

# Chapter 1 Economic Freedom of the World in 2017

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 edition is a continuation of this process. Through the years, additional data related to the measurement of economic freedom has become available and insights about how to use it to improve the measurement of economic freedom has evolved.

This year’s annual report reflects our continued effort to improve the accuracy of the Economic Freedom of the World (EFW) measure. For the first time in many years, we have added a new component to the index. Component 1E: State Ownership of Assets will join the other Area 1 components measuring the size of government. Unlike the other components of Area 1 that measure the annual flow of taxes and expenditures, this new component measures the stock of assets, including capital and land, owned by the government. This component is derived from the relatively new Varieties of Democracy (V-Dem) dataset (Coppedge, 2018); it is likely we will be adding more information from the V-Dem dataset in the future, particularly data related to property rights and the rule of law in Area 2.

## 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 (pp. 225–237). The entire data set used in the construction of the index is freely available to researchers at <[www.fraserinstitute.org/economic-freedom/dataset](http://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 2017 and for years ending in zero or five back to 1970. The data are available for 123 countries for every year from 2000 to 2017 and for approximately 100 countries back to 1980. 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 better disentangle its 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 25 components in the index. Many of the components are themselves made up of several sub-components. In total, the index incorporates 43 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.

Past reports have provided detailed explanations of why the components are included in each of the five areas. Therefore, we will keep the explanation of the underlying components in each of the five areas relatively brief.

**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 state ownership of assets earn the highest ratings in this area.

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

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### 1. Size of Government

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

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### 2. Legal System and Property Rights

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

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### 3. Sound Money

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

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### 4. Freedom to Trade Internationally

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

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### 5. Regulation

- |                                                             |                                           |
|-------------------------------------------------------------|-------------------------------------------|
| A. Credit market regulations                                | (v) Mandated cost of worker dismissal     |
| (i) Ownership of banks                                      | (vi) Conscription                         |
| (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) Extra payments / bribes / favoritism |
| (iii) Centralized collective bargaining                     | (v) Licensing restrictions                |
| (iv) Hours regulations                                      | (vi) Cost of tax compliance               |

Note: Area 2 ratings are adjusted to reflect inequalities in the legal treatment of women. In Chapter 2: Country Data Tables, the adjustment factor is shown in the row labelled *Gender Disparity Index*. For methodological details, see Rosemarie Fike, Chapter 3: Adjusting for Gender Disparity in Economic Freedom and Why It Matters (*Economic Freedom of the World: 2017 Edition*: 189–211).

**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 nine 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 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 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.

### 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.

### Gender Disparity Index

For some time, we have been aware of a major shortcoming of the EFW index: in some countries, the law restricts the rights of women relative to men. In order to correct for this factor, the index now includes an adjustment to the rating of Area 2 that reflects cross-country differences in legal rights according to gender. For several years, the Economic Freedom of the World network has been examining this issue and considering alternative ways the EFW index might be modified to account for this factor more fully. The authors of this report have organized sessions on this issue at both the annual international meeting of the Economic Freedom of the World network and at other scholarly conferences. Input has been obtained from a wide range of sources, including representatives from countries for which inclusion of this factor is likely to exert the greatest impact on the country's EFW rating.

These discussions resulted in agreement on three important considerations. First, the modifications should reflect formal legal differences, rather than informal traditional and cultural differences that exert an impact on outcomes according to gender. Second, the adjustments must be based on data on legal differences that withhold from women economic freedoms accorded to men. Third, to the fullest extent possible, the gender adjustment should be made for each year covered by the EFW data set.

Fortunately, the World Bank has recently developed a dataset on legal differences according to gender that covers a lengthy time frame (1960 to the present). As discussed in Chapter 3 of the 2017 report, Rosemarie Fike used these data to construct a cross-country Gender Disparity Index of legal rights from 1970 to the present. Over 40 questions from the World Bank dataset (World Bank, 2015) related to the legal rights of women compared to those of men were used in the construction of the gender-disparity measure. This Gender Disparity Index is used to adjust the Area 2 ratings. We recognize that others may favor alternative methods of accounting for this factor. Again, we invite other researchers to develop alternative methods believed to be superior to the one used here. The Fraser Institute has created a stand-alone website ([womenandprogress.org](http://womenandprogress.org)) that explores how economic freedom contributes to women's advancement.

## Summary Economic Freedom ratings in 2017

Exhibits 1.2a and 1.2b (pp. 8–9) present the summary economic freedom ratings, sorted from highest to lowest, for the 162 countries of this year’s report.<sup>1</sup> These ratings are for 2017, 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, Ireland, United Kingdom, Canada, Australia, and Mauritius.

The rankings of some other major countries are Japan (17<sup>th</sup>), Germany (20<sup>th</sup>), Italy (46<sup>th</sup>), France (50<sup>th</sup>), Mexico (76<sup>th</sup>), Russia (85<sup>th</sup>), India (79<sup>th</sup>), China (113<sup>th</sup>), and Brazil (120<sup>th</sup>). The 10 lowest-rated countries are: Iraq, Republic of Congo, Egypt, Syria, Democratic Republic of Congo, Angola, Algeria, Sudan, Libya, and lastly Venezuela.

## Economic Freedom ratings and rankings for Areas and Components of Area 5 in 2017

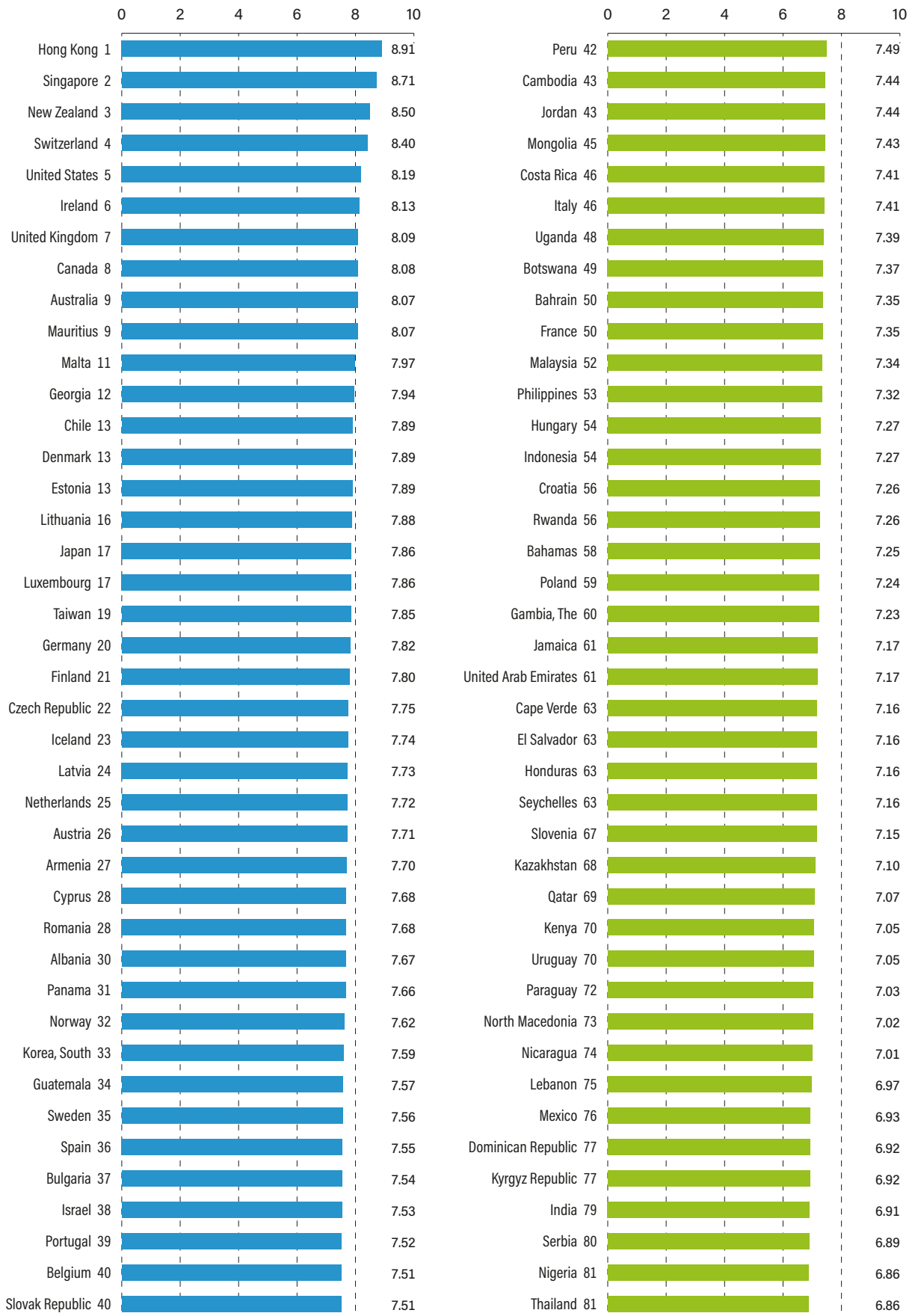
Exhibit 1.3 (pp. 10–14) presents the ratings (and rankings) for each of the five areas of the index and for Components 5A, 5B, and 5C. A number of interesting patterns emerge from an analysis of these data. High-income industrial economies generally rank quite high for Legal System and Property Rights (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.

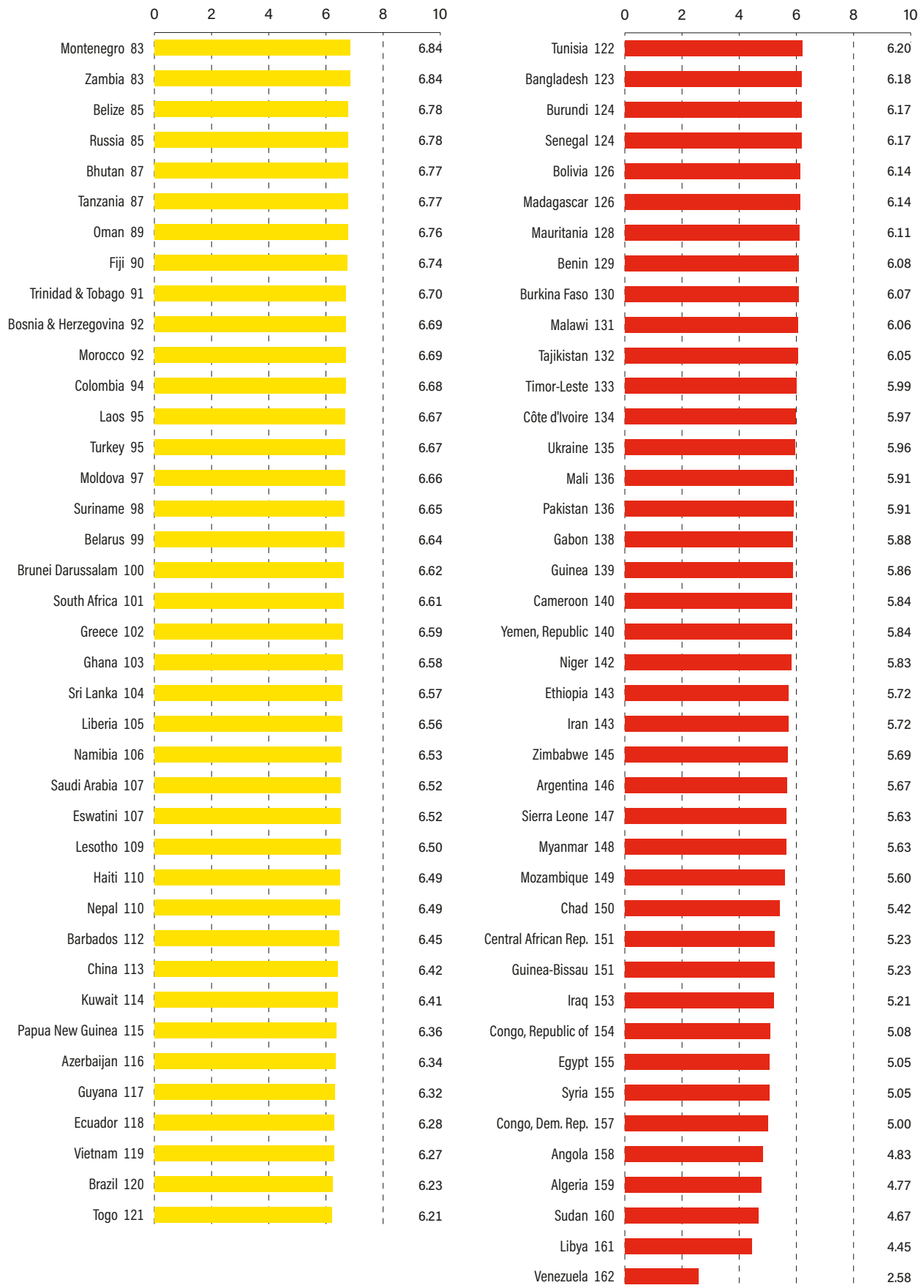
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1. Note that the official names of two countries have changed: Macedonia is now North Macedonia and Swaziland is now Eswatini. The new names are shown in exhibit 1.2 and the alphabetic order of countries in exhibit 1.3 has been adjusted accordingly.

Exhibit 1.2a: Summary Economic Freedom Ratings for 2017, First and Second Quartiles





## Exhibit 1.2b: Summary Economic Freedom Ratings for 2017, Third and Fourth Quartiles



### Exhibit 1.3: Area Economic Freedom Ratings (Rankings) for 2017

	Areas					Components of Area 5		
	1 Size of Government	2 Legal System and Property Rights	3 Sound Money	4 Freedom to trade internationally	5 Regulation	5A Credit market regulations	5B Labor market regulations	5C Business regulations
	Rating (Rank)	Rating (Rank)	Rating (Rank)	Rating (Rank)	Rating (Rank)	Rating (Rank)	Rating (Rank)	Rating (Rank)
Albania	7.53 (28)	5.06 (83)	9.65 (14)	8.34 (16)	7.77 (36)	9.72 (20)	6.94 (60)	6.65 (70)
Algeria	3.58 (161)	4.73 (98)	7.34 (117)	2.77 (160)	5.41 (152)	5.10 (154)	5.42 (120)	5.72 (129)
Angola	6.76 (67)	2.95 (156)	5.57 (158)	3.21 (158)	5.66 (145)	6.73 (131)	5.37 (123)	4.88 (152)
Argentina	5.71 (121)	3.98 (130)	6.47 (148)	6.55 (114)	5.65 (146)	6.09 (145)	5.13 (131)	5.72 (128)
Armenia	7.40 (33)	5.86 (48)	9.48 (32)	8.20 (26)	7.54 (50)	9.26 (47)	6.41 (82)	6.95 (54)
Australia	6.96 (56)	7.92 (12)	9.46 (35)	7.56 (64)	8.47 (10)	9.64 (25)	7.72 (29)	8.05 (16)
Austria	5.66 (123)	7.93 (10)	9.42 (40)	8.09 (35)	7.45 (59)	9.24 (49)	5.62 (114)	7.50 (35)
Azerbaijan	4.84 (149)	5.49 (63)	6.85 (136)	7.29 (77)	7.22 (73)	8.00 (100)	6.20 (93)	7.46 (36)
Bahamas	8.10 (15)	6.52 (29)	6.88 (135)	6.54 (115)	8.22 (16)	8.62 (77)	8.36 (11)	7.69 (32)
Bahrain	6.97 (55)	5.22 (76)	9.36 (50)	7.42 (71)	7.81 (33)	7.61 (113)	7.79 (27)	8.02 (17)
Bangladesh	8.15 (14)	3.14 (151)	6.98 (131)	5.95 (135)	6.67 (110)	7.88 (102)	7.17 (52)	4.96 (150)
Barbados	6.27 (93)	5.88 (46)	6.16 (152)	6.96 (93)	6.99 (87)	6.29 (142)	8.15 (14)	6.54 (74)
Belarus	6.12 (101)	5.33 (67)	7.44 (115)	6.78 (101)	7.50 (53)	7.33 (120)	7.19 (51)	7.99 (18)
Belgium	4.86 (147)	7.07 (21)	9.48 (30)	8.16 (33)	7.99 (26)	9.21 (51)	7.37 (44)	7.38 (40)
Belize	6.89 (63)	5.21 (78)	7.19 (123)	6.53 (116)	8.08 (20)	9.95 (14)	7.55 (36)	6.76 (65)
Benin	7.06 (47)	4.18 (124)	6.69 (140)	6.08 (130)	6.40 (128)	6.82 (129)	6.22 (92)	6.15 (100)
Bhutan	6.91 (62)	6.41 (33)	6.82 (138)	6.28 (125)	7.46 (58)	7.77 (107)	7.94 (20)	6.66 (69)
Bolivia	5.89 (109)	3.48 (143)	9.34 (54)	7.03 (91)	4.93 (158)	7.63 (111)	3.84 (157)	3.32 (160)
Bosnia & Herzegovina	5.63 (127)	4.19 (121)	8.31 (93)	7.84 (48)	7.50 (54)	10.00 (1)	7.35 (45)	5.14 (145)
Botswana	6.37 (88)	5.88 (47)	9.26 (62)	7.44 (70)	7.90 (29)	9.19 (53)	7.49 (41)	7.01 (48)
Brazil	5.65 (124)	4.53 (107)	9.42 (42)	7.13 (87)	4.41 (161)	4.97 (157)	4.21 (153)	4.04 (157)
Brunei Darussalam	3.33 (162)	5.31 (68)	8.77 (80)	7.16 (86)	8.52 (8)	9.13 (57)	8.69 (7)	7.74 (30)
Bulgaria	7.13 (44)	5.28 (72)	9.43 (38)	8.11 (34)	7.74 (38)	10.00 (1)	7.06 (56)	6.16 (99)
Burkina Faso	5.73 (114)	4.26 (116)	6.97 (132)	6.49 (119)	6.87 (96)	7.68 (110)	6.91 (64)	6.01 (110)
Burundi	6.92 (61)	3.53 (142)	8.24 (95)	5.88 (141)	6.27 (133)	5.00 (155)	7.80 (26)	6.02 (109)
Cambodia	9.08 (2)	4.43 (110)	9.33 (55)	7.34 (73)	7.05 (82)	9.50 (33)	6.51 (79)	5.13 (146)
Cameroon	6.95 (57)	3.20 (149)	7.32 (118)	5.15 (152)	6.57 (117)	7.17 (126)	7.33 (46)	5.22 (143)
Canada	6.48 (81)	7.85 (13)	9.55 (20)	7.91 (43)	8.61 (7)	9.96 (12)	8.13 (16)	7.74 (29)
Cape Verde	7.18 (41)	6.04 (44)	8.33 (92)	7.18 (84)	7.09 (79)	9.54 (31)	4.89 (142)	6.84 (62)
Central African Republic	6.50 (79)	2.73 (159)	6.67 (144)	4.69 (156)	5.54 (150)	8.20 (94)	3.25 (160)	5.17 (144)
Chad	7.43 (32)	2.72 (160)	6.83 (137)	5.17 (151)	4.96 (157)	5.96 (149)	5.38 (122)	3.54 (159)
Chile	8.17 (13)	6.44 (32)	9.53 (23)	8.34 (17)	6.97 (89)	8.61 (78)	5.32 (127)	6.97 (51)
China	4.67 (153)	5.58 (59)	8.50 (85)	6.81 (99)	6.55 (118)	7.14 (127)	5.54 (117)	6.97 (52)

## Exhibit 1.3 (continued): Area Economic Freedom Ratings (Rankings) for 2017

	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	7.24 (36)	3.94 (131)	8.19 (98)	6.68 (108)	7.34 (64)	9.91 (15)	5.82 (107)	6.28 (91)
Congo, Dem. Rep.	6.93 (59)	3.11 (152)	4.37 (161)	5.56 (147)	5.05 (154)	4.33 (159)	5.73 (109)	5.08 (147)
Congo, Republic	5.61 (128)	3.10 (153)	5.74 (157)	5.39 (149)	5.56 (149)	5.97 (148)	5.66 (113)	5.05 (148)
Costa Rica	7.04 (48)	5.82 (49)	9.76 (6)	7.96 (41)	6.46 (124)	6.80 (130)	6.14 (96)	6.44 (85)
Côte d'Ivoire	5.93 (107)	4.21 (119)	7.12 (125)	5.92 (139)	6.67 (111)	7.69 (109)	6.12 (100)	6.19 (97)
Croatia	5.72 (118)	5.58 (60)	9.55 (18)	8.18 (29)	7.29 (66)	9.33 (37)	6.36 (87)	6.16 (98)
Cyprus	6.92 (60)	6.13 (42)	9.36 (52)	8.27 (20)	7.72 (41)	10.00 (1)	6.25 (90)	6.93 (55)
Czech Republic	6.66 (71)	6.40 (34)	9.28 (59)	8.22 (24)	8.19 (18)	10.00 (1)	8.09 (17)	6.46 (83)
Denmark	4.71 (152)	8.08 (9)	9.84 (4)	8.47 (9)	8.37 (12)	10.00 (1)	7.27 (49)	7.85 (25)
Dominican Republic	6.43 (84)	4.11 (125)	9.51 (28)	7.94 (42)	6.63 (113)	8.33 (87)	6.02 (102)	5.54 (138)
Ecuador	6.52 (77)	4.00 (129)	8.33 (91)	6.52 (117)	6.04 (138)	8.57 (79)	4.98 (138)	4.57 (155)
Egypt	4.86 (148)	4.04 (128)	5.77 (156)	5.81 (144)	4.78 (159)	3.67 (160)	4.97 (139)	5.71 (131)
El Salvador	8.41 (6)	3.57 (141)	9.85 (2)	7.63 (58)	6.33 (132)	9.21 (52)	4.42 (150)	5.35 (141)
Estonia	6.19 (99)	7.40 (20)	9.27 (60)	8.42 (13)	8.20 (17)	9.95 (13)	6.24 (91)	8.41 (5)
Eswatini	5.25 (138)	4.88 (92)	7.72 (111)	7.01 (92)	7.74 (39)	8.78 (71)	7.75 (28)	6.69 (66)
Ethiopia	5.58 (129)	4.66 (102)	6.49 (147)	5.13 (153)	6.72 (105)	7.07 (128)	7.29 (48)	5.81 (121)
Fiji	5.97 (105)	5.34 (66)	7.01 (128)	6.43 (122)	8.94 (4)	9.76 (19)	9.29 (2)	7.77 (27)
Finland	4.71 (151)	8.78 (1)	9.41 (43)	8.22 (25)	7.89 (30)	9.90 (16)	5.22 (129)	8.54 (4)
France	4.82 (150)	6.99 (22)	9.48 (31)	8.16 (32)	7.32 (65)	8.94 (64)	5.61 (115)	7.41 (38)
Gabon	6.29 (91)	4.21 (120)	6.12 (153)	5.91 (140)	6.85 (98)	8.11 (97)	7.59 (34)	4.84 (154)
Gambia, The	7.23 (37)	5.43 (64)	9.22 (64)	7.19 (83)	7.06 (80)	7.17 (125)	7.86 (24)	6.14 (102)
Georgia	7.58 (24)	6.34 (36)	8.89 (77)	8.74 (3)	8.15 (19)	9.88 (18)	6.64 (75)	7.92 (23)
Germany	6.17 (100)	7.42 (19)	9.46 (36)	8.04 (38)	8.00 (25)	8.33 (87)	7.53 (38)	8.13 (10)
Ghana	8.01 (17)	5.23 (75)	5.88 (155)	6.59 (113)	7.18 (76)	8.40 (84)	6.64 (76)	6.50 (78)
Greece	4.39 (158)	5.73 (54)	7.98 (106)	7.68 (54)	7.17 (78)	10.00 (1)	4.98 (137)	6.52 (77)
Guatemala	9.44 (1)	4.33 (112)	9.55 (22)	8.03 (39)	6.50 (121)	9.63 (26)	3.94 (156)	5.94 (116)
Guinea	5.40 (136)	3.24 (148)	7.78 (109)	5.93 (137)	6.94 (90)	10.00 (1)	5.34 (126)	5.48 (139)
Guinea-Bissau	5.04 (145)	2.85 (157)	6.27 (151)	6.16 (129)	5.85 (143)	7.20 (123)	3.46 (159)	6.88 (60)
Guyana	5.72 (116)	4.80 (95)	8.37 (88)	6.29 (124)	6.41 (127)	6.33 (139)	7.09 (55)	5.79 (123)
Haiti	8.50 (5)	2.50 (161)	7.08 (126)	7.47 (69)	6.86 (97)	8.16 (95)	7.94 (22)	4.49 (156)
Honduras	8.84 (3)	3.70 (137)	9.12 (68)	7.22 (82)	6.91 (92)	9.54 (30)	5.13 (132)	6.07 (105)
Hong Kong	8.19 (12)	7.93 (11)	9.63 (15)	9.33 (1)	9.44 (1)	10.00 (1)	9.37 (1)	8.94 (2)
Hungary	5.39 (137)	5.96 (45)	9.74 (8)	7.97 (40)	7.29 (67)	8.71 (74)	6.83 (68)	6.32 (88)

## Exhibit 1.3 (continued): Area Economic Freedom Ratings (Rankings) for 2017

	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	5.81 (112)	8.38 (5)	9.53 (24)	7.28 (78)	7.68 (44)	7.33 (120)	7.63 (33)	8.07 (15)
India	8.22 (11)	5.17 (80)	8.37 (89)	6.08 (131)	6.69 (108)	6.55 (137)	6.74 (72)	6.78 (64)
Indonesia	8.31 (8)	4.94 (89)	9.68 (12)	6.95 (94)	6.47 (122)	8.20 (93)	4.69 (149)	6.52 (76)
Iran	5.46 (132)	4.58 (104)	8.01 (105)	4.93 (155)	5.60 (148)	6.41 (138)	4.84 (143)	5.54 (137)
Iraq	5.04 (144)	2.78 (158)	7.14 (124)	5.54 (148)	5.52 (151)	4.53 (158)	6.19 (94)	5.85 (120)
Ireland	6.72 (69)	7.51 (17)	9.47 (33)	8.56 (7)	8.39 (11)	9.31 (45)	7.91 (23)	7.94 (20)
Israel	6.47 (82)	6.20 (39)	9.38 (48)	8.22 (23)	7.39 (62)	9.58 (28)	5.38 (121)	7.21 (43)
Italy	6.12 (102)	5.78 (51)	9.40 (46)	8.24 (22)	7.54 (51)	9.60 (27)	6.81 (69)	6.20 (96)
Jamaica	7.46 (30)	5.07 (82)	8.49 (86)	6.84 (97)	7.98 (27)	9.56 (29)	7.94 (21)	6.45 (84)
Japan	5.73 (115)	7.62 (16)	9.52 (25)	8.18 (28)	8.25 (15)	8.69 (75)	8.13 (15)	7.93 (22)
Jordan	7.55 (26)	4.81 (94)	9.49 (29)	7.54 (66)	7.79 (35)	8.72 (73)	7.68 (30)	6.96 (53)
Kazakhstan	7.02 (51)	5.30 (70)	8.89 (76)	6.62 (112)	7.70 (43)	8.93 (65)	7.24 (50)	6.92 (56)
Kenya	7.43 (31)	5.20 (79)	9.23 (63)	6.70 (107)	6.70 (107)	6.67 (133)	7.15 (53)	6.28 (90)
Korea, South	7.04 (49)	6.47 (30)	9.60 (16)	7.59 (62)	7.26 (69)	9.33 (37)	4.84 (144)	7.61 (33)
Kuwait	5.22 (141)	4.98 (88)	8.35 (90)	6.76 (103)	6.72 (106)	9.00 (61)	5.42 (119)	5.74 (125)
Kyrgyz Republic	7.03 (50)	4.26 (115)	9.27 (61)	7.36 (72)	6.68 (109)	8.38 (85)	5.72 (110)	5.95 (115)
Laos	6.27 (94)	5.61 (58)	7.38 (116)	7.54 (65)	6.53 (120)	9.13 (58)	4.82 (145)	5.66 (133)
Latvia	6.78 (66)	6.29 (37)	9.28 (58)	8.36 (14)	7.94 (28)	9.24 (48)	7.54 (37)	7.05 (47)
Lebanon	8.36 (7)	3.84 (134)	9.56 (17)	6.75 (104)	6.36 (130)	6.67 (133)	7.50 (40)	4.90 (151)
Lesotho	5.56 (130)	5.35 (65)	7.73 (110)	6.45 (121)	7.40 (61)	9.67 (22)	6.62 (77)	5.92 (117)
Liberia	7.19 (40)	4.22 (117)	9.03 (74)	6.20 (128)	6.17 (136)	5.67 (150)	6.37 (86)	6.49 (80)
Libya	3.65 (160)	3.58 (140)	6.50 (146)	2.35 (161)	6.16 (137)	8.50 (83)	6.78 (71)	3.20 (161)
Lithuania	7.39 (34)	6.56 (28)	9.22 (65)	8.20 (27)	8.04 (23)	9.67 (22)	6.69 (74)	7.77 (28)
Luxembourg	5.43 (133)	8.34 (6)	9.36 (51)	8.31 (18)	7.88 (31)	9.33 (37)	6.38 (85)	7.94 (21)
Madagascar	7.58 (25)	2.98 (155)	7.63 (112)	6.67 (109)	5.83 (144)	7.39 (118)	4.36 (151)	5.74 (126)
Malawi	5.95 (106)	4.74 (96)	6.98 (130)	6.62 (111)	6.01 (140)	5.33 (152)	6.86 (67)	5.85 (119)
Malaysia	6.44 (83)	5.57 (61)	8.23 (97)	7.79 (51)	8.67 (6)	9.64 (24)	8.04 (18)	8.32 (7)
Mali	5.71 (119)	3.46 (144)	7.30 (119)	6.87 (95)	6.20 (135)	7.70 (108)	5.02 (136)	5.86 (118)
Malta	7.08 (46)	6.45 (31)	9.55 (21)	8.42 (12)	8.34 (14)	10.00 (1)	8.02 (19)	7.01 (49)
Mauritania	5.86 (110)	3.71 (136)	8.05 (104)	6.02 (134)	6.90 (94)	9.17 (55)	5.85 (106)	5.66 (132)
Mauritius	8.05 (16)	6.86 (24)	9.44 (37)	8.48 (8)	7.50 (52)	8.51 (81)	6.41 (83)	7.60 (34)
Mexico	7.90 (18)	4.18 (122)	7.89 (108)	7.64 (57)	7.05 (81)	9.14 (56)	5.57 (116)	6.43 (86)
Moldova	6.38 (85)	4.34 (111)	8.15 (101)	7.48 (68)	6.93 (91)	9.52 (32)	5.06 (134)	6.21 (95)

## Exhibit 1.3 (continued): Area Economic Freedom Ratings (Rankings) for 2017

	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	7.86 (20)	5.81 (50)	9.10 (70)	6.73 (105)	7.63 (47)	9.45 (35)	6.81 (70)	6.65 (71)
Montenegro	5.93 (108)	4.89 (91)	8.15 (100)	8.17 (31)	7.04 (83)	6.67 (133)	7.66 (32)	6.78 (63)
Morocco	6.22 (96)	5.56 (62)	7.29 (120)	7.08 (90)	7.27 (68)	8.81 (70)	5.95 (104)	7.07 (46)
Mozambique	5.43 (134)	4.10 (126)	6.94 (133)	6.52 (118)	5.00 (156)	6.33 (139)	3.07 (161)	5.60 (135)
Myanmar	6.81 (64)	3.61 (139)	6.67 (143)	5.21 (150)	5.85 (142)	6.01 (146)	4.95 (141)	6.60 (73)
Namibia	5.71 (120)	6.36 (35)	6.46 (150)	6.48 (120)	7.66 (45)	8.82 (69)	8.19 (13)	5.96 (114)
Nepal	7.22 (38)	4.54 (106)	6.81 (139)	6.63 (110)	7.24 (70)	9.33 (37)	6.39 (84)	6.00 (111)
Netherlands	4.34 (159)	8.11 (8)	9.42 (41)	8.66 (4)	8.06 (21)	8.33 (87)	7.51 (39)	8.34 (6)
New Zealand	6.64 (74)	8.61 (2)	9.51 (27)	8.61 (6)	9.13 (2)	10.00 (1)	8.77 (6)	8.63 (3)
Nicaragua	6.64 (73)	4.43 (109)	9.15 (67)	7.80 (50)	7.01 (84)	9.45 (34)	5.97 (103)	5.61 (134)
Niger	6.24 (95)	3.74 (135)	7.08 (127)	5.57 (146)	6.54 (119)	7.63 (112)	4.26 (152)	7.73 (31)
Nigeria	8.59 (4)	3.32 (145)	8.57 (83)	6.08 (132)	7.75 (37)	8.99 (62)	8.93 (5)	5.34 (142)
North Macedonia	6.74 (68)	4.31 (113)	8.14 (102)	7.89 (45)	8.02 (24)	9.71 (21)	6.98 (57)	7.38 (41)
Norway	4.93 (146)	8.48 (3)	9.55 (19)	7.57 (63)	7.59 (49)	9.33 (37)	5.36 (125)	8.08 (13)
Oman	4.44 (157)	6.18 (40)	8.74 (81)	7.67 (56)	6.77 (102)	6.65 (136)	6.26 (89)	7.41 (37)
Pakistan	7.02 (52)	3.63 (138)	6.67 (142)	5.85 (142)	6.36 (129)	8.09 (98)	4.97 (140)	6.02 (108)
Panama	7.87 (19)	5.17 (81)	9.74 (9)	8.65 (5)	6.87 (95)	9.11 (59)	5.02 (135)	6.47 (82)
Papua New Guinea	6.09 (104)	4.18 (123)	6.47 (149)	7.32 (75)	7.71 (42)	8.37 (86)	8.69 (8)	6.07 (106)
Paraguay	8.30 (9)	3.87 (133)	9.43 (39)	7.32 (74)	6.25 (134)	8.92 (66)	4.12 (155)	5.71 (130)
Peru	7.53 (27)	4.73 (97)	9.72 (10)	8.24 (21)	7.22 (72)	8.52 (80)	6.94 (59)	6.21 (94)
Philippines	8.29 (10)	4.21 (118)	9.52 (26)	7.16 (85)	7.41 (60)	9.23 (50)	6.94 (58)	6.07 (104)
Poland	5.63 (125)	5.78 (52)	9.70 (11)	7.89 (46)	7.19 (75)	7.83 (105)	7.12 (54)	6.62 (72)
Portugal	6.20 (98)	6.84 (25)	9.39 (47)	8.35 (15)	6.81 (100)	7.40 (117)	5.86 (105)	7.16 (44)
Qatar	5.69 (122)	6.14 (41)	8.50 (84)	7.54 (67)	7.46 (56)	8.00 (100)	6.28 (88)	8.11 (11)
Romania	6.99 (54)	6.13 (43)	9.37 (49)	8.43 (10)	7.48 (55)	8.88 (67)	7.43 (42)	6.13 (103)
Russia	6.33 (89)	4.83 (93)	9.31 (56)	6.83 (98)	6.60 (115)	8.22 (92)	5.52 (118)	6.06 (107)
Rwanda	5.25 (140)	6.92 (23)	9.18 (66)	7.11 (88)	7.84 (32)	7.18 (124)	8.28 (12)	8.08 (14)
Saudi Arabia	5.20 (142)	5.30 (69)	8.97 (75)	6.32 (123)	6.82 (99)	6.28 (143)	6.93 (61)	7.23 (42)
Senegal	7.02 (53)	4.28 (114)	7.22 (122)	6.70 (106)	5.63 (147)	7.53 (115)	3.58 (158)	5.78 (124)
Serbia	6.37 (86)	5.03 (86)	8.24 (96)	7.62 (60)	7.17 (77)	8.13 (96)	6.88 (65)	6.52 (75)
Seychelles	6.27 (92)	5.76 (53)	9.09 (71)	7.29 (76)	7.38 (63)	7.88 (103)	7.40 (43)	6.84 (61)
Sierra Leone	6.94 (58)	3.88 (132)	6.54 (145)	6.05 (133)	4.74 (160)	3.67 (160)	5.16 (130)	5.39 (140)
Singapore	7.20 (39)	8.22 (7)	9.85 (3)	9.29 (2)	8.98 (3)	10.00 (1)	7.67 (31)	9.27 (1)

## Exhibit 1.3 (continued): Area Economic Freedom Ratings (Rankings) for 2017

	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	6.49 (80)	5.68 (56)	9.46 (34)	8.30 (19)	7.59 (48)	9.88 (17)	6.92 (63)	5.98 (112)
Slovenia	5.25 (139)	6.22 (38)	9.41 (44)	7.90 (44)	6.98 (88)	8.33 (87)	6.12 (99)	6.49 (79)
South Africa	5.77 (113)	5.05 (84)	8.17 (99)	6.87 (96)	7.20 (74)	9.18 (54)	6.61 (78)	5.80 (122)
Spain	6.09 (103)	6.76 (27)	9.40 (45)	8.05 (36)	7.46 (57)	9.32 (44)	6.14 (95)	6.92 (57)
Sri Lanka	7.63 (22)	4.91 (90)	7.58 (113)	5.83 (143)	6.91 (93)	7.58 (114)	6.45 (81)	6.68 (68)
Sudan	7.64 (21)	3.03 (154)	4.40 (160)	2.31 (162)	5.95 (141)	6.23 (144)	4.71 (147)	6.92 (58)
Suriname	6.37 (87)	4.69 (100)	7.24 (121)	7.22 (81)	7.73 (40)	8.66 (76)	8.98 (4)	5.55 (136)
Sweden	4.54 (155)	7.75 (15)	9.30 (57)	8.18 (30)	8.05 (22)	9.33 (37)	6.93 (62)	7.87 (24)
Switzerland	7.60 (23)	8.40 (4)	9.93 (1)	7.62 (61)	8.48 (9)	9.33 (37)	7.85 (25)	8.25 (9)
Syria	5.72 (117)	3.24 (147)	5.93 (154)	4.97 (154)	5.37 (153)	5.59 (151)	5.68 (112)	4.85 (153)
Taiwan	7.38 (35)	6.76 (26)	9.75 (7)	7.73 (53)	7.64 (46)	8.08 (99)	6.86 (66)	7.98 (19)
Tajikistan	5.09 (143)	5.04 (85)	7.54 (114)	5.94 (136)	6.63 (114)	7.84 (104)	5.73 (108)	6.31 (89)
Tanzania	6.66 (72)	5.69 (55)	8.27 (94)	6.24 (127)	7.00 (85)	8.76 (72)	6.51 (80)	5.73 (127)
Thailand	6.78 (65)	4.67 (101)	8.59 (82)	7.24 (80)	7.00 (86)	9.30 (46)	4.70 (148)	6.99 (50)
Timor-Leste	4.45 (156)	3.27 (146)	8.11 (103)	7.78 (52)	6.33 (131)	5.20 (153)	7.30 (47)	6.49 (81)
Togo	6.51 (78)	5.24 (73)	6.98 (129)	5.67 (145)	6.63 (112)	8.33 (87)	4.17 (154)	7.40 (39)
Trinidad & Tobago	5.40 (135)	4.56 (105)	9.11 (69)	7.81 (49)	6.60 (116)	6.00 (147)	7.55 (35)	6.25 (92)
Tunisia	5.63 (126)	5.29 (71)	6.90 (134)	6.76 (102)	6.42 (126)	7.22 (122)	5.36 (124)	6.69 (67)
Turkey	6.60 (76)	4.62 (103)	8.85 (78)	7.27 (79)	6.03 (139)	6.30 (141)	4.71 (146)	7.07 (45)
Uganda	7.48 (29)	4.71 (99)	9.35 (53)	7.63 (59)	7.79 (34)	8.50 (82)	8.66 (9)	6.21 (93)
Ukraine	7.16 (43)	4.44 (108)	4.99 (159)	6.78 (100)	6.44 (125)	7.79 (106)	5.13 (133)	6.42 (87)
United Arab Emirates	5.85 (111)	5.67 (57)	9.06 (72)	8.05 (37)	7.24 (71)	6.70 (132)	6.70 (73)	8.31 (8)
United Kingdom	6.21 (97)	7.78 (14)	9.67 (13)	8.43 (11)	8.35 (13)	8.88 (68)	8.38 (10)	7.80 (26)
United States	7.16 (42)	7.44 (18)	9.80 (5)	7.67 (55)	8.86 (5)	9.33 (36)	9.16 (3)	8.10 (12)
Uruguay	6.32 (90)	5.23 (74)	9.04 (73)	7.86 (47)	6.80 (101)	7.37 (119)	6.13 (97)	6.90 (59)
Venezuela	4.58 (154)	1.98 (162)	0.69 (162)	3.18 (159)	2.49 (162)	3.33 (162)	2.11 (162)	2.01 (162)
Vietnam	6.70 (70)	5.00 (87)	6.68 (141)	6.27 (126)	6.73 (104)	8.95 (63)	5.26 (128)	5.96 (113)
Yemen, Republic	7.11 (45)	3.16 (150)	7.96 (107)	5.93 (138)	5.04 (155)	5.00 (155)	6.12 (101)	3.99 (158)
Zambia	6.61 (75)	5.22 (77)	8.80 (79)	7.10 (89)	6.46 (123)	7.52 (116)	5.72 (111)	6.15 (101)
Zimbabwe	5.49 (131)	4.05 (127)	8.42 (87)	3.75 (157)	6.73 (103)	9.10 (60)	6.12 (98)	4.96 (149)

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.

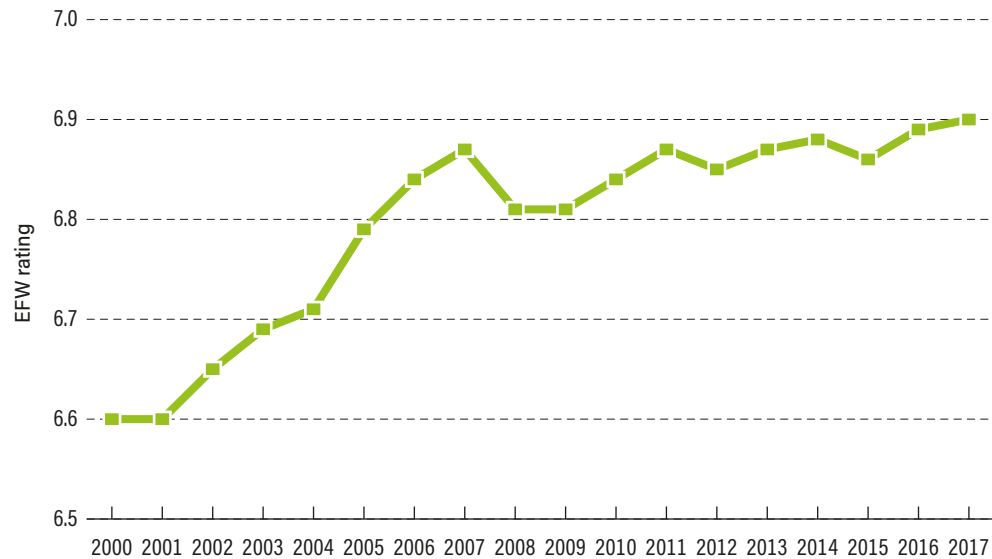
One of the problems with the chain-linked index was that it was limited to just the 123 countries that were available in the chain-link's "base year" of 2000. Beginning with the report of 2017, we have replaced the chain-linked index with the EFW Panel Dataset, which reports area and summary ratings for all countries for which we have a regular EFW index score in any given year.<sup>2</sup> 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. (1) 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 162 jurisdictions in the EFW index. (2) 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 provides scholars interested in the longer time trends with the best possible set of data. Previous editions of the *Economic Freedom of the World* have reported the global average from 1980 to present among the set of 102 nations with complete data. For instance, last year's report (p. 17) reported that the average rating increased among developed nations from 6.43 to 7.71 and among developing nations from 4.91 to 6.65 between 1980 and 2016. Most of the increase occurred during the 1980-to-2000 period. Exhibit 1.4 shows the global average for all 123 nations with complete data since 2000. Between 2000 and 2017, the average economic-freedom rating increased to 6.90 from 6.60 units, which is about three-tenths 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 that economic liberalization continues in most countries even into the new millennium.

<sup>2</sup> The EFW Panel Dataset may be found at <<https://www.fraserinstitute.org/economic-freedom/dataset>>.

Exhibit 1.4: Average Economic Freedom Rating, 2000–2017



## New countries to consider

The number of countries covered in the EFW index has grown quickly in the last few years. The primary constraint that prevents adding more countries is the availability of data from our third-party data sources. In particular, it is very difficult to add new countries unless they are in both the *Global Competitiveness Report* published by the World Economic Forum and the World Bank's *Doing Business* report, because we rely on those two sources for a large share of our data.

In the last year, we examined the possibility of adding 13 new nations, who were not yet in both of these reports: Afghanistan, Comoros, Djibouti, Eritrea, Kosovo, Maldives, Palestinian Territories, Sao Tome and Principe, Solomon Islands, Somalia, South Sudan, Uzbekistan, and Vanuatu. Though there is *technically* enough data to score them, in the end, it was decided that the quality of data for these nations has not yet reached the level that warrants inclusion in the main EFW index. Exhibit 1.5 nevertheless shows the area and summary EFW index ratings and the summary ranking that each country would have received had they been included in this year's final dataset.

Three nations stand out for additional comment: Kosovo, Palestinian Territories, and Vanuatu, all of which score higher than most would expect. Vanuatu would have earned summary ratings of 8.15 and Kosovo of 8.17, which would be good enough to rank 6<sup>th</sup> and 7<sup>th</sup> in the world. While some other former communist nations like Georgia and Estonia score highly on the EFW index, Kosovo's troubled recent history would not seem to be good for the development of such high economic freedom. It also seems odd that Vanuatu, a small island nation in the south Pacific, scored so highly. Palestine's 7.71 would have ranked 28<sup>th</sup>, higher than all of its neighbors including Israel. In part, we suspect that Palestine's lack of state capacity to do much taxing or regulating could explain the score, but again this seems too high. We plan to continue to examine the availability and quality of the data for these countries, and others, and hope to be able to add more countries in the coming years. We invite comments from readers with expertise in these countries to provide feedback on the perceived accuracy of these scores.



## Exhibit 1.5 Area and Summary Ratings for Potential New Countries, 2017

	1 Size of Government	2 Legal System and Property Rights	3 Sound Money	4 Freedom to trade internationally	5 Regulation	Summary Index Rating	Summary Rank
Afghanistan	8.47	2.88	9.50	5.48	7.49	6.76	94
Comoros	5.73	4.66	7.13	7.58	7.66	6.55	113
Djibouti	3.31	4.42	9.76	6.95	7.89	6.46	120
Eritrea	2.00	3.74	6.44	3.74	4.93	4.17	173
Kosovo	7.23	6.25	9.68	8.89	8.67	8.15	7
Maldives	7.03	4.83	9.46	6.97	7.34	7.13	72
Palestinian Territories	7.68	5.60	9.16	8.89	7.23	7.71	28
Sao Tome and Principe	6.47	6.05	9.39	7.30	6.75	7.19	64
Solomon Islands	5.37	5.89	7.20	5.76	8.65	6.57	110
Somalia	7.37	3.60	5.00	6.93	6.83	5.95	145
South Sudan	4.16	3.23	1.67	0.26	4.87	2.84	174
Uzbekistan	7.17	4.49	6.83	4.03	7.03	5.91	146
Vanuatu	8.26	6.85	9.34	8.02	8.37	8.17	6

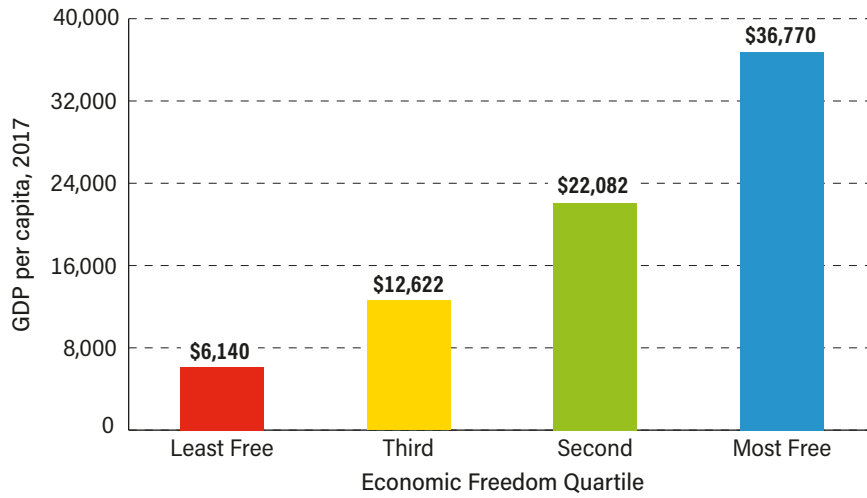
## Economic freedom and human progress

As is customary, this chapter concludes with some simple graphs illustrating relationships between economic freedom and various other indicators of human and political progress (Exhibits 1.6–1.14). The graphs use the average of the EFW panel dataset for the period from 1995 to 2017, breaking the data into four quartiles ordered from low to high. Because persistence is important and the impact of economic freedom will be felt over a lengthy time period, it is better to use the average rating over a fairly long time span rather than the current rating to observe the impact of economic freedom on performance.

The graphs begin with the data on the relationship between economic freedom and the level of per-capita GDP. 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. In other cases, the observed relationships may reflect the fact that some of the variables that influence economic freedom may also influence political factors like trust, honesty in government, and protection of civil liberties. Thus, we are not necessarily arguing that there is a direct causal relation between economic freedom and the variables considered below. In other words, these graphs 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 potentially fruitful areas for future research.

### Exhibit 1.6: Economic Freedom and Income per Capita

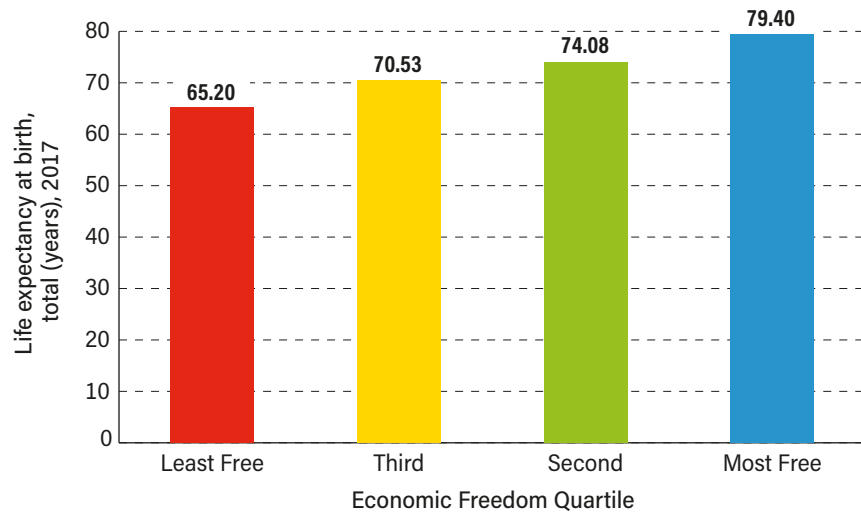
*Countries with greater economic freedom have substantially higher per-capita incomes.*



Note: Income = GDP per capita, (constant PPP US\$), 2017.  
 Sources: Average Economic Freedom Panel Score, 1995–2017; World Bank, 2017, *World Development Indicators*.

### Exhibit 1.7: Economic Freedom and Life Expectancy

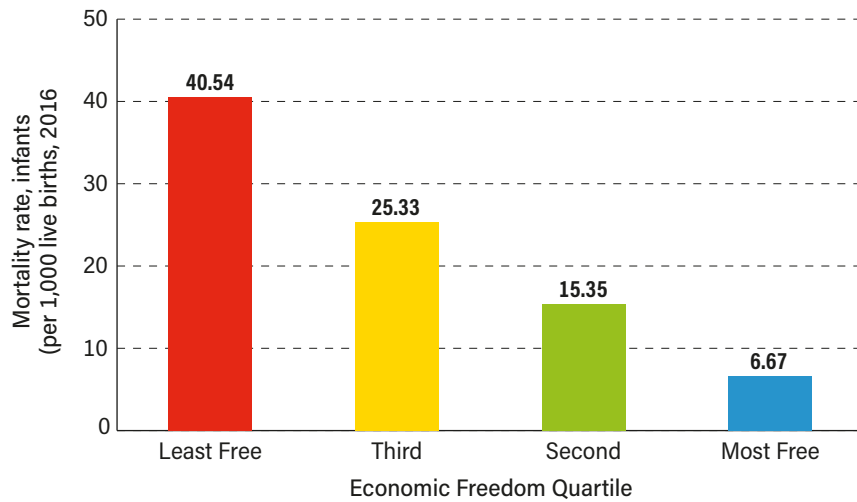
*Life expectancy is over 14 years longer in countries with the most economic freedom than in countries with the least.*



Sources: Average Economic Freedom Panel Score, 1995–2017; World Bank, 2017, *World Development Indicators*.

### Exhibit 1.8: Economic Freedom and Infant Mortality Rate

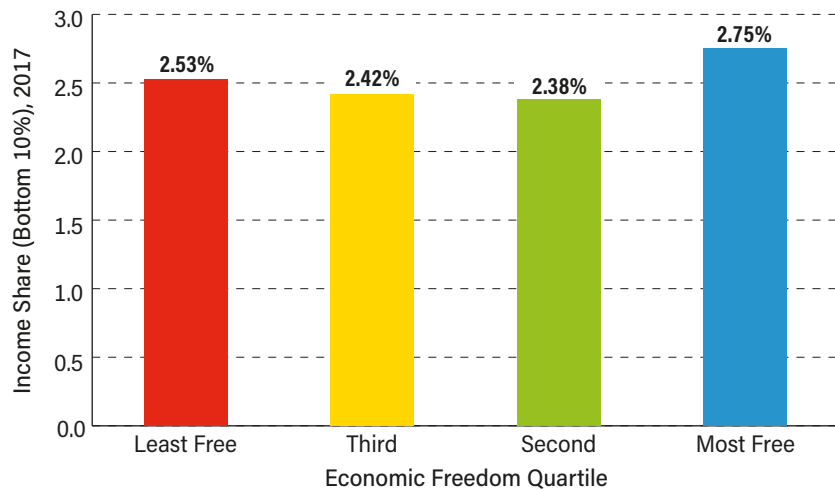
*The infant mortality rate is almost seven times higher in nations in the lowest quartile of economic freedom compared to nations in the highest quartile.*



Sources: Average Economic Freedom Panel Score, 1995–2017; World Bank, 2017, *World Development Indicators*.

### Exhibit 1.9: Economic Freedom and the Income Share of the Poorest 10%

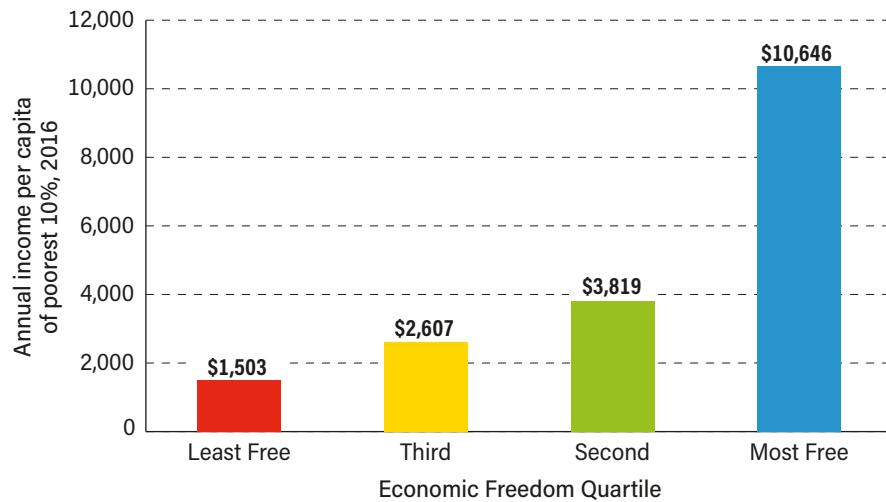
*The share of income earned by the poorest 10% of the population is unrelated to economic freedom.*



Sources: Average Economic Freedom Panel Score, 1995–2017; World Bank, 2017, *World Development Indicators*.

**Exhibit 1.10: Economic Freedom and the Income Earned by the Poorest 10%**

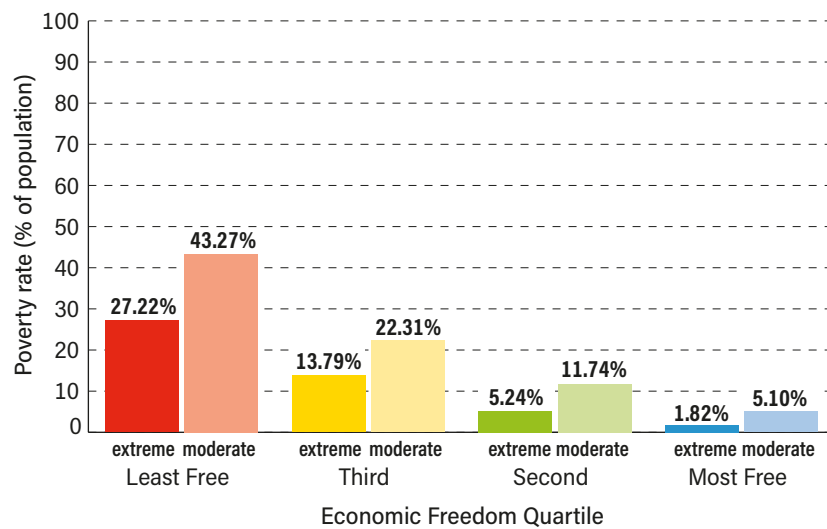
*The amount of income, as opposed to the share, earned by the poorest 10% of the population is much higher in countries with higher economic freedom.*



Note: Annual income per capita of poorest 10% (constant PPP US\$), 2016.  
Sources: Average Economic Freedom Panel Score, 1995-2017; World Bank, 2017, *World Development Indicators*.

**Exhibit 1.11: Economic Freedom and Extreme and Moderate Poverty Rates**

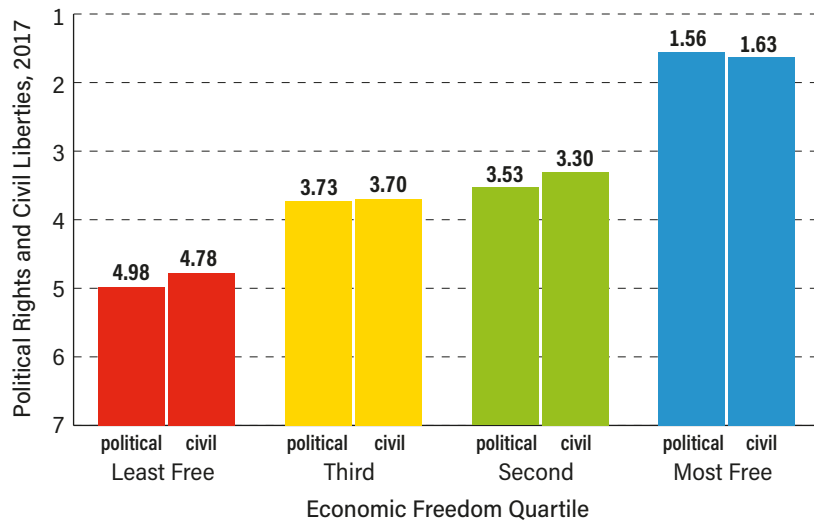
*Extreme and moderate poverty are lower in countries with more economic freedom.*



Note: The **extreme** poverty rate is the percentage of a country's population that lives on **\$1.90** per day; the **moderate** poverty rate is the percentage that lives **\$3.20** per day, in 2011 constant PPP-adjusted dollars.  
Sources: Average Economic Freedom Panel Score, 1995-2017; World Bank, 2017, *World Development Indicators*; for details, see Connors, 2011.

### Exhibit 1.12: Economic Freedom and Political Rights and Civil Liberties

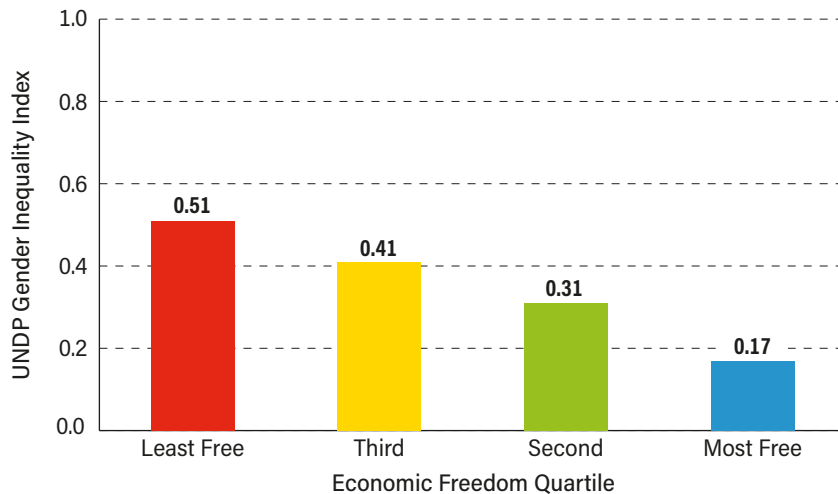
*Greater economic freedom is associated with more political rights and civil liberties.*



Note: **Political rights** and **civil liberties** are measured on a scale from 1 to 7: 1 = the highest degree of political rights and civil liberties; 7 = the lowest.  
 Sources: Average Economic Freedom Panel Score, 1995–2017; Freedom House, 2017, *Freedom in the World 2017*.

### Exhibit 1.13: Economic Freedom and the UN Gender Inequality Index

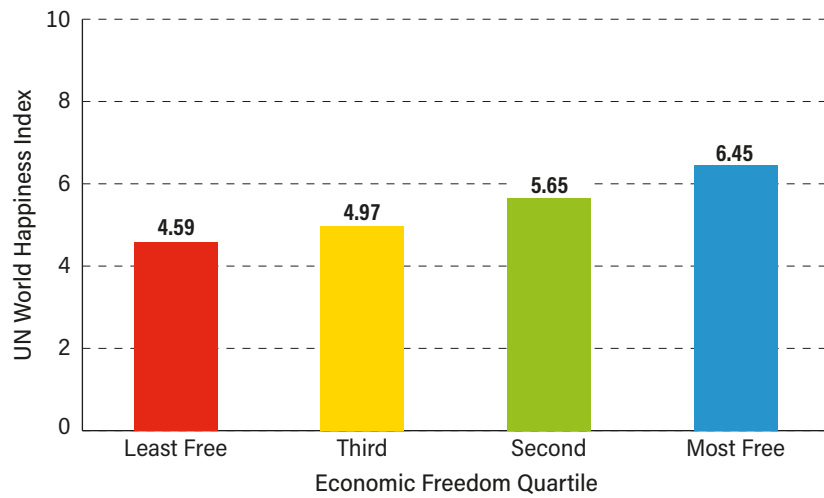
*Men and women tend to fare equally in countries with greater economic freedom*



Note: "The Gender Inequality Index (GII) reflects gender-based disadvantage in three dimensions—reproductive health, empowerment and the labour market—for as many countries as data of reasonable quality allow ... It ranges from 0, where women and men fare equally, to 1, where one gender fares as poorly as possible in all measured dimensions." Data are for 2015.  
 Sources: Average Economic Freedom Panel Score, 1995–2017; United Nations Development Programme, 2016, *Table 5: Gender Inequality Index*.

### Exhibit 1.14: Economic Freedom and the UN World Happiness Index

*People in countries with greater economic freedom tend to be happier about their lives.*



Note: "The rankings are based on answers to the main life evaluation question ... This is called the Cantril ladder: it asks respondents to think of a ladder, with the best possible life for them being a 10, and the worst possible life being a 0. They are then asked to rate their own current lives on that 0 to 10 scale." Data are for 2015.  
Sources: *Average Economic Freedom Panel Score, 1995-2017*; United Nations, 2016, *World Happiness Report 2016 Update*.

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