and exporting | |
-

5. Regulation

- | | |
|---|---|
| A. Credit market regulations | C. Business regulations |
| (i) Ownership of banks | (i) Administrative requirements |
| (ii) Private sector credit | (ii) Bureaucracy costs |
| (iii) Interest rate controls / negative real interest rates | (iii) Starting a business |
| B. Labor market regulations | (iv) Extra payments / bribes / favoritism |
| (i) Hiring regulations and minimum wage | (v) Licensing restrictions |
| (ii) Hiring and firing regulations | (vi) Cost of tax compliance |
| (iii) Centralized collective bargaining | |
| (iv) Hours regulations | |
| (v) Mandated cost of worker dismissal | |
| (vi) Conscription | |

The third component (1C) in this area measures the extent to which countries use private investment and enterprises rather than government investment and firms to direct resources. Governments and state-owned enterprises play by rules that are different from those to which private enterprises are subject. They are not dependent on consumers for their revenue or on investors for capital. They often operate in protected markets. Thus, economic freedom is reduced as government enterprises produce a larger share of total output.

The fourth component (1D) is based on (1Di) the top marginal income tax rate and (1Dii) the top marginal income and payroll tax rate and the income threshold at which these rates begin to apply. These two sub-components are averaged to calculate the top marginal tax rate (1D). High marginal tax rates that apply at relatively low income levels are also indicative of reliance upon government. Such rates deny individuals the fruits of their labor. Thus, countries with high marginal tax rates and low income thresholds are rated lower.

Taken together, the four components of Area 1 measure the degree to which a country relies on personal choice and markets rather than government budgets and political decision-making. Therefore, countries with low levels of government spending as a share of the total, a smaller government enterprise sector, and lower marginal tax rates earn the highest ratings in this area.

2 *Legal System and Property Rights*

Protection of persons and their rightfully acquired property is a central element of economic freedom and a civil society. Indeed, it is the most important function of government. Area 2 focuses on this issue. The key ingredients of a legal system consistent with economic freedom are rule of law, security of property rights, an independent and unbiased judiciary, and impartial and effective enforcement of the law. The nine components in this area are indicators of how effectively the protective functions of government are performed. These components are from three primary sources: the *International Country Risk Guide*, the *Global Competitiveness Report*, and the World Bank's *Doing Business* project.

Security of property rights, protected by the rule of law, provides the foundation for both economic freedom and the efficient operation of markets. Freedom to exchange, for example, is meaningless if individuals do not have secure rights to property, including the fruits of their labor. When individuals and businesses lack confidence that contracts will be enforced and the fruits of their productive efforts protected, their incentive to engage in productive activity is eroded. Perhaps more than any other area, this area is essential for the efficient allocation of resources. Countries with major deficiencies in this area are unlikely to prosper regardless of their policies in the other four areas.

3 *Sound Money*

Money oils the wheels of exchange. An absence of sound money undermines gains from trade. As Milton Friedman informed us long ago, inflation is a monetary phenomenon, caused by too much money chasing too few goods. High rates of monetary growth lead to inflation. Similarly, when the rate of inflation increases, it also tends to become more volatile. High and volatile rates of inflation distort relative prices, alter the fundamental terms of long-term contracts, and make it virtually impossible for individuals and businesses to plan sensibly for the future. Sound

money is essential to protect property rights and, thus, economic freedom. Inflation erodes the value of property held in monetary instruments. When governments finance their expenditures by creating money, in effect, they are expropriating the property and violating the economic freedom of their citizens.

The important thing is that individuals have access to sound money: who provides it makes little difference. Thus, in addition to data on a country's rate of inflation and its government's monetary policy, it is important to consider how difficult it is to use alternative, more credible, currencies. If bankers can offer saving and checking accounts in other currencies or if citizens can open foreign bank accounts, then access to sound money is increased and economic freedom expanded.

There are four components to the EFW index in Area 3. All of them are objective and relatively easy to obtain. The first three are designed to measure the consistency of monetary policy (or institutions) with long-term price stability. Component 3D is designed to measure the ease with which other currencies can be used via domestic and foreign bank accounts. In order to earn a high rating in this area, a country must follow policies and adopt institutions that lead to low (and stable) rates of inflation and avoid regulations that limit the ability to use alternative currencies.

4 *Freedom to Trade Internationally*

In our modern world of high technology and low costs for communication and transportation, freedom of exchange across national boundaries is a key ingredient of economic freedom. Many goods and services are now either produced abroad or contain resources supplied from abroad. Voluntary exchange is a positive-sum activity: both trading partners gain and the pursuit of the gain provides the motivation for the exchange. Thus, freedom to trade internationally also contributes substantially to our modern living standards.

At the urging of protectionist critics and special-interest groups, virtually all countries adopt trade restrictions of various types. Tariffs and quotas are obvious examples of roadblocks that limit international trade. Because they reduce the convertibility of currencies, controls on the exchange rate also hinder international trade. The volume of trade is also reduced if the passage of goods through customs is onerous and time consuming. Sometimes these delays are the result of administrative inefficiency while in other instances they reflect the actions of corrupt officials seeking to extract bribes. In both cases, economic freedom is reduced.

The components in this area are designed to measure a wide variety of restraints that affect international exchange: tariffs, quotas, hidden administrative restraints, and controls on exchange rates and the movement of capital. In order to get a high rating in this area, a country must have low tariffs, easy clearance and efficient administration of customs, a freely convertible currency, and few controls on the movement of physical and human capital.

5 *Regulation*

When regulations restrict entry into markets and interfere with the freedom to engage in voluntary exchange, they reduce economic freedom. The fifth area of the index focuses on regulatory restraints that limit the freedom of exchange in credit, labor, and product markets. The first component (5A) reflects conditions in the domestic credit market. One sub-component provides evidence on the extent to

which the banking industry is privately owned. The final two sub-components indicate the extent to which credit is supplied to the private sector and whether controls on interest rates interfere with the market for credit. Countries that use a private banking system to allocate credit to private parties and refrain from controlling interest rates receive higher ratings for this regulatory component.

Many types of labor market regulations infringe on the economic freedom of employees and employers. Among the more prominent are minimum wages, dismissal regulations, centralized wage setting, extension of union contracts to non-participating parties, and conscription. Labor-market regulations (component 5B) is designed to measure the extent to which these restraints upon economic freedom are present. In order to earn high marks in the component rating regulation of the labor market, a country must allow market forces to determine wages and establish the conditions of hiring and firing, and refrain from the use of conscription.

Like the regulation of credit and labor markets, the regulation of business activities (component 5C) inhibits economic freedom. The sub-components of 5C are designed to identify the extent to which regulations and bureaucratic procedures restrain entry and reduce competition. In order to score high in this portion of the index, countries must allow markets to determine prices and refrain from regulatory activities that retard entry into business and increase the cost of producing products. They also must refrain from “playing favorites”, that is, from using their power to extract financial payments and reward some businesses at the expense of others.

Construction of Area and Summary ratings

Theory provides us with some direction regarding elements that should be included in the five areas and the summary index, but it does not indicate what weights should be attached to the components within the areas or among the areas in the construction of the summary index. It would be nice if these factors were independent of each other and a weight could be attached to each of them. In the past, we investigated several methods of weighting the various components, including principle component analysis and a survey of economists. We have also invited others to use their own weighting structure if they believe that it is preferable. Our experience indicates that the summary index is not very sensitive to alternative weighting methods.

Furthermore, there is reason to question whether the areas (and components) are independent or work together like the wheels, motor, transmission, driveshaft, and frame of a car. Just as these interconnected parts provide for the mobility of an automobile, it may be the combination of interrelated factors that brings about economic freedom. Which is more important for the mobility of an automobile: the motor, wheels, or transmission? The question cannot be easily answered because the parts work together. If any of these key parts break down, the car is immobile. Institutional quality may be much the same. If any of the key parts are absent, the overall effectiveness is undermined.

As the result of these two considerations, we organize the elements of the index in a manner that seems sensible to us but we make no attempt to weight the components in any special way when deriving either area or summary ratings. Of course, the component and sub-component data are available to researchers who would like to consider alternative weighting schemes and we encourage them to do so.

Summary Economic Freedom Ratings for 2014

Exhibits 1.2a and 1.2b (pp. 8–9) present the summary economic freedom ratings, sorted from highest to lowest, for the 159 countries of this year’s report. These ratings are for 2014, the most recent year for which comprehensive data are available.

Hong Kong and Singapore, once again, occupy the top two positions. Next comes New Zealand and Switzerland, two countries almost always in the top five. Five countries—Canada, Georgia, Ireland, Mauritius, and United Arab Emirates—are tied for fifth place. Australia and United Kingdom conclude the top ten with a tie.

The rankings of some other major countries are the United States (16th), Germany (30th), Japan (tied for 40th), South Korea (tied for 42nd), France (tied for 57th), Italy (69th), Mexico (tied for 88th), Russia (tied for 102nd), India (112th), China (tied for 113th), and Brazil (124th). The 10 lowest-rated countries are: Iran, Algeria, Chad, Guinea, Angola, Central African Republic, Argentina, Republic of Congo, Libya, and lastly Venezuela.

The EFW index is calculated back to 1970 as the availability of data allows; see the Country Data Tables in chapter 2 or our website, www.freetheworld.com, for information from past years. Because some data for earlier years may have been updated or corrected, researchers are always encouraged to use the data from the most recent annual report to assure the most reliable figures.

Area Economic Freedom Ratings (and Rankings) for 2014

Exhibit 1.3 (pp. 10–14) presents the ratings (and rankings) for each of the five areas of the index and for Components SA, 5B, and 5C. A number of interesting patterns emerge from an analysis of these data. High-income industrial economies generally rank quite high for Legal System and Property Rights (Area 2), Sound Money (Area 3), and Freedom to Trade Internationally (Area 4). Their ratings were lower, however, for Size of Government (Area 1) and Regulation (Area 5). This was particularly true for western European countries.

On the other hand, a number of developing nations have a small fiscal size of government but rate low in other areas and, as a result, have a low overall rating. The lesson from this is clear: a small fiscal size of government is insufficient to ensure economic freedom. The institutions of economic freedom, such as the rule of law and property rights, as well as sound money, trade openness, and sensible regulation are also required.

Weakness in the rule of law and property rights is particularly pronounced in sub-Saharan Africa and for several nations that were formerly part of the Soviet bloc, though several countries in the latter group have made impressive strides toward improvement. Many nations in Latin America and Southeast Asia also score poorly for rule of law and property rights. The nations that rank poorly in this category also tend to score poorly in the trade and regulation areas, even though several have reasonably sized governments and sound money.

Exhibit 1.2a: Summary Economic Freedom Ratings for 2014, First and Second Quartiles



Exhibit 1.2b: Summary Economic Freedom Ratings for 2014, Third and Fourth Quartiles

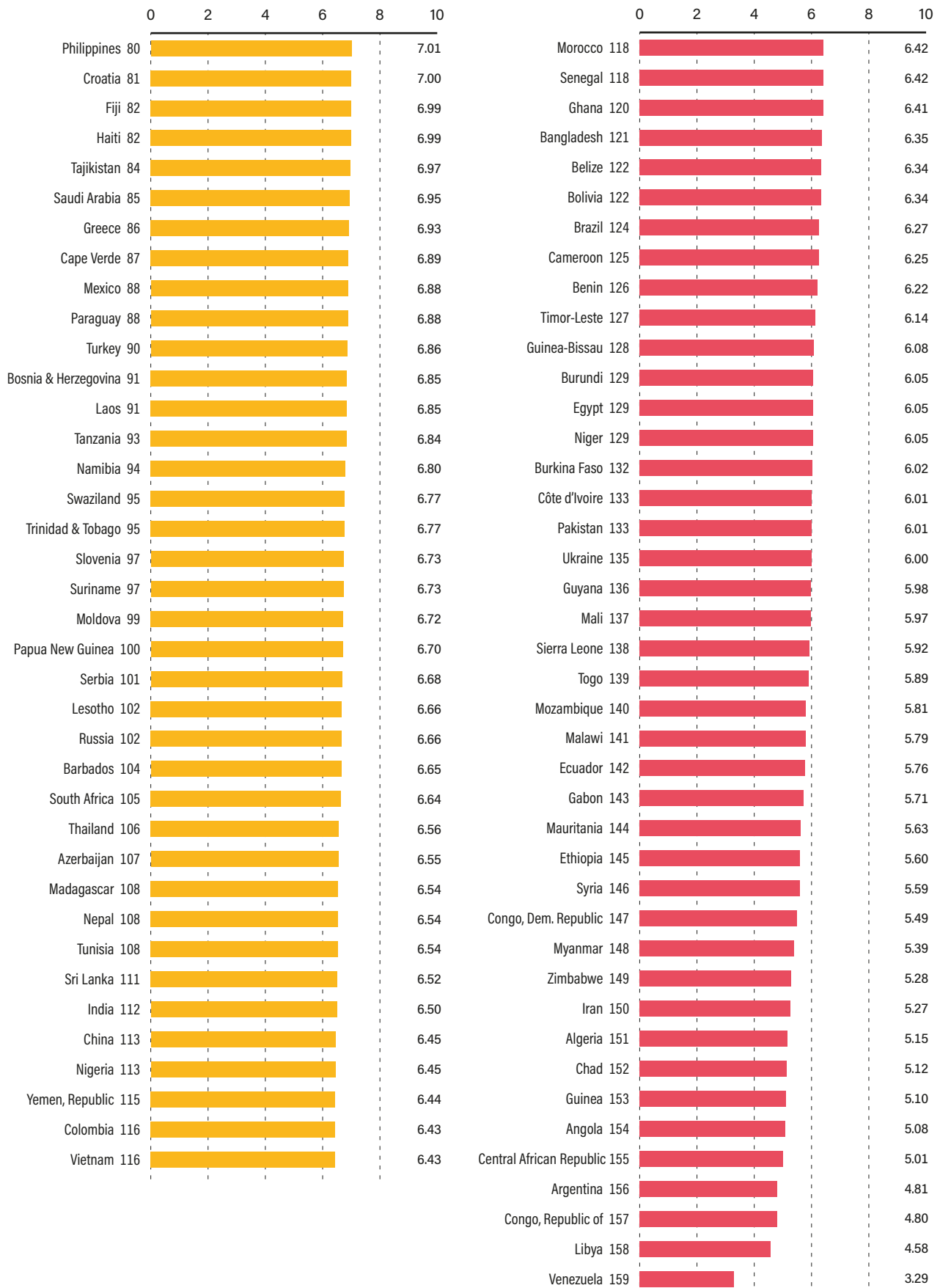


Exhibit 1.3: Area Economic Freedom Ratings (Rankings) for 2014

	Areas					Components of Area 5		
	1 Size of Government	2 Legal System and Property Rights	3 Sound Money	4 Freedom to trade internationally	5 Regulation	5A Credit market regulations	5B Labor market regulations	5C Business regulations
	Rating (Rank)	Rating (Rank)	Rating (Rank)	Rating (Rank)	Rating (Rank)	Rating (Rank)	Rating (Rank)	Rating (Rank)
Albania	7.5 (39)	4.8 (107)	9.6 (19)	8.1 (31)	7.0 (87)	7.2 (131)	7.2 (58)	6.4 (72)
Algeria	3.5 (157)	4.8 (106)	7.2 (113)	4.6 (154)	5.7 (149)	6.2 (145)	4.8 (138)	6.0 (122)
Angola	4.4 (146)	3.2 (151)	6.9 (128)	5.1 (147)	5.7 (148)	8.7 (77)	2.5 (159)	6.0 (126)
Argentina	5.0 (136)	4.1 (134)	5.6 (156)	3.4 (157)	5.9 (144)	7.5 (124)	5.3 (126)	4.9 (152)
Armenia	7.7 (30)	5.6 (75)	9.4 (44)	8.4 (13)	7.5 (55)	9.5 (36)	6.3 (90)	6.7 (45)
Australia	6.6 (66)	8.0 (15)	9.3 (48)	7.7 (54)	8.1 (16)	9.5 (31)	8.0 (18)	6.7 (46)
Austria	5.1 (132)	8.1 (11)	9.6 (21)	8.2 (26)	6.9 (97)	8.9 (72)	5.6 (110)	6.1 (120)
Azerbaijan	5.2 (130)	5.9 (59)	7.4 (109)	7.1 (82)	7.1 (82)	8.0 (104)	6.6 (79)	6.7 (48)
Bahamas	8.1 (16)	6.7 (34)	6.9 (131)	6.7 (104)	8.6 (3)	8.6 (84)	8.4 (12)	8.8 (1)
Bahrain	6.7 (63)	6.5 (40)	9.1 (58)	7.6 (59)	8.0 (17)	9.0 (67)	8.1 (15)	7.1 (29)
Bangladesh	8.8 (2)	3.0 (153)	7.0 (121)	5.9 (135)	7.0 (86)	8.0 (107)	7.3 (53)	5.7 (139)
Barbados	6.2 (90)	6.5 (43)	7.2 (114)	6.9 (87)	6.5 (127)	6.0 (146)	7.2 (55)	6.2 (104)
Belgium	3.9 (153)	7.8 (19)	9.7 (10)	8.3 (17)	7.7 (42)	9.5 (28)	7.2 (61)	6.4 (70)
Belize	6.1 (96)	4.2 (131)	6.9 (135)	6.6 (106)	8.0 (21)	9.9 (10)	7.6 (43)	6.4 (77)
Benin	5.9 (108)	4.9 (100)	6.9 (129)	6.2 (122)	7.3 (71)	8.7 (79)	6.0 (101)	7.1 (26)
Bhutan	7.6 (37)	6.6 (37)	6.9 (134)	6.6 (107)	7.7 (43)	7.4 (127)	8.6 (6)	7.1 (28)
Bolivia	6.3 (87)	4.3 (123)	8.7 (77)	6.6 (109)	5.8 (146)	8.9 (73)	4.1 (152)	4.5 (156)
Bosnia & Herzegovina	5.4 (127)	5.0 (93)	8.5 (83)	7.7 (53)	7.6 (47)	9.1 (60)	7.8 (26)	5.9 (132)
Botswana	6.1 (95)	6.1 (56)	8.9 (71)	7.5 (66)	7.8 (29)	9.3 (42)	7.4 (49)	6.7 (47)
Brazil	7.0 (57)	4.7 (112)	8.2 (91)	6.7 (99)	4.7 (155)	6.4 (141)	4.5 (144)	3.4 (158)
Brunei Darussalam	5.0 (138)	6.7 (33)	9.0 (65)	7.1 (78)	8.4 (7)	8.9 (69)	8.7 (5)	7.5 (14)
Bulgaria	7.0 (56)	5.0 (88)	9.2 (52)	8.0 (33)	7.6 (46)	9.4 (38)	7.3 (52)	6.2 (103)
Burkina Faso	5.5 (121)	3.8 (142)	7.0 (126)	6.3 (118)	7.4 (61)	8.7 (80)	7.2 (60)	6.4 (69)
Burundi	6.0 (102)	3.5 (148)	8.0 (98)	6.2 (124)	6.5 (122)	5.0 (151)	7.9 (21)	6.6 (50)
Cambodia	7.9 (24)	4.2 (129)	9.3 (50)	7.6 (61)	7.1 (80)	9.2 (50)	6.7 (75)	5.4 (145)
Cameroon	8.0 (19)	4.2 (130)	7.2 (115)	5.3 (145)	6.7 (112)	7.0 (134)	7.4 (47)	5.5 (143)
Canada	6.3 (85)	8.0 (13)	9.6 (23)	7.8 (48)	8.1 (12)	9.7 (16)	8.1 (13)	6.5 (66)
Cape Verde	6.4 (82)	5.9 (61)	8.5 (86)	7.1 (81)	6.6 (117)	8.6 (85)	4.1 (150)	7.0 (33)
Central African Rep.	6.6 (68)	2.0 (159)	6.1 (150)	4.7 (151)	5.8 (147)	7.9 (114)	3.5 (155)	5.9 (134)
Chad	6.1 (101)	3.2 (152)	6.4 (144)	5.2 (146)	4.7 (156)	3.7 (157)	5.8 (105)	4.6 (155)
Chile	8.0 (18)	6.9 (31)	8.9 (69)	8.3 (16)	6.9 (90)	9.1 (57)	5.1 (130)	6.6 (59)
China	5.1 (134)	5.8 (65)	8.2 (92)	6.8 (95)	6.3 (131)	7.3 (130)	5.5 (117)	6.3 (94)

Ratings are shown rounded to the nearest tenth of a point, but the rankings are based on the unrounded ratings.

Exhibit 1.3 (continued): Area Economic Freedom Ratings (Rankings) for 2014

	Areas					Components of Area 5		
	1 Size of Government	2 Legal System and Property Rights	3 Sound Money	4 Freedom to trade internationally	5 Regulation	5A Credit market regulations	5B Labor market regulations	5C Business regulations
	Rating (Rank)	Rating (Rank)	Rating (Rank)	Rating (Rank)	Rating (Rank)	Rating (Rank)	Rating (Rank)	Rating (Rank)
Colombia	6.1 (98)	4.1 (133)	8.1 (94)	6.7 (102)	7.1 (84)	9.1 (59)	5.9 (104)	6.2 (100)
Congo, Dem. Rep.	5.5 (122)	2.0 (157)	8.8 (74)	4.6 (155)	6.6 (116)	6.3 (142)	5.4 (121)	8.0 (7)
Congo, Republic of	4.4 (149)	3.0 (154)	5.9 (154)	4.7 (152)	6.0 (142)	6.2 (144)	5.7 (109)	6.3 (85)
Costa Rica	7.6 (34)	6.3 (50)	9.4 (39)	8.0 (36)	6.5 (124)	6.6 (138)	6.4 (85)	6.5 (65)
Côte d'Ivoire	5.6 (115)	4.8 (105)	7.0 (122)	5.9 (133)	6.7 (108)	8.2 (99)	5.5 (116)	6.4 (68)
Croatia	4.7 (140)	5.8 (68)	9.3 (45)	7.9 (43)	7.3 (67)	9.1 (56)	6.8 (72)	6.0 (121)
Cyprus	7.3 (48)	6.4 (45)	7.2 (112)	7.8 (50)	7.9 (24)	10.0 (9)	7.7 (35)	6.1 (117)
Czech Republic	5.7 (112)	6.4 (47)	9.6 (27)	8.3 (22)	7.7 (44)	9.9 (12)	8.0 (19)	5.2 (151)
Denmark	3.8 (155)	8.2 (8)	9.7 (12)	8.5 (8)	8.1 (11)	10.0 (1)	7.5 (45)	6.9 (35)
Dominican Rep.	8.2 (15)	4.3 (122)	9.5 (30)	7.8 (49)	6.8 (104)	7.8 (116)	6.5 (84)	6.1 (116)
Ecuador	5.3 (128)	4.2 (128)	6.9 (133)	6.2 (121)	6.1 (138)	9.3 (48)	3.6 (154)	5.5 (144)
Egypt	5.9 (105)	4.5 (118)	8.8 (72)	5.8 (138)	5.2 (154)	4.0 (156)	5.1 (133)	6.4 (74)
El Salvador	8.4 (11)	4.1 (132)	9.7 (14)	7.8 (47)	6.9 (96)	8.1 (101)	6.4 (88)	6.1 (109)
Estonia	6.0 (104)	7.3 (23)	9.1 (56)	8.4 (12)	7.7 (38)	10.0 (1)	6.0 (100)	7.2 (21)
Ethiopia	6.1 (94)	5.0 (95)	5.5 (157)	5.0 (149)	6.5 (125)	5.7 (149)	7.6 (42)	6.2 (95)
Fiji	7.3 (46)	6.2 (52)	6.1 (149)	6.4 (117)	8.9 (2)	9.6 (23)	9.0 (3)	8.1 (5)
Finland	4.4 (148)	8.9 (1)	9.5 (28)	8.2 (27)	7.4 (60)	9.5 (29)	5.5 (119)	7.3 (18)
France	4.3 (151)	7.2 (26)	9.7 (9)	8.3 (21)	7.1 (83)	9.3 (41)	5.7 (107)	6.2 (101)
Gabon	5.6 (117)	4.3 (124)	6.0 (152)	5.8 (136)	6.9 (93)	8.0 (104)	7.4 (46)	5.3 (149)
Gambia, The	7.5 (40)	5.4 (83)	8.0 (102)	7.5 (65)	7.2 (76)	6.9 (135)	8.4 (11)	6.2 (99)
Georgia	7.8 (27)	6.6 (36)	9.1 (60)	8.5 (10)	7.9 (26)	9.6 (24)	6.7 (74)	7.4 (16)
Germany	5.5 (119)	7.7 (21)	9.6 (22)	7.9 (42)	6.9 (88)	8.3 (93)	5.9 (103)	6.6 (56)
Ghana	7.0 (55)	5.3 (85)	6.8 (137)	6.3 (119)	6.5 (118)	7.2 (132)	6.2 (93)	6.3 (93)
Greece	4.7 (142)	5.9 (62)	9.7 (15)	7.9 (40)	6.4 (129)	8.6 (86)	4.5 (143)	6.3 (92)
Guatemala	8.7 (5)	4.4 (119)	9.6 (24)	8.0 (32)	6.7 (109)	9.5 (35)	4.2 (148)	6.4 (78)
Guinea	6.4 (79)	3.5 (149)	7.5 (108)	4.7 (153)	3.5 (159)	0.0 (159)	4.8 (140)	5.6 (142)
Guinea-Bissau	7.2 (52)	4.1 (136)	6.3 (146)	5.9 (134)	6.9 (92)	9.0 (64)	3.5 (156)	8.3 (2)
Guyana	4.1 (152)	4.5 (117)	8.1 (95)	6.4 (116)	6.8 (105)	6.3 (142)	7.9 (22)	6.1 (114)
Haiti	8.7 (6)	2.6 (156)	8.2 (93)	8.0 (34)	7.4 (59)	8.2 (97)	8.1 (14)	6.0 (123)
Honduras	8.7 (4)	4.2 (125)	9.2 (53)	7.2 (75)	6.8 (102)	8.7 (81)	5.2 (128)	6.5 (60)
Hong Kong	9.3 (1)	8.1 (10)	9.4 (43)	9.4 (2)	9.0 (1)	10.0 (1)	9.4 (1)	7.7 (12)
Hungary	5.4 (126)	6.1 (55)	9.5 (33)	8.2 (25)	7.3 (69)	9.7 (20)	6.6 (80)	5.6 (141)

Ratings are shown rounded to the nearest tenth of a point, but the rankings are based on the unrounded ratings.

Exhibit 1.3 (continued): Area Economic Freedom Ratings (Rankings) for 2014

	Areas					Components of Area 5		
	1 Size of Government	2 Legal System and Property Rights	3 Sound Money	4 Freedom to trade internationally	5 Regulation	5A Credit market regulations	5B Labor market regulations	5C Business regulations
	Rating (Rank)	Rating (Rank)	Rating (Rank)	Rating (Rank)	Rating (Rank)	Rating (Rank)	Rating (Rank)	Rating (Rank)
Iceland	5.2 (131)	8.3 (6)	7.0 (120)	7.0 (85)	7.8 (30)	8.3 (93)	7.8 (25)	7.2 (22)
India	8.5 (8)	5.2 (86)	6.9 (130)	5.6 (144)	6.3 (132)	6.5 (139)	6.0 (99)	6.4 (73)
Indonesia	7.7 (31)	4.7 (110)	9.3 (49)	7.1 (79)	6.3 (133)	8.1 (102)	4.6 (142)	6.2 (106)
Iran	5.4 (125)	5.6 (73)	7.0 (119)	3.0 (159)	5.3 (152)	4.9 (154)	4.8 (139)	6.3 (86)
Ireland	5.7 (110)	8.0 (14)	9.6 (18)	8.7 (3)	7.7 (36)	8.8 (74)	7.3 (54)	7.2 (23)
Israel	6.4 (83)	5.9 (60)	9.5 (31)	8.0 (35)	7.1 (79)	10.0 (1)	5.3 (125)	6.1 (115)
Italy	5.1 (133)	5.7 (70)	9.8 (5)	8.1 (30)	7.1 (77)	9.4 (37)	6.6 (78)	5.4 (148)
Jamaica	7.7 (33)	5.0 (89)	8.4 (88)	7.0 (83)	7.9 (27)	9.6 (27)	7.9 (20)	6.1 (107)
Japan	4.7 (141)	7.8 (18)	9.5 (29)	7.7 (56)	7.3 (64)	7.9 (115)	8.0 (17)	6.2 (105)
Jordan	8.0 (17)	6.1 (54)	9.5 (32)	8.0 (38)	7.5 (52)	7.7 (122)	7.8 (30)	7.1 (25)
Kazakhstan	7.5 (42)	6.3 (48)	9.0 (67)	6.0 (128)	7.9 (22)	9.3 (42)	7.7 (34)	6.8 (43)
Kenya	7.8 (26)	4.9 (96)	9.0 (64)	6.5 (112)	7.4 (63)	8.0 (109)	7.8 (28)	6.3 (82)
Korea, South	6.4 (77)	6.5 (41)	9.6 (26)	7.6 (57)	6.9 (91)	9.3 (42)	4.8 (136)	6.6 (57)
Kuwait	6.2 (88)	6.6 (38)	8.3 (90)	6.9 (89)	7.7 (41)	10.0 (1)	6.8 (70)	6.3 (87)
Kyrgyz Republic	7.9 (20)	4.7 (111)	8.7 (80)	7.4 (72)	7.1 (78)	8.7 (82)	6.1 (96)	6.6 (49)
Laos	8.5 (9)	5.9 (64)	6.5 (142)	6.8 (92)	6.6 (115)	8.4 (91)	4.9 (135)	6.5 (67)
Latvia	5.9 (107)	6.6 (35)	9.3 (46)	8.3 (18)	7.8 (33)	9.1 (63)	7.7 (40)	6.5 (62)
Lebanon	8.4 (10)	4.4 (121)	9.7 (11)	6.6 (108)	6.2 (137)	5.0 (151)	7.6 (41)	5.9 (129)
Lesotho	5.2 (129)	5.8 (66)	8.0 (101)	6.5 (111)	7.8 (31)	9.7 (18)	6.8 (69)	6.8 (40)
Liberia	8.2 (13)	4.7 (113)	9.2 (55)	5.6 (143)	8.5 (6)	9.5 (32)	7.7 (36)	8.2 (4)
Libya	3.2 (159)	3.6 (145)	6.0 (151)	4.7 (150)	5.5 (151)	6.7 (137)	6.3 (91)	3.5 (157)
Lithuania	7.2 (51)	6.4 (44)	9.4 (41)	7.9 (44)	8.1 (13)	9.9 (13)	7.9 (23)	6.6 (55)
Luxembourg	4.5 (145)	8.4 (5)	9.5 (34)	8.4 (11)	7.5 (58)	9.3 (42)	6.0 (98)	7.1 (30)
Macedonia	6.3 (86)	5.7 (72)	8.3 (89)	7.7 (51)	8.1 (14)	9.5 (30)	7.5 (44)	7.3 (17)
Madagascar	8.3 (12)	3.4 (150)	8.0 (97)	6.7 (103)	6.3 (134)	7.7 (121)	4.7 (141)	6.4 (79)
Malawi	5.9 (106)	4.9 (99)	5.8 (155)	5.9 (132)	6.5 (121)	6.5 (140)	6.9 (67)	6.1 (112)
Malaysia	6.6 (67)	7.0 (29)	6.8 (136)	7.6 (62)	8.2 (9)	9.6 (25)	7.8 (31)	7.4 (15)
Mali	5.0 (135)	4.4 (120)	6.9 (127)	7.0 (86)	6.4 (128)	7.9 (111)	5.2 (129)	6.2 (98)
Malta	5.7 (111)	7.0 (28)	9.6 (20)	8.4 (14)	7.9 (25)	9.6 (22)	7.7 (38)	6.4 (75)
Mauritania	3.6 (156)	4.1 (137)	7.0 (123)	6.6 (110)	6.9 (94)	8.4 (90)	6.6 (77)	5.7 (140)
Mauritius	7.6 (36)	6.5 (42)	9.6 (25)	8.5 (6)	7.7 (39)	9.2 (51)	7.2 (59)	6.8 (41)
Mexico	7.8 (29)	4.2 (126)	8.1 (96)	7.5 (67)	6.8 (101)	8.9 (71)	5.4 (123)	6.1 (113)

Ratings are shown rounded to the nearest tenth of a point, but the rankings are based on the unrounded ratings.

Exhibit 1.3 (continued): Area Economic Freedom Ratings (Rankings) for 2014

	Areas					Components of Area 5		
	1 Size of Government	2 Legal System and Property Rights	3 Sound Money	4 Freedom to trade internationally	5 Regulation	5A Credit market regulations	5B Labor market regulations	5C Business regulations
	Rating (Rank)	Rating (Rank)	Rating (Rank)	Rating (Rank)	Rating (Rank)	Rating (Rank)	Rating (Rank)	Rating (Rank)
Moldova	6.5 (73)	5.0 (90)	7.8 (105)	7.3 (74)	7.1 (85)	9.7 (19)	5.5 (115)	5.9 (130)
Mongolia	7.9 (23)	5.9 (63)	8.5 (84)	7.5 (69)	7.2 (74)	7.7 (118)	7.1 (64)	6.7 (44)
Montenegro	6.5 (71)	5.5 (81)	8.6 (82)	8.2 (23)	7.5 (53)	8.9 (70)	7.2 (57)	6.4 (81)
Morocco	6.1 (100)	6.1 (53)	7.4 (110)	6.5 (115)	6.1 (141)	7.1 (133)	4.3 (146)	6.8 (42)
Mozambique	6.2 (89)	4.1 (138)	6.5 (141)	6.5 (113)	5.8 (145)	7.7 (119)	3.1 (157)	6.6 (53)
Myanmar	5.7 (114)	3.6 (146)	6.5 (143)	5.1 (148)	6.1 (139)	5.9 (148)	6.1 (94)	6.2 (96)
Namibia	6.5 (75)	6.3 (51)	6.7 (139)	6.8 (94)	7.7 (37)	9.3 (49)	7.9 (24)	6.1 (119)
Nepal	7.9 (22)	4.8 (108)	6.4 (145)	6.7 (100)	6.9 (95)	8.3 (93)	5.9 (102)	6.3 (83)
Netherlands	3.9 (154)	8.1 (9)	9.8 (4)	8.7 (4)	7.7 (34)	9.1 (62)	7.4 (50)	6.8 (39)
New Zealand	6.4 (80)	8.7 (2)	9.5 (36)	8.7 (5)	8.5 (5)	9.9 (11)	8.5 (7)	7.2 (24)
Nicaragua	8.6 (7)	4.5 (116)	8.9 (70)	7.6 (58)	7.3 (66)	9.5 (34)	6.5 (81)	6.0 (128)
Niger	6.4 (81)	4.1 (135)	6.8 (138)	5.7 (142)	7.3 (68)	9.4 (40)	4.3 (147)	8.2 (3)
Nigeria	7.0 (58)	3.7 (143)	7.9 (103)	6.0 (129)	7.6 (49)	9.6 (26)	8.4 (8)	4.7 (154)
Norway	5.0 (137)	8.7 (3)	9.6 (17)	7.0 (84)	7.2 (73)	10.0 (1)	4.5 (145)	7.2 (20)
Oman	4.5 (144)	7.2 (25)	8.8 (75)	7.9 (39)	7.9 (23)	9.8 (14)	7.3 (51)	6.6 (52)
Pakistan	7.9 (25)	4.0 (140)	6.2 (147)	5.8 (139)	6.2 (136)	8.1 (100)	5.2 (127)	5.4 (147)
Panama	7.5 (41)	5.5 (82)	9.2 (51)	8.5 (9)	6.6 (114)	8.5 (89)	5.1 (131)	6.3 (91)
Papua New Guinea	6.0 (103)	4.9 (97)	7.8 (106)	6.8 (98)	8.0 (20)	7.9 (113)	8.4 (9)	7.7 (11)
Paraguay	8.2 (14)	3.7 (144)	9.3 (47)	6.9 (88)	6.3 (135)	8.5 (87)	4.1 (151)	6.1 (108)
Peru	7.4 (44)	4.7 (109)	9.4 (42)	7.7 (55)	7.5 (50)	9.6 (21)	7.1 (63)	5.9 (135)
Philippines	8.8 (3)	4.8 (104)	6.9 (132)	7.1 (80)	7.5 (54)	9.3 (42)	6.6 (76)	6.5 (63)
Poland	5.6 (116)	6.4 (46)	9.7 (13)	7.9 (45)	7.5 (56)	8.7 (78)	7.7 (33)	6.0 (124)
Portugal	5.5 (124)	7.0 (30)	9.8 (2)	8.2 (24)	6.9 (89)	8.4 (92)	6.1 (97)	6.3 (84)
Qatar	6.5 (69)	7.9 (16)	9.1 (59)	7.9 (46)	8.1 (15)	10.0 (1)	6.5 (82)	7.8 (10)
Romania	6.8 (61)	6.0 (58)	9.4 (38)	8.4 (15)	7.7 (35)	9.7 (17)	7.2 (56)	6.2 (97)
Russia	6.5 (72)	5.4 (84)	9.0 (68)	5.8 (137)	6.6 (113)	8.2 (98)	5.6 (112)	6.1 (110)
Rwanda	5.5 (120)	7.2 (24)	9.5 (35)	6.6 (105)	8.0 (18)	8.1 (103)	8.4 (10)	7.6 (13)
Saudi Arabia	5.0 (138)	7.4 (22)	8.5 (87)	6.2 (123)	7.7 (40)	8.9 (68)	7.1 (62)	7.1 (27)
Senegal	7.2 (50)	5.0 (94)	7.1 (116)	6.8 (93)	6.0 (143)	8.5 (88)	3.7 (153)	5.7 (138)
Serbia	6.8 (60)	4.8 (103)	7.7 (107)	7.5 (64)	6.5 (120)	6.8 (136)	7.0 (66)	5.8 (136)
Seychelles	7.3 (47)	5.5 (80)	9.1 (61)	8.1 (28)	7.4 (62)	8.0 (104)	7.0 (65)	7.2 (19)
Sierra Leone	6.7 (64)	4.2 (127)	7.3 (111)	6.1 (126)	5.3 (153)	4.2 (155)	5.6 (111)	6.1 (118)

Ratings are shown rounded to the nearest tenth of a point, but the rankings are based on the unrounded ratings.

Exhibit 1.3 (continued): Area Economic Freedom Ratings (Rankings) for 2014

	Areas					Components of Area 5		
	1 Size of Government	2 Legal System and Property Rights	3 Sound Money	4 Freedom to trade internationally	5 Regulation	5A Credit market regulations	5B Labor market regulations	5C Business regulations
	Rating (Rank)	Rating (Rank)	Rating (Rank)	Rating (Rank)	Rating (Rank)	Rating (Rank)	Rating (Rank)	Rating (Rank)
Singapore	7.8 (28)	8.3 (7)	9.4 (37)	9.4 (1)	8.5 (4)	10.0 (1)	7.8 (29)	7.8 (9)
Slovak Rep	6.1 (97)	5.6 (74)	9.8 (3)	8.5 (7)	7.3 (70)	9.2 (52)	7.4 (48)	5.3 (150)
Slovenia	4.4 (147)	6.3 (49)	8.5 (85)	7.9 (41)	6.5 (123)	7.6 (123)	6.2 (92)	5.7 (137)
South Africa	5.5 (118)	5.8 (67)	8.0 (99)	6.7 (101)	7.1 (81)	9.1 (61)	6.4 (87)	5.9 (133)
Spain	5.7 (113)	6.5 (39)	9.8 (1)	8.0 (37)	6.8 (98)	9.0 (65)	5.5 (118)	6.0 (127)
Sri Lanka	7.9 (21)	5.1 (87)	7.0 (124)	5.8 (140)	6.8 (100)	7.5 (125)	6.5 (83)	6.5 (64)
Suriname	6.2 (91)	4.6 (114)	9.2 (54)	6.5 (114)	7.2 (72)	8.0 (108)	7.8 (27)	5.9 (131)
Swaziland	6.4 (76)	4.8 (102)	8.0 (100)	6.8 (97)	7.8 (28)	8.8 (75)	7.7 (37)	6.9 (36)
Sweden	3.4 (158)	8.0 (12)	9.8 (6)	8.3 (19)	7.8 (32)	9.8 (15)	6.7 (73)	6.8 (38)
Switzerland	7.7 (32)	8.5 (4)	9.8 (7)	7.3 (73)	8.0 (19)	9.3 (42)	7.7 (32)	7.0 (32)
Syria	6.2 (92)	6.0 (57)	5.1 (158)	4.5 (156)	6.1 (140)	5.6 (150)	5.7 (108)	7.0 (31)
Taiwan	7.2 (54)	6.8 (32)	9.6 (16)	7.5 (63)	7.2 (75)	9.1 (58)	5.5 (114)	6.9 (37)
Tajikistan	6.5 (74)	5.6 (76)	9.1 (57)	6.9 (90)	6.8 (99)	8.7 (82)	5.4 (122)	6.4 (76)
Tanzania	7.4 (45)	5.5 (78)	7.9 (104)	6.0 (130)	7.3 (65)	9.4 (39)	6.3 (89)	6.3 (90)
Thailand	7.2 (53)	5.0 (92)	7.1 (117)	6.8 (96)	6.7 (107)	9.1 (54)	4.8 (137)	6.3 (88)
Timor-Leste	4.5 (143)	3.5 (147)	8.8 (73)	6.3 (120)	7.5 (51)	9.5 (32)	6.9 (68)	6.2 (102)
Togo	6.7 (62)	3.0 (155)	7.1 (118)	6.1 (127)	6.5 (119)	7.5 (126)	4.2 (149)	8.0 (6)
Trinidad & Tobago	5.5 (123)	4.5 (115)	8.6 (81)	7.7 (52)	7.5 (57)	8.7 (76)	7.7 (39)	6.0 (125)
Tunisia	6.1 (99)	5.7 (69)	7.0 (125)	7.1 (77)	6.8 (106)	7.3 (129)	6.4 (86)	6.6 (58)
Turkey	6.6 (65)	5.0 (91)	9.0 (63)	7.2 (76)	6.5 (126)	8.0 (110)	4.9 (134)	6.6 (54)
Uganda	7.4 (43)	4.9 (98)	8.7 (78)	7.5 (68)	8.2 (10)	9.1 (54)	9.0 (4)	6.4 (80)
Ukraine	6.5 (70)	4.9 (101)	5.9 (153)	6.0 (131)	6.7 (110)	7.9 (112)	5.7 (106)	6.4 (71)
United Arab Emirates	7.6 (38)	7.8 (20)	8.7 (76)	8.1 (29)	7.7 (45)	8.3 (93)	6.8 (71)	7.9 (8)
United Kingdom	6.2 (93)	7.8 (17)	9.8 (8)	8.3 (20)	7.6 (48)	7.8 (117)	8.1 (16)	6.9 (34)
United States	6.4 (78)	7.1 (27)	9.4 (40)	7.6 (60)	8.3 (8)	9.0 (66)	9.2 (2)	6.6 (51)
Uruguay	7.0 (59)	5.5 (77)	9.1 (62)	7.4 (70)	6.4 (130)	7.3 (128)	5.6 (113)	6.3 (89)
Venezuela	4.4 (150)	2.0 (158)	3.0 (159)	3.1 (158)	3.9 (158)	6.0 (147)	2.5 (158)	3.3 (159)
Vietnam	7.6 (35)	5.5 (79)	6.2 (148)	6.2 (125)	6.7 (111)	9.1 (53)	5.5 (120)	5.4 (146)
Yemen, Republic	7.2 (49)	4.0 (139)	8.7 (79)	6.8 (91)	5.5 (150)	5.0 (151)	5.4 (124)	6.1 (111)
Zambia	6.3 (84)	5.7 (71)	9.0 (66)	7.4 (71)	6.8 (103)	7.7 (120)	6.1 (95)	6.5 (61)
Zimbabwe	5.8 (109)	3.9 (141)	6.7 (140)	5.7 (141)	4.2 (157)	2.7 (158)	5.1 (132)	4.9 (153)

Ratings are shown rounded to the nearest tenth of a point, but the rankings are based on the unrounded ratings.

The Chain-Linked Summary Index

Through time, the index has become more comprehensive and the available data more complete. As a result, the number and composition of the components for many countries varies across time. This presents a problem similar to that confronted when calculating GDP or a price index over time when we know that the underlying bundle of goods and services is changing from one year to another. In order to correct for this problem and assure comparability across time, we have done the same thing that statisticians analyzing national income do: we have chain-linked the data.

The base year for the chain-link index is 2000, and as a result the chain-link index is not available for any countries added since that year. Changes in a country's chain-linked index through time are based only on changes in components that were present in adjoining years. For example, the 2010 chain-linked rating is based on the 2009 rating but is adjusted based on the changes in the underlying data between 2009 and 2010 for those components that were present in both years. If the common components for a country in 2010 were the same as in 2009, then no adjustment was made to the country's 2010 summary rating. However, if the 2010 components were lower than those for 2009 for the components present in both years, then the country's 2010 summary rating was adjusted downward proportionally to reflect this fact. Correspondingly, in cases where the ratings for the common components were higher in 2010 than for 2009, the country's 2010 summary rating was adjusted upward proportionally. The chain-linked ratings were constructed by repeating this procedure backward in time to 1970 and forward in time to 2014.

The chain-linked methodology means that a country's rating will change across time periods only when there is a change in ratings for components present during adjacent years. This is precisely what one would want when making comparisons across time periods.

The chain-linked summary ratings for selected years are found in **Exhibit 1.4** (pp. 16–19). The chain-link methodology was also used to derive ratings for Area 1 to Area 5. These ratings are available together with other data omitted due to limited space at www.freetheworld.com. Please note that there can be significant differences between the unadjusted and the chain-linked ratings; this is especially true for countries with less complete data in earlier years. Researchers conducting long-term studies should use the chain-linked data.

Exhibit 1.4: Chain-linked Summary Ratings from 1970 to 2014

	1970	1975	1980	1985	1990	1995	2000	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Albania					4.36	5.05	6.26	7.11	7.30	7.37	7.38	7.46	7.51	7.39	7.33	7.37	7.50
Algeria			3.82	3.60	3.43	4.06	4.69	5.25	5.31	5.02	4.83	4.87	4.77	4.56	4.61	4.66	4.62
Argentina	4.36	2.76	3.96	3.30	4.42	7.04	7.41	5.97	6.09	6.20	5.99	5.95	5.72	5.65	5.13	4.99	4.79
Australia	6.95	6.06	6.85	7.16	7.56	7.97	8.22	8.23	8.27	8.31	8.21	8.10	8.10	8.09	8.03	7.99	8.09
Austria	6.08	5.93	6.34	6.35	6.99	7.18	7.96	7.84	7.81	7.77	7.66	7.62	7.53	7.56	7.53	7.50	7.55
Bahamas		6.41	6.29	6.36	6.47	6.44	6.72	6.87	6.74	6.82	6.84	6.76	6.70	6.65	6.65	6.65	6.63
Bahrain			7.42	6.92	6.88	7.22	7.69	7.35	7.61	7.78	7.69	7.56	7.69	7.70	7.52	7.50	7.55
Bangladesh		3.03	3.38	3.68	4.57	5.49	6.01	6.17	6.34	6.23	6.24	6.46	6.52	6.50	6.42	6.51	6.44
Barbados		5.66	5.79	6.25	6.30	6.29	6.41	6.64	6.42	6.55	6.42	6.56	6.64	6.62	6.70	6.44	6.46
Belgium	7.49	6.85	7.11	7.08	7.40	7.36	7.89	7.54	7.51	7.50	7.42	7.43	7.47	7.44	7.41	7.39	7.64
Belize			5.70	5.43	6.11	6.87	6.52	6.83	6.74	6.81	6.78	6.54	6.45	6.45	6.48	6.29	6.19
Benin			5.14	4.89	5.16	4.83	5.39	5.67	5.98	5.86	5.70	5.83	5.81	5.76	5.55	5.87	5.94
Bolivia			4.01	3.44	5.43	6.61	6.98	6.36	6.40	6.16	6.11	6.33	6.39	6.36	6.45	6.49	6.31
Botswana			5.25	5.57	5.92	6.40	7.36	7.29	7.19	7.34	7.06	6.99	7.22	7.43	7.47	7.39	7.47
Brazil	5.11	4.07	3.84	3.28	4.50	4.73	6.00	6.30	6.28	6.20	6.32	6.36	6.56	6.60	6.57	6.37	6.29
Bulgaria				5.02	3.90	4.62	5.41	6.85	7.00	7.01	7.08	7.23	7.22	7.28	7.28	7.25	7.29
Burundi		3.88	3.99	4.42	4.63	3.94	4.73	4.87	5.35	5.26	4.84	5.25	5.02	5.24	5.26	6.07	6.07
Cameroon			5.62	5.73	5.81	5.68	5.84	6.14	6.11	5.99	5.92	6.06	6.56	6.58	6.63	6.59	6.49
Canada	7.91	7.12	7.68	7.78	8.15	8.12	8.37	8.23	8.20	8.16	8.11	8.08	8.05	7.98	8.01	8.03	8.09
Central African Rep.				4.38	4.83	4.42	5.23	5.28	5.49	5.77	5.71	5.78	5.72	5.84	5.82	5.70	5.50
Chad				4.93	4.93	4.90	5.43	5.43	5.50	5.21	5.06	5.36	5.77	5.60	5.36	5.67	5.66
Chile	3.96	3.62	5.39	5.84	6.79	7.54	7.42	7.92	7.93	8.04	7.97	7.96	7.94	7.97	7.86	7.89	7.86
China			3.74	4.74	4.43	5.17	5.78	5.87	5.96	6.08	6.06	6.11	6.07	6.13	6.20	6.26	6.26
Colombia	5.28	4.84	4.74	5.22	5.07	5.59	5.52	5.76	5.93	6.16	6.11	6.32	6.33	6.40	6.39	6.42	6.24
Congo, Dem. Rep.	4.31	3.71	2.76	3.84	3.22	3.51	3.97	4.88	5.40	5.48	5.44	5.51	5.61	5.58	5.54	5.79	5.64
Congo, Republic of			4.50	4.31	4.97	5.02	4.35	4.74	4.83	4.73	4.92	5.18	4.95	4.75	4.71	4.94	4.98
Costa Rica		5.92	5.07	5.03	6.64	6.97	7.52	7.66	7.85	7.67	7.45	7.51	7.41	7.71	7.67	7.63	7.66
Côte d'Ivoire			5.39	6.08	5.57	5.20	5.91	6.05	5.70	5.64	5.66	5.88	5.85	5.90	5.86	5.77	6.05
Croatia					5.05	6.35	6.77	6.84	6.91	7.03	7.08	6.97	7.21	7.24	7.19	7.30	
Cyprus		5.80	5.53	5.53	6.04	6.41	6.66	7.66	7.60	7.74	7.70	7.73	7.65	7.59	7.39	6.96	7.22
Czech Republic					6.16	6.90	7.15	7.19	7.35	7.38	7.34	7.35	7.39	7.54	7.51	7.69	
Denmark	6.83	6.23	6.38	6.52	7.25	7.73	8.07	7.94	7.95	7.96	7.87	7.65	7.75	7.69	7.55	7.64	7.72

Exhibit 1.4 (continued): Chain-linked Summary Ratings from 1970 to 2014

	1970	1975	1980	1985	1990	1995	2000	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Dominican Rep.			5.17	4.92	4.34	5.99	6.75	6.42	6.33	6.39	6.36	6.85	7.06	7.08	6.94	7.11	7.21
Ecuador	3.89	4.91	5.30	4.39	5.36	6.17	5.76	5.85	5.93	5.77	5.77	5.76	5.70	5.71	5.88	5.88	5.63
Egypt		3.59	4.40	4.86	4.60	5.99	6.80	6.58	6.71	6.91	6.74	6.66	6.79	6.61	6.57	6.51	6.31
El Salvador			4.46	4.19	4.69	7.47	7.69	7.67	7.79	7.86	7.75	7.62	7.43	7.37	7.41	7.48	7.63
Estonia						6.07	7.51	7.97	7.95	7.84	7.76	7.68	7.76	7.69	7.62	7.61	7.71
Fiji		5.27	5.57	5.97	5.72	6.11	6.23	6.63	6.46	6.52	6.58	6.45	6.33	6.48	6.39	6.25	6.33
Finland	6.81	6.15	6.64	6.92	7.23	7.50	8.03	7.87	7.87	7.90	7.79	7.69	7.73	7.81	7.75	7.61	7.69
France	6.63	5.93	6.09	5.99	7.07	7.00	7.51	7.36	7.36	7.54	7.46	7.50	7.43	7.34	7.27	7.21	7.35
Gabon			4.51	5.09	5.48	5.39	5.82	5.60	5.78	5.69	5.73	5.69	5.50	5.38	5.33	5.36	5.51
Germany	7.44	6.85	7.16	7.25	7.65	7.65	7.88	7.78	7.71	7.59	7.51	7.57	7.53	7.63	7.57	7.57	7.58
Ghana		3.64	3.05	3.20	5.06	5.53	5.66	6.48	6.98	7.00	6.94	7.00	6.86	6.88	6.57	6.66	6.51
Greece	6.31	5.84	5.74	5.12	5.97	6.46	6.93	7.33	7.24	7.29	7.07	6.93	6.75	6.64	6.62	6.83	6.88
Guatemala	5.98	6.46	5.87	4.68	5.62	6.96	6.57	7.15	7.36	7.36	6.94	7.14	7.24	7.26	7.26	7.42	7.43
Guinea-Bissau					2.98	3.17	4.07	4.83	5.11	4.82	4.86	5.26	5.35	5.44	5.77	5.84	5.85
Guyana						5.05	6.53	6.12	6.28	6.48	6.70	6.62	6.50	6.61	6.61	6.32	6.22
Haiti			6.57	5.81	5.66	5.64	6.95	6.94	6.92	6.89	7.06	7.17	6.87	7.00	6.83	7.22	7.39
Honduras			5.97	5.38	5.45	6.26	6.67	6.85	7.17	7.21	7.12	6.99	7.04	7.11	6.99	6.95	7.02
Hong Kong	8.70	8.72	9.03	8.64	8.60	9.15	8.86	8.95	8.96	9.01	9.05	8.95	8.85	8.81	8.88	8.86	8.93
Hungary			3.94	4.68	5.04	6.20	7.08	7.24	7.15	7.18	7.22	7.32	7.32	7.40	7.34	7.30	7.34
Iceland	6.13	4.40	5.25	5.53	6.95	7.69	8.04	8.11	8.00	7.86	7.27	6.82	6.41	6.74	6.81	6.86	7.04
India	5.35	4.49	5.34	5.01	5.05	5.80	6.34	6.90	6.70	6.72	6.66	6.60	6.59	6.79	6.78	6.82	6.68
Indonesia	4.54	5.20	5.05	6.13	6.50	6.62	6.07	6.64	6.70	6.72	6.70	6.75	7.05	7.07	7.05	7.18	7.18
Iran	5.81	5.65	3.37	3.84	4.40	4.32	5.87	6.49	6.36	6.39	6.43	6.43	6.46	6.18	5.50	5.81	5.49
Ireland	6.79	5.97	6.47	6.54	7.13	8.28	8.21	8.40	8.26	8.17	8.02	7.91	7.75	7.92	8.07	8.09	8.15
Israel	4.83	4.08	3.67	4.25	4.92	6.38	7.12	7.63	7.52	7.52	7.51	7.44	7.60	7.62	7.64	7.67	7.70
Italy	5.99	5.18	5.38	5.57	6.61	6.66	7.56	7.33	7.22	7.12	7.04	6.94	7.11	7.14	7.14	7.08	7.13
Jamaica			3.92	4.85	5.48	6.65	7.58	7.64	7.62	7.44	7.39	7.42	7.12	7.15	7.30	7.46	7.33
Japan	6.79	6.38	6.89	7.06	7.56	7.47	7.91	7.81	7.80	7.73	7.60	7.49	7.51	7.42	7.58	7.44	7.40
Jordan		5.31	5.35	5.74	5.85	6.51	7.45	7.58	7.51	7.69	7.47	7.56	7.75	7.75	7.84	7.91	7.80
Kenya	4.80	4.63	4.80	5.29	5.43	5.89	6.72	7.24	7.11	7.18	6.84	7.02	7.07	7.02	7.18	7.19	7.18
Korea, South	5.39	5.26	5.49	5.54	6.31	6.67	6.81	7.27	7.45	7.46	7.26	7.18	7.28	7.29	7.21	7.13	7.21
Kuwait			4.99	6.85	5.45	6.95	7.14	7.52	7.64	7.77	7.45	7.53	7.40	7.35	7.38	7.31	7.28

Exhibit 1.4 (continued): Chain-linked Summary Ratings from 1970 to 2014

	1970	1975	1980	1985	1990	1995	2000	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Latvia						5.29	6.98	7.30	7.42	7.35	7.28	7.15	7.01	7.12	7.21	7.31	7.45
Lithuania						5.31	6.60	6.95	7.03	7.11	7.02	7.12	6.99	7.02	7.03	7.18	7.36
Luxembourg	7.48	7.63	7.51	7.83	7.80	7.94	8.03	7.72	7.70	7.71	7.72	7.60	7.59	7.55	7.52	7.63	7.77
Madagascar			4.00	4.58	4.48	4.60	5.96	5.89	5.98	6.38	6.33	6.44	6.58	6.37	6.66	6.84	6.67
Malawi		5.16	4.61	4.95	5.39	4.56	4.91	5.09	5.26	5.55	5.82	5.91	5.97	6.08	5.74	5.50	5.52
Malaysia	6.53	6.31	6.96	7.02	7.40	7.59	6.81	6.99	6.92	6.99	6.72	6.78	7.00	7.02	6.99	7.21	7.24
Mali		5.41	5.73	4.81	5.11	5.22	6.20	5.98	6.28	6.33	5.89	5.96	5.97	5.91	5.91	6.00	6.05
Malta			5.53	5.30	5.50	6.95	6.79	7.60	7.43	7.80	7.65	7.65	7.61	7.58	7.55	7.55	7.67
Mauritius		4.77	4.70	6.08	5.93	7.45	7.62	7.52	7.38	7.91	7.98	7.87	7.92	7.99	8.08	8.07	7.97
Mexico	6.45	5.76	5.13	4.61	6.13	6.43	6.49	6.81	6.85	6.77	6.70	6.59	6.69	6.70	6.73	6.77	6.86
Morocco	5.65	5.07	4.45	5.20	5.18	6.28	6.18	6.37	6.21	6.29	6.31	6.31	6.45	6.51	6.39	6.42	6.37
Myanmar			4.50	4.15	3.13	3.80	3.67	3.95	4.28	3.69	3.83	4.01	4.12	4.18	4.90	5.15	5.12
Namibia					5.11	6.16	6.23	6.51	6.41	6.62	6.60	6.60	6.51	6.26	6.50	6.62	6.66
Nepal			5.49	5.01	5.11	5.15	5.86	6.23	6.45	6.03	5.90	5.73	5.92	6.02	6.02	6.24	6.32
Netherlands	7.04	6.55	7.23	7.28	7.60	7.97	8.12	7.92	7.84	7.82	7.75	7.60	7.58	7.70	7.64	7.70	7.82
New Zealand	6.32	5.69	6.35	6.21	7.82	8.84	8.52	8.46	8.26	8.39	8.40	8.10	8.10	8.17	8.26	8.38	8.37
Nicaragua			3.68	1.78	2.75	5.71	6.73	6.89	7.04	7.02	6.86	6.82	6.91	7.04	7.10	7.09	7.06
Niger			4.53	4.97	5.05	4.24	5.33	5.42	5.66	5.59	5.60	5.69	5.93	6.01	5.80	5.89	5.57
Nigeria	3.55	3.36	3.25	3.68	3.31	3.76	5.30	6.08	6.49	6.28	5.98	5.84	6.11	6.33	6.22	6.39	6.39
Norway	5.94	5.58	5.79	6.47	7.14	7.57	7.28	7.70	7.55	7.69	7.59	7.46	7.38	7.47	7.49	7.48	7.48
Oman			6.78	6.34	6.99	7.54	7.43	7.47	7.74	7.64	7.68	7.57	7.45	7.59	7.48	7.56	
Pakistan	4.20	3.54	4.30	4.91	4.87	5.67	5.53	5.87	5.94	5.87	5.75	5.91	5.98	6.02	5.95	5.96	5.71
Panama		6.68	5.56	6.13	6.45	7.45	7.55	7.60	7.55	7.63	7.32	7.33	7.25	7.16	7.37	7.41	7.51
Papua New Guinea			5.90	6.07	6.38	5.84	6.09	6.07	6.30	6.36	6.46	6.52	6.58	6.57	6.47	6.52	
Paraguay			5.68	4.82	5.60	6.53	6.44	6.36	6.33	6.29	6.42	6.48	6.62	6.68	6.78	6.81	6.75
Peru	4.43	3.54	3.90	2.61	3.98	6.51	7.30	7.30	7.33	7.31	7.43	7.43	7.51	7.50	7.44	7.25	7.26
Philippines	5.29	5.22	5.33	5.07	5.79	7.30	6.97	7.00	7.05	6.86	6.76	6.72	7.09	7.27	6.83	7.07	6.94
Poland			3.46	3.55	5.36	6.66	6.90	6.95	6.87	7.00	7.16	7.09	7.21	7.29	7.25	7.41	
Portugal	5.89	3.72	5.52	5.37	6.24	7.46	7.61	7.36	7.52	7.51	7.33	7.29	7.05	7.33	7.36	7.54	7.60
Romania			4.37	4.29	3.79	5.31	7.07	6.80	7.32	7.01	7.18	7.14	7.18	7.26	7.38	7.50	
Russia					4.42	5.14	6.08	6.09	6.24	6.30	6.24	6.34	6.37	6.44	6.46	6.45	
Rwanda				4.90	3.69	5.52	5.99	6.32	6.59	6.88	6.86	7.20	7.40	7.25	7.33	7.33	

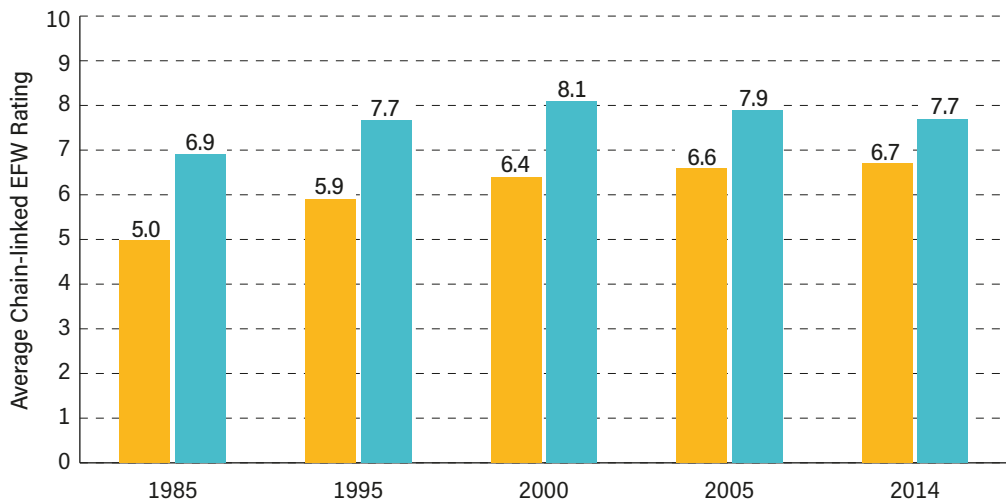
Exhibit 1.4 (continued): Chain-linked Summary Ratings from 1970 to 2014

	1970	1975	1980	1985	1990	1995	2000	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Senegal			4.43	5.18	5.31	4.56	5.75	5.81	5.76	5.87	5.78	5.93	5.78	5.73	5.75	6.09	6.14
Sierra Leone		4.99	4.99	3.69	3.88	4.35	4.98	6.10	6.18	6.45	6.51	6.81	6.91	6.80	6.99	6.66	6.49
Singapore	7.61	7.41	7.76	8.00	8.59	8.90	8.61	8.73	8.64	8.61	8.57	8.55	8.53	8.53	8.41	8.39	8.58
Slovak Republic						5.40	6.72	7.66	7.57	7.59	7.58	7.40	7.44	7.45	7.35	7.32	7.47
Slovenia						5.17	6.75	6.94	7.02	6.99	7.05	7.06	6.55	6.56	6.55	6.41	6.72
South Africa	6.30	5.71	5.85	5.49	5.50	6.57	7.09	7.01	6.95	6.94	6.66	6.66	6.87	6.94	6.91	6.88	6.77
Spain	6.41	5.84	6.10	6.08	6.56	7.24	7.84	7.60	7.56	7.52	7.36	7.26	7.26	7.38	7.28	7.25	7.36
Sri Lanka			4.77	4.94	4.81	6.06	6.17	6.20	6.38	6.20	6.04	6.12	6.26	6.40	6.38	6.33	6.28
Sweden	5.49	5.34	5.66	6.45	6.99	7.32	7.72	7.60	7.55	7.52	7.50	7.48	7.61	7.60	7.51	7.43	7.56
Switzerland	7.59	7.60	8.14	8.30	8.30	8.32	8.76	8.36	8.34	8.35	8.16	8.20	8.23	8.22	8.18	8.16	8.24
Syria	3.95	4.18	3.30	3.06	3.52	4.21	5.13	5.60	5.36	5.56	5.37	5.55	5.73	6.05	5.23	5.27	5.18
Taiwan	6.66	5.83	6.58	6.84	7.26	7.37	7.42	7.66	7.71	7.67	7.63	7.54	7.74	7.75	7.72	7.74	7.73
Tanzania	4.41	3.19	3.65	3.47	3.87	5.43	5.98	6.36	6.48	6.39	6.28	6.26	6.53	6.59	6.47	6.59	6.59
Thailand	6.05	6.01	6.08	6.17	6.83	7.18	6.55	6.68	6.80	6.77	6.75	6.69	6.60	6.54	6.52	6.51	6.52
Togo			4.06	5.13	5.71	5.44	5.79	5.83	6.04	6.00	5.71	5.58	5.62	5.65	5.41	6.05	5.91
Trinidad & Tobago		4.58	4.85	4.82	5.54	7.32	7.47	7.14	7.24	7.23	7.12	7.02	6.95	6.99	6.95	6.75	6.79
Tunisia	4.54	4.57	4.82	4.60	5.32	5.73	6.17	6.02	6.36	6.35	6.28	6.27	6.06	6.00	6.00	5.85	5.96
Turkey	3.49	3.87	3.77	4.85	5.06	5.89	5.83	6.09	6.11	6.24	6.56	6.52	6.52	6.70	6.66	6.50	6.50
Uganda			3.14	2.82	2.86	5.15	6.81	7.26	7.43	7.47	7.48	7.40	7.56	7.37	7.45	7.53	7.57
Ukraine						3.40	4.58	5.74	5.87	5.83	5.80	5.86	5.87	6.12	6.22	6.10	5.93
United Arab Emirates			6.06	6.86	7.23	6.98	7.31	7.49	7.64	7.73	7.76	7.50	7.68	7.83	7.85	7.88	7.75
United Kingdom	5.99	5.93	6.57	7.54	8.09	8.23	8.61	8.38	8.24	8.17	8.03	8.12	7.90	7.92	7.94	7.99	8.04
United States	7.60	7.73	7.92	8.11	8.40	8.50	8.65	8.22	8.13	8.23	8.11	7.90	7.76	7.70	7.82	7.68	7.75
Uruguay			6.06	5.96	6.33	6.47	7.09	7.03	7.00	7.07	7.12	7.05	7.29	7.35	7.31	7.16	7.06
Venezuela	7.31	6.17	6.69	6.08	5.69	4.40	5.84	4.52	4.55	4.23	4.08	4.14	3.84	3.79	3.71	3.21	3.15
Zambia		4.93	5.27	3.96	3.29	4.76	6.80	7.25	7.48	7.57	7.58	7.56	7.68	7.57	7.59	7.52	7.57
Zimbabwe			3.88	4.17	4.70	5.81	4.57	2.97	3.04	3.30	4.65	4.48	4.51	5.06	5.13	5.20	5.35

Economic freedom, poverty, and convergence— three historic decades

There are 109 countries for which the EFW data have been continuously available since 1985. In 1985, the World Bank classified 20 of these countries as “high-income industrial”, while the other 89 were classified as low and middle-income developing economies. **Exhibit 1.5** presents the average chain-linked economic-freedom rating for both the 20 high-income industrial and the 89 developing economies for various years from 1985 to 2014. As these data show, economic freedom has increased throughout the world during the past three decades. The average EFW rating of the 20 high-income countries was 0.8 units higher in 2014 than 1985 and that of the 89 developing economies, 1.7 units higher.

Exhibit 1.5: Average Chain-linked EFW Ratings—Developing Economies Compared to High-income Countries, 1985–2014



Note: High-income countries are the 20 countries classified by the World Bank as “high-income industrial” countries in 1985. There were 109 countries (20 high-income and 89 developing) with continuous EFW data during the period from 1985 to 2014.

As Exhibit 1.5 shows, the average EFW rating of the developing economies has increased more rapidly than the average EFW rating for the high-income countries. As a result, the economic freedom gap between the two groups narrowed during the period from 1985 to 2014. The average summary EFW rating of the high-income countries was 6.9 in 1985, compared to 5.0 for the developing economies, a gap of 1.9 units. In 2014, the average summary rating of the high-income countries was 7.7 compared to 6.7 for the developing countries, a gap of 1.0. Thus, the gap between economic freedom in the high-income developed economies and economic freedom in the world’s less-developed countries was cut nearly in half during this 29-year period. As Exhibit 1.5 shows, the narrowing of the gap has been particularly pronounced since 2000.

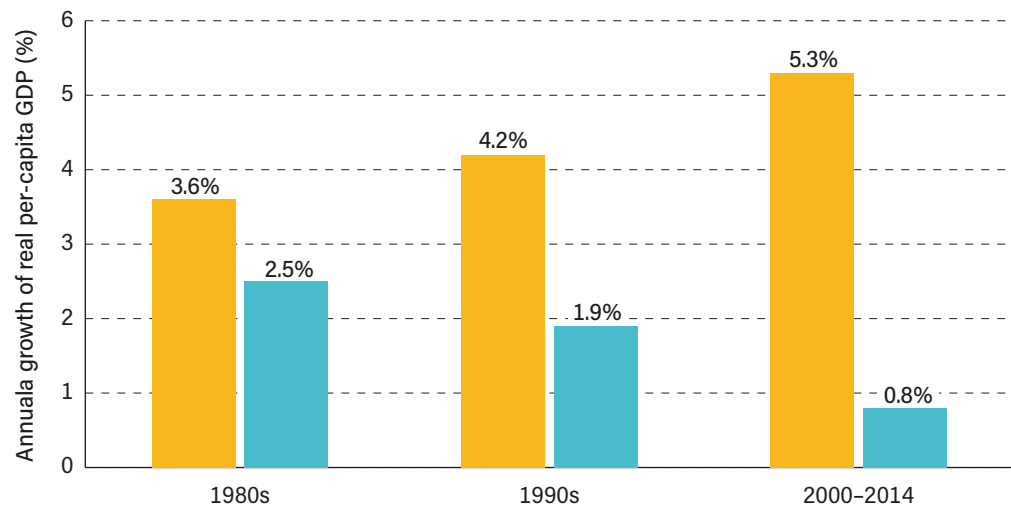
The gains of the developing economies have been large in the areas of sound money (Area 3) and trade liberalization (Area 4). Between 1985 and 2014, the monetary rating of the developing countries rose from 6.0 to 7.9, an increase of 1.9 units. These numbers reflect that, compared to the 1970s and 1980s, developing

countries have followed a monetary policy more consistent with price stability in recent decades. The gains in trade liberalization were even larger. The trade liberalization ratings of the developing economies jumped from 4.0 in 1985 to 6.6 in 2014, a substantial and encouraging gain of 2.6 units during the 29-year period. This gain is reflective of sharp reductions in tariff rates, elimination of exchange rate controls, and other moves toward trade liberalization in many developing countries.

Growth of real per-capita GDP

Exhibit 1.6 presents the figures for the population-weighted annual growth rate of per-capita GDP since 1980 for the 20 high-income countries and the 89 low-income developing economies. As these data show, the growth rate of per-capita GDP of the high-income group has been declining, while the growth rate of the developing economies has been rising. The gap in the annual growth rates between the two groups was relatively small, 1.1 percentage points, during the 1980s. The gap was larger during the 1990s, but by 2000-to-2014 it was huge, 4.5 percentage points. During this latter period, the 5.3% annual growth rate of per-capita GDP of the developing economies was more than six times the 0.8% annual growth rate of the high-income economies.

Exhibit 1.6: Growth of Real per-Capita GDP—Developing Economies ■
Compared to High-income Countries ■, 1980–2014



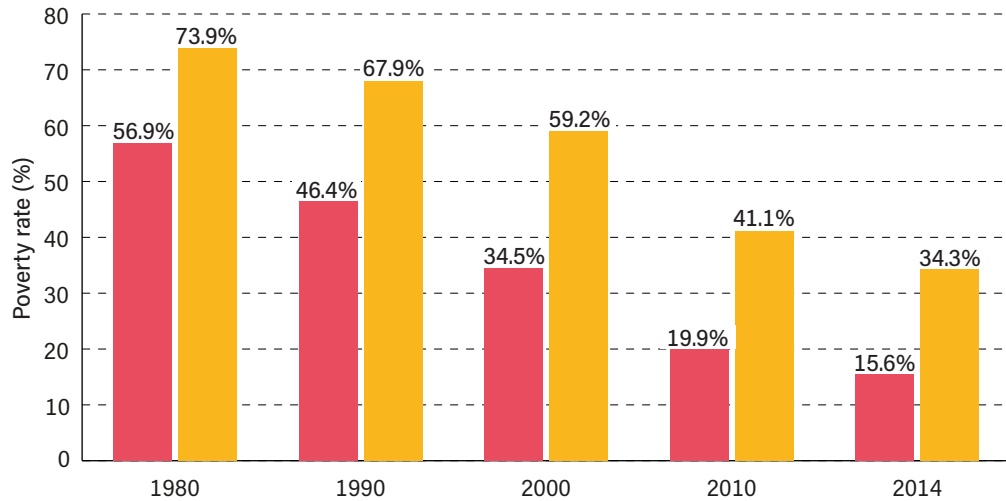
Note: Growth rates of real per-capita GDP were calculated in local currency units. Growth rates derived using the purchasing-power-parity method to convert the figures to real per-capita GDP measured in 2011 international dollars were virtually identical to the rates presented above. Because data were not available, the growth figures in 1980 exclude all former Soviet-bloc countries except for Bulgaria.

Source: World Bank, 2016, *World Development Indicators*.

Falling poverty rates in the developing world

Some observers fear that growth propelled by economic freedom will leave the poor behind. This has not been the case during the past three decades. The World Bank classifies persons with incomes of less than \$1.90 per day (measured in 2011 international dollars) as living in extreme poverty. Similarly, persons living on less than \$3.10 per day are classified as living in moderate poverty. **Exhibit 1.7** presents the extreme and moderate poverty rates of the 89 developing economies for various years from 1980 to 2014. The extreme poverty rate in the developing world fell from 56.9% in 1980 to 34.5% in 2000, and 15.6% in 2014. Thus, the extreme poverty rate in less-developed

Exhibit 1.7: Extreme ■ and Moderate ■ Poverty Rates for the Developing World, 1980–2014



Note: The **extreme** poverty rate is the percentage of a country's population that lives on \$1.90 per day; the **moderate** poverty rate is the percentage that lives \$3.10 per day, in 2011 constant PPP-adjusted dollars. The World Bank's poverty rate data were used to calculate the poverty rates for the developing countries. This data set is missing values for the poverty rate for various countries and years. Autoregressive estimation procedures were used to fill in the missing values and derive the poverty rates for each country. For details, see Connors, 2011.

Source: World Bank, 2016, *World Development Indicators*.

countries is now more than 40 percentage points lower than in 1980. In 1980, 73.9% of the population of low-income countries had incomes below the moderate poverty-rate threshold in 1980. By 2000, the moderate poverty rate in the developing world had declined to 59.2%, and by 2014 the figure had fallen to 34.3%. Thus, the moderate poverty rate was reduced by more than 50% during the 34-year period.

Clearly, enormous progress has been made against poverty during the past third of a century. Today, approximately six billion people live in countries that were classified as low-income, less-developed countries in 1980. If the poverty rates of 1980 were present today, an additional 2.4 billion people would be experiencing both extreme and moderate poverty. The developing countries that moved most markedly toward economic freedom achieved both strong economic growth and substantial reductions in poverty. This indicates that an institutional and policy environment consistent with economic freedom is an important ingredient of progress against poverty.

Three decades of convergence

The past 200 years have been a remarkable period of human history. During these two centuries, the per-person income of the world has expanded by tenfold, and in the West per-capita income is now about 20 times the figure of 1820 (Maddison, 2007). As incomes grew rapidly in the West and a few other regions, most of the less-developed world lagged behind. In 1820, the wealthy nations of the world had income levels five or six times those of poor countries, but by 1980 the income levels in the world's richest countries were 30 or 40 times those of the less-developed world. Thus, historic growth occurred from 1820 to 1980 but it was accompanied by decade after decade of expanding worldwide income inequality.

The production-function model has dominated the growth and development literature for more than a half century. Within the framework of this model, growth is a

function of labor, capital, and technology. The model implies that capital will move away from economies where capital is abundant and incomes high toward the lower-income economies where its productivity is higher. In turn, this movement will shrink the gap between the high- and low-income countries. Further, low-income individuals gain because they are able to acquire technology and adopt the successful ideas present in the high-income countries. For several decades, the growth theorists forecast income convergence between the high- and low-income countries. But it did not happen, at least not prior to 1980. Why not? The institutions and policies supportive of economic freedom were largely absent. Therefore, most less-developed countries continued to stagnate.

However, if low-income countries adopt policies more consistent with economic freedom, convergence will occur and the income gap decline. As Exhibits 1.5 and 1.6 indicate, this is precisely what happened during the past three decades. The gap in economic freedom between the rich and poor nations of the world narrowed and so too did the income gap. After two centuries of expanding income inequality, the trend has reversed. Worldwide, income inequality is now declining.

Xavier Sala-i-Martin of Columbia University and Maxim Pinkovskiy of the Federal Reserve Bank of New York examined the data on this issue in great detail. Their research indicates that worldwide income inequality and the poverty rate both declined during the 1980s and 1990s (Sala-i-Martin, 2006; Pinkovskiy and Sala-i-Martin, 2009). To a large degree, these trends were driven by the rapid growth of populous countries, particularly China and India. While the ranking of both is still low, the EFW rating of China has increased substantially since 1980 (and India's rating since 1990). As Sala-i-Martin and Pinkovskiy note, the population-weighted average growth rate of the developing economies exceeded that of the high-income countries during the 1980s and 1990s. As Exhibit 1.6 illustrates, the growth of the low-income countries compared to their high-income counterparts accelerated during the period from 2000 to 2014. Given this acceleration in the growth of less-developed countries compared to their high-income counterparts, it is a virtual certainty that the trends toward both lower poverty rates and less income inequality are continuing.

The past three decades have been a truly remarkable era of world history. For the first time, the world has achieved both higher levels of per-capita income and a reduction in income inequality. As less-developed countries have moved toward economic freedom, they have grown more rapidly, narrowed the income gap relative to high-income countries, and made historic progress toward the reduction of poverty. Interestingly, this trend toward income equality has been almost entirely overlooked by intellectuals, the media, and the general populace.

Economic freedom and human progress

As is customary, this chapter concludes with some simple graphs illustrating relationships between economic freedom and various other indicators of human and political progress. The graphs (**Exhibits 1.8–1.14**) use the average of the chain-linked EFW index for the period from 1990 to 2014, breaking the data into four quartiles ordered from low to high. Because persistence is important and the impact of economic freedom will be felt over a lengthy time period, it is better to use the average rating over a fairly long time span rather than the current rating to observe the impact of economic freedom on performance.

The graphs begin with the data on the relationship between economic freedom and the level of per-capita GDP and economic growth. In recent years, numerous scholarly studies have analyzed these relationships in detail and, almost without exception, have found that countries with higher and improving economic freedom grow more rapidly and achieve higher levels of per-capita GDP (Hall and Lawson, 2014).

Many of the relationships illustrated in the graphs below reflect the impact of economic freedom as it works through increasing economic growth. In other cases, the observed relationships may reflect the fact that some of the variables that influence economic freedom may also influence political factors like trust, honesty in government, and protection of civil liberties. Thus, we are not necessarily arguing that there is a direct causal relation between economic freedom and the variables considered below. In other words, these graphics are no substitute for real, scholarly investigation that controls for other factors. Nonetheless, we believe that the graphs provide some insights about the contrast between the nature and characteristics of market-oriented economies and those dominated by government regulation and planning. At the very least, these figures suggest potential fruitful areas for future research.

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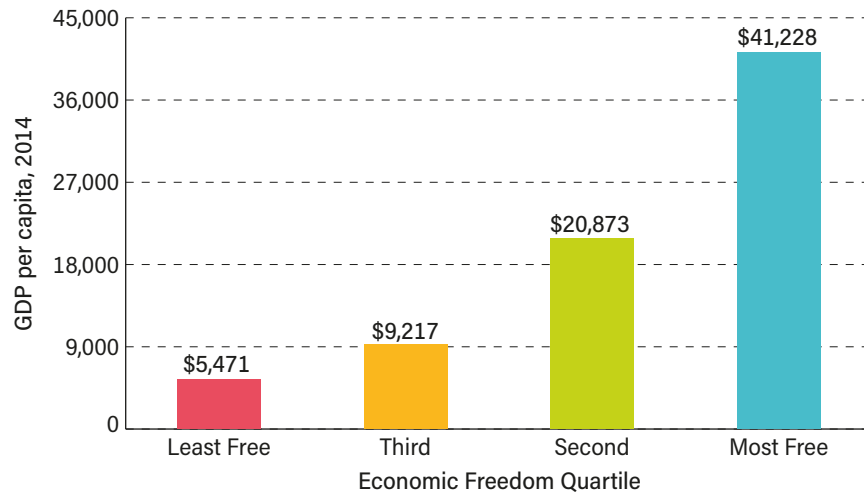
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Exhibit 1.8: Economic Freedom and Income per Capita

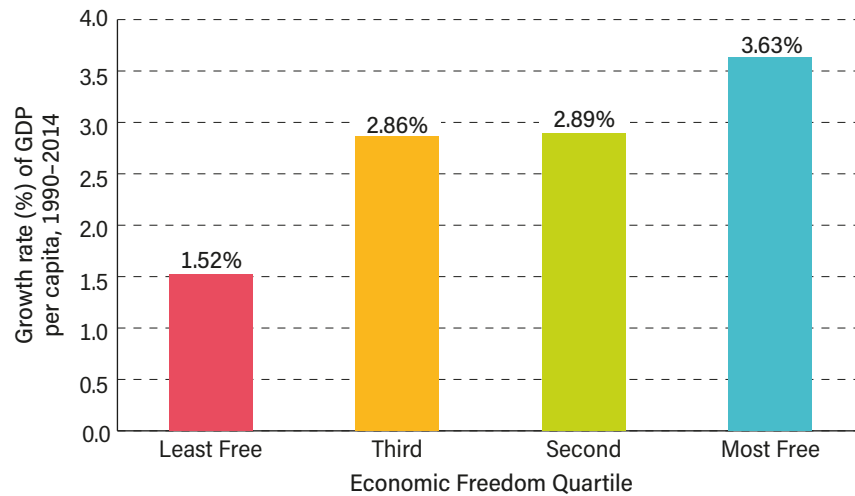
Countries with more economic freedom have substantially higher per-capita incomes.



Note: Income = GDP per capita, (PPP constant 2011 US\$), 2014.
 Sources: Gwartney, Lawson and Hall, 2015, *Economic Freedom of the World: 2015 Annual Report*; World Bank, 2016, *World Development Indicators*.

Exhibit 1.9: Economic Freedom and Economic Growth

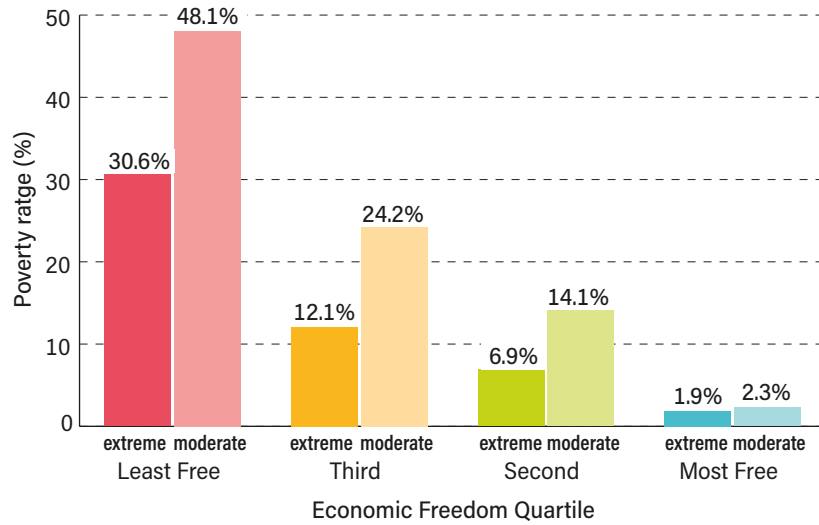
Countries with more economic freedom tend to grow more rapidly.



Note: The growth data were adjusted to control for the initial level of income.
 Sources: Gwartney, Lawson and Hall, 2015, *Economic Freedom of the World: 2015 Annual Report*; World Bank, 2016, *World Development Indicators*.

Exhibit 1.10: Economic Freedom and Extreme and Moderate Poverty Rates

Extreme and moderate poverty are lower in countries with more economic freedom.

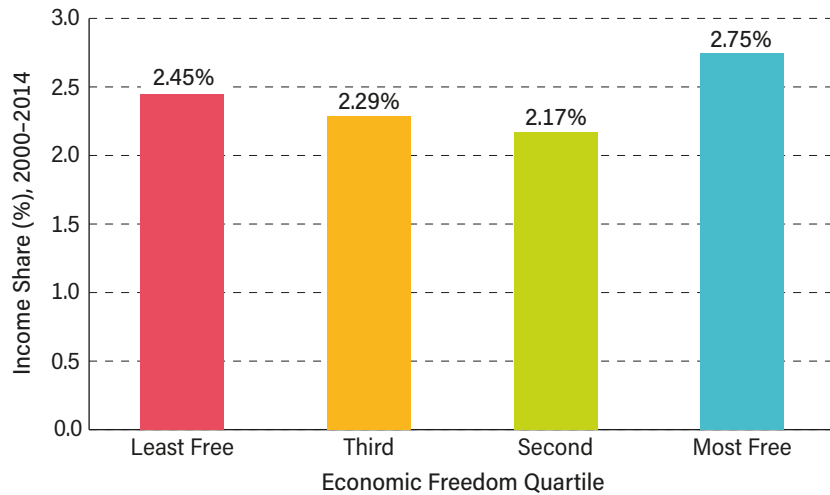


Note: The **extreme** poverty rate is the percentage of a country's population that lives on **\$1.90** per day; the **moderate** poverty rate is the percentage that lives **\$3.10** per day, in 2011 constant PPP-adjusted dollars.

Sources: Gwartney, Lawson and Hall, 2015, *Economic Freedom of the World: 2015 Annual Report*; World Bank, 2016, *World Development Indicators*; for details, see Connors, 2011.

Exhibit 1.11: Economic Freedom and the Income Share of the Poorest 10%

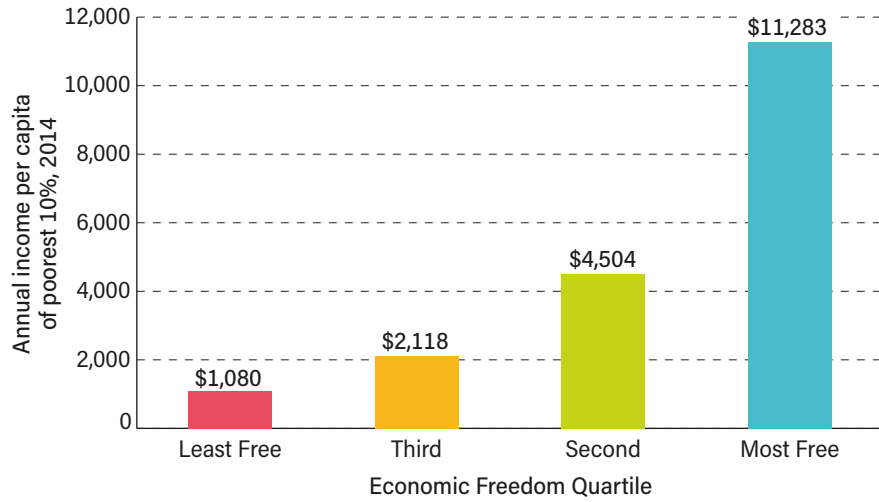
The share of income earned by the poorest 10% of the population is unrelated to economic freedom.



Sources: Gwartney, Lawson and Hall, 2015, *Economic Freedom of the World: 2015 Annual Report*; World Bank, 2016, *World Development Indicators*.

Exhibit 1.12: Economic Freedom and the Income Earned by the Poorest 10%

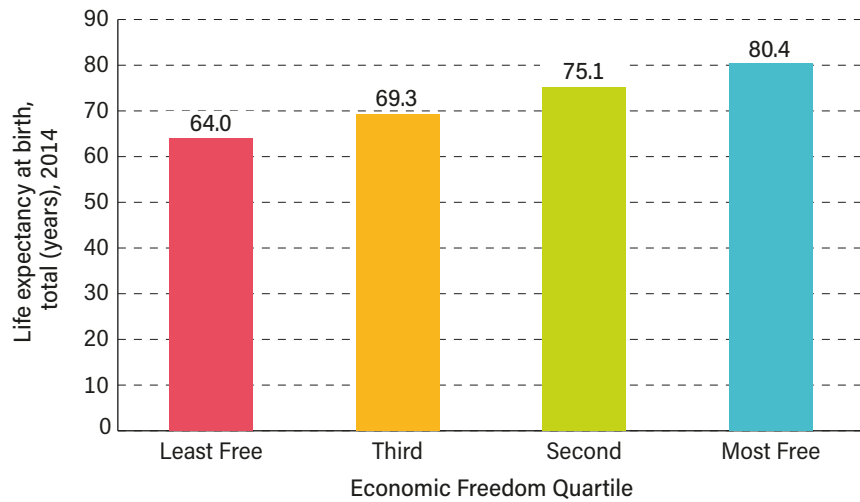
The amount of income, as opposed to the share, earned by the poorest 10% of the population is much higher in countries with higher economic freedom.



Note: Annual income per capita of poorest 10% (PPP constant 2011 US\$), 2014
 Sources: Gwartney, Lawson and Hall, 2015, *Economic Freedom of the World: 2015 Annual Report*; World Bank, 2016, *World Development Indicators*.

Exhibit 1.13: Economic Freedom and Life Expectancy

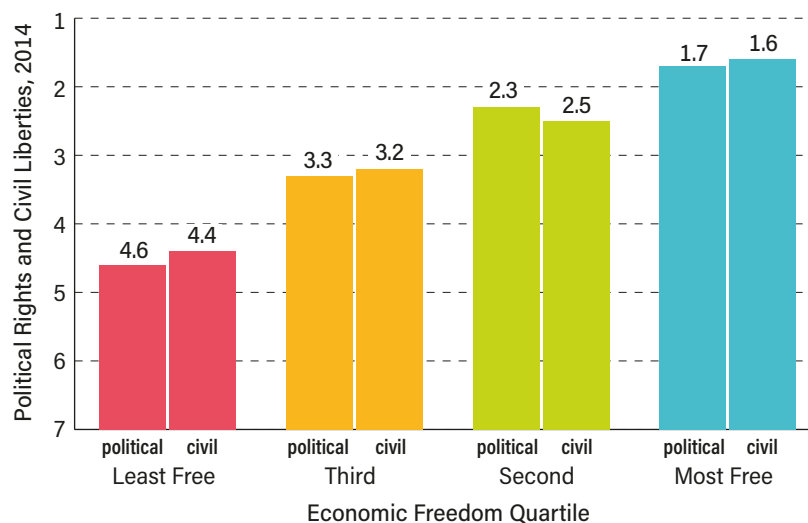
Life expectancy is about 20 years longer in countries with the most economic freedom than in countries with the least.



Sources: Gwartney, Lawson and Hall, 2015, *Economic Freedom of the World: 2015 Annual Report*; World Bank, 2016, *World Development Indicators*.

Exhibit 1.14: Economic Freedom and Political Rights and Civil Liberties

Greater economic freedom is associated with more political rights and civil liberties.



Note: **Political rights** and **civil liberties** are measured on a scale from 1 to 7: 1 = the highest degree of political rights and civil liberties; 7 = the lowest.

Sources: Gwartney, Lawson and Hall, 2015, *Economic Freedom of the World: 2015 Annual Report*; Freedom House, 2015, *Freedom in the World 2015*.

Data available to researchers

The full data set, including all of the data published in this report as well as data omitted due to limited space, can be downloaded for free at <www.freetheworld.com>. The data file available there contains the most up-to-date and accurate data for the *Economic Freedom of the World* index. Some variable names and data sources have evolved over the years since the first publication in 1996; users should consult earlier editions of *Economic Freedom of the World* for details regarding sources and descriptions for those years. All editions of the report are available in PDF and can be downloaded for free at <www.freetheworld.com>. However, users are always strongly encouraged to use the data from this most recent data file as updates and corrections, even to earlier years' data, do occur. Users doing long-term or longitudinal studies are encouraged to use the chain-linked index as it is the most consistent through time.

If you have difficulty downloading the data, please contact Fred McMahon via e-mail to <freetheworld@fraserinstitute.org>. If you have technical questions about the data itself, please contact Joshua Hall <joshua.c.hall@gmail.com> or Robert Lawson <robert.a.lawson@gmail.com>.

Please cite the data as: James Gwartney, Robert Lawson, and Joshua Hall (2016). Economic Freedom Dataset, published in *Economic Freedom of the World: 2016 Annual Report*. Fraser Institute. <http://www.freetheworld.com/datasets_efw.html>.

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A list of published papers that have used the economic freedom ratings from *Economic Freedom of the World* is available on line at <<http://www.freetheworld.com/papers.html>>. In most cases, a brief abstract of the article is provided. If you know of other papers current or forthcoming that should be included on this page, or have further information about any of these papers or authors, please write to <freetheworld@fraserinstitute.org>.