

Chapter 1 Economic Freedom of the World in 2019

The Economic Freedom of the World project is one of ongoing research. As Milton Friedman stated in his foreword to the initial report, *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. We urge users of the EFW index to use the data only from the most recent report because of data updates and changes to the report’s methodology over time. All the ratings for all countries and years for which we have ratings are available in each year’s datafile. The most recent comprehensive data available for this report are from 2019, so the report does not capture the effects of the coronavirus on freedom.

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 a sound money that results in macroeconomic price stability and predictability. 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 classical liberal 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, *Economic Freedom of the World: 1975-1995*. In addition to the Friedmans, several of the world’s leading economists including Douglass North, Gary Becker, Peter Bauer, William Niskanen, and Gordon Tullock participated in the discussions leading to the EFW index. 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 sources of data are preferred to those that involve surveys or value judgments. With that said, given the multidimensional 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 sources of data. 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 the ratings of

the subcategories and how these 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 (pp. 251–264). The entire data set used in the construction of the index is freely available to researchers at <www.fraserinstitute.org/economic-freedom/dataset>.

The EFW index rates up to 165 jurisdictions. The data are available annually from 2000 to 2019 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, they 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 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

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 rates |
| | 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 by the Gender Legal Rights Adjustment (Fike, 2017) to reflect disparities in the legal treatment of women.

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 2021 Annual Report

We have added three new countries with scores for 2019: Comoros, Djibouti, and Somalia. These are the final three countries to be fully incorporated into the EFW index from the now discontinued *Economic Freedom of the Arab World* series of reports. This brings the total number of countries to 165, up from 162.

Unfortunately, presumably because of the coronavirus pandemic, the World Bank has yet to release a new *Doing Business* report and the World Economic Forum elected not to release new ratings in its *Global Competitiveness Report*. As a result, we were not able to update completely many components of the EFW index that rely on those sources for all or a portion of the scores. Given this reality, it is perhaps best to think of this edition of the EFW index as being a reflection of 2018/2019 as many 2018 data points had to be carried over to 2019. We will fully update the 2019 data if and when these sources become available.

In 2019 and 2020, we integrated a number of variables from the Varieties of Democracy (VDem) database (Coppedge *et al.*, 2021) into the EFW index. We originally based our ratings on the normalized z-scores as reported in VDem, but in this edition of the report, and going forward, we used VDem's "linearized original scale" data. V-Dem reports a version of their processed data that returns it to their original interval, typically 0–4. We make use of this version of the data because it gives us a clean set of intervals to translate to our 0–10 scale. This change has resulted only in very minor changes to the EFW index ratings for most jurisdictions in those EFW components that rely in whole or in part on the VDem data.

In 2020, the World Bank made modifications to the Women, Business, & the Law database that have changed the composition of the gender-adjustment factor used to modify Area 2. First, the World Bank no longer includes separate variables measuring the legal rights of married and unmarried women. In addition, several questions regarding industry-specific restrictions on women's labor have been dropped. They have also added a few new variables, including one that captures whether married couples have equal administrative rights over their shared assets.

Finally, this data is now updated on an annual basis instead of every other year and is available for each country going back to 1970. These changes allow for a gender-adjustment factor that is more consistently measured across all countries and years.

As a result of these changes, there are now 17 variables used to calculate the Gender Legal Rights Adjustment: 16 variables that overlap with the previous gender-adjustment factors plus the new property rights variable. These 17 factors are:

1. Can a woman apply for a passport in the same way as a man?
2. Can a woman travel outside the country in the same way as a man?
3. Can a woman travel outside her home in the same way as a man?
4. Can a woman choose where to live in the same way as a man?
5. Can a woman get a job in the same way as a man?
6. Can a woman work at night in the same way as a man?
7. Can a woman work in a job deemed dangerous in the same way as a man?
8. Can a woman work in an industrial job in the same way as a man?
9. Is there no legal provision that requires a married woman to obey her husband?
10. Can a woman be head of household in the same way as a man?
11. Can a woman sign a contract in the same way as a man?
12. Can a woman register a business in the same way as a man?
13. Can a woman open a bank account in the same way as a man?
14. Do men and women have equal ownership rights to immovable property?
15. Do sons and daughters have equal rights to inherit assets from their parents?
16. Do male and female surviving spouses have equal rights to inherit assets?
17. Does the law grant spouses equal administrative authority over assets during marriage?

The method for calculating gender adjustment score for each country remains unchanged. For each question, if the written law treats men and women equally that country receives “1” for that question and a “0” if women face additional restrictions that men do not face. The overall gender-adjustment factor is a simple average of a country’s score for each of these 17 questions.

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

be-cause 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. See Rosemarie Fike's description in chapter 3 of the 2017 report (Fike, 2017) for the details on this adjustment. This method was updated in 2021 by Dr. Fike as described above. 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 2019

Exhibits 1.2a and 1.2b (pp. 8–9) present the summary economic-freedom ratings, sorted from highest to lowest, for the 165 jurisdictions of this year's report. These ratings are for 2019, 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, Georgia, the United States, Ireland, Lithuania, Australia, and Denmark.

The rankings of some other major countries are Canada (14th), Japan (18th), Germany (22nd), Italy (47th), France (53rd), Mexico (75th), Russia (100th), India (108th), Brazil (109th), and China (116th). The 10 lowest-rated countries are: Central African Republic, Democratic Republic of Congo, Syria, Republic of Congo, Iran, Zimbabwe, Algeria, 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, and this remains the case in 2019. The ratings in this year's report are based on data for 2019. Thus, Hong Kong's rating in this report still does not fully reflect all the unrest that began in 2019; or the new security law imposed in 2020 by the Chinese government, with potential sentences of life imprisonment, and the accompanying arrests in its aftermath. Even so, we are perhaps just beginning to see the effect of policy changes in Hong Kong as the result of the 1997 establishment of Hong Kong as a Special Administrative Region within China. In this year's report, Hong Kong's overall EFW rating fell by over one-tenth of a point to 8.91 in 2019 from 9.03 in 2018. Almost the entirety of this decline in the overall rating is the result of a decline in its score for Area 2. Legal Structure and Property Rights from 7.87 to 7.53—this is a decline of over two-tenths of a standard deviation in Area 2. It should be noted, further, that this decline was the result of a partial update to most of the measures in Area 2 because our data from the Global Competitiveness Report and Doing Business could not be up-dated this year. Our expectation is that the ratings for Hong Kong both overall and especially in Area 2 will see a further degradation once more complete data are integrated into the EFW index.

Exhibit 1.2a: Summary Economic Freedom Ratings for 2019, First and Second Quartiles

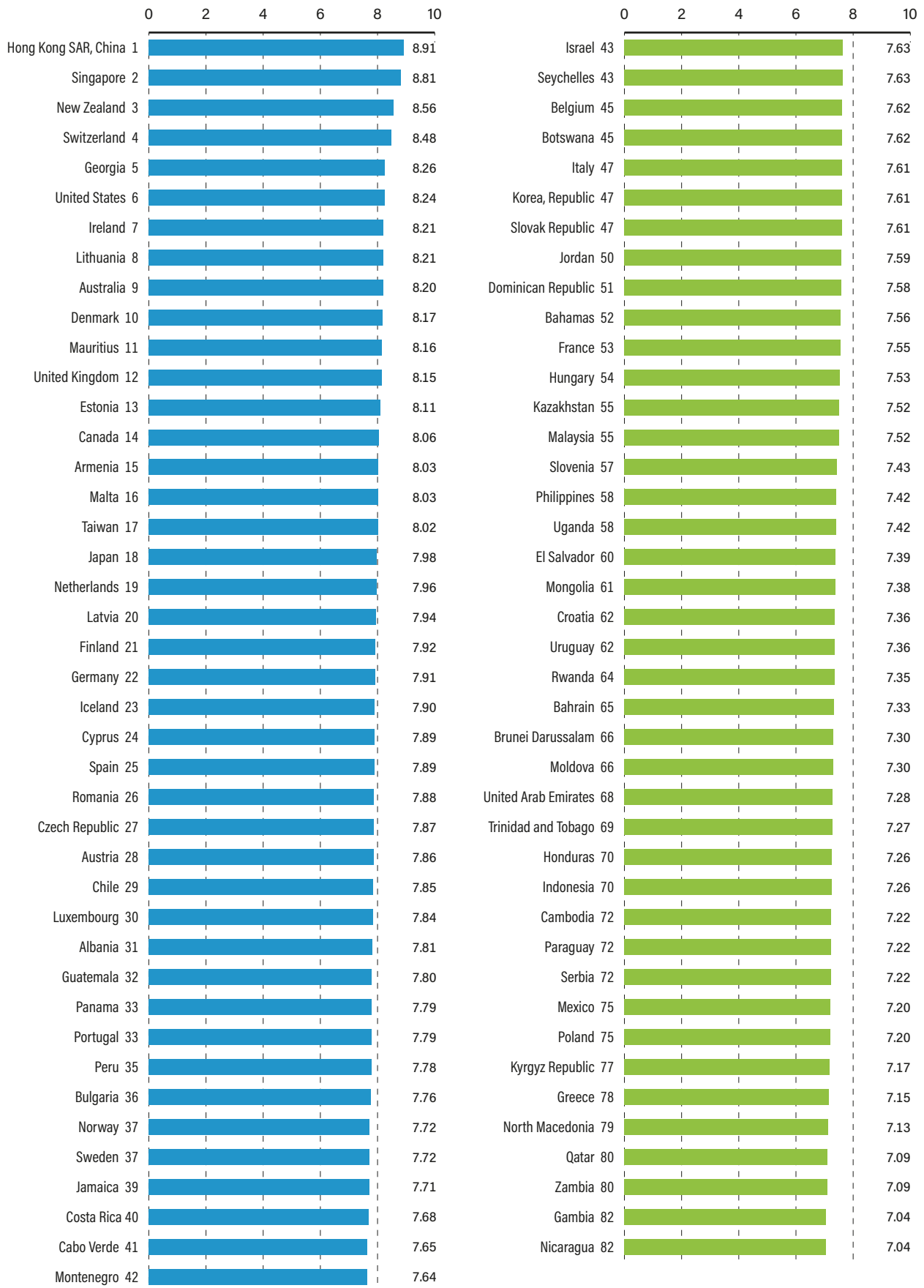
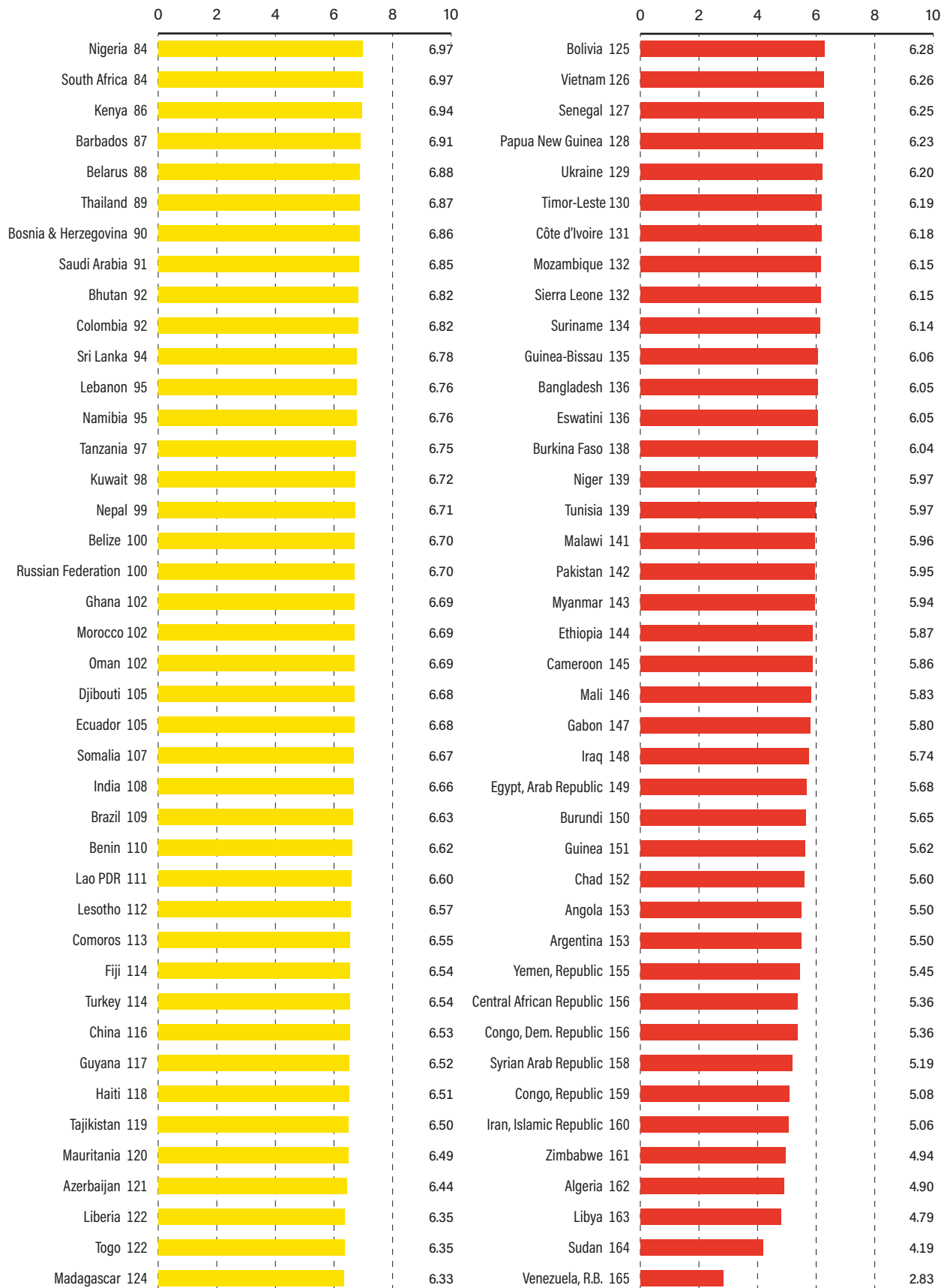


Exhibit 1.2b: Summary Economic Freedom Ratings for 2019, Third and Fourth Quartiles



Ratings and rankings in 2019 for the five Areas of the index and the Components of Area 5

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 some 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 1.3: Area Economic Freedom Ratings (Rankings) for 2019

	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	8.00 (24)	5.3 (75)	9.9 (2)	8.2 (44)	7.7 (50)	9.5 (34)	6.7 (70)	6.9 (76)
Algeria	4.62 (163)	4.1 (128)	7.3 (124)	2.5 (164)	5.8 (149)	6.2 (148)	5.6 (117)	5.7 (135)
Angola	7.53 (47)	3.7 (141)	4.9 (161)	5.4 (152)	6.0 (146)	7.0 (133)	5.3 (134)	5.6 (137)
Argentina	6.26 (114)	4.8 (103)	4.0 (162)	6.4 (118)	6.0 (145)	6.7 (142)	5.1 (140)	6.1 (119)
Armenia	7.83 (29)	6.3 (42)	9.6 (21)	8.5 (20)	7.8 (41)	9.7 (21)	6.5 (88)	7.3 (47)
Australia	6.54 (96)	8.3 (9)	9.7 (18)	8.0 (54)	8.5 (10)	9.4 (41)	7.8 (25)	8.3 (12)
Austria	5.43 (145)	8.3 (8)	9.4 (44)	8.4 (26)	7.7 (53)	9.3 (43)	5.9 (111)	7.8 (34)
Azerbaijan	5.38 (149)	5.2 (77)	7.0 (139)	7.2 (81)	7.4 (74)	8.3 (91)	6.5 (81)	7.2 (53)
Bahamas, The	8.77 (3)	6.3 (39)	7.8 (115)	6.3 (127)	8.7 (5)	9.8 (13)	8.4 (7)	7.9 (29)
Bahrain	6.73 (85)	4.7 (107)	9.2 (71)	8.2 (43)	7.7 (48)	7.6 (125)	7.9 (22)	7.6 (39)
Bangladesh	8.11 (23)	2.9 (155)	7.0 (141)	5.8 (143)	6.6 (127)	7.8 (115)	7.1 (58)	4.8 (154)
Barbados	6.57 (93)	5.8 (60)	7.8 (113)	6.7 (105)	7.6 (55)	9.3 (43)	7.0 (62)	6.6 (100)
Belarus	5.49 (142)	5.7 (64)	8.9 (81)	6.9 (96)	7.4 (69)	7.3 (130)	7.2 (50)	7.6 (38)
Belgium	4.75 (159)	7.4 (21)	9.4 (45)	8.4 (32)	8.1 (23)	9.1 (58)	7.4 (44)	7.9 (31)
Belize	7.29 (55)	5.0 (86)	7.1 (133)	6.4 (120)	7.7 (51)	8.7 (77)	7.5 (38)	6.7 (90)
Benin	7.96 (25)	4.6 (111)	7.1 (132)	6.2 (131)	7.2 (81)	8.3 (102)	6.3 (93)	7.1 (58)
Bhutan	7.42 (50)	5.9 (55)	7.1 (135)	6.0 (134)	7.6 (56)	7.8 (116)	7.9 (19)	7.1 (60)
Bolivia	6.03 (123)	3.9 (134)	9.3 (69)	7.0 (92)	5.2 (157)	7.6 (123)	3.8 (161)	4.2 (159)
Bosnia & Herzegovina	6.49 (100)	4.3 (126)	8.4 (94)	7.8 (65)	7.4 (71)	10.0 (1)	7.2 (49)	5.0 (153)
Botswana	6.88 (76)	6.1 (48)	9.4 (55)	7.9 (60)	7.8 (38)	8.5 (87)	7.4 (43)	7.7 (36)
Brazil	6.83 (80)	5.2 (81)	9.3 (59)	7.0 (93)	4.8 (162)	5.4 (157)	4.5 (159)	4.6 (158)
Brunei Darussalam	6.67 (88)	5.0 (90)	8.8 (82)	7.2 (82)	8.8 (4)	9.3 (42)	8.8 (4)	8.2 (18)
Bulgaria	7.02 (72)	5.9 (54)	9.7 (20)	8.4 (33)	7.8 (43)	9.5 (33)	7.2 (51)	6.7 (86)
Burkina Faso	5.99 (126)	4.1 (131)	6.8 (146)	6.3 (125)	7.1 (95)	7.6 (124)	7.0 (60)	6.5 (101)
Burundi	6.35 (109)	4.1 (130)	8.7 (85)	2.7 (163)	6.4 (132)	5.0 (159)	8.1 (14)	6.2 (115)
Cabo Verde	7.62 (40)	6.4 (38)	9.8 (6)	7.1 (87)	7.3 (75)	9.8 (12)	4.9 (148)	7.3 (49)
Cambodia	8.37 (11)	3.7 (138)	9.3 (68)	7.7 (70)	7.0 (99)	9.5 (35)	6.5 (89)	5.1 (150)
Cameroon	7.50 (48)	2.8 (157)	7.2 (128)	5.1 (156)	6.7 (118)	7.7 (119)	7.3 (47)	5.1 (148)
Canada	6.30 (112)	8.0 (12)	9.7 (19)	7.7 (73)	8.6 (8)	10.0 (1)	8.1 (13)	7.8 (33)
Central African Rep.	6.12 (118)	3.5 (148)	6.6 (149)	5.2 (155)	5.4 (156)	8.3 (91)	3.3 (163)	4.7 (155)
Chad	8.60 (6)	2.7 (161)	6.8 (147)	5.1 (157)	4.9 (161)	6.0 (150)	5.4 (130)	3.3 (163)
Chile	7.83 (31)	6.6 (32)	9.6 (27)	8.2 (48)	7.0 (97)	8.9 (70)	5.0 (146)	7.3 (50)
China	6.08 (121)	5.2 (82)	8.4 (93)	6.7 (106)	6.3 (138)	6.9 (137)	5.5 (123)	6.6 (97)

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 2019

	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	7.04 (71)	4.9 (96)	8.3 (97)	6.6 (112)	7.3 (76)	9.5 (39)	5.8 (112)	6.6 (99)
Comoros	6.74 (83)	3.8 (137)	7.1 (130)	7.1 (85)	7.9 (33)	9.3 (51)	7.7 (26)	6.8 (82)
Congo, Dem. Republic	7.67 (38)	2.7 (160)	5.7 (158)	5.3 (154)	5.4 (155)	5.7 (151)	5.5 (125)	5.1 (149)
Congo, Republic	6.86 (77)	3.0 (154)	5.1 (160)	5.5 (151)	5.0 (159)	4.7 (160)	5.7 (116)	4.6 (156)
Costa Rica	7.54 (45)	6.4 (37)	9.8 (7)	8.1 (50)	6.6 (122)	6.7 (141)	6.0 (104)	7.1 (57)
Côte d'Ivoire	6.79 (82)	4.5 (115)	7.3 (127)	5.5 (150)	6.9 (109)	7.7 (120)	6.1 (101)	6.9 (73)
Croatia	5.56 (138)	6.1 (50)	9.4 (53)	8.3 (39)	7.5 (64)	9.3 (43)	6.4 (91)	6.6 (93)
Cyprus	7.25 (58)	6.3 (40)	9.3 (60)	8.6 (16)	7.9 (35)	10.0 (1)	6.3 (94)	7.5 (42)
Czech Republic	6.64 (90)	7.0 (28)	9.0 (80)	8.4 (29)	8.3 (15)	9.7 (22)	8.1 (12)	7.2 (56)
Denmark	5.34 (150)	8.6 (3)	9.6 (26)	8.8 (8)	8.5 (9)	10.0 (1)	7.3 (48)	8.3 (10)
Djibouti	6.20 (117)	3.4 (149)	9.6 (25)	7.0 (95)	7.3 (80)	9.0 (60)	6.8 (69)	6.0 (126)
Dominican Republic	8.77 (4)	4.7 (105)	9.6 (30)	8.2 (47)	6.6 (121)	8.1 (108)	6.1 (99)	5.7 (134)
Ecuador	7.11 (65)	4.7 (109)	8.5 (88)	6.8 (104)	6.3 (136)	8.9 (68)	5.0 (145)	5.1 (147)
Egypt, Arab Republic	5.43 (144)	3.6 (143)	7.7 (116)	6.2 (128)	5.4 (154)	5.5 (156)	5.2 (137)	5.5 (140)
El Salvador	8.67 (5)	4.4 (118)	9.7 (17)	7.8 (63)	6.3 (137)	8.7 (78)	4.5 (158)	5.8 (132)
Estonia	6.60 (91)	7.7 (15)	9.4 (57)	8.7 (15)	8.2 (19)	9.7 (22)	6.3 (95)	8.7 (2)
Eswatini	5.81 (131)	3.8 (136)	7.5 (120)	6.0 (135)	7.2 (88)	7.9 (111)	7.6 (32)	5.9 (129)
Ethiopia	6.41 (107)	4.5 (117)	6.1 (155)	5.5 (148)	6.8 (113)	6.9 (134)	6.9 (64)	6.7 (91)
Fiji	6.01 (124)	5.2 (80)	7.1 (134)	6.2 (129)	8.2 (21)	9.8 (16)	8.0 (17)	6.8 (83)
Finland	5.14 (151)	8.6 (4)	9.4 (50)	8.5 (22)	8.0 (30)	9.9 (11)	5.3 (135)	8.7 (3)
France	5.08 (155)	7.2 (25)	9.4 (46)	8.6 (18)	7.6 (58)	8.9 (69)	5.9 (108)	7.9 (32)
Gabon	6.79 (81)	2.7 (162)	6.5 (151)	5.9 (137)	7.1 (93)	8.3 (91)	7.3 (46)	5.6 (136)
Gambia, The	7.06 (68)	5.0 (89)	9.5 (41)	6.5 (115)	7.1 (89)	6.8 (138)	7.9 (21)	6.6 (95)
Georgia	8.14 (21)	6.7 (30)	9.2 (75)	9.1 (3)	8.2 (22)	9.7 (18)	6.6 (77)	8.1 (23)
Germany	6.00 (125)	7.7 (14)	9.4 (47)	8.3 (38)	8.1 (26)	8.3 (91)	7.5 (39)	8.4 (7)
Ghana	8.33 (14)	5.2 (79)	6.4 (152)	6.4 (119)	7.1 (91)	8.4 (90)	6.7 (75)	6.3 (108)
Greece	5.41 (146)	5.9 (56)	9.3 (67)	7.9 (57)	7.2 (86)	9.7 (22)	5.0 (142)	6.8 (79)
Guatemala	9.41 (1)	4.9 (98)	9.5 (39)	8.3 (41)	6.9 (107)	9.6 (32)	5.0 (143)	6.1 (122)
Guinea	4.29 (165)	3.9 (133)	7.5 (121)	5.5 (147)	6.9 (112)	9.5 (40)	5.6 (120)	5.6 (139)
Guinea-Bissau	8.32 (15)	2.8 (156)	6.7 (148)	6.6 (114)	5.9 (147)	7.4 (129)	4.8 (149)	5.6 (138)
Guyana	6.21 (116)	5.3 (71)	8.1 (105)	6.3 (122)	6.6 (124)	6.3 (147)	7.1 (54)	6.4 (105)
Haiti	8.36 (12)	2.4 (165)	6.8 (143)	7.8 (66)	7.1 (90)	8.7 (80)	8.0 (15)	4.6 (157)
Honduras	8.94 (2)	4.2 (127)	9.4 (52)	6.8 (101)	6.9 (105)	9.7 (22)	5.1 (138)	6.0 (125)

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 2019

	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)
Hong Kong SAR, China	8.42 (9)	7.5 (20)	9.7 (12)	9.6 (1)	9.3 (1)	9.9 (10)	9.4 (1)	8.6 (5)
Hungary	5.93 (129)	6.3 (41)	9.5 (36)	8.4 (31)	7.5 (61)	8.8 (75)	6.7 (72)	7.0 (69)
Iceland	6.12 (119)	8.5 (6)	9.5 (31)	7.7 (69)	7.7 (52)	7.1 (132)	7.6 (35)	8.3 (16)
India	7.55 (43)	5.5 (67)	7.7 (118)	5.9 (141)	6.7 (120)	6.5 (145)	6.4 (90)	7.1 (59)
Indonesia	8.16 (20)	4.9 (101)	9.6 (22)	7.0 (91)	6.6 (126)	8.1 (105)	4.7 (153)	6.9 (71)
Iran, Islamic Republic	6.65 (89)	3.6 (144)	6.2 (153)	3.4 (161)	5.5 (153)	6.4 (146)	4.7 (152)	5.3 (144)
Iraq	5.05 (156)	3.2 (151)	7.7 (117)	5.9 (140)	6.9 (108)	9.5 (35)	6.1 (100)	5.0 (152)
Ireland	6.72 (87)	7.7 (17)	9.5 (37)	8.7 (11)	8.4 (13)	9.0 (60)	7.9 (20)	8.3 (17)
Israel	6.43 (104)	6.1 (49)	9.8 (10)	8.4 (28)	7.4 (68)	9.5 (38)	5.4 (132)	7.4 (43)
Italy	5.72 (135)	6.5 (34)	9.4 (48)	8.7 (14)	7.8 (45)	9.8 (17)	6.8 (68)	6.8 (80)
Jamaica	8.22 (19)	5.8 (59)	9.3 (62)	7.1 (89)	8.2 (20)	9.7 (22)	7.9 (24)	7.0 (67)
Japan	6.06 (122)	7.7 (18)	9.5 (33)	8.3 (40)	8.3 (14)	8.7 (82)	8.2 (11)	8.2 (20)
Jordan	7.84 (27)	4.3 (123)	9.9 (1)	8.0 (52)	7.9 (36)	8.7 (79)	7.7 (27)	7.2 (52)
Kazakhstan	7.83 (30)	5.6 (65)	9.1 (76)	7.1 (86)	8.0 (29)	9.3 (54)	7.6 (37)	7.1 (64)
Kenya	6.72 (86)	5.0 (93)	9.4 (49)	6.7 (108)	6.9 (106)	6.8 (140)	7.1 (52)	6.9 (75)
Korea, Rep.	6.52 (99)	6.6 (33)	9.6 (29)	8.0 (53)	7.4 (70)	9.3 (43)	4.8 (151)	8.1 (25)
Kuwait	5.96 (127)	4.9 (94)	8.0 (110)	7.3 (79)	7.4 (72)	10.0 (1)	5.5 (124)	6.6 (96)
Kyrgyz Republic	7.40 (53)	4.9 (99)	9.4 (56)	7.1 (84)	7.0 (98)	8.6 (83)	5.9 (107)	6.5 (102)
Lao PDR	7.05 (69)	4.8 (104)	7.5 (122)	7.3 (80)	6.5 (128)	9.1 (57)	4.8 (150)	5.5 (141)
Latvia	6.44 (103)	7.0 (27)	9.3 (64)	8.7 (12)	8.3 (18)	9.3 (53)	7.6 (31)	7.9 (30)
Lebanon	8.12 (22)	4.1 (129)	9.2 (73)	5.9 (138)	6.5 (130)	6.7 (144)	7.5 (41)	5.2 (145)
Lesotho	5.81 (132)	5.2 (78)	8.0 (109)	6.6 (111)	7.2 (82)	8.7 (81)	6.6 (76)	6.4 (106)
Liberia	7.15 (63)	4.3 (124)	7.9 (112)	6.3 (123)	6.2 (142)	5.7 (153)	6.5 (82)	6.3 (110)
Libya	4.98 (157)	3.5 (147)	8.0 (108)	1.6 (165)	5.9 (148)	8.5 (85)	6.4 (92)	2.8 (164)
Lithuania	7.66 (39)	7.2 (24)	9.3 (61)	8.6 (17)	8.3 (16)	10.0 (1)	6.7 (74)	8.2 (21)
Luxembourg	5.58 (137)	8.2 (11)	9.3 (66)	8.2 (46)	7.9 (32)	9.0 (60)	6.5 (83)	8.3 (13)
Madagascar	7.75 (33)	3.0 (153)	8.0 (107)	6.7 (109)	6.2 (140)	8.1 (107)	4.6 (155)	5.9 (130)
Malawi	6.32 (110)	4.9 (100)	7.0 (140)	5.0 (158)	6.6 (125)	6.7 (143)	6.9 (66)	6.2 (116)
Malaysia	7.04 (70)	5.8 (58)	8.4 (92)	7.6 (74)	8.7 (7)	9.7 (20)	8.0 (16)	8.3 (15)
Mali	5.89 (130)	3.5 (146)	7.4 (123)	6.1 (133)	6.3 (135)	7.7 (118)	5.2 (136)	6.1 (124)
Malta	6.97 (74)	6.5 (35)	9.5 (34)	8.7 (10)	8.4 (12)	10.0 (1)	8.0 (18)	7.3 (46)
Mauritania	6.83 (79)	3.6 (145)	8.1 (104)	6.7 (107)	7.2 (85)	9.7 (22)	6.0 (105)	6.0 (127)
Mauritius	7.91 (26)	6.9 (29)	9.5 (32)	8.5 (19)	8.0 (31)	7.9 (110)	7.9 (23)	8.0 (28)

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 2019

	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)
Mexico	8.28 (16)	4.7 (108)	8.2 (102)	7.7 (71)	7.1 (92)	9.0 (59)	5.6 (121)	6.7 (89)
Moldova	7.82 (32)	5.7 (63)	8.0 (111)	7.6 (77)	7.4 (66)	9.7 (19)	5.6 (118)	7.0 (66)
Mongolia	7.47 (49)	6.0 (51)	8.5 (91)	7.0 (90)	7.9 (37)	10.0 (1)	6.6 (80)	7.1 (62)
Montenegro	6.41 (106)	5.4 (69)	9.8 (8)	8.5 (21)	8.1 (27)	9.5 (37)	7.7 (30)	7.1 (61)
Morocco	6.54 (97)	5.7 (62)	7.3 (126)	6.9 (98)	7.0 (100)	8.8 (71)	4.9 (147)	7.2 (51)
Mozambique	5.55 (139)	4.5 (116)	7.6 (119)	6.9 (97)	6.2 (139)	9.6 (29)	3.1 (164)	6.0 (128)
Myanmar	7.42 (51)	3.8 (135)	6.8 (144)	5.6 (146)	6.1 (143)	5.7 (152)	5.4 (131)	7.2 (54)
Namibia	6.73 (84)	6.3 (43)	6.9 (142)	6.3 (126)	7.6 (54)	7.9 (113)	8.2 (10)	6.8 (78)
Nepal	7.61 (41)	5.0 (92)	7.0 (138)	6.6 (113)	7.4 (73)	9.0 (64)	6.5 (86)	6.6 (94)
Netherlands	5.11 (152)	8.3 (7)	9.3 (70)	9.0 (4)	8.1 (24)	8.3 (91)	7.6 (34)	8.4 (8)
New Zealand	6.60 (92)	8.7 (1)	9.8 (5)	8.8 (9)	9.0 (3)	9.7 (22)	8.6 (5)	8.6 (4)
Nicaragua	6.26 (115)	4.3 (125)	9.5 (35)	8.1 (49)	7.0 (101)	9.6 (30)	5.9 (109)	5.5 (143)
Niger	6.46 (101)	3.7 (140)	7.1 (137)	5.9 (139)	6.7 (116)	7.8 (114)	5.1 (139)	7.2 (55)
Nigeria	8.33 (13)	3.7 (139)	8.8 (83)	6.1 (132)	7.9 (34)	9.3 (50)	9.0 (3)	5.5 (142)
North Macedonia	7.23 (60)	4.6 (112)	8.0 (106)	7.7 (68)	8.1 (25)	9.8 (14)	7.1 (53)	7.4 (44)
Norway	5.11 (153)	8.5 (5)	9.4 (51)	7.9 (59)	7.7 (49)	9.3 (43)	5.4 (127)	8.4 (9)
Oman	5.11 (154)	5.2 (76)	8.2 (99)	7.6 (75)	7.3 (78)	7.5 (128)	6.7 (73)	7.7 (37)
Pakistan	8.23 (18)	3.6 (142)	6.2 (154)	5.7 (144)	6.0 (144)	6.9 (135)	5.1 (141)	6.2 (117)
Panama	7.69 (36)	5.5 (66)	9.9 (3)	8.9 (5)	7.0 (104)	8.9 (67)	5.0 (144)	6.9 (70)
Papua New Guinea	5.69 (136)	4.6 (110)	6.0 (156)	7.6 (76)	7.2 (84)	8.5 (86)	7.5 (40)	5.8 (133)
Paraguay	8.48 (8)	4.4 (119)	9.6 (23)	7.2 (83)	6.4 (134)	8.4 (89)	4.5 (156)	6.1 (121)
Peru	7.72 (35)	5.3 (72)	9.7 (14)	8.7 (13)	7.4 (65)	8.8 (74)	6.9 (67)	6.7 (88)
Philippines	8.39 (10)	4.4 (121)	9.7 (16)	7.1 (88)	7.5 (62)	9.1 (56)	7.1 (59)	6.2 (113)
Poland	6.12 (120)	6.1 (47)	8.3 (96)	8.0 (51)	7.4 (67)	8.2 (103)	7.1 (56)	7.0 (65)
Portugal	6.28 (113)	7.2 (23)	9.4 (42)	8.8 (7)	7.2 (83)	8.3 (91)	5.8 (114)	7.6 (41)
Qatar	5.94 (128)	5.4 (70)	8.3 (95)	8.4 (34)	7.5 (63)	8.3 (91)	6.0 (103)	8.0 (27)
Romania	7.25 (57)	6.4 (36)	9.4 (54)	8.8 (6)	7.5 (59)	8.5 (84)	7.4 (45)	6.6 (92)
Russian Federation	5.55 (140)	5.1 (83)	9.1 (77)	6.9 (100)	6.8 (114)	8.3 (91)	5.9 (110)	6.3 (112)
Rwanda	5.54 (141)	6.2 (45)	9.3 (58)	7.9 (58)	7.8 (46)	6.9 (136)	8.3 (8)	8.2 (19)
Saudi Arabia	4.70 (161)	6.1 (46)	8.8 (84)	7.4 (78)	7.3 (77)	7.9 (112)	7.1 (55)	6.9 (74)
Senegal	7.06 (67)	4.3 (122)	7.2 (129)	6.8 (103)	5.8 (150)	7.5 (126)	3.6 (162)	6.4 (107)
Serbia	6.56 (94)	5.5 (68)	8.5 (90)	7.9 (56)	7.6 (57)	9.0 (63)	6.9 (65)	6.8 (81)
Seychelles	7.19 (62)	5.7 (61)	9.2 (74)	8.3 (37)	7.7 (47)	8.0 (109)	7.6 (36)	7.6 (40)

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Exhibit 1.3 (continued): Area Economic Freedom Ratings (Rankings) for 2019

	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)
Sierra Leone	7.73 (34)	4.4 (120)	7.1 (131)	6.5 (117)	5.0 (160)	3.3 (162)	5.5 (126)	6.1 (120)
Singapore	7.56 (42)	8.3 (10)	9.8 (9)	9.4 (2)	9.0 (2)	10.0 (1)	7.7 (29)	9.3 (1)
Slovak Republic	6.30 (111)	6.3 (44)	9.3 (63)	8.4 (35)	7.8 (42)	9.8 (15)	6.9 (63)	6.7 (85)
Slovenia	5.45 (143)	6.6 (31)	9.6 (28)	8.2 (45)	7.3 (79)	8.3 (91)	6.2 (98)	7.3 (48)
Somalia	7.53 (46)	2.4 (164)	9.4 (43)	8.4 (36)	5.6 (152)	— —	7.6 (33)	3.6 (162)
South Africa	7.00 (73)	6.0 (52)	8.3 (98)	6.5 (116)	7.2 (87)	8.8 (72)	6.5 (84)	6.1 (118)
Spain	6.42 (105)	7.3 (22)	9.5 (40)	8.4 (27)	7.8 (39)	9.6 (31)	6.2 (96)	7.7 (35)
Sri Lanka	8.28 (17)	5.1 (85)	8.2 (103)	5.5 (149)	6.9 (110)	7.3 (131)	6.5 (85)	6.9 (72)
Sudan	8.52 (7)	2.7 (159)	1.8 (164)	3.1 (162)	4.8 (163)	4.0 (161)	4.4 (160)	5.8 (131)
Suriname	5.75 (134)	4.5 (113)	7.1 (136)	6.3 (121)	7.1 (94)	9.0 (65)	7.1 (57)	5.2 (146)
Sweden	4.68 (162)	7.9 (13)	9.7 (11)	8.5 (23)	7.8 (44)	9.3 (43)	6.0 (102)	8.0 (26)
Switzerland	7.69 (37)	8.7 (2)	9.8 (4)	7.9 (61)	8.3 (17)	9.3 (43)	7.0 (61)	8.5 (6)
Syrian Arab Republic	6.85 (78)	3.0 (152)	6.0 (157)	4.9 (159)	5.2 (158)	5.6 (155)	5.8 (113)	4.1 (160)
Taiwan	7.33 (54)	7.1 (26)	9.7 (13)	7.9 (62)	8.0 (28)	8.1 (106)	7.7 (28)	8.3 (11)
Tajikistan	5.77 (133)	4.7 (106)	8.6 (86)	6.6 (110)	6.7 (117)	8.2 (104)	5.8 (115)	6.2 (114)
Tanzania	7.23 (59)	5.3 (73)	8.2 (101)	6.0 (136)	7.0 (96)	8.4 (88)	6.6 (79)	6.1 (123)
Thailand	7.14 (64)	4.9 (97)	8.6 (87)	6.8 (102)	6.9 (111)	9.2 (55)	4.7 (154)	6.7 (87)
Timor-Leste	4.71 (160)	3.4 (150)	8.2 (100)	8.5 (25)	6.2 (141)	5.0 (158)	6.5 (87)	7.1 (63)
Togo	7.28 (56)	5.1 (84)	7.3 (125)	5.6 (145)	6.4 (133)	8.3 (91)	4.5 (157)	6.4 (104)
Trinidad and Tobago	7.07 (66)	5.3 (74)	9.3 (65)	7.9 (55)	6.8 (115)	6.0 (149)	7.5 (42)	6.8 (77)
Tunisia	5.41 (147)	5.0 (87)	6.6 (150)	6.3 (124)	6.5 (129)	6.8 (139)	5.6 (122)	7.0 (68)
Turkey	6.53 (98)	4.9 (102)	8.5 (89)	7.0 (94)	5.8 (151)	5.6 (154)	5.4 (128)	6.4 (103)
Uganda	7.54 (44)	4.5 (114)	9.5 (38)	7.8 (67)	7.8 (40)	8.3 (101)	8.6 (6)	6.6 (98)
Ukraine	6.94 (75)	4.9 (95)	5.6 (159)	6.9 (99)	6.6 (123)	7.8 (117)	5.4 (133)	6.7 (84)
United Arab Emirates	5.41 (148)	5.9 (53)	9.1 (79)	8.5 (24)	7.5 (60)	7.7 (121)	6.7 (71)	8.1 (22)
United Kingdom	6.56 (95)	7.7 (16)	9.6 (24)	8.4 (30)	8.4 (11)	8.8 (76)	8.2 (9)	8.3 (14)
United States	7.40 (52)	7.5 (19)	9.7 (15)	7.8 (64)	8.7 (6)	9.0 (66)	9.0 (2)	8.1 (24)
Uruguay	6.46 (102)	5.8 (57)	9.2 (72)	8.3 (42)	7.0 (103)	7.6 (122)	5.9 (106)	7.4 (45)
Venezuela, RB	4.34 (164)	2.5 (163)	0.7 (165)	4.1 (160)	2.5 (165)	3.3 (162)	2.2 (165)	2.0 (165)
Vietnam	6.37 (108)	5.0 (91)	6.8 (145)	6.2 (130)	7.0 (102)	9.3 (52)	5.4 (129)	6.3 (109)
Yemen, Republic	7.83 (28)	2.7 (158)	7.8 (114)	5.4 (153)	3.5 (164)	0.0 (164)	6.6 (78)	3.9 (161)
Zambia	7.21 (61)	5.0 (88)	9.1 (78)	7.7 (72)	6.5 (131)	7.5 (127)	5.6 (119)	6.3 (111)
Zimbabwe	4.79 (158)	4.0 (132)	3.4 (163)	5.8 (142)	6.7 (119)	8.8 (73)	6.2 (97)	5.1 (151)

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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 sub-categories for many countries vary across time. This makes it difficult to directly compare index values from earlier periods with those of 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.

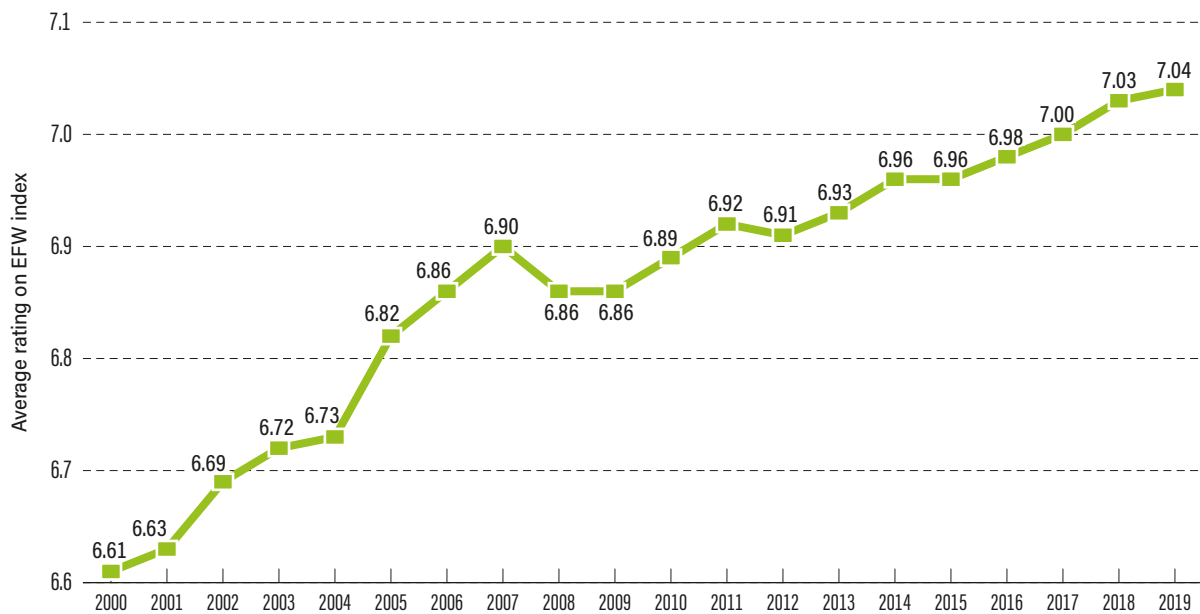
One of the problems with the chain-linked index was that it was limited to just the 123 countries that were available in the chain-link's "base year" of 2000. Beginning with the 2017 report, we have replaced the chain-linked index with the EFW Panel Dataset, which reports area and summary ratings for all countries for which we have a regular EFW index score in any given year. 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 variable 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 variables 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 up-dated or corrected, researchers are always encouraged to use the data from the most recent annual report to assure the most reliable figures.¹

The panel dataset provides 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 2019, the average economic freedom rating increased to 7.04 from 6.61 points, which is about four-tenths of a standard deviation over this period. While the pace of liberalization has certainly slowed in the 2000s compared to advances in the 1980s and 1990s, these figures confirm the fact that economic liberalization continues in most countries even into the new millennium.

1 Note that the official names of two countries have changed: Macedonia is now North Macedonia and Swaziland is now Eswatini. The alphabetic order of countries in the EFW Panel Dataset has been adjusted accordingly. ISO codes remain the same.

Exhibit 1.4: Average Economic Freedom Rating, 2000–2019



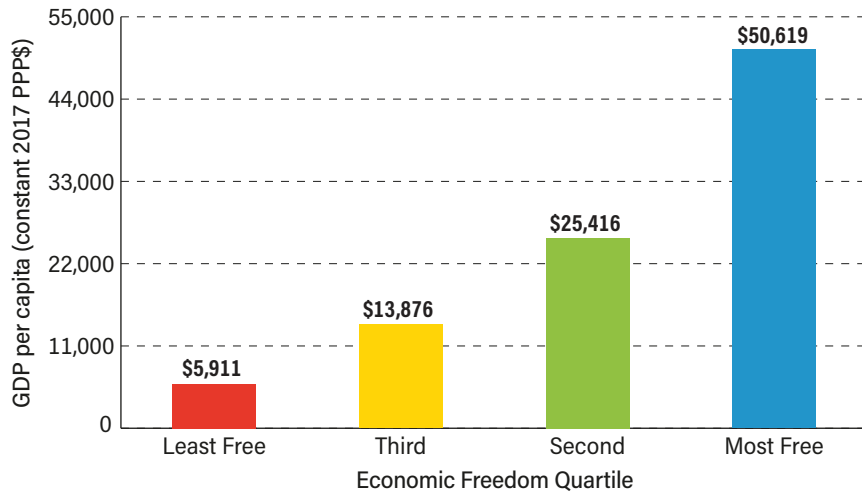
Economic freedom and human progress

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 2019, 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 fruitful areas for future research.

Exhibit 1.5: Economic Freedom and Income per Capita

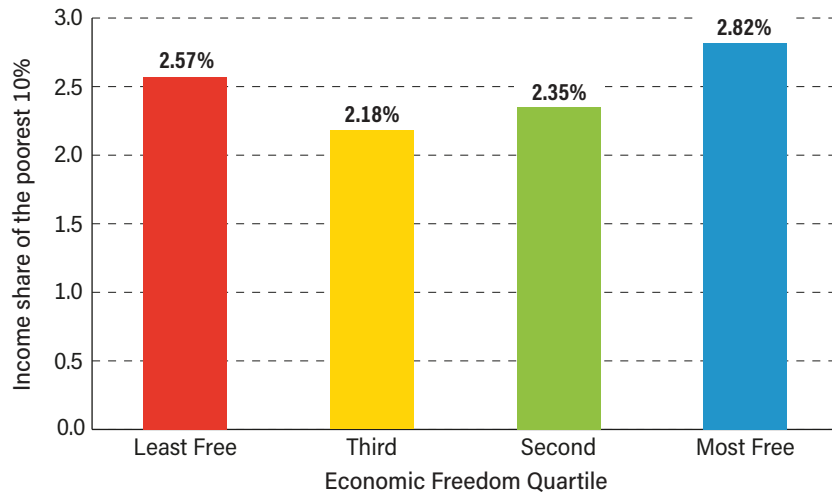
Countries with greater economic freedom have substantially higher per-capita incomes.



Sources: *Economic Freedom of the World: 2021 Report*; World Bank, 2021, *World Development Indicators* [on-line database].

Exhibit 1.6: Economic Freedom and the Income Share of the Poorest 10%

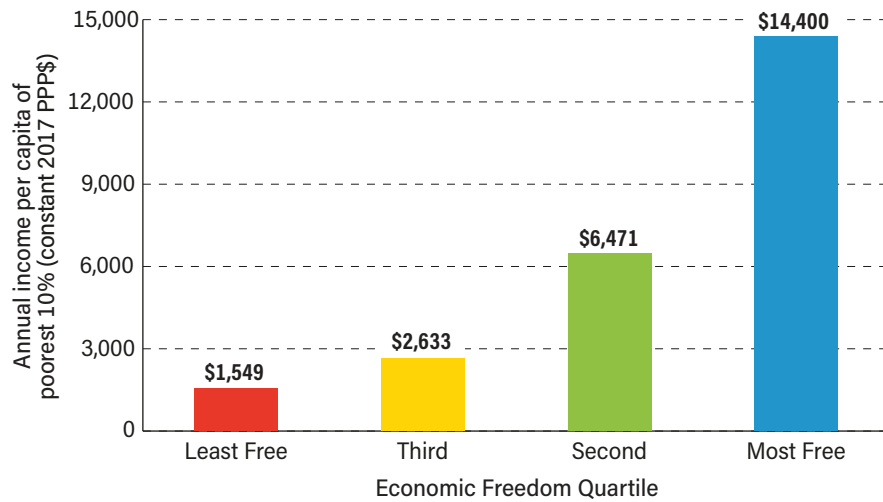
The share of income earned by the poorest 10% of the population is unrelated to economic freedom.



Sources: *Economic Freedom of the World: 2021 Report*; World Bank, 2021, *World Development Indicators* [on-line database].

Exhibit 1.7: Economic Freedom and the Income Earned by the Poorest 10%

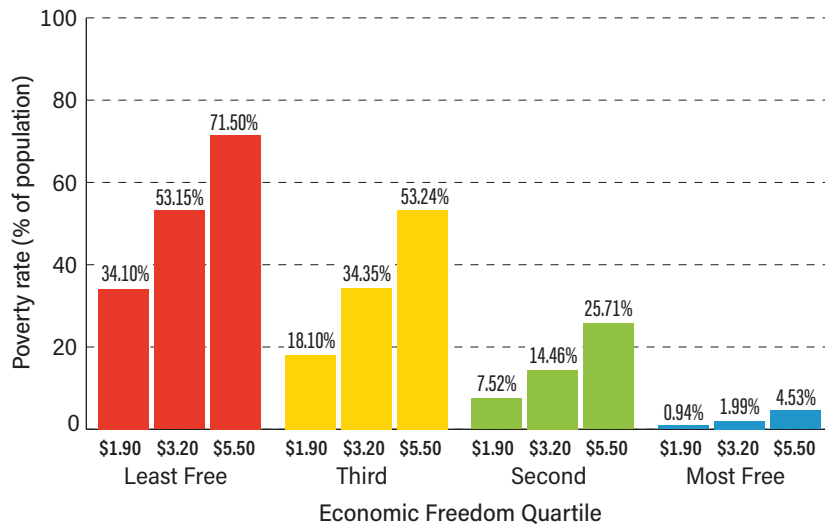
The amount of income, as opposed to the share, earned by the poorest 10% of the population is much higher in countries with higher economic freedom.



Sources: *Economic Freedom of the World: 2021 Report*; World Bank, 2021, *World Development Indicators* [on-line database].

Exhibit 1.8: The Effect of Economic Freedom on Poverty Rates

Poverty rates are lower in countries with more economic freedom.

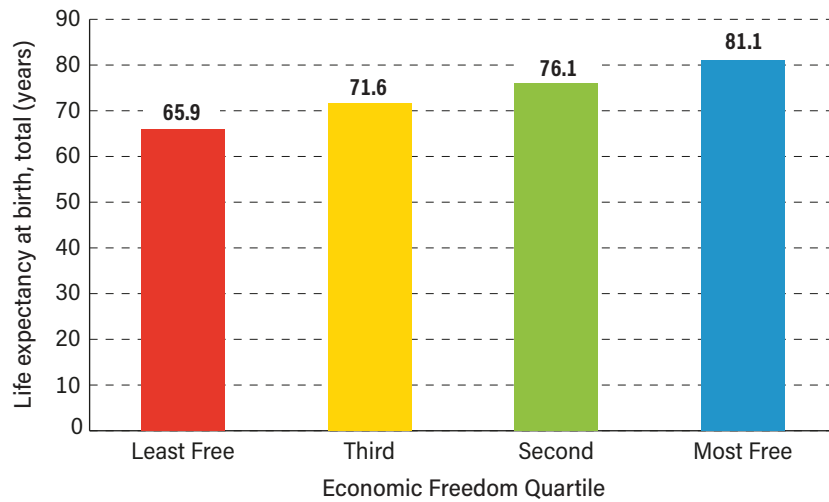


Note: The columns show the percentage of a country's population that lives on \$1.90 per day, \$3.20 per day, or \$5.50 per day, in 2011 constant PPP-adjusted dollars.

Sources: *Economic Freedom of the World: 2021 Report*; World Bank, 2021, *World Development Indicators* [on-line database].

Exhibit 1.9: Economic Freedom and Life Expectancy

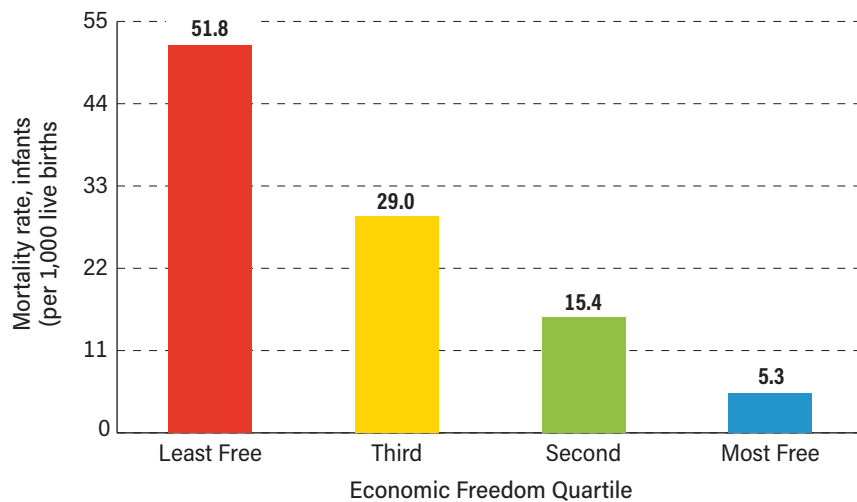
Life expectancy is over 15 years longer in countries with the most economic freedom than in countries with the least.



Sources: *Economic Freedom of the World: 2021 Report*; World Bank, 2021, *World Development Indicators* [on-line database].

Exhibit 1.10: Economic Freedom and Infant Mortality Rate

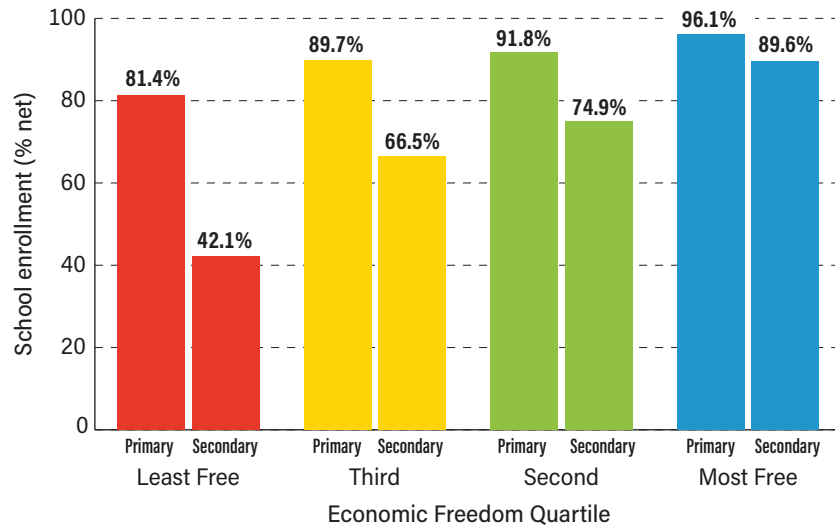
The infant mortality rate is almost ten times higher in nations in the lowest quartile of economic freedom than in nations in the highest quartile.



Sources: *Economic Freedom of the World: 2021 Report*; World Bank, 2021, *World Development Indicators* [on-line database].

Exhibit 1.11: Economic Freedom and School Enrollment

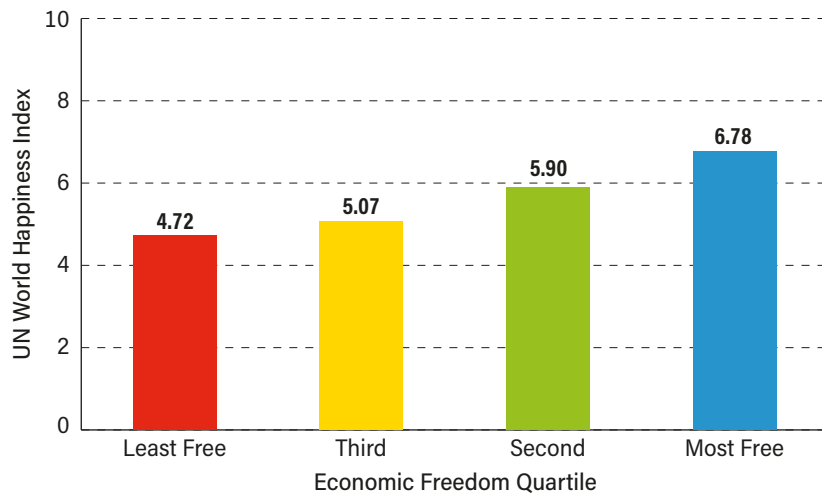
School enrollment is considerably higher in economically free nations.



Sources: *Economic Freedom of the World: 2021 Report*; World Bank, 2021, *World Development Indicators* [on-line database].

Exhibit 1.12: Economic Freedom and the UN World Happiness Index

People report higher levels of happiness in economically free nations



Sources: *Economic Freedom of the World: 2021 Report*; United Nations, *World Happiness Report 2021*.

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