

Chapter 1 Economic Freedom of the World in 2018

From the beginning, the participants in the Economic Freedom of the World (EFW) project recognized that development of the best possible measure of economic freedom, both across countries and through time, would be an ongoing project. As Milton Friedman stated in his foreword to *Economic Freedom of the World: 1975–1995* (Gwartney, Lawson, and Block, 1996), additional work would be necessary to “bring the indexes of economic freedom up to date and to incorporate the additional understanding that will be generated”.

This year’s annual report reflects our continued effort to improve the accuracy of the Economic Freedom of the World (EFW) measure. Last year, we added Component 1E: State Ownership of the Economy. This component is derived from the relatively new *Varieties of Democracy* (V-Dem) dataset (Coppedge, *et al.*, 2020). In this year’s report, we are using additional information from V-Dem to augment our existing data in a number of other components of the index. These and other changes to the index are described in greater detail below.

We urge users of the EFW index to use the data only from the most recent report because of changes to the report’s methodology from one edition to the next. All the ratings for all countries and years for which we have ratings are available in each year’s datafile.

What is economic freedom?

Economic freedom is based on the concept of self-ownership. Because of this self-ownership, individuals have a right to choose—to decide how to use their time and talents to shape their lives. On the other hand, they do not have a right to the time, talents, and resources of others. Thus, they have no right to take things from others or demand that others provide things for them.

The cornerstones of economic freedom are personal choice, voluntary exchange, open markets, and clearly defined and enforced property rights. Individuals 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. When economic freedom is present, the choices of individuals will decide what and how goods and services are produced. Put another way, economically free individuals will be permitted to decide for themselves rather than having options imposed on them by the political process or the use of violence, theft, or fraud by others.

The EFW index is designed to measure the degree to which the institutions and policies of countries are consistent with economic freedom. In order to achieve a high EFW rating, a country must do some things, but refrain from

others. Governments enhance economic freedom when they provide an infrastructure for voluntary exchange, and protect individuals and their property from aggressors using violence, coercion, and fraud to seize things that do not belong to them. In this regard, the legal system is particularly important. The country's legal institutions must protect the person and property of all individuals from the aggressive acts of others and enforce contracts in an even-handed manner. Access must also be provided to money of sound value. But governments must also refrain from actions that restrict personal choice, interfere with voluntary exchange, and limit entry into markets. Economic freedom is reduced when taxes, government expenditures, and regulations are substituted for personal choice, voluntary exchange, and market coordination.

The EFW measure might be thought of as a measure of the degree to which scarce resources are allocated by personal choices coordinated by markets rather than centralized planning directed by the political process. It might also be thought of as an effort to identify how closely the institutions and policies of a country correspond with the ideal of a 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—an overview

The EFW index provides a comprehensive measure of the consistency of a country's institutions and policies with economic freedom. It is an outgrowth of a series of six conferences hosted by Milton and Rose Friedman and Michael Walker from 1986 to 1994, which produced three books (Walker, 1988; Block, 1991; Easton and Walker, 1992) reporting the various prototypes and approaches examined in the discussions that culminated in the initial publication of *Economic Freedom of the World*. In addition to the Friedmans, several of the world's leading economists including Douglass North, Gary Becker, Peter Bauer, William Niskanen, and Gordon Tullock contributed to the development of the EFW measure. The index is published by a network of institutes spearheaded by the Fraser Institute in Canada. Members of the network and other interested parties meet annually to review the structure of the index and consider ideas for its improvement.

The construction of the EFW index is based on three important methodological principles. First, objective components are preferred to those that involve surveys or value judgments. With that said, 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 of this report (p. ____). The entire data set used in the construction of the index is freely available to researchers at <www.fraserinstitute.org/economic-freedom/dataset>.

The total number of jurisdictions in the index remains at 162. The data are available annually from 2000 to 2018 and for years ending in zero or five back to 1970. This dataset 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 several decades. The EFW measure is a valuable tool for scholars seeking to examine the contribution of economic institutions more thoroughly and disentangle their influence from political, climatic, locational, cultural, and historical factors as determinants of growth and development.

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 Property Rights, [3] Sound Money [4] Freedom to Trade Internationally, and [5] Regulation of credit, labor, and business.

Within the five major areas, there are 24 components in the index. Many of the 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.

Area 1: Size of Government focuses on how government expenditures and tax rates affect economic freedom. Taken together, the five 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. Countries with lower levels of government spending, lower marginal tax rates, and less government investment and state ownership of assets earn the highest ratings in this area.

Area 2: Legal System and Property Rights focuses on the importance of the legal system as a determinant of economic freedom. Protection of persons and their rightfully acquired property is a central element of economic freedom. Many would argue that it is the most important function of government. 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 eight components of Area 2 are indicators of how effectively the protective functions of government are performed.

Area 3: Sound Money focuses on the importance of money and relative price stability in the exchange process. Sound money—money with relatively stable

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 investment | (ii) Top marginal income and payroll tax rate |
| | E. State ownership of assets |

2. Legal System and Property Rights¹

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

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) Financial openness |
| (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 | (v) Mandated cost of worker dismissal |
| (i) Ownership of banks | (vi) Conscriptation |
| (ii) Private sector credit | C. Business regulations |
| (iii) Interest rate controls / negative real interest rates | (i) Administrative requirements |
| B. Labor market regulations | (ii) Bureaucracy costs |
| (i) Hiring regulations and minimum wage | (iii) Starting a business |
| (ii) Hiring and firing regulations | (iv) Impartial public administration |
| (iii) Centralized collective bargaining | (v) Licensing restrictions |
| (iv) Hours regulations | (vi) Cost of tax compliance |

Note 1: Area 2 ratings are adjusted to reflect inequalities in the legal treatment of women. See Fike, 2017 for details.

purchasing power across time—reduces transaction costs and facilitates exchange, thereby promoting economic freedom. The four components of this area provide a measure of the extent to which people in different countries have access to sound money. In order to earn a high rating in Area 3, 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.

Area 4: Freedom to Trade Internationally focuses on exchange across national boundaries. In our modern world, freedom to trade with people in other countries is an important ingredient of economic freedom. When governments impose restrictions that reduce the ability of their residents to engage in voluntary exchange with people in other countries, economic freedom is diminished. The components in Area 4 are designed to measure a wide variety of trade restrictions: 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.

Area 5: Regulation measures how regulations that restrict entry into markets and interfere with the freedom to engage in voluntary exchange reduce economic freedom. The components of Area 5 focus on regulatory restraints that limit the freedom of exchange in credit, labor, and product markets.

Key changes to the EFW index in the 2020 Annual Report

In this year’s report, we have made key and important changes to nine components. This means that making comparisons for these variables (and for the associated area and summary ratings) between the 2019 report and this 2020 report will be extraordinarily difficult. Please see the Appendix: Data Notes and Sources (p. 213) for additional details and exact sources.

Component 1C: Government investment was thoroughly updated all the way back to 1970 using data from the IMF’s Investment and Capital Dataset on government investment. The older categorical ratings based on our early evaluations of the scope of government enterprises as well as some ratings that could not be verified have been dropped. The component is now just called “Government Investment”. The rating formula is now based on a standard max and min formula instead of the old categorical rating method.

Component 2A: Judicial independence is now based on three underlying sources instead of one. We now use new information from the V-Dem on “judicial purges”, “government attacks on the judiciary”, “court packing”, “high court independence”, and “low court independence”, as well as data from Staton and Linzer’s “global measure of judicial independence”.

Component 2B: Impartial courts is now based on three underlying sources instead of one. New information from V-Dem on “judicial corrupt decision” and the World Governance Indicators (WGI) on “rule of law” are used.

Component 2C: Protection of property rights is now based on three underlying sources instead of one. New information on “property rights” from V-Dem and the “property rights and rule-based governance” data from the World Bank’s Country Policy and Institutional Assessment (CPIA) are used.

Component 2E: Integrity of the legal system is now based on two underlying sources instead of one. V-Dem data on “judicial accountability”, “compliance with the High Court”, “judicial review”, “transparent laws with predictable enforcement”, and “access to justice” are now included in the calculation of this component.

Component 2F: Legal enforcement of contracts is now based on two underlying sources instead of one. The new information is the “enforcement of contracts” data from the Business Environment Risk Intelligence (BERI).

Component 2I: Business costs of crime has been deleted entirely because the source no longer reports it and no satisfactory replacement was available.

Sub-component 4Di: Financial openness. The old sub-component, “Foreign Ownership/Investment Restrictions” based on the Global Competitiveness Report, has been replaced with the Chinn-Ito (2006) data for all countries and all years. The reason is that the GCR stopped reporting this information, and the Chinn-Ito data has broader country and year coverage. The sub-component title has been changed accordingly.

Sub-component 5Civ: Impartial public administration. The old sub-component, “Extra Payments/Bribes/Favoritism” based on the Global Competitiveness Report, has been replaced with the V-Dem data on “rigorous and impartial public administration” for all countries and all years. The reason is that the GCR stopped reporting this information, and the V-Dem data has broader country and year coverage. The sub-component title has been changed accordingly.

One important consequence of these changes is that we are now able to rate significantly more countries in earlier years because the new sources go farther back in time than much of the information we had previously been relying on. For instance, we now have ratings for 84 countries in 1970 rather than just 54. Also, using multiple sources in each component should reduce the impact of any measurement error or idiosyncrasies in the data for any given country or year.

It is impossible to make so many changes without an impact on the ratings and rankings of the countries in the EFW index. While most nations’ ratings and rankings change only modestly, there are a few that are affected to a fairly significant degree. While this is unfortunate, we are confident the revised index is more accurate as it is based on more and better-quality underlying data.

Construction of Area and Summary ratings

Theory provides us with some direction about 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.

In 2017, we introduced an adjustment to the rating of Area 2 that reflects cross-country differences in legal rights based on gender. Over 40 questions from a World Bank dataset related to the legal rights of women compared to those of men are used in the construction of a gender disparity measure. This is then used to adjust the Area 2 ratings. See Rosemarie Fike's description in Chapter 3 of the 2017 report (Fike, 2017) for details on this adjustment. The Fraser Institute has created a stand-alone website (womenandprogress.org) that explores how economic freedom contributes to women's advancement.

Summary Economic Freedom ratings in 2018

Exhibits 1.2a and 1.2b (pp. 9–10) present the summary economic freedom ratings, sorted from highest to lowest, for the 162 jurisdictions of this year's report. These ratings are for 2018, the most recent year for which comprehensive data are available. Hong Kong and Singapore, as usual, occupy the top two positions. The next highest scoring nations are New Zealand, Switzerland, United States, Australia, Mauritius, Georgia, Canada, and Ireland.

The rankings of some other major countries are Japan (20th), Germany (21st), Italy (51st), France (58th), Mexico (68th), Russia (89th), India (105th), Brazil (105th), and China (124th). The 10 lowest-rated countries are: Central African Republic, Democratic Republic of Congo, Zimbabwe, Republic of Congo, Algeria, Iran, Angola, Libya, Sudan, and, lastly, Venezuela.

Hong Kong has been in the first position at the top of the EFW index for all years for which we have data. The ratings in this year's report are based on data

for 2018. Thus, Hong Kong's rating in this report is unaffected by the 2019 proposal to transfer certain legal cases to the mainland and the protest and sometimes brutal suppression that followed; or by the new security law imposed in 2020 by the Chinese government with potential sentences of life imprisonment and the accompanying arrests in its aftermath. Between 1997 and 2018, there was no evidence of significant policy changes in Hong Kong as the result of the 1997 establishment of Hong Kong as a Special Administrative Region within China. Our data indicate that there have not been any major changes in tax and spending policy, monetary stability, or regulatory policy. In fact, Hong Kong's 2018 rating of 8.94 is its highest since the financial crisis in 2008. However, it will be surprising if the apparent increase in the insecurity of property rights and the weakening of the rule of law caused by the interventions of the Chinese government in 2019 and 2020 do not result in lower scores, especially in Area 2, for Hong Kong in future reports.

Economic Freedom ratings and rankings for the Five Areas and the Components of Area 5 in 2018

Exhibit 1.3 (pp. 11–15) presents the ratings (and rankings) for each of the five areas of the index and for Components 5A, 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), particularly regulation of labor markets (Component 5B). This was particularly true for the high-income countries of Western Europe.

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.

As the area ratings show, weakness in the rule of law and property rights is particularly pronounced in Sub-Saharan Africa, among Islamic nations, 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 2018, First and Second Quartiles

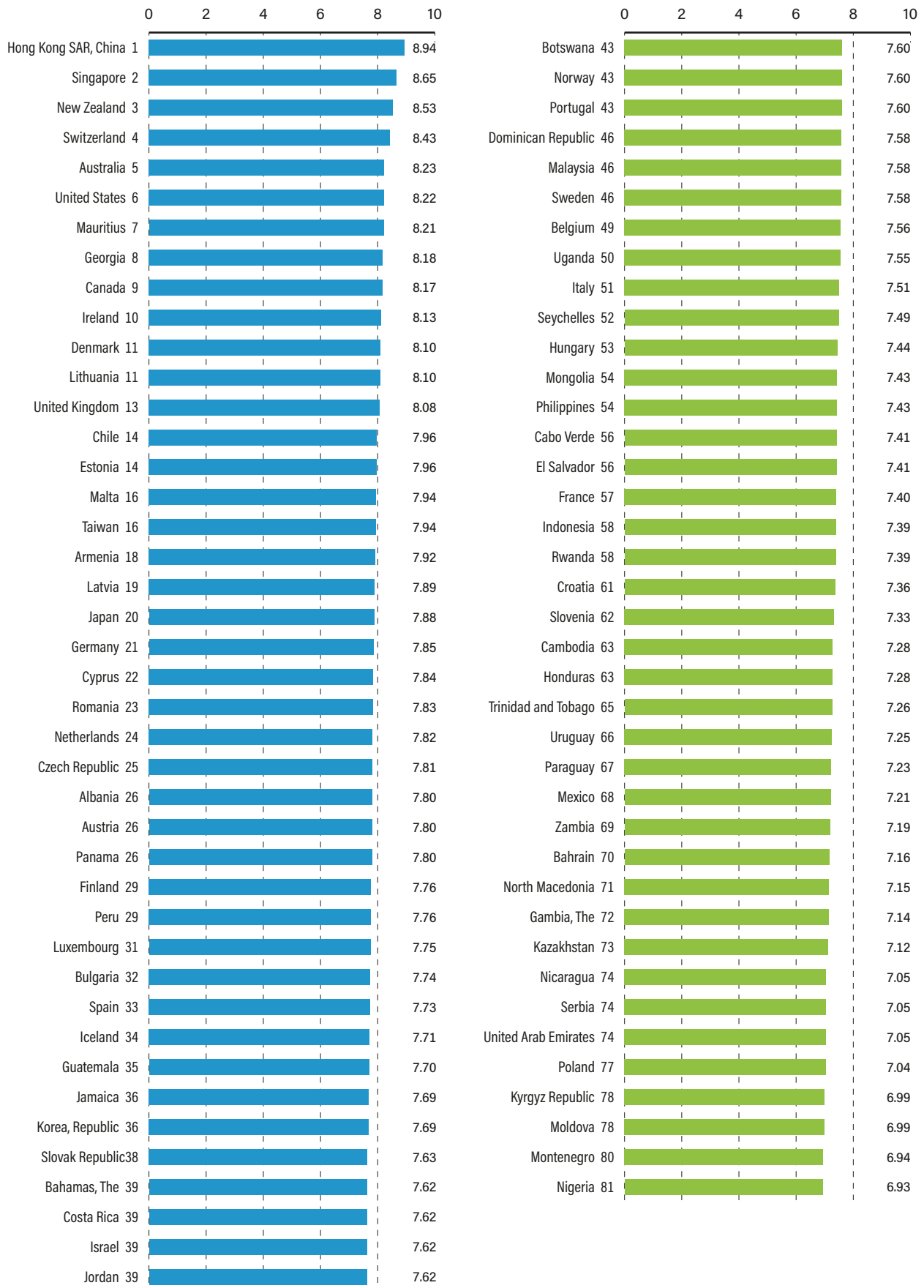


Exhibit 1.2b: Summary Economic Freedom Ratings for 2018, Third and Fourth Quartiles

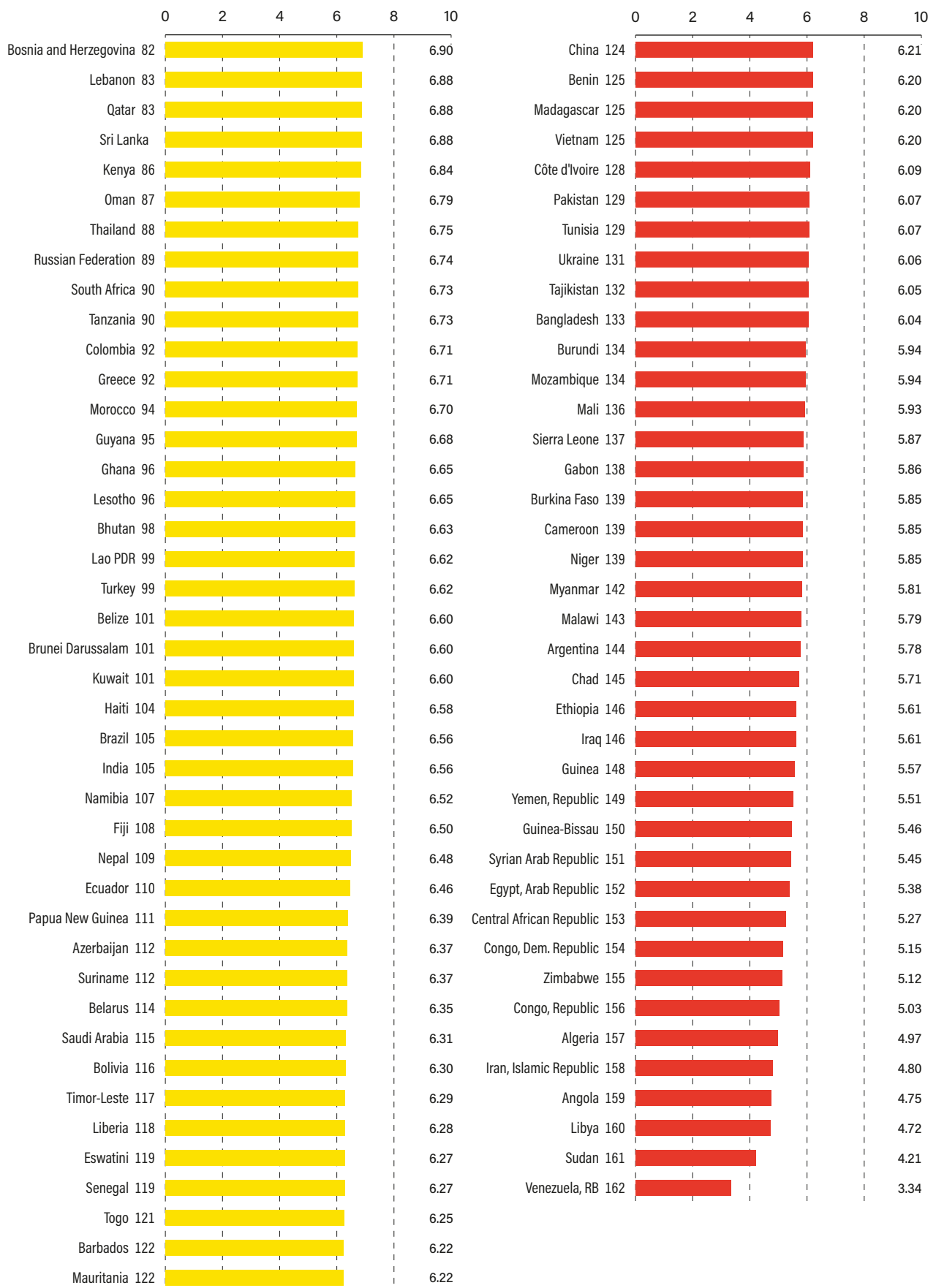


Exhibit 1.3: Area Economic Freedom Ratings (Rankings) for 2018

	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	8.09 (22)	5.17 (74)	9.82 (6)	8.20 (39)	7.72 (49)	9.74 (19)	6.72 (68)	6.71 (86)
Algeria	4.24 (161)	4.53 (115)	7.92 (110)	2.58 (160)	5.56 (148)	5.10 (155)	5.65 (114)	5.95 (127)
Angola	7.31 (48)	3.43 (147)	4.70 (160)	2.92 (158)	5.39 (151)	5.18 (154)	5.34 (129)	5.64 (134)
Argentina	6.05 (111)	4.63 (105)	5.07 (156)	7.41 (75)	5.76 (146)	5.75 (148)	5.12 (136)	6.40 (106)
Armenia	7.85 (27)	5.98 (47)	9.56 (23)	8.46 (21)	7.76 (44)	9.55 (29)	6.46 (84)	7.28 (54)
Australia	6.90 (64)	7.93 (9)	9.66 (16)	7.94 (52)	8.73 (7)	9.95 (12)	7.80 (29)	8.43 (13)
Austria	5.66 (128)	7.95 (7)	9.36 (46)	8.38 (26)	7.67 (54)	9.24 (49)	5.86 (109)	7.90 (32)
Azerbaijan	5.22 (142)	4.72 (96)	7.32 (122)	7.24 (81)	7.34 (72)	8.33 (88)	6.54 (79)	7.13 (59)
Bahamas, The	9.10 (2)	6.17 (40)	8.11 (103)	6.25 (119)	8.46 (15)	9.12 (55)	8.36 (9)	7.88 (33)
Bahrain	6.62 (79)	4.72 (95)	9.18 (67)	7.58 (73)	7.69 (52)	7.61 (116)	7.90 (24)	7.56 (42)
Bangladesh	8.08 (23)	3.04 (155)	6.93 (135)	5.56 (142)	6.61 (117)	7.88 (103)	7.05 (57)	4.88 (152)
Barbados	5.49 (135)	5.70 (53)	6.47 (149)	6.80 (100)	6.65 (113)	6.29 (141)	6.99 (60)	6.69 (87)
Belarus	5.96 (114)	4.72 (97)	7.27 (124)	6.75 (102)	7.06 (89)	7.00 (130)	7.19 (51)	6.99 (68)
Belgium	4.90 (151)	7.12 (21)	9.33 (53)	8.28 (33)	8.19 (23)	9.21 (50)	7.42 (45)	7.94 (31)
Belize	7.29 (49)	4.75 (90)	7.07 (129)	6.06 (125)	7.83 (40)	9.27 (48)	7.55 (40)	6.69 (88)
Benin	6.62 (78)	4.68 (100)	7.06 (131)	5.84 (133)	6.80 (111)	6.82 (133)	6.34 (90)	7.22 (57)
Bhutan	6.66 (74)	5.66 (56)	7.07 (130)	6.09 (124)	7.68 (53)	7.77 (108)	7.94 (21)	7.33 (52)
Bolivia	5.97 (113)	3.89 (136)	9.36 (44)	7.02 (90)	5.25 (153)	7.63 (115)	3.83 (157)	4.29 (157)
Bosnia & Herzegovina	6.45 (93)	4.57 (110)	8.30 (92)	7.69 (66)	7.48 (61)	10.00 (1)	7.21 (50)	5.24 (144)
Botswana	6.66 (75)	6.07 (45)	9.35 (47)	7.89 (55)	8.05 (29)	9.12 (56)	7.42 (44)	7.61 (40)
Brazil	6.86 (68)	5.02 (83)	9.31 (56)	6.84 (96)	4.77 (159)	5.30 (153)	4.46 (153)	4.55 (156)
Brunei Darussalam	3.33 (162)	5.40 (65)	8.56 (82)	7.14 (86)	8.55 (10)	8.63 (79)	8.79 (5)	8.22 (24)
Bulgaria	6.87 (67)	5.92 (50)	9.56 (22)	8.47 (20)	7.87 (38)	10.00 (1)	7.17 (52)	6.45 (102)
Burkina Faso	5.19 (144)	4.14 (131)	6.54 (146)	6.27 (117)	7.12 (83)	7.68 (112)	7.01 (59)	6.68 (89)
Burundi	6.84 (69)	4.34 (123)	8.81 (78)	3.39 (157)	6.33 (133)	5.00 (156)	8.05 (17)	5.94 (128)
Cabo Verde	7.47 (41)	6.25 (36)	8.44 (85)	7.65 (68)	7.26 (76)	9.54 (31)	4.88 (143)	7.37 (49)
Cambodia	8.42 (16)	3.85 (138)	9.46 (32)	7.74 (63)	6.95 (100)	9.50 (34)	6.46 (85)	4.90 (151)
Cameroon	7.34 (41)	3.07 (154)	7.27 (125)	5.12 (151)	6.47 (127)	7.17 (126)	7.28 (48)	4.98 (149)
Canada	6.69 (74)	7.74 (11)	9.59 (20)	8.09 (48)	8.75 (6)	10.00 (1)	8.08 (16)	8.18 (25)
Central African Republic	5.95 (115)	3.39 (148)	6.48 (147)	5.15 (150)	5.39 (150)	8.20 (94)	3.25 (160)	4.71 (154)
Chad	8.94 (4)	3.23 (153)	6.37 (150)	5.05 (152)	4.93 (156)	5.96 (147)	5.37 (126)	3.46 (160)
Chile	8.21 (19)	6.73 (27)	9.60 (18)	8.12 (46)	7.12 (82)	9.04 (60)	4.97 (142)	7.36 (50)
China	4.85 (153)	4.93 (86)	8.32 (90)	6.52 (112)	6.44 (130)	7.14 (127)	5.54 (119)	6.63 (92)

Exhibit 1.3 (continued): Area Economic Freedom Ratings (Rankings) for 2018

	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	6.64 (76)	4.57 (108)	8.28 (93)	6.62 (109)	7.41 (69)	9.91 (13)	5.84 (110)	6.49 (100)
Congo, Dem. Rep.	7.57 (35)	2.89 (159)	4.78 (159)	5.21 (149)	5.31 (152)	5.67 (149)	5.49 (122)	4.77 (153)
Congo, Republic	6.70 (73)	3.27 (151)	4.90 (158)	5.40 (146)	4.90 (157)	4.04 (157)	5.66 (113)	4.99 (148)
Costa Rica	7.40 (45)	6.16 (41)	9.71 (11)	8.04 (49)	6.81 (110)	7.13 (129)	6.02 (102)	7.26 (56)
Côte d'Ivoire	6.20 (101)	4.59 (107)	7.32 (121)	5.41 (145)	6.92 (101)	7.69 (111)	6.07 (98)	7.01 (67)
Croatia	5.79 (119)	5.98 (48)	9.37 (41)	8.22 (38)	7.46 (64)	9.33 (37)	6.41 (88)	6.63 (93)
Cyprus	7.36 (47)	6.22 (38)	9.22 (66)	8.48 (18)	7.93 (36)	10.00 (1)	6.30 (91)	7.50 (43)
Czech Republic	6.64 (77)	6.62 (29)	9.02 (73)	8.33 (29)	8.41 (16)	10.00 (1)	8.12 (15)	7.11 (61)
Denmark	5.48 (137)	8.16 (3)	9.68 (15)	8.67 (8)	8.51 (12)	10.00 (1)	7.27 (49)	8.25 (22)
Dominican Republic	8.77 (5)	4.80 (89)	9.57 (21)	8.14 (43)	6.60 (119)	8.03 (100)	6.14 (97)	5.64 (135)
Ecuador	6.56 (85)	4.55 (114)	8.14 (101)	6.90 (92)	6.16 (141)	8.57 (80)	4.98 (141)	4.95 (150)
Egypt, Arab Republic	4.92 (150)	3.76 (141)	7.56 (115)	5.84 (132)	4.80 (158)	3.67 (158)	5.23 (132)	5.51 (140)
El Salvador	8.76 (7)	4.34 (125)	9.86 (2)	7.64 (69)	6.46 (128)	9.21 (51)	4.47 (152)	5.70 (132)
Estonia	6.35 (98)	7.43 (15)	9.26 (62)	8.58 (14)	8.17 (24)	9.29 (46)	6.26 (92)	8.95 (3)
Eswatini	5.56 (130)	4.57 (112)	7.63 (114)	6.03 (127)	7.55 (57)	8.78 (73)	7.63 (35)	6.24 (116)
Ethiopia	5.79 (120)	4.21 (129)	6.26 (153)	4.91 (153)	6.89 (103)	6.93 (131)	6.93 (62)	6.80 (80)
Fiji	5.67 (127)	4.96 (85)	7.01 (133)	5.94 (130)	8.93 (4)	9.76 (18)	9.29 (2)	7.73 (37)
Finland	4.89 (152)	8.12 (5)	9.36 (43)	8.40 (24)	8.03 (30)	9.90 (14)	5.34 (130)	8.85 (4)
France	4.95 (148)	6.68 (28)	9.36 (45)	8.46 (22)	7.58 (56)	8.94 (67)	5.91 (106)	7.88 (34)
Gabon	7.05 (59)	3.50 (146)	6.26 (152)	5.43 (144)	7.07 (87)	8.33 (88)	7.33 (47)	5.56 (138)
Gambia, The	6.87 (66)	5.05 (80)	9.45 (33)	7.21 (84)	7.11 (86)	6.84 (132)	7.92 (23)	6.56 (96)
Georgia	7.86 (26)	6.47 (32)	9.30 (58)	9.02 (3)	8.27 (19)	9.73 (20)	6.63 (75)	8.43 (11)
Germany	6.13 (106)	7.38 (17)	9.39 (39)	8.23 (37)	8.13 (26)	8.33 (88)	7.54 (41)	8.50 (8)
Ghana	8.60 (10)	5.11 (76)	6.30 (151)	6.13 (123)	7.13 (81)	8.40 (87)	6.65 (73)	6.33 (111)
Greece	4.95 (149)	5.71 (52)	7.93 (109)	7.82 (57)	7.17 (78)	9.67 (21)	5.04 (139)	6.79 (82)
Guatemala	9.51 (1)	4.73 (94)	9.49 (29)	8.29 (31)	6.48 (125)	9.63 (25)	3.87 (156)	5.95 (126)
Guinea	4.54 (157)	3.70 (143)	7.39 (119)	5.34 (148)	6.87 (104)	10.00 (1)	5.09 (138)	5.52 (139)
Guinea-Bissau	6.06 (110)	3.03 (156)	6.77 (141)	5.76 (135)	5.70 (147)	7.45 (119)	3.46 (159)	6.19 (119)
Guyana	6.10 (108)	5.22 (72)	8.33 (89)	6.71 (104)	7.04 (91)	6.33 (140)	7.84 (27)	6.93 (72)
Haiti	8.44 (15)	2.57 (162)	7.03 (132)	7.80 (60)	7.06 (88)	8.49 (83)	8.04 (18)	4.65 (155)
Honduras	8.98 (3)	4.22 (128)	9.40 (38)	6.83 (97)	6.97 (97)	9.54 (30)	5.14 (135)	6.24 (117)
Hong Kong SAR, China	8.48 (13)	7.49 (14)	9.79 (8)	9.49 (1)	9.47 (1)	10.00 (1)	9.37 (1)	9.04 (2)
Hungary	5.74 (122)	6.27 (35)	9.48 (30)	8.29 (32)	7.42 (68)	8.71 (75)	6.71 (70)	6.85 (77)

Exhibit 1.3 (continued): Area Economic Freedom Ratings (Rankings) for 2018

	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	5.97 (112)	8.08 (6)	9.37 (42)	7.36 (76)	7.74 (47)	7.23 (123)	7.57 (37)	8.43 (12)
India	7.16 (54)	5.07 (79)	8.34 (88)	5.71 (139)	6.53 (122)	6.55 (138)	6.42 (87)	6.62 (94)
Indonesia	8.69 (8)	5.11 (77)	9.70 (13)	6.88 (94)	6.56 (121)	8.20 (93)	4.71 (148)	6.76 (84)
Iran, Islamic Republic	5.87 (117)	4.21 (130)	6.17 (154)	2.29 (161)	5.45 (149)	6.41 (139)	4.74 (146)	5.21 (145)
Iraq	5.02 (146)	3.32 (150)	7.84 (111)	5.80 (134)	6.07 (142)	6.76 (134)	6.19 (96)	5.26 (143)
Ireland	6.52 (89)	7.40 (16)	9.44 (36)	8.72 (7)	8.55 (9)	9.33 (37)	7.93 (22)	8.39 (15)
Israel	6.57 (84)	5.87 (51)	9.81 (7)	8.45 (23)	7.40 (70)	9.52 (33)	5.36 (127)	7.31 (53)
Italy	5.54 (133)	6.35 (34)	9.35 (49)	8.59 (13)	7.75 (45)	9.60 (26)	6.79 (66)	6.85 (76)
Jamaica	8.45 (14)	5.67 (55)	9.14 (69)	7.06 (89)	8.15 (25)	9.56 (27)	7.86 (26)	7.03 (65)
Japan	5.85 (118)	7.34 (19)	9.51 (27)	8.30 (30)	8.40 (17)	8.69 (76)	8.17 (13)	8.35 (18)
Jordan	7.87 (25)	4.66 (103)	9.59 (19)	8.01 (50)	7.95 (35)	8.72 (74)	7.74 (30)	7.40 (48)
Kazakhstan	7.67 (33)	5.00 (84)	8.79 (79)	6.19 (121)	7.96 (34)	9.33 (37)	7.56 (39)	6.98 (69)
Kenya	6.38 (96)	5.04 (81)	9.27 (60)	6.69 (106)	6.82 (108)	6.67 (135)	7.13 (53)	6.66 (91)
Korea, Rep.	6.81 (70)	6.55 (30)	9.61 (17)	7.98 (51)	7.49 (59)	9.33 (37)	4.77 (145)	8.36 (16)
Kuwait	5.69 (125)	4.92 (87)	8.16 (99)	7.28 (77)	6.97 (98)	9.00 (62)	5.52 (120)	6.38 (107)
Kyrgyz Republic	7.12 (56)	4.35 (122)	9.24 (64)	7.21 (83)	7.01 (94)	8.63 (78)	5.91 (105)	6.50 (99)
Lao PDR	7.11 (57)	4.75 (91)	7.52 (117)	7.28 (78)	6.43 (131)	9.13 (54)	4.78 (144)	5.40 (141)
Latvia	6.55 (87)	6.81 (26)	9.27 (59)	8.61 (12)	8.19 (22)	8.91 (69)	7.64 (34)	8.03 (29)
Lebanon	8.29 (18)	3.89 (135)	8.99 (74)	6.74 (103)	6.47 (126)	6.67 (135)	7.47 (42)	5.29 (142)
Lesotho	6.19 (102)	4.92 (88)	8.00 (108)	6.60 (110)	7.54 (58)	9.67 (21)	6.64 (74)	6.31 (112)
Liberia	6.46 (92)	4.29 (126)	8.08 (105)	6.37 (116)	6.21 (139)	5.67 (149)	6.37 (89)	6.58 (95)
Libya	4.71 (155)	3.77 (140)	7.17 (127)	1.98 (162)	5.98 (143)	8.50 (82)	6.78 (67)	2.67 (161)
Lithuania	7.54 (36)	7.00 (23)	9.25 (63)	8.48 (19)	8.22 (20)	9.67 (21)	6.67 (72)	8.33 (20)
Luxembourg	5.55 (132)	7.77 (10)	9.30 (57)	8.15 (42)	7.96 (33)	9.00 (62)	6.53 (80)	8.36 (17)
Madagascar	7.51 (37)	2.92 (158)	7.65 (112)	6.71 (105)	6.19 (140)	8.14 (96)	4.64 (150)	5.80 (130)
Malawi	5.90 (116)	5.33 (67)	6.86 (139)	4.62 (155)	6.24 (136)	5.33 (152)	6.91 (64)	6.47 (101)
Malaysia	6.55 (88)	5.48 (62)	9.71 (12)	7.63 (70)	8.54 (11)	9.53 (32)	8.04 (19)	8.05 (28)
Mali	5.71 (124)	3.53 (145)	7.34 (120)	6.67 (107)	6.39 (132)	7.70 (109)	5.25 (131)	6.22 (118)
Malta	6.94 (61)	6.14 (43)	9.51 (26)	8.64 (9)	8.47 (13)	10.00 (1)	7.95 (20)	7.45 (45)
Mauritania	6.16 (104)	3.96 (134)	8.02 (107)	5.95 (129)	6.98 (96)	9.17 (53)	6.00 (103)	5.77 (131)
Mauritius	8.15 (21)	6.46 (33)	9.52 (25)	8.53 (16)	8.36 (18)	8.95 (66)	7.90 (25)	8.25 (23)
Mexico	8.38 (17)	4.73 (93)	8.13 (102)	7.66 (67)	7.14 (79)	9.03 (61)	5.59 (117)	6.80 (79)
Moldova	7.29 (50)	4.70 (98)	8.21 (97)	7.28 (79)	7.46 (63)	9.80 (17)	5.61 (115)	6.97 (70)

Exhibit 1.3 (continued): Area Economic Freedom Ratings (Rankings) for 2018

	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)
Mongolia	7.43 (44)	5.97 (49)	8.92 (77)	7.10 (87)	7.71 (50)	9.45 (35)	6.60 (78)	7.08 (62)
Montenegro	5.72 (123)	5.22 (71)	8.26 (94)	8.34 (28)	7.14 (80)	6.67 (135)	7.67 (33)	7.08 (63)
Morocco	6.37 (97)	5.60 (57)	7.22 (126)	6.88 (93)	7.43 (66)	8.88 (70)	6.06 (99)	7.35 (51)
Mozambique	5.48 (136)	4.36 (120)	7.47 (118)	6.15 (122)	6.23 (137)	9.67 (24)	3.07 (161)	5.97 (124)
Myanmar	7.50 (39)	3.72 (142)	6.73 (142)	4.89 (154)	6.22 (138)	6.01 (144)	5.23 (133)	7.41 (47)
Namibia	5.56 (131)	6.18 (39)	6.73 (143)	5.91 (131)	8.21 (21)	9.55 (28)	8.17 (12)	6.91 (74)
Nepal	6.92 (63)	4.64 (104)	6.89 (137)	6.59 (111)	7.36 (71)	9.33 (37)	6.48 (83)	6.25 (113)
Netherlands	5.23 (141)	7.94 (8)	9.31 (55)	8.62 (10)	7.99 (32)	8.00 (101)	7.63 (36)	8.34 (19)
New Zealand	6.62 (81)	8.25 (1)	9.79 (9)	8.86 (5)	9.14 (2)	10.00 (1)	8.63 (7)	8.78 (5)
Nicaragua	6.62 (82)	4.26 (127)	9.42 (37)	8.14 (45)	6.82 (107)	9.39 (36)	5.91 (107)	5.15 (146)
Niger	6.32 (100)	3.87 (137)	6.94 (134)	5.76 (136)	6.33 (134)	7.13 (128)	4.26 (154)	7.60 (41)
Nigeria	8.18 (20)	3.58 (144)	8.97 (76)	6.03 (126)	7.88 (37)	8.99 (64)	8.96 (4)	5.68 (133)
North Macedonia	7.20 (53)	4.56 (113)	8.14 (100)	7.73 (64)	8.12 (27)	9.82 (16)	7.11 (54)	7.43 (46)
Norway	5.18 (145)	8.14 (4)	9.14 (70)	7.82 (59)	7.73 (48)	9.33 (37)	5.42 (123)	8.44 (10)
Oman	4.97 (147)	5.57 (58)	8.41 (87)	8.17 (40)	6.81 (109)	5.98 (146)	6.69 (71)	7.76 (36)
Pakistan	7.74 (30)	3.83 (139)	6.58 (144)	5.69 (140)	6.51 (123)	8.09 (98)	5.09 (137)	6.36 (109)
Panama	7.75 (29)	5.44 (63)	9.87 (1)	8.92 (4)	7.02 (92)	9.11 (57)	5.00 (140)	6.95 (71)
Papua New Guinea	5.78 (121)	4.45 (119)	6.47 (148)	7.48 (74)	7.75 (46)	8.48 (84)	8.69 (6)	6.06 (121)
Paraguay	8.48 (12)	4.34 (124)	9.53 (24)	7.22 (82)	6.57 (120)	8.92 (68)	4.53 (151)	6.25 (115)
Peru	7.67 (32)	5.24 (70)	9.83 (5)	8.61 (11)	7.44 (65)	8.52 (81)	6.87 (65)	6.91 (75)
Philippines	8.64 (9)	4.57 (111)	9.45 (35)	7.08 (88)	7.43 (67)	9.08 (58)	7.05 (58)	6.16 (120)
Poland	5.67 (126)	5.99 (46)	8.32 (91)	7.91 (54)	7.32 (73)	7.83 (105)	7.10 (56)	7.04 (64)
Portugal	6.13 (105)	6.97 (24)	9.35 (48)	8.56 (15)	6.97 (99)	7.40 (121)	5.81 (111)	7.69 (38)
Qatar	5.65 (129)	5.49 (61)	8.24 (96)	7.89 (56)	7.12 (84)	7.33 (122)	6.03 (101)	8.00 (30)
Romania	7.24 (52)	6.24 (37)	9.33 (52)	8.74 (6)	7.60 (55)	8.88 (71)	7.41 (46)	6.51 (98)
Russian Federation	6.42 (95)	4.68 (102)	9.09 (72)	6.86 (95)	6.63 (115)	8.00 (101)	5.90 (108)	5.99 (123)
Rwanda	6.16 (103)	6.09 (44)	9.45 (34)	7.25 (80)	8.00 (31)	7.18 (125)	8.27 (10)	8.55 (7)
Saudi Arabia	4.57 (156)	4.68 (101)	8.65 (80)	6.94 (91)	6.73 (112)	6.28 (142)	7.10 (55)	6.80 (81)
Senegal	7.46 (41)	4.35 (121)	7.30 (123)	6.40 (115)	5.86 (145)	7.53 (117)	3.60 (158)	6.44 (103)
Serbia	6.48 (91)	5.44 (64)	8.47 (84)	7.59 (72)	7.27 (74)	8.13 (97)	6.92 (63)	6.77 (83)
Seychelles	6.71 (72)	5.54 (59)	9.26 (61)	8.27 (35)	7.69 (51)	7.88 (104)	7.56 (38)	7.63 (39)
Sierra Leone	7.77 (28)	3.97 (133)	6.82 (140)	5.74 (137)	5.03 (154)	3.67 (158)	5.16 (134)	6.25 (114)
Singapore	7.27 (51)	7.70 (12)	9.84 (3)	9.44 (2)	9.01 (3)	10.00 (1)	7.68 (32)	9.34 (1)

Exhibit 1.3 (continued): Area Economic Freedom Ratings (Rankings) for 2018

	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)
Slovak Republic	6.55 (86)	6.14 (42)	9.32 (54)	8.26 (36)	7.86 (39)	9.88 (15)	6.95 (61)	6.73 (85)
Slovenia	5.39 (138)	6.54 (31)	9.34 (51)	8.11 (47)	7.27 (75)	8.33 (88)	6.20 (95)	7.27 (55)
South Africa	6.11 (107)	5.68 (54)	8.20 (98)	6.44 (113)	7.24 (77)	9.18 (52)	6.51 (81)	6.02 (122)
Spain	6.10 (109)	7.06 (22)	9.34 (50)	8.34 (27)	7.81 (42)	9.32 (45)	6.25 (93)	7.85 (35)
Sri Lanka	8.76 (6)	5.09 (78)	8.08 (106)	5.44 (143)	7.02 (93)	7.64 (114)	6.49 (82)	6.93 (73)
Sudan	8.49 (11)	2.85 (160)	2.51 (161)	2.68 (159)	4.55 (160)	3.33 (161)	4.71 (147)	5.60 (137)
Suriname	5.53 (134)	4.47 (117)	7.56 (116)	6.81 (99)	7.47 (62)	8.66 (77)	8.14 (14)	5.60 (136)
Sweden	4.75 (154)	7.54 (13)	9.37 (40)	8.38 (25)	7.83 (41)	9.33 (37)	6.05 (100)	8.10 (26)
Switzerland	7.70 (31)	8.21 (2)	9.83 (4)	7.80 (61)	8.58 (8)	9.33 (37)	7.82 (28)	8.59 (6)
Syrian Arab Republic	6.62 (80)	2.96 (157)	8.09 (104)	4.56 (156)	5.01 (155)	5.59 (151)	5.49 (121)	3.94 (158)
Taiwan	7.46 (42)	6.86 (25)	9.72 (10)	7.61 (71)	8.08 (28)	8.08 (99)	7.73 (31)	8.44 (9)
Tajikistan	5.27 (140)	4.47 (118)	7.65 (113)	6.25 (118)	6.61 (118)	8.18 (95)	5.76 (112)	5.89 (129)
Tanzania	7.07 (58)	5.36 (66)	8.25 (95)	5.98 (128)	7.00 (95)	8.42 (85)	6.60 (77)	5.96 (125)
Thailand	7.00 (60)	4.52 (116)	8.57 (81)	6.82 (98)	6.84 (105)	9.28 (47)	4.69 (149)	6.54 (97)
Timor-Leste	4.45 (159)	3.27 (152)	8.44 (86)	8.17 (41)	7.11 (85)	7.70 (110)	6.44 (86)	7.19 (58)
Togo	6.93 (62)	5.14 (75)	7.13 (128)	5.63 (141)	6.44 (129)	8.33 (88)	4.17 (155)	6.82 (78)
Trinidad and Tobago	7.16 (55)	5.21 (73)	9.17 (68)	7.94 (53)	6.83 (106)	6.00 (145)	7.47 (43)	7.02 (66)
Tunisia	5.21 (143)	5.32 (68)	6.57 (145)	6.63 (108)	6.64 (114)	7.22 (124)	5.57 (118)	7.11 (60)
Turkey	6.87 (65)	4.61 (106)	8.50 (83)	7.17 (85)	5.97 (144)	6.06 (143)	5.41 (124)	6.44 (104)
Uganda	7.89 (24)	4.74 (92)	9.50 (28)	7.82 (58)	7.80 (43)	8.42 (86)	8.63 (8)	6.34 (110)
Ukraine	6.72 (71)	4.57 (109)	5.65 (155)	6.78 (101)	6.61 (116)	7.80 (106)	5.35 (128)	6.67 (90)
United Arab Emirates	5.28 (139)	5.25 (69)	8.98 (75)	8.27 (34)	7.49 (60)	7.67 (113)	6.72 (69)	8.07 (27)
United Kingdom	6.61 (83)	7.37 (18)	9.46 (31)	8.50 (17)	8.47 (14)	8.88 (72)	8.25 (11)	8.28 (21)
United States	7.50 (40)	7.33 (20)	9.69 (14)	7.77 (62)	8.82 (5)	9.07 (59)	8.98 (3)	8.40 (14)
Uruguay	6.43 (94)	5.52 (60)	9.10 (71)	8.14 (44)	7.06 (90)	7.77 (107)	5.94 (104)	7.47 (44)
Venezuela, RB	4.31 (160)	2.76 (161)	0.69 (162)	6.42 (114)	2.52 (162)	3.33 (160)	2.24 (162)	1.98 (162)
Vietnam	6.35 (99)	4.69 (99)	6.88 (138)	6.19 (120)	6.92 (102)	8.95 (65)	5.38 (125)	6.43 (105)
Yemen, Rep.	7.61 (34)	3.36 (149)	6.91 (136)	5.35 (147)	4.31 (161)	2.50 (162)	6.63 (76)	3.79 (159)
Zambia	7.50 (38)	5.03 (82)	9.23 (65)	7.71 (65)	6.50 (124)	7.52 (118)	5.60 (116)	6.37 (108)
Zimbabwe	4.51 (158)	4.07 (132)	5.03 (157)	5.73 (138)	6.28 (135)	7.44 (120)	6.24 (94)	5.15 (147)

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

The EFW Panel Dataset

Over the years, the EFW index has become more comprehensive and the available data more complete. As a result, the number and composition of the components for many countries vary across time. This makes it difficult to directly compare index values from earlier periods with later periods. To assist researchers who are interested in a consistent time-series for a particular country and/or longitudinal data for a panel of countries, we previously developed and reported a chain-linked version of the index.

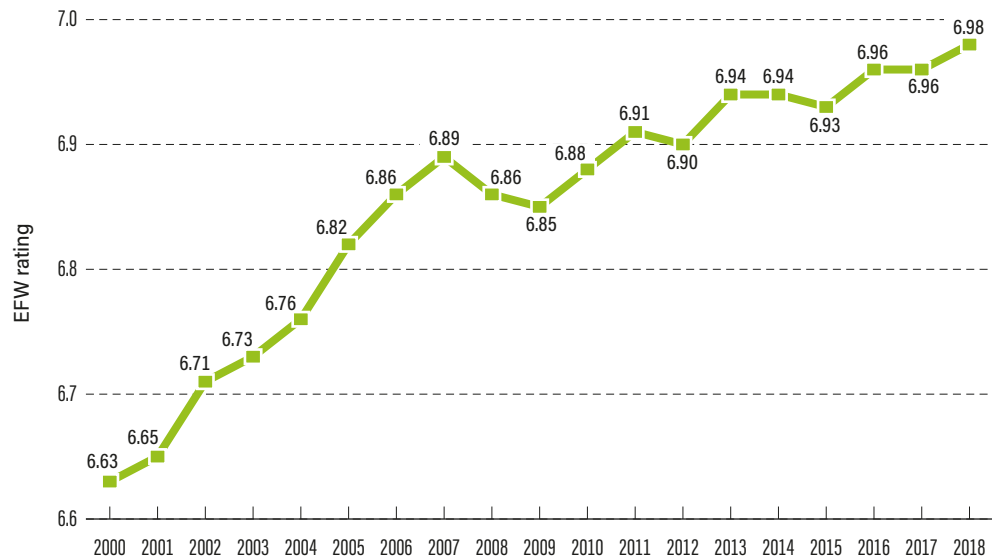
One of the problems with the chain-linked index was that it was limited to just the 123 countries that were available in the chain-link's "base year" of 2000. Beginning with the 2017 report, we have replaced the chain-linked index with the EFW Panel Dataset, which reports area and summary ratings for all countries for which we have a regular EFW index score in any given year.¹ The EFW Panel Dataset is our best attempt to provide scholars with consistent time-series/longitudinal data.

The EFW Panel Dataset adjusts the regular EFW index in two ways. First, from the most-recent year annually back to 2000, whenever possible, we estimate any missing data by autoregressively "back-casting" the data, meaning we use actual values in later years to estimate the missing values for earlier years. For example, if a country is missing a data value for a particular component from 2000 to 2004, this method estimates the missing values based on data available in 2005 and thereafter. This approach allows us to have area and summary ratings for up to the entire set of countries in the EFW index. Second, for 1970, 1975, 1980, 1985, 1990, and 1995, the index is chain-linked as described in previous editions. That is, using 2000 as the base year, *changes* in a country's scores backward in time are based only on *changes* in components that were present in adjoining years. It should be noted that the EFW Panel Dataset contains area and summary ratings only for those years in which the country received a regular EFW index rating. 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.

The panel dataset permits scholars interested in the longer time trends with the best possible set of data. Exhibit 1.4 shows the global average for all 123 nations with complete data since 2000. Between 2000 and 2018, the average economic freedom rating increased to 6.98 from 6.63 units, which is about one-third of a standard deviation over this period. While the pace of liberalization has certainly slowed in the 2000s compared to the 1980s and 1990s, these figures confirm the fact that economic liberalization continues in most countries even into the new millennium.

1 The EFW Panel Dataset may be found at <<https://www.fraserinstitute.org/economic-freedom/dataset>>.

Exhibit 1.4: Average Economic Freedom Rating, 2000–2018



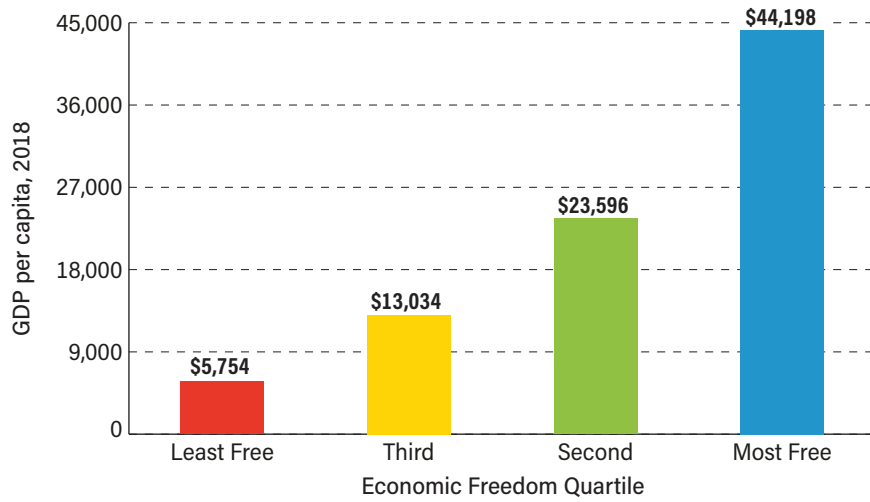
Economic freedom and human progress

As is customary, this chapter concludes with some simple graphs illustrating relationships between economic freedom and various other indicators of human progress (Exhibits 1.5–1.11). The graphs use the average of the EFW panel dataset for the period from 2000 to 2018, breaking the data into four quartiles ordered from least free to most free. 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. 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 income. 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 into 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.

Exhibit 1.5: Economic Freedom and Income per Capita

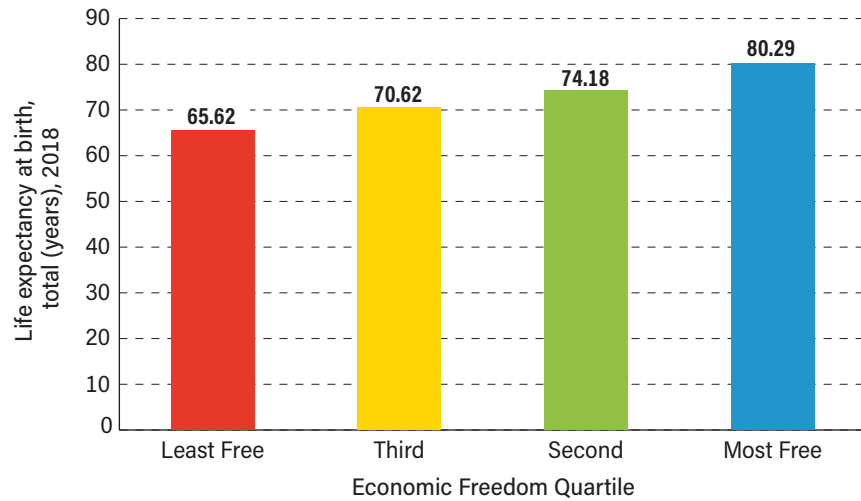
Countries with greater economic freedom have substantially higher per-capita incomes.



Sources: Average Economic Freedom Panel Score, 2000–2018; World Bank, 2020, *World Development Indicators*.

Exhibit 1.6: Economic Freedom and Life Expectancy

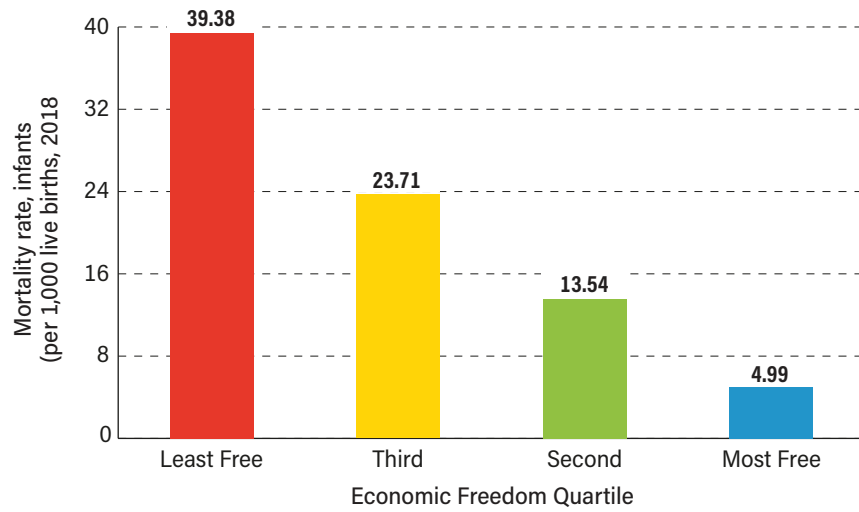
Life expectancy is over 14 years longer in countries with the most economic freedom than in countries with the least.



Sources: Average Economic Freedom Panel Score, 2000–2018; World Bank, 2020, *World Development Indicators*.

Exhibit 1.7: Economic Freedom and Infant Mortality Rate

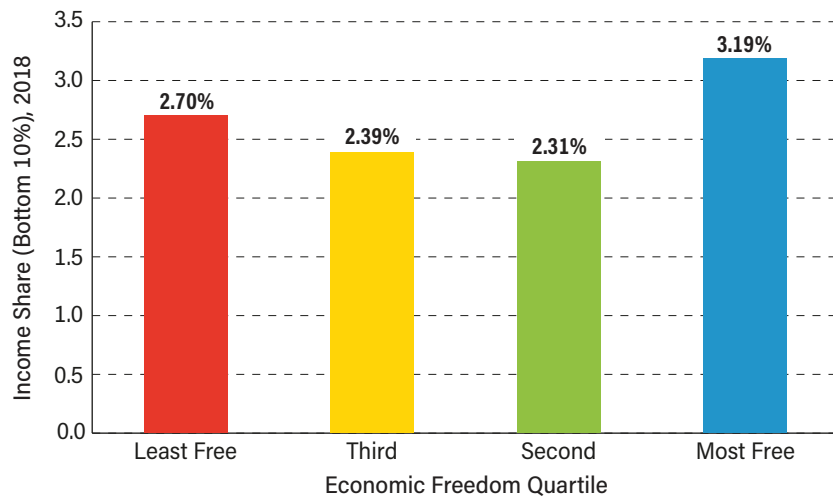
The infant mortality rate is almost eight times higher in nations in the lowest quartile of economic freedom compared to nations in the highest quartile.



Sources: Average Economic Freedom Panel Score, 2000–2018; World Bank, 2020, *World Development Indicators*.

Exhibit 1.8: Economic Freedom and the Income Share of the Poorest 10%

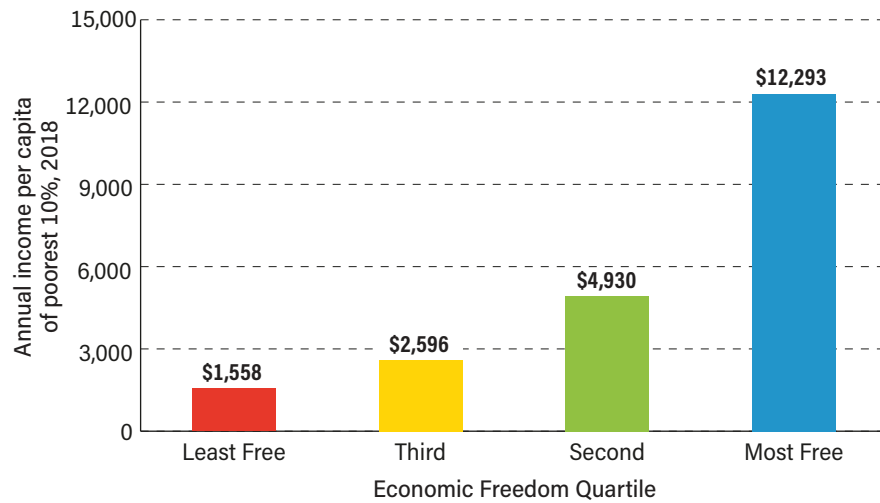
The share of income earned by the poorest 10% of the population is unrelated to economic freedom.



Sources: Average Economic Freedom Panel Score, 2000–2018; World Bank, 2020, *World Development Indicators*.

Exhibit 1.9: Economic Freedom and the Income Earned by the Poorest 10%

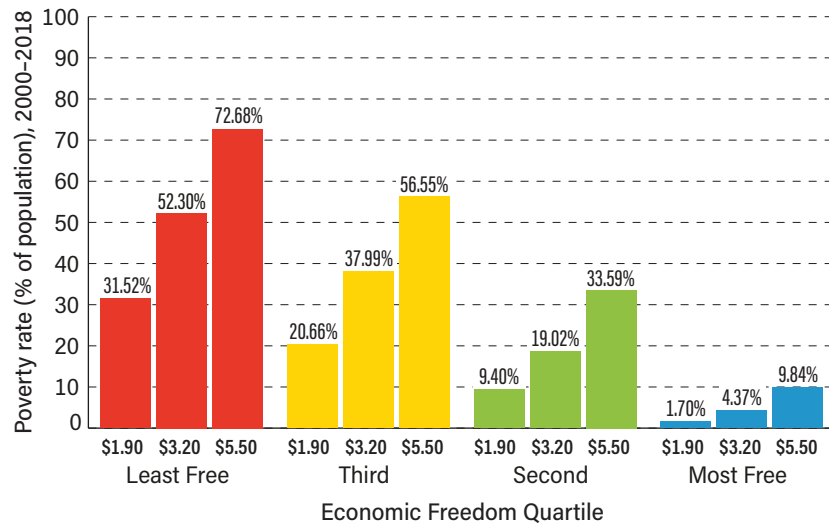
The amount of income, as opposed to the share, earned by the poorest 10% of the population is much higher in countries with higher economic freedom.



Sources: Average Economic Freedom Panel Score, 2000–2018; World Bank, 2020, *World Development Indicators*.

Exhibit 1.10: The Effect of Economic Freedom on Poverty Rates

Poverty rates are lower in countries with more economic freedom.

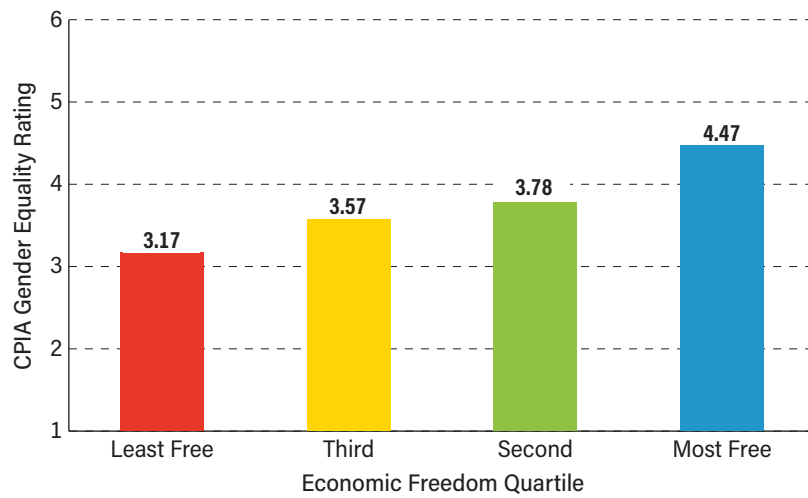


Note: The columns show the percentage of a country's population that lives on **\$1.90** per day, **\$3.20** per day, or **\$5.50** per day, in 2011 constant PPP-adjusted dollars.

Sources: Average Economic Freedom Panel Score, 2000–2018; World Bank, 2020, *World Development Indicators*.

Exhibit 1.11: Economic Freedom and the CPIA Gender Equality Rating

Men and women tend to fare equally in countries with greater economic freedom



Sources: Average Economic Freedom Panel Score, 2000–2018; World Bank, 2020, *World Development Indicators*.

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