

# Chapter 1 Economic Freedom of the World in 2010

This year is the 100<sup>th</sup> anniversary of Milton Friedman's birth. Milton Friedman was the godfather of the *Economic Freedom of the World* (EFW) project. He believed that, if economic freedom could be measured with greater accuracy, this would make it possible for researchers to identify its impact on economic performance with greater clarity. This has been the case. Since our first publication in 1996, numerous studies have used data from *Economic Freedom of the World* to examine the impact of economic freedom on investment, economic growth, income levels, and poverty rates. Virtually without exception, these studies have found that countries with institutions and policies more consistent with economic freedom have higher investment rates, more rapid economic growth, higher income levels, and more rapid reduction in poverty rates.

Nonetheless, the battle over the merits of economic freedom continues to rage. Several high-income economies are now experiencing high unemployment rates, sluggish growth, and rising levels of government debt. In spite of the evidence to the contrary, many believe that the financial crisis of 2008 was the result of lax regulation and insufficient government oversight. Both central planning and Keynesian economics have made a comeback. Budget deficits have soared recently to historic highs, and popular Keynesian economists like Paul Krugman argue that the continued sluggishness merely reflects that the deficits have not been large enough (Krugman, 2010, July 28). Democratic governments to a large degree centrally plan key sectors of many western economies, including energy, health care, and education. Against this background, both the measurement of economic freedom and the ideas of Milton Friedman are perhaps more relevant than ever before.

## What is economic freedom?

The key ingredients of economic freedom are:

- personal choice
- voluntary exchange coordinated by markets;
- freedom to enter and compete in markets; and
- protection of persons and their property from aggression by others.

These four cornerstones imply that economic freedom is present when individuals are permitted to choose for themselves and engage in voluntary transactions as long as they do not harm the person or property of others. While individuals have a right to their own time, talents, and resources, they do not have a right to those of others. Thus, individuals do not have a right to take things from others or demand that others provide things for them. Use of violence, theft, fraud, and physical invasions are

not permissible but, otherwise, individuals are free to choose, trade, and cooperate with others, and compete as they see fit. In an economically free society, the primary role of government is to protect individuals and their property from aggression by others. The EFW index is designed to measure the extent to which the institutions and policies of a nation are consistent with this protective function.

### **Why is measurement of economic freedom important?**

Building on the work of Nobel laureates Friedrich Hayek and Douglass North, there has been an explosion of research examining the impact of economic, political, and legal institutions on the performance of economies during the past two decades. Economists refer to this body of literature as the New Institutional Economics. This research illustrates that institutions exert a major impact on cross-country differences in both per capita income and economic growth.<sup>1</sup> Other factors, including cultural characteristics, climate, and location may also be important, but institutional attributes generally have more explanatory power. Debate continues on the set of institutions most important for the growth process and the cause and effect relationships among various economic and political arrangements. Research indicates that economic institutions exert a stronger and more consistent impact on economic growth than political democracy. However, the two may be complementary. Moves toward a more democratic political structure often occur either shortly before or shortly after economic reforms. This has led to debate about how the ordering of economic and political reforms influence performance and why reforms occur in some countries, but not others.

The New Institutional Economics highlights the importance of the Economic Freedom of the World project. The EFW data set provides the most comprehensive measure of the degree to which countries rely on markets rather than political decision-making to allocate resources. Obviously, a reliable measure of the degree to which countries rely on market institutions is central to the ongoing scholarly efforts to disentangle the importance of both economic and political institutions as determinants of economic performance, as well as the potential importance of other factors.

### **How does democracy affect economic freedom?**

A larger share of the world's population now lives in democratic countries than at any time in history. However, there is little popular understanding of the limitations of democracy and why, if unconstrained, it is likely to result in outcomes that most would consider undesirable. A majority vote rule is a highly useful method of deciding who will carry out the protective functions of government. But, it is quite another thing to use majority voting to decide how resources will be used in the economy. As public choice analysis highlights, majoritarian democracy tends to be shortsighted. It is biased toward the adoption of programs that provide immediate, highly visible, benefits at the expense of future costs that are difficult to identify. This shortsighted nature of democratic politics explains why unconstrained democracies throughout the world are plagued by excessive debt and unfunded promises. Budget deficits, debt financing, and promises that cannot be kept without higher future taxes are not an aberration. They are reflective of the incentive structure accompanying unconstrained democracy.

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<sup>1</sup> See Acemoglu and Robinson, 2012 for an important recent contribution that focuses on the role of institutions in the growth and development process.

Moreover, unconstrained democracy will enhance the power of well-organized special interests relative to the ordinary citizen. Political incentives will lead politicians to “trade” favors to interest groups in exchange for political contributions that will help them win the next election. When the government becomes heavily involved in activities that provide favors to some at the expense of others, people will be encouraged to divert resources away from productive activities and toward lobbying, campaign contributions, and other forms of political favor seeking. All of these shortcomings tend to corrupt the political process and lead even democratic governments to adopt counterproductive policies.

However, research also indicates that shifts from authoritarian to democratic political regimes often precede the adoption of reforms that promote economic freedom. This raises an interesting possibility: perhaps democracy initially enhances economic freedom, but with time, this positive impact reverses.<sup>2</sup> As democracies mature, interest groups become more powerful, transfers and subsidies more widespread, and the share of the citizenry dependent on the government increases. This suggests that more mature democracies will tend to be characterized by declining economic freedom, a dependent population, and economic stagnation. Clearly, these issues are complex and accurate measurement of economic freedom is an essential element of scholarly research on these vitally important topics.

## **The *Economic Freedom of the World* index for 2010**

The construction of the index published in *Economic Freedom of the World* is based on three important methodological principles. First, objective components are always preferred to those that involve surveys or value judgments. Given the 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 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, and only when the data are unavailable from international sources. 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. Complete methodological details can be found in the Appendix: Explanatory Notes and Data Sources (page 271). The entire data set used in the construction of the index is freely available to researchers at <[www.freetheworld.com](http://www.freetheworld.com)>.

### **Structure of the EFW index**

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

2 This theory is highly consistent with the analysis of Olson, 1982.

Within the five major areas, there are 24 components in this year's index. Many of those components are themselves made up of several sub-components. In total, the index comprises 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. The sub-component ratings are averaged to determine each component. The component ratings within each area are then averaged to derive ratings for each of the five areas. In turn, the five area ratings are averaged to derive the summary rating for each country. The following section provides an overview of the five major areas.

### 1 *Size of Government*

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

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

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

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

### 2 *Legal System and Property Rights*

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

## 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 |

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### 2. Legal System and Property Rights

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

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

### 3 *Sound Money*

Money oils the wheels of exchange. An absence of sound money undermines gains from trade. As Milton Friedman informed us long ago, inflation is a monetary phenomenon, caused by too much money chasing too few goods. High rates of monetary growth invariably lead to inflation. Similarly, when the rate of inflation increases, it also tends to become more volatile. High and volatile rates of inflation distort relative prices, alter the fundamental terms of long-term contracts, and make it virtually impossible for individuals and businesses to plan sensibly for the future. Sound money is essential to protect property rights and, thus, economic freedom. Inflation erodes the value of property held in monetary instruments. When governments finance their expenditures by creating money, in effect, they are expropriating the property and violating the economic freedom of their citizens.

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

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

### 4 *Freedom to Trade Internationally*

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

At the urging of protectionist critics and special-interest groups, virtually all countries adopt trade restrictions of various types. Tariffs and quotas are obvious examples of roadblocks that limit international trade. Because they reduce the convertibility of currencies, controls on the exchange rate also hinder international



trade. The volume of trade is also reduced if the passage of goods through customs is onerous and time consuming. Sometimes these delays are the result of administrative inefficiency while in other instances they reflect the actions of corrupt officials seeking to extract bribes. In both cases, economic freedom is reduced.

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

## 5 Regulation

When regulations restrict entry into markets and interfere with the freedom to engage in voluntary exchange, they reduce economic freedom. The fifth area of the index focuses on regulatory restraints that limit the freedom of exchange in credit, labor, and product markets. The first component (5A) reflects conditions in the domestic credit market. One sub-component provides evidence on the extent to which the banking industry is privately owned. The final two sub-components indicate the extent to which credit is supplied to the private sector and whether controls on interest rates interfere with the market in credit. Countries that use a private banking system to allocate credit to private parties and refrain from controlling interest rates receive higher ratings for this regulatory component.

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

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

## Construction of Area and Summary ratings

Theory provides us with some direction regarding elements that should be included in the five areas and the summary index, but it does not indicate what weights should be attached to the components within the areas or among the areas in the construction of the summary index. It would be nice if these factors were independent of each other and a weight could be attached to each of them. During the past several years, we have 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. In the final analysis, the summary index is not very sensitive to substantial variations in the weights.

Furthermore, there is reason to question whether the areas (and components) are independent or work together like the wheels, motor, transmission, drive shaft, and frame of a car. Just as it is these interconnected parts that provide the mobility of an automobile, it may be the working of a number 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.

### Changes in this year's index

Every five years we consider significant revisions that will improve the accuracy and comprehensiveness of the EFW index. This process has been undertaken during the past year. We are constantly looking for new data that might improve the quality of the index. In addition, external data sources might substantially modify or discontinue a data series used in the EFW index. Thus, while we recognize the value of continuity, occasional review and modification are necessary and prudent.

There have been 42 variables, organized into 23 components, in the EFW index since the last major revision five years ago. One component (size of the trade sector) and one sub-component (foreign bank regulations) were dropped from this year's index because of concerns expressed by many, including members of the Economic Freedom Network, that they were not effectively capturing constraints on economic freedom. One sub-component (price controls) was dropped from this year's index because it is no longer available from its original sources or elsewhere.

We added two new components and one new sub-component to this year's report. In Area 2 we are adding two components (2H and 2I) related to crime and the effectiveness of police. Both new components in this area come from the World Economic Forum's *Global Competitiveness Report*. In Area 4, we added a third sub-component to the component measuring international capital market controls. This new sub-component (4Diii) measures the freedom foreigners have to visit a country without a travel visa. This revised component (4D) is now called "Controls on the movement of capital and people". The three additions along with the three deletions result in an index that is comprised of 24 components (still based on 42 variables).

The methodology and basic structure of the index remains unchanged. As in previous years, the index still has a summary rating and ratings for each of the five major areas. Areas 1 and 3 remain unchanged. Area 2 has the two new components for a total of nine components. Area 4 has one fewer component, because the measure of the size of the trade sector was dropped, but one additional sub-component (4Diii: Freedom of foreigners to visit). In Area 5, Component 5A goes from four to three sub-components, since consideration of the regulation of foreign banks has been dropped, and Component 5C goes from seven to six sub-components with the dropping of the measure of price controls.



In addition, three countries were added to the index this year: Qatar, Cambodia, and Saudi Arabia. We expect to add additional countries in the next few years.

## Summary Economic Freedom Ratings for 2010

Exhibit 1.2 presents summary economic freedom ratings, sorted from highest to lowest. These ratings are for the year 2010, the most recent year for which comprehensive data are available. Hong Kong and Singapore, once again, occupy the top two positions. The other nations in the top 10 are New Zealand, Switzerland, Australia, Canada, Bahrain, Mauritius, Finland, and Chile. The rankings of some other major countries are the United States (18<sup>th</sup>), Japan (20<sup>th</sup>), Germany (31<sup>st</sup>), Korea (37<sup>th</sup>), France (47<sup>th</sup>), Italy (83<sup>rd</sup>), Mexico (91<sup>st</sup>), Russia (95<sup>th</sup>), Brazil (105<sup>th</sup>), China (107<sup>th</sup>), and India (111<sup>th</sup>). It is worth noting that several oil-rich, middle-eastern nations including Bahrain, United Arab Emirates, Qatar, Kuwait, and Oman score reasonably well on the index. The 10 lowest-rated countries are Mozambique, Algeria, Guinea-Bissau, Democratic Republic of Congo, Angola, Republic of Congo, Zimbabwe, Myanmar, and—in last place—Venezuela. The results for the three newly added countries are: Qatar (7.70, 17<sup>th</sup>), Cambodia (7.16, 58<sup>th</sup>), and Saudi Arabia (7.06, 65<sup>th</sup>).

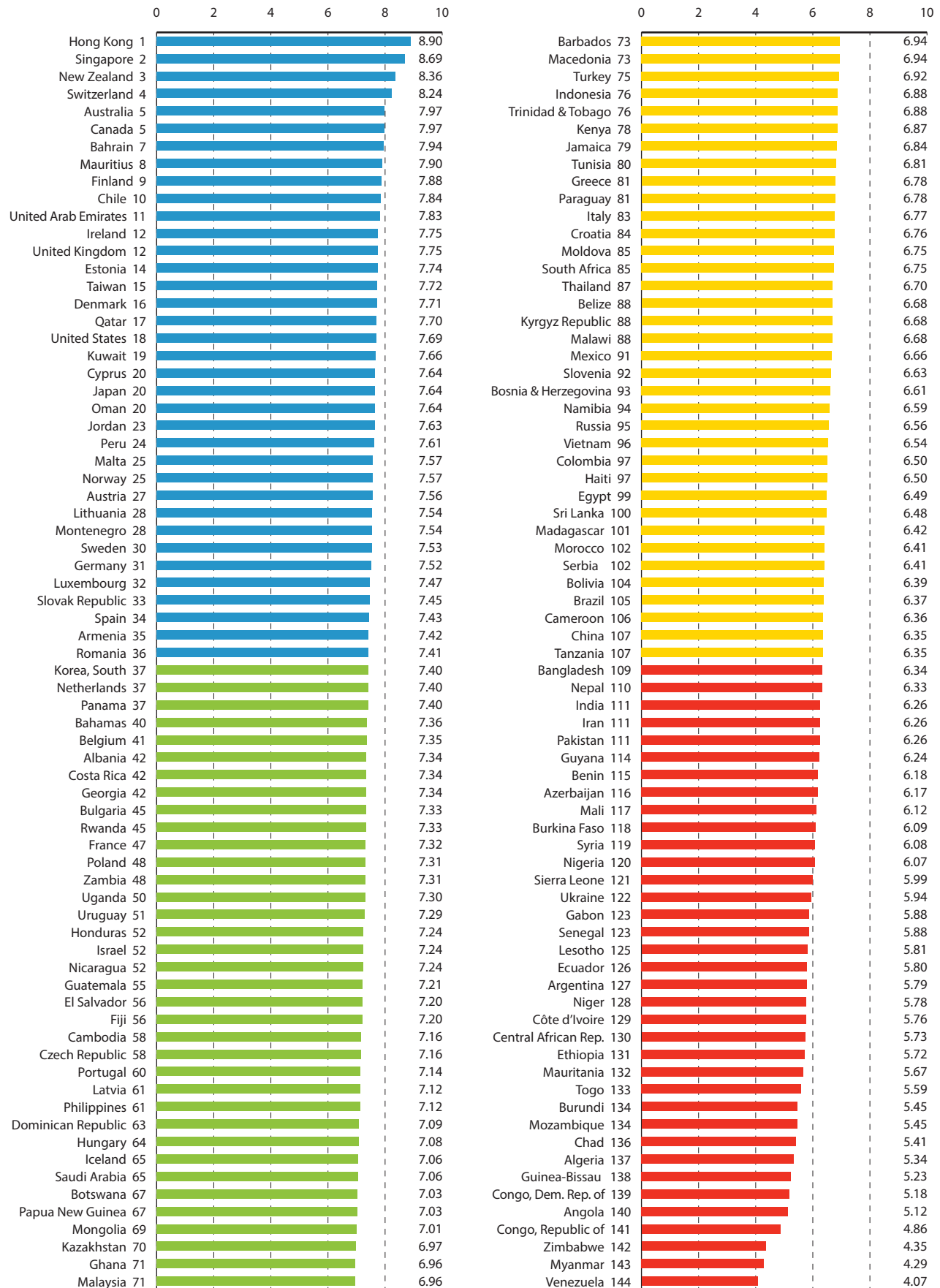
The EFW index is calculated back to 1970 as the availability of data allows; see the Country Data Tables in chapter 2 or our website, <<http://www.freetheworld.com>>, for information from past years. Because some data for earlier years may have been updated or corrected, researchers are always encouraged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

## Area Economic Freedom Ratings (and Rankings) for 2010

Exhibit 1.3 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). This was particularly true for western European countries.

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

Weakness in the rule of law and property rights is particularly pronounced in sub-Saharan Africa, among Islamic nations, and for several nations that were part of the Soviet bloc, though many of the last 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 1.2: Summary Economic Freedom Ratings for 2010**

**Exhibit 1.3: Area Economic Freedom Ratings (Rankings) for 2010**

	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	8.04 (15)	5.36 (78)	9.73 (4)	7.30 (64)	6.29 (111)	7.04 (117)	5.93 (89)	5.91 (78)
Algeria	3.65 (142)	4.44 (107)	8.42 (72)	5.65 (136)	4.56 (142)	3.72 (144)	5.17 (116)	4.80 (127)
Angola	4.63 (133)	3.74 (130)	5.57 (140)	6.47 (108)	5.18 (137)	7.38 (113)	3.79 (138)	4.36 (135)
Argentina	6.29 (81)	4.31 (115)	6.59 (118)	6.24 (120)	5.52 (133)	6.57 (124)	5.27 (113)	4.72 (130)
Armenia	7.64 (29)	5.56 (72)	9.18 (47)	7.59 (48)	7.12 (60)	8.80 (60)	6.61 (68)	5.94 (73)
Australia	6.67 (62)	8.09 (13)	9.43 (29)	7.28 (66)	8.40 (11)	9.69 (14)	7.90 (26)	7.60 (25)
Austria	4.90 (127)	8.08 (14)	9.64 (13)	7.66 (43)	7.54 (40)	8.97 (54)	6.33 (80)	7.31 (27)
Azerbaijan	4.88 (129)	5.97 (55)	6.27 (128)	6.79 (91)	6.94 (72)	8.00 (94)	6.86 (61)	5.95 (72)
Bahamas	8.19 (12)	6.57 (40)	7.21 (100)	5.95 (132)	8.89 (5)	8.79 (61)	9.17 (2)	8.73 (2)
Bahrain	6.88 (55)	7.00 (32)	9.18 (48)	7.90 (27)	8.73 (6)	9.00 (51)	8.87 (5)	8.33 (9)
Bangladesh	8.83 (3)	3.61 (132)	6.48 (124)	6.10 (126)	6.69 (91)	8.19 (84)	6.58 (69)	5.32 (112)
Barbados	6.73 (60)	7.79 (18)	6.57 (120)	6.68 (98)	6.91 (75)	7.00 (119)	6.93 (59)	6.81 (43)
Belgium	3.99 (138)	7.08 (30)	9.69 (6)	7.96 (21)	8.00 (21)	9.52 (20)	7.38 (46)	7.11 (35)
Belize	6.44 (72)	4.36 (112)	8.48 (69)	6.23 (121)	7.91 (24)	9.70 (13)	8.18 (18)	5.84 (82)
Benin	7.12 (44)	4.52 (102)	6.80 (113)	5.81 (134)	6.66 (94)	9.23 (37)	5.87 (92)	4.87 (126)
Bolivia	6.31 (78)	4.09 (120)	8.70 (65)	7.00 (82)	5.85 (128)	9.00 (51)	4.54 (130)	4.02 (138)
Bosnia & Herzegovina	5.53 (108)	4.57 (98)	8.27 (77)	7.64 (46)	7.02 (66)	9.49 (24)	6.43 (75)	5.13 (114)
Botswana	5.03 (121)	6.81 (35)	8.33 (74)	7.35 (61)	7.63 (35)	8.87 (57)	7.09 (55)	6.94 (40)
Brazil	6.63 (63)	5.16 (85)	8.00 (84)	7.13 (75)	4.91 (140)	6.53 (125)	4.47 (131)	3.73 (140)
Bulgaria	6.46 (68)	4.99 (90)	9.51 (24)	7.90 (25)	7.76 (30)	9.98 (8)	7.74 (30)	5.57 (101)
Burkina Faso	6.17 (84)	4.33 (114)	6.97 (109)	6.41 (110)	6.58 (99)	6.24 (130)	7.66 (37)	5.83 (83)
Burundi	5.24 (114)	2.98 (137)	6.98 (108)	5.29 (141)	6.76 (86)	7.60 (106)	7.97 (23)	4.70 (131)
Cambodia	7.89 (25)	4.61 (95)	9.26 (42)	7.50 (53)	6.54 (101)	7.03 (118)	7.51 (43)	5.09 (117)
Cameroon	7.98 (21)	4.00 (121)	6.74 (114)	6.51 (106)	6.55 (100)	7.50 (107)	7.53 (41)	4.63 (133)
Canada	6.12 (89)	8.16 (11)	9.46 (26)	7.53 (50)	8.59 (8)	9.30 (33)	8.49 (11)	7.99 (15)
Central African Rep.	7.00 (50)	2.34 (143)	6.95 (110)	6.64 (100)	5.71 (131)	7.43 (111)	3.79 (139)	5.92 (76)
Chad	7.57 (32)	3.08 (136)	5.75 (135)	5.72 (135)	4.94 (139)	6.03 (134)	5.92 (90)	2.87 (143)
Chile	7.77 (27)	7.17 (27)	8.94 (55)	8.20 (10)	7.10 (64)	8.28 (81)	5.79 (96)	7.22 (32)
China	4.98 (123)	6.25 (49)	7.89 (92)	6.57 (104)	6.05 (122)	6.91 (122)	5.57 (106)	5.67 (97)
Colombia	6.13 (87)	4.36 (111)	8.20 (79)	6.82 (90)	6.99 (68)	8.73 (63)	5.88 (91)	6.35 (55)
Congo, Dem. Rep. of	5.19 (116)	2.40 (142)	7.12 (102)	5.41 (139)	5.79 (130)	6.11 (132)	5.67 (101)	5.60 (98)
Congo, Rep. of	5.08 (119)	3.28 (133)	3.91 (143)	6.07 (128)	5.96 (125)	6.10 (133)	6.37 (78)	5.43 (108)
Costa Rica	7.85 (26)	6.11 (54)	8.00 (85)	8.05 (16)	6.71 (89)	7.45 (110)	6.55 (70)	6.13 (64)
Côte d'Ivoire	6.45 (70)	2.95 (138)	6.56 (121)	6.43 (109)	6.41 (108)	9.00 (51)	5.70 (98)	4.54 (134)
Croatia	4.96 (124)	5.76 (63)	8.42 (73)	7.71 (37)	6.95 (70)	9.01 (50)	6.40 (76)	5.45 (106)
Cyprus	6.93 (51)	6.88 (33)	9.44 (28)	8.04 (18)	6.89 (78)	7.82 (100)	6.17 (83)	6.69 (45)

## Exhibit 1.3 (continued): Area Economic Freedom Ratings (Rankings) for 2010

	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)
Czech Republic	4.96 (125)	6.16 (52)	9.45 (27)	7.77 (33)	7.47 (46)	9.22 (38)	7.67 (36)	5.51 (105)
Denmark	3.78 (140)	8.67 (3)	9.60 (16)	7.99 (20)	8.52 (10)	9.69 (15)	7.46 (44)	8.41 (7)
Dominican Republic	8.18 (13)	4.22 (119)	9.24 (45)	7.52 (51)	6.29 (110)	7.15 (114)	6.31 (81)	5.42 (109)
Ecuador	5.63 (102)	3.97 (123)	6.38 (126)	6.88 (88)	6.16 (116)	9.30 (32)	4.21 (135)	4.97 (119)
Egypt	6.58 (66)	5.24 (83)	8.81 (61)	6.33 (116)	5.49 (134)	5.88 (138)	4.90 (121)	5.68 (95)
El Salvador	8.46 (6)	3.84 (129)	9.25 (44)	7.46 (58)	6.97 (69)	8.52 (74)	6.38 (77)	6.01 (68)
Estonia	6.06 (93)	7.29 (25)	9.43 (30)	8.08 (14)	7.84 (26)	9.81 (10)	5.96 (88)	7.74 (21)
Ethiopia	6.10 (91)	5.44 (77)	5.58 (139)	5.41 (138)	6.08 (121)	4.45 (143)	7.59 (40)	6.21 (62)
Fiji	7.51 (34)	5.77 (62)	6.67 (116)	7.07 (78)	8.98 (2)	9.67 (16)	8.98 (4)	8.30 (10)
Finland	4.98 (122)	8.85 (1)	9.62 (15)	7.89 (28)	8.04 (19)	10.00 (1)	5.63 (102)	8.49 (4)
France	4.66 (131)	7.43 (24)	9.67 (9)	7.67 (40)	7.16 (58)	8.52 (73)	5.83 (94)	7.14 (34)
Gabon	5.73 (100)	4.35 (113)	5.65 (137)	6.17 (123)	7.48 (43)	7.10 (116)	8.68 (7)	6.67 (46)
Georgia	6.24 (83)	5.71 (66)	8.80 (62)	8.20 (11)	7.75 (32)	8.18 (85)	7.80 (29)	7.28 (28)
Germany	5.46 (111)	7.97 (16)	9.59 (18)	7.65 (45)	6.93 (73)	7.99 (97)	5.35 (112)	7.46 (26)
Ghana	8.28 (10)	5.58 (71)	7.13 (101)	6.94 (84)	6.87 (79)	8.13 (90)	6.52 (71)	5.96 (70)
Greece	5.80 (96)	5.51 (74)	9.67 (10)	7.52 (52)	5.38 (136)	6.00 (135)	4.36 (133)	5.78 (87)
Guatemala	8.00 (19)	3.93 (126)	9.37 (33)	8.25 (8)	6.49 (102)	9.15 (44)	4.57 (127)	5.74 (89)
Guinea-Bissau	4.46 (135)	2.85 (139)	6.26 (130)	6.12 (125)	6.45 (106)	8.74 (62)	3.32 (141)	7.28 (29)
Guyana	4.28 (136)	4.44 (106)	7.96 (89)	7.07 (77)	7.46 (47)	8.43 (77)	8.05 (19)	5.92 (77)
Haiti	8.48 (5)	2.12 (144)	8.03 (83)	7.17 (71)	6.72 (88)	8.17 (86)	8.20 (16)	3.78 (139)
Honduras	8.21 (11)	4.29 (116)	9.35 (36)	7.60 (47)	6.77 (85)	9.04 (48)	4.98 (119)	6.29 (57)
Hong Kong	8.89 (2)	8.18 (10)	9.31 (38)	9.02 (2)	9.08 (1)	9.37 (27)	9.28 (1)	8.57 (3)
Hungary	3.94 (139)	6.34 (47)	9.60 (17)	7.92 (24)	7.62 (36)	9.28 (34)	7.32 (51)	6.27 (59)
Iceland	4.83 (130)	8.33 (8)	8.42 (71)	6.31 (118)	7.41 (48)	6.33 (127)	7.72 (32)	8.19 (12)
India	6.37 (75)	5.55 (73)	6.42 (125)	6.28 (119)	6.70 (90)	6.97 (120)	8.00 (21)	5.13 (115)
Indonesia	7.90 (23)	4.48 (105)	8.99 (53)	6.74 (93)	6.29 (112)	8.27 (82)	4.66 (125)	5.93 (74)
Iran	6.42 (74)	5.78 (60)	8.53 (68)	5.18 (142)	5.40 (135)	6.31 (129)	4.37 (132)	5.52 (104)
Ireland	5.72 (101)	7.79 (17)	9.48 (25)	8.50 (4)	7.23 (54)	6.00 (135)	7.93 (25)	7.75 (20)
Israel	6.10 (92)	6.16 (53)	8.88 (57)	7.95 (22)	7.11 (61)	9.27 (35)	5.19 (115)	6.88 (42)
Italy	3.68 (141)	5.95 (57)	9.66 (11)	7.66 (42)	6.91 (76)	8.65 (68)	6.48 (72)	5.59 (100)
Jamaica	7.62 (30)	4.88 (92)	7.98 (86)	7.11 (76)	6.59 (98)	6.33 (127)	7.61 (39)	5.83 (84)
Japan	5.80 (97)	7.52 (22)	9.89 (1)	7.16 (73)	7.83 (27)	8.14 (88)	8.30 (14)	7.04 (38)
Jordan	6.92 (52)	6.47 (43)	9.19 (46)	7.79 (32)	7.79 (29)	8.05 (92)	8.41 (13)	6.90 (41)
Kazakhstan	7.09 (45)	5.66 (70)	8.24 (78)	6.37 (111)	7.48 (44)	9.21 (39)	7.14 (54)	6.08 (66)
Kenya	7.04 (48)	4.56 (100)	8.74 (63)	6.87 (89)	7.11 (62)	8.41 (78)	7.52 (42)	5.41 (110)
Korea, South	6.85 (56)	6.50 (41)	9.58 (20)	7.21 (70)	6.86 (80)	9.33 (28)	4.58 (126)	6.66 (47)

## Exhibit 1.3 (continued): Area Economic Freedom Ratings (Rankings) for 2010

	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)
Kuwait	6.45 (69)	7.10 (29)	9.26 (43)	7.66 (41)	7.81 (28)	10.00 (1)	6.93 (60)	6.51 (51)
Kyrgyz Republic	7.36 (39)	4.39 (108)	8.14 (81)	6.92 (86)	6.61 (97)	7.48 (109)	6.63 (67)	5.71 (92)
Latvia	5.22 (115)	6.40 (46)	8.93 (56)	7.90 (26)	7.14 (59)	8.37 (79)	6.82 (62)	6.23 (61)
Lesotho	5.08 (118)	4.48 (104)	5.82 (134)	6.37 (112)	7.29 (53)	10.00 (1)	7.09 (56)	4.77 (129)
Lithuania	6.79 (57)	6.45 (45)	9.37 (34)	7.49 (54)	7.60 (37)	8.70 (64)	7.65 (38)	6.45 (54)
Luxembourg	4.13 (137)	8.29 (9)	9.35 (35)	8.06 (15)	7.55 (39)	9.15 (43)	5.55 (107)	7.93 (16)
Macedonia	6.11 (90)	5.23 (84)	7.97 (87)	7.29 (65)	8.11 (16)	9.84 (9)	7.85 (28)	6.65 (48)
Madagascar	8.97 (1)	3.10 (135)	7.85 (93)	6.02 (130)	6.16 (115)	7.72 (104)	5.07 (117)	5.70 (94)
Malawi	7.45 (37)	5.47 (76)	6.98 (107)	6.62 (103)	6.90 (77)	8.03 (93)	6.95 (57)	5.71 (91)
Malaysia	6.13 (88)	6.86 (34)	6.52 (123)	7.25 (69)	8.03 (20)	9.12 (46)	7.87 (27)	7.10 (36)
Mali	6.44 (71)	4.49 (103)	6.86 (111)	6.66 (99)	6.14 (118)	8.00 (96)	5.21 (114)	5.22 (113)
Malta	5.80 (98)	7.52 (23)	9.54 (23)	8.15 (13)	6.86 (81)	9.03 (49)	6.76 (63)	4.77 (128)
Mauritania	5.59 (105)	4.60 (96)	5.24 (141)	6.22 (122)	6.69 (92)	8.00 (94)	7.14 (53)	4.92 (124)
Mauritius	7.89 (24)	6.21 (50)	9.28 (40)	8.17 (12)	7.97 (22)	9.52 (21)	7.38 (47)	7.02 (39)
Mexico	7.18 (43)	4.57 (97)	8.07 (82)	6.74 (95)	6.74 (87)	8.65 (69)	5.53 (108)	6.03 (67)
Moldova	7.19 (42)	5.48 (75)	7.38 (96)	6.92 (85)	6.77 (84)	9.13 (45)	5.59 (104)	5.60 (99)
Mongolia	7.45 (36)	5.67 (69)	7.22 (99)	7.26 (68)	7.47 (45)	9.50 (22)	7.23 (52)	5.67 (96)
Montenegro	6.00 (94)	6.47 (42)	9.57 (21)	7.77 (35)	7.90 (25)	9.78 (12)	8.01 (20)	5.91 (79)
Morocco	6.25 (82)	5.97 (56)	7.07 (103)	6.76 (92)	5.99 (123)	7.39 (112)	4.12 (137)	6.47 (53)
Mozambique	4.66 (132)	4.23 (118)	5.86 (133)	6.62 (102)	5.90 (127)	9.20 (40)	2.76 (143)	5.75 (88)
Myanmar	6.33 (77)	3.19 (134)	5.73 (136)	1.78 (144)	4.39 (143)	5.08 (141)	— —	— —
Namibia	5.60 (104)	6.68 (39)	6.36 (127)	6.36 (114)	7.94 (23)	10.00 (1)	7.69 (35)	6.13 (65)
Nepal	8.34 (8)	3.85 (128)	6.26 (129)	6.74 (94)	6.47 (103)	8.52 (75)	5.81 (95)	5.09 (116)
Netherlands	3.36 (144)	8.10 (12)	9.56 (22)	8.31 (7)	7.67 (33)	8.61 (70)	6.72 (66)	7.68 (22)
New Zealand	5.94 (95)	8.69 (2)	9.73 (3)	8.45 (6)	8.98 (3)	10.00 (1)	8.51 (9)	8.42 (6)
Nicaragua	8.45 (7)	4.53 (101)	8.29 (76)	7.72 (36)	7.19 (57)	9.42 (25)	6.73 (64)	5.43 (107)
Niger	6.79 (58)	3.95 (125)	6.65 (117)	5.56 (137)	5.96 (126)	9.62 (19)	3.30 (142)	4.97 (121)
Nigeria	6.16 (85)	3.95 (124)	6.59 (119)	6.55 (105)	7.11 (63)	8.68 (66)	7.97 (22)	4.67 (132)
Norway	5.55 (107)	8.65 (4)	9.32 (37)	6.98 (83)	7.32 (52)	10.00 (1)	4.34 (134)	7.63 (24)
Oman	5.35 (113)	7.58 (20)	8.86 (59)	7.69 (38)	8.72 (7)	9.63 (17)	8.75 (6)	7.79 (18)
Pakistan	8.68 (4)	4.27 (117)	6.04 (131)	5.87 (133)	6.44 (107)	8.57 (71)	5.68 (99)	5.06 (118)
Panama	8.02 (17)	5.06 (88)	9.04 (51)	8.00 (19)	6.85 (82)	9.18 (41)	5.40 (111)	5.98 (69)
Papua New Guinea	7.34 (40)	4.71 (94)	7.27 (98)	7.46 (56)	8.36 (12)	8.70 (65)	8.64 (8)	7.75 (19)
Paraguay	8.01 (18)	3.63 (131)	8.65 (66)	7.49 (55)	6.15 (117)	8.33 (80)	4.56 (128)	5.54 (102)
Peru	7.53 (33)	5.10 (86)	9.27 (41)	8.60 (3)	7.55 (38)	9.33 (28)	7.36 (49)	5.96 (71)
Philippines	8.31 (9)	4.37 (110)	9.29 (39)	6.69 (97)	6.92 (74)	8.91 (56)	6.02 (87)	5.83 (85)



## Exhibit 1.3 (continued): Area Economic Freedom Ratings (Rankings) for 2010

	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)
Poland	6.35 (76)	6.33 (48)	9.39 (31)	7.27 (67)	7.20 (56)	8.24 (83)	7.42 (45)	5.93 (75)
Portugal	5.52 (110)	6.69 (38)	9.75 (2)	7.93 (23)	5.80 (129)	6.44 (126)	4.67 (124)	6.28 (58)
Qatar	6.59 (65)	7.53 (21)	8.64 (67)	7.68 (39)	8.04 (18)	7.95 (98)	7.69 (34)	8.48 (5)
Romania	7.04 (49)	5.72 (65)	9.02 (52)	7.86 (30)	7.39 (50)	9.38 (26)	6.93 (58)	5.85 (81)
Russia	6.75 (59)	5.27 (80)	8.47 (70)	6.08 (127)	6.24 (114)	7.77 (103)	6.05 (86)	4.90 (125)
Rwanda	5.57 (106)	6.72 (37)	9.05 (49)	7.02 (81)	8.30 (13)	8.55 (72)	8.48 (12)	7.88 (17)
Saudi Arabia	5.04 (120)	7.66 (19)	7.51 (95)	7.04 (79)	8.04 (17)	7.92 (99)	7.96 (24)	8.24 (11)
Senegal	5.40 (112)	4.39 (109)	7.03 (105)	6.50 (107)	6.10 (120)	8.84 (58)	4.55 (129)	4.92 (123)
Serbia	5.78 (99)	4.92 (91)	7.94 (90)	7.03 (80)	6.38 (109)	8.50 (76)	5.70 (97)	4.95 (122)
Sierra Leone	6.68 (61)	4.00 (122)	7.02 (106)	6.12 (124)	6.13 (119)	5.66 (139)	5.67 (100)	7.06 (37)
Singapore	8.06 (14)	8.38 (6)	9.05 (50)	9.05 (1)	8.92 (4)	10.00 (1)	7.72 (31)	9.04 (1)
Slovak Republic	6.29 (80)	5.78 (61)	9.71 (5)	8.04 (17)	7.40 (49)	9.16 (42)	7.33 (50)	5.72 (90)
Slovenia	4.54 (134)	6.20 (51)	8.30 (75)	7.65 (44)	6.47 (104)	7.50 (108)	5.42 (109)	6.49 (52)
South Africa	5.52 (109)	5.70 (67)	8.18 (80)	7.16 (72)	7.21 (55)	8.94 (55)	6.07 (85)	6.62 (49)
Spain	6.15 (86)	6.76 (36)	9.67 (8)	7.77 (34)	6.80 (83)	9.08 (47)	4.72 (123)	6.61 (50)
Sri Lanka	7.08 (46)	5.25 (82)	6.55 (122)	6.90 (87)	6.64 (96)	7.12 (115)	6.44 (73)	6.35 (56)
Sweden	3.60 (143)	8.38 (7)	9.64 (12)	7.88 (29)	8.13 (15)	9.78 (11)	6.43 (74)	8.19 (13)
Switzerland	7.60 (31)	8.55 (5)	9.39 (32)	7.14 (74)	8.54 (9)	9.33 (28)	8.19 (17)	8.10 (14)
Syria	6.52 (67)	5.06 (87)	7.28 (97)	5.99 (131)	5.57 (132)	5.59 (140)	5.58 (105)	5.54 (103)
Taiwan	7.45 (35)	7.02 (31)	9.63 (14)	7.55 (49)	6.94 (71)	8.67 (67)	4.93 (120)	7.22 (33)
Tanzania	5.60 (103)	5.73 (64)	7.71 (94)	6.05 (129)	6.68 (93)	8.83 (59)	5.84 (93)	5.36 (111)
Thailand	7.43 (38)	5.35 (79)	7.06 (104)	6.63 (101)	7.05 (65)	9.27 (36)	5.63 (103)	6.26 (60)
Togo	7.26 (41)	2.55 (140)	6.69 (115)	6.32 (117)	5.11 (138)	6.17 (131)	4.19 (136)	4.97 (120)
Trinidad & Tobago	6.91 (53)	4.56 (99)	7.96 (88)	7.43 (60)	7.52 (42)	9.33 (28)	7.38 (48)	5.86 (80)
Tunisia	7.05 (47)	6.45 (44)	6.85 (112)	6.34 (115)	7.35 (51)	8.12 (91)	6.72 (65)	7.22 (31)
Turkey	6.91 (54)	5.25 (81)	8.86 (60)	7.33 (63)	6.25 (113)	7.79 (101)	4.76 (122)	6.19 (63)
Uganda	7.66 (28)	5.05 (89)	8.71 (64)	7.44 (59)	7.64 (34)	9.49 (23)	7.71 (33)	5.70 (93)
Ukraine	6.62 (64)	4.79 (93)	5.60 (138)	6.72 (96)	5.97 (124)	8.14 (89)	6.08 (84)	3.69 (141)
United Arab Emirates	7.94 (22)	7.27 (26)	7.93 (91)	7.84 (31)	8.18 (14)	7.64 (105)	8.50 (10)	8.40 (8)
United Kingdom	5.18 (117)	7.97 (15)	9.58 (19)	8.48 (5)	7.53 (41)	6.69 (123)	8.24 (15)	7.65 (23)
United States	6.43 (73)	7.14 (28)	9.68 (7)	7.46 (57)	7.76 (31)	6.95 (121)	9.06 (3)	7.26 (30)
Uruguay	6.31 (79)	5.89 (58)	8.98 (54)	8.24 (9)	7.01 (67)	8.15 (87)	6.20 (82)	6.69 (44)
Venezuela	4.96 (126)	2.48 (141)	4.72 (142)	3.91 (143)	4.27 (144)	5.93 (137)	3.61 (140)	3.26 (142)
Vietnam	8.04 (16)	5.88 (59)	5.93 (132)	6.37 (113)	6.46 (105)	9.63 (18)	5.40 (110)	4.35 (136)
Zambia	7.99 (20)	5.70 (68)	8.87 (58)	7.34 (62)	6.64 (95)	7.78 (102)	6.34 (79)	5.80 (86)
Zimbabwe	4.90 (128)	3.90 (127)	2.87 (144)	5.40 (140)	4.70 (141)	4.79 (142)	5.05 (118)	4.25 (137)

## The Chain-Linked Summary Index

The data published in *Economic Freedom of the World* are available for many countries back to 1970. Through time, the index has become more comprehensive and the available data more complete. As a result, the number and composition of the components for many countries will vary across time. This presents a problem similar to that confronted when calculating GDP or a price index over time when we know that the underlying bundle of goods and services is changing from one year to another. In order to correct for this problem and assure comparability across time, we have done the same thing that statisticians analyzing national income do: we have chain-linked the data.

The base year for the chain-linked index is 2000, and as a result the chain-linked index is not available for any countries added since that year. Changes in a country's chain-linked index through time are based only on changes in components that were present in adjoining years. For example, the 2005 chain-linked rating is based on the 2004 rating but is adjusted based on the changes in the underlying data between 2004 and 2005 for those components that were present in both years. If the common components for a country in 2005 were the same as in 2004, then no adjustment was made to the country's 2005 summary rating. However, if the 2005 components were lower than those for 2004 for the components present in both years, then the country's 2005 summary rating was adjusted downward proportionally to reflect this fact.

Correspondingly, in cases where the ratings for the common components were higher in 2005 than for 2004, the country's 2005 summary rating was adjusted upward proportionally. The chain-linked ratings were constructed by repeating this procedure backward in time to 1970 and forward in time to 2010. The chain-linked methodology means that a country's rating will change across time periods only when there is a change in ratings for components present during adjacent years. This is precisely what one would want when making comparisons across time periods.

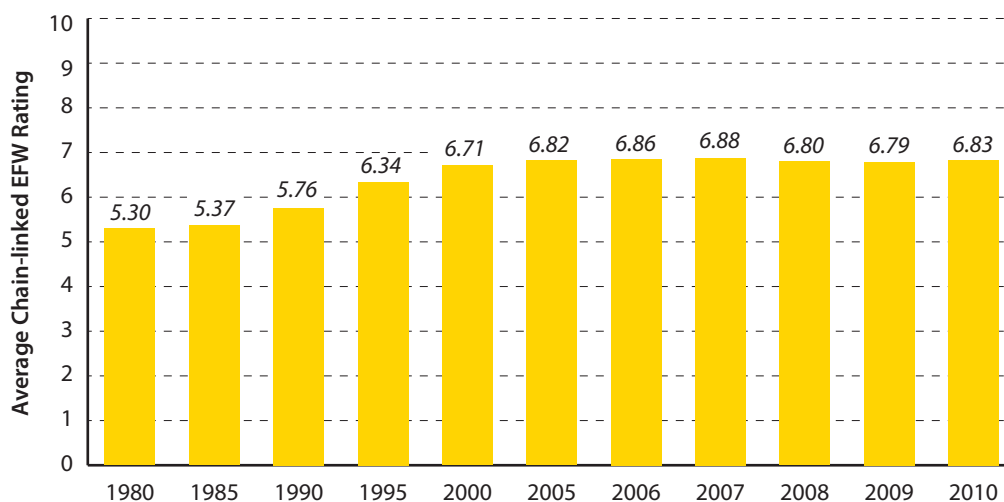
### Average chain-linked economic freedom rating

Exhibit 1.4 shows the average chain-linked economic freedom rating for the 102 countries with ratings since 1980. The average level of economic freedom, as measured by this chain-linked EFW index, has increased from 5.30 in 1980 to 5.76 in 1990 to 6.71 in 2000 and finally to 6.83 in 2010. After seeing the global average drop for two consecutive years in 2008 and 2009, the average summary rating increased again in 2010. Much of the long-term increase since 1980 was driven by reductions in marginal income-tax rates, improvements in monetary policy, eliminations of military conscription, and global trade liberalization.

### Chain-linked summary ratings from 1970 to 2010

The chain-linked summary ratings for all years are found in Exhibit 1.6. The chain-linked methodology was also used to derive ratings for Area 1 to Area 5 and for Components 5A, 5B, and 5C. These are shown at the top of the country tables above the unadjusted ratings. Please note that there can be significant differences between the unadjusted and the chain-linked ratings; this is especially true for countries with less complete data in earlier years. Researchers conducting long-term studies should use the chain-linked data.

**Exhibit 1.4: Average Chain-linked EFW Rating for the 102 countries with ratings since 1980**



### Big movers

The chain-linked summary ratings are most useful for tracking changes over time. Since 1990, the chain-linked summary ratings of Uganda, Zambia, and Nicaragua have increased by 4 points; and many formerly Communist nations, such as Poland, Bulgaria, Albania, and Romania are among the countries with the sharpest increases in economic freedom since 1990. In Latin America, Peru and El Salvador have shown marked improvements as well. In contrast, the summary ratings of Venezuela, Zimbabwe, United States, and Malaysia fell.<sup>3</sup>

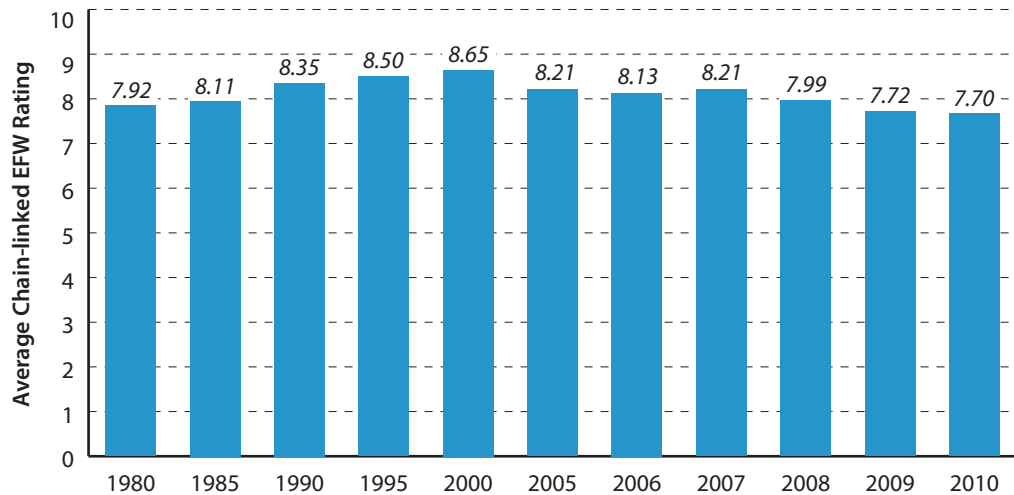
In the last 10 years, both African and formerly Communist nations—such as Rwanda, Malawi, and Ghana, and Romania, Bulgaria, and Albania—show the largest increases in economic freedom. Countries showing the biggest declines since 2000 include Venezuela, Argentina, Iceland, and the United States.

### The declining economic freedom of the United States

The United States, long considered the standard bearer for economic freedom among large industrial nations, has experienced a remarkable plunge in economic freedom during the past decade. From 1980 to 2000, the United States was generally rated the third freest economy in the world, ranking behind only Hong Kong and Singapore. After increasing steadily during the period from 1980 to 2000, the chain-linked EFW rating of the United States fell from 8.65 in 2000 to 8.21 in 2005 and 7.70 in 2010 (Exhibit 1.5). The chain-linked ranking of the United States has fallen precipitously from second in 2000 to eighth in 2005 and 19<sup>th</sup> in 2010 (unadjusted ranking of 18<sup>th</sup>). By 2009, the United States had fallen behind Switzerland, Canada, Australia, Chile, and Mauritius, countries that chose not to follow the path of massive growth in government financed by borrowing that is now the most prominent characteristic of US fiscal policy. By 2010, the United States had also fallen behind Finland and Denmark, two European welfare states. Moreover, it now trails Bahrain, the United Arab Emirates, Estonia, Taiwan, and Qatar, countries that are not usually perceived of

<sup>3</sup> See Chapter 3: Institutions and Economic, Political, and Civil Liberty in Latin America (p. 173) for additional details on the economic and political institutions of Latin American countries.

**Exhibit 1.5: Average Chain-linked EFW Rating for the United States from 1980 to 2010**



as bastions of economic freedom. The United States has now reached a point where even small additional decreases in the rating will cause large ranking changes because there are so many more countries clustered in this range of the index.

US ratings have declined in four of the five Areas of the EFW index. The rating in Legal System and Protection of Property Rights (Area 2) dropped by more than 2 points between 2000 and 2010. While it is difficult to pinpoint the precise reason for this decline, the increased use of eminent domain to transfer property to powerful political interests, the ramifications of the wars on terrorism and drugs, and the violation of the property rights of bondholders in the bailout of automobile companies have all weakened the United States' tradition of the rule of law and, we believe, contributed to the sharp decline of the Area 2 rating. The rating for Freedom to Trade Internationally (Area 4) fell by over one point, and the ratings for Size of Government (Area 1) and Regulation (Area 5) by more than a half point. The only Area where the United States' rating was basically unchanged was Access to Sound Money (Area 3).

Government consumption, transfers and subsidies, and government investment all rose during the decade, while their private-sector counterparts were lower. These changes were the major reason underlying the decline in the rating for Area 1. The time cost of clearing customs increased and government borrowing consumed a substantially larger share of the credit market, contributing to the rating reductions in Areas 4 and 5. Some of the declines between 2000 and 2010 in the ratings of individual components and sub-components were very large. For example, the rating for Protection of property rights (2C) fell to 6.8 from 9.1. The rating reflecting import and export compliance costs (4Bii) fell to 7.2 from 9.5. Reflecting the large fiscal deficits of recent years, the private-sector credit rating (5Aii) plummeted to 0.8 from 9.4. The rating reflecting burdensome administrative regulations (5Ci) plunged to 4.0 from 7.9.

The approximate one-point decline in the summary rating between 2000 and 2010 on the 10-point scale of the index may not sound like much, but scholarly work on this topic indicates that a one-point decline is associated with a reduction in the long-term growth of GDP of between 1.0 and 1.5 percentage points annually (Gwartney, Holcombe and Lawson, 2006). This implies that, unless policies undermining economic freedom are reversed, the future annual growth of the US economy will be half its historic average of 3%.

**Exhibit 1.6: Chain-linked summary ratings from 1970 to 2010**

	1970	1975	1980	1985	1990	1995	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Albania					4.37	5.07	6.23	6.28	6.64	7.13	6.92	7.12	7.31	7.45	7.44	7.47	7.49
Algeria			3.82	3.60	3.43	4.06	4.66	4.68	4.60	4.63	4.76	5.25	5.17	5.02	4.82	4.88	4.88
Argentina	4.36	2.76	3.96	3.30	4.42	7.04	7.40	6.73	6.23	6.09	6.23	5.97	6.09	6.30	6.07	5.95	5.77
Australia	6.96	6.07	6.86	7.17	7.57	7.98	8.07	7.93	7.97	8.11	8.02	8.24	8.28	8.32	8.22	8.20	8.14
Austria	6.08	5.93	6.33	6.34	6.98	7.16	7.55	7.38	7.40	7.96	7.86	7.84	7.81	7.79	7.68	7.62	7.55
Bahamas		6.38	6.26	6.33	6.43	6.41	6.69	6.78	6.75	6.79	6.89	6.85	6.69	6.81	6.79	6.69	6.59
Bahrain			7.42	6.92	6.91	7.21	7.74	7.64	7.62	7.56	7.34	7.39	7.65	7.81	7.72	7.75	7.89
Bangladesh		3.03	3.38	3.68	4.57	5.49	6.02	5.81	5.99	5.89	5.69	6.17	6.34	6.29	6.29	6.51	6.43
Barbados		5.53	5.66	6.10	6.15	6.14	6.20	6.21	6.11	6.12	6.20	6.39	6.22	6.39	6.26	6.28	6.50
Belgium	7.44	6.80	7.06	7.03	7.35	7.43	7.89	7.53	7.48	7.67	7.54	7.53	7.50	7.54	7.46	7.42	7.47
Belize			5.69	5.42	6.10	6.86	6.54	6.48	6.93	6.96	6.90	6.90	6.82	6.81	6.78	6.81	6.68
Benin			5.23	4.98	5.25	4.92	5.49	5.51	5.64	5.59	5.41	5.55	5.85	5.83	5.78	5.81	5.79
Bolivia			4.18	3.44	5.42	6.60	6.97	6.70	6.55	6.49	6.38	6.38	6.40	6.17	6.12	6.34	6.36
Botswana			5.25	5.57	5.92	6.40	7.42	7.39	7.42	7.21	7.24	7.11	7.08	7.58	7.44	7.18	7.24
Brazil	5.10	4.06	3.83	3.28	4.46	4.72	5.93	5.86	6.16	6.01	6.03	6.27	6.21	6.16	6.42	6.32	6.42
Bulgaria				5.02	3.90	4.60	5.37	5.88	6.45	6.69	6.63	6.85	7.00	7.18	7.10	7.24	7.23
Burundi		3.83	3.94	4.37	4.58	3.89	4.73	4.95	4.73	4.50	4.61	4.66	5.00	5.16	4.73	5.22	5.17
Cameroon			5.62	5.73	5.81	5.68	5.92	6.04	6.07	6.10	6.18	6.19	6.27	6.28	6.14	6.28	6.62
Canada	7.91	7.12	7.68	7.78	8.09	8.11	8.36	8.25	8.22	8.33	8.29	8.34	8.31	8.29	8.25	8.14	8.09
Central African Rep.				4.35	4.80	4.39	5.27	5.35	5.21	5.75	5.82	5.48	5.69	5.77	5.70	5.80	6.28
Chad				5.00	5.00	4.96	5.40	5.83	5.90	5.81	5.62	5.30	5.38	5.37	5.36	5.52	5.64
Chile	3.96	3.62	5.38	5.83	6.78	7.53	7.41	7.57	7.70	7.89	7.75	7.92	7.93	8.05	7.96	7.89	7.87
China			3.74	4.74	4.43	5.17	5.75	5.81	5.79	5.87	5.54	5.88	5.98	6.09	6.07	6.12	6.16
Colombia	5.28	4.84	4.74	5.22	5.07	5.59	5.51	5.58	5.57	5.82	5.82	5.84	5.97	6.18	6.12	6.27	6.31
Congo, Dem. Rep. of	4.05	3.49	2.60	3.61	3.03	3.28	3.85	3.73	4.58	4.53	4.55	4.46	5.06	4.76	4.61	4.70	4.96
Congo, Rep. of			4.50	4.31	4.97	5.02	4.28	4.62	4.48	4.72	4.81	4.71	4.81	4.73	4.94	5.19	5.02
Costa Rica		5.92	5.07	5.03	6.64	6.97	7.51	7.32	7.21	7.44	7.20	7.66	7.85	7.67	7.45	7.48	7.44
Côte d'Ivoire			5.39	6.08	5.57	5.20	5.99	5.96	5.82	5.90	5.90	6.11	6.12	6.10	5.86	6.10	5.94
Croatia						5.06	6.35	6.28	6.43	6.54	6.68	6.75	6.82	6.92	7.04	7.05	7.03
Cyprus		5.80	5.53	5.53	6.04	6.41	6.51	6.52	6.98	6.87	7.63	7.55	7.53	7.77	7.73	7.60	7.55
Czech Republic						5.84	6.53	6.56	6.67	6.84	6.89	6.92	6.91	7.14	7.12	7.09	7.08
Denmark	6.84	6.24	6.39	6.53	7.26	7.73	7.92	7.69	7.78	8.06	8.00	7.94	7.96	7.97	7.87	7.64	7.76



## Exhibit 1.6 (continued): Chain-linked summary ratings from 1970 to 2010

	1970	1975	1980	1985	1990	1995	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Dominican Republic			5.16	4.91	4.34	5.99	6.76	6.73	6.69	6.19	5.59	6.53	6.33	6.42	6.39	6.82	6.98
Ecuador	3.87	4.89	5.29	4.38	5.35	6.15	5.82	5.61	6.22	6.21	5.47	5.85	5.93	5.77	5.80	5.79	5.70
Egypt		3.59	4.40	4.86	4.60	5.99	6.81	6.60	6.22	6.10	6.08	6.59	6.72	6.97	6.79	6.69	6.78
El Salvador			4.47	4.19	4.69	7.47	7.69	7.64	7.57	7.61	7.62	7.66	7.75	7.75	7.75	7.52	7.41
Estonia						6.08	7.61	7.67	7.75	7.86	7.81	7.97	7.95	8.02	7.76	7.72	7.75
Fiji		5.28	5.58	5.98	5.73	6.12	6.24	6.12	6.17	6.14	6.13	6.54	6.49	6.49	6.54	6.42	6.46
Finland	6.82	6.16	6.65	6.92	7.24	7.50	7.73	7.61	7.63	7.95	7.87	7.97	7.87	7.91	7.81	7.81	7.89
France	6.63	5.93	6.09	5.99	7.07	7.02	7.31	6.97	7.14	7.38	7.39	7.38	7.38	7.58	7.60	7.47	7.39
Gabon			4.50	5.08	5.47	5.38	5.81	5.64	5.58	5.65	5.68	5.60	5.78	5.69	5.73	5.69	5.66
Germany	7.44	6.85	7.16	7.25	7.65	7.63	7.67	7.45	7.54	7.83	7.73	7.76	7.70	7.61	7.53	7.57	7.53
Ghana		3.64	3.05	3.20	5.06	5.53	5.66	5.78	6.14	6.64	6.36	6.49	7.00	7.01	6.93	7.13	7.09
Greece	6.33	5.86	5.76	5.14	5.99	6.44	6.91	6.79	6.99	7.32	7.26	7.31	7.27	7.13	6.96	6.60	6.73
Guatemala	5.98	6.46	5.87	4.68	5.62	6.96	6.57	6.62	6.80	6.91	6.84	7.15	7.26	7.28	7.17	7.16	7.14
Guinea-Bissau					3.24	3.45	4.43	4.84	4.89	5.10	4.97	5.20	5.50	5.19	5.24	5.66	5.66
Guyana						5.20	6.72	6.65	6.41	6.28	6.01	6.36	6.53	6.74	6.96	6.89	6.75
Haiti			6.51	5.76	5.61	5.59	6.89	6.60	6.56	6.67	6.75	6.77	6.75	6.72	6.88	6.99	6.83
Honduras			5.97	5.38	5.45	6.26	6.68	6.47	6.72	6.78	6.75	6.86	7.19	7.22	7.14	6.96	7.03
Hong Kong	8.69	8.71	9.02	8.63	8.59	9.14	8.86	8.81	8.79	8.84	8.74	8.93	8.94	9.01	9.05	8.95	8.80
Hungary			3.94	4.67	5.04	6.19	6.56	6.90	6.68	7.21	7.35	7.23	7.13	7.14	7.18	7.19	7.10
Iceland	6.13	4.40	5.25	5.53	6.95	7.69	8.04	7.93	7.91	8.05	8.01	8.09	7.96	7.84	7.15	7.02	7.02
India	5.36	4.50	5.35	5.02	5.05	5.80	6.32	6.16	6.39	6.50	6.40	6.89	6.68	6.55	6.55	6.47	6.42
Indonesia	4.54	5.21	5.06	6.14	6.52	6.62	6.07	5.70	6.03	6.38	6.20	6.63	6.69	6.77	6.74	6.78	7.04
Iran	5.80	5.64	3.36	3.83	4.39	4.31	5.90	6.27	6.11	6.21	6.36	6.47	6.34	6.29	6.31	6.41	6.49
Ireland	6.79	5.97	6.47	6.54	7.13	8.29	8.20	8.01	8.06	8.05	8.11	8.41	8.26	8.30	8.20	7.82	7.92
Israel	4.58	3.87	3.48	4.03	4.66	6.04	6.77	6.70	7.20	7.20	7.14	7.37	7.25	7.26	7.22	7.13	7.25
Italy	5.98	5.17	5.37	5.57	6.60	6.66	7.36	7.20	7.29	7.15	7.18	7.33	7.23	6.85	6.76	6.72	6.73
Jamaica			3.92	4.85	5.48	6.65	7.57	7.34	7.38	7.36	7.48	7.62	7.60	7.45	7.25	7.25	6.95
Japan	6.78	6.38	6.88	7.05	7.58	7.50	7.90	7.51	7.46	7.88	7.77	7.83	7.79	7.78	7.65	7.59	7.61
Jordan		5.28	5.32	5.71	5.81	6.45	7.40	7.09	7.41	7.39	7.17	7.61	7.51	7.64	7.41	7.14	7.61
Kenya	4.80	4.63	4.80	5.29	5.43	5.89	6.72	6.80	6.81	6.96	6.59	7.09	7.01	7.05	6.68	6.91	6.91
Korea, South	5.39	5.26	5.49	5.54	6.31	6.67	6.79	7.10	7.15	7.27	7.31	7.26	7.44	7.47	7.26	7.23	7.20
Kuwait			4.99	6.85	5.46	6.93	7.07	7.49	7.58	7.59	7.48	7.46	7.57	7.73	7.46	7.76	7.75

## Exhibit 1.6 (continued): Chain-linked summary ratings from 1970 to 2010

	1970	1975	1980	1985	1990	1995	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Latvia						5.28	6.96	6.97	7.34	7.18	7.15	7.30	7.43	7.36	7.26	7.11	7.00
Lithuania						5.31	6.60	6.55	6.96	6.97	6.90	7.05	7.05	7.13	6.99	7.10	7.12
Luxembourg	7.48	7.63	7.51	7.83	7.80	7.94	8.02	8.02	7.89	7.93	7.98	7.72	7.70	7.76	7.77	7.68	7.59
Madagascar			4.01	4.59	4.49	4.61	5.96	6.27	5.83	6.03	5.78	5.79	5.89	6.19	6.13	6.22	6.41
Malawi		5.17	4.62	4.96	5.40	4.57	4.95	5.42	5.48	5.89	5.58	5.41	5.58	5.87	6.05	6.14	6.46
Malaysia	6.51	6.29	6.94	7.00	7.40	7.62	6.79	6.39	6.58	6.66	6.69	6.98	6.90	6.97	6.70	6.65	6.94
Mali		5.41	5.73	4.81	5.11	5.22	6.19	5.94	5.59	6.06	5.87	6.03	6.34	6.38	6.04	6.13	6.13
Malta			5.50	5.28	5.48	6.92	6.76	6.73	6.84	6.53	7.45	7.68	7.51	7.81	7.60	7.58	7.62
Mauritius		4.80	4.73	6.12	6.06	7.55	7.60	7.38	7.20	7.11	6.97	7.57	7.41	7.95	8.04	7.93	7.90
Mexico	6.45	5.76	5.13	4.61	6.13	6.43	6.44	6.31	6.64	6.62	6.62	6.87	6.91	6.83	6.77	6.60	6.65
Morocco	5.65	5.07	4.45	5.20	5.18	6.28	6.14	6.14	6.13	6.32	6.15	6.37	6.21	6.33	6.33	6.35	6.36
Myanmar			4.50	4.15	3.13	3.80	3.67	3.44	3.09	3.19	3.67	3.63	3.93	3.52	3.62	3.78	3.89
Namibia					5.11	6.14	6.38	6.35	6.39	6.51	6.24	6.46	6.36	6.57	6.35	6.41	6.40
Nepal			5.49	5.01	5.11	5.15	5.87	5.88	5.83	5.51	5.51	6.18	6.40	6.02	5.88	5.68	5.90
Netherlands	7.04	6.55	7.23	7.28	7.60	7.95	8.21	7.91	7.94	7.88	7.83	7.92	7.84	7.84	7.78	7.58	7.58
New Zealand	6.32	5.69	6.35	6.21	7.82	8.84	8.52	8.39	8.52	8.56	8.56	8.56	8.26	8.50	8.41	8.37	8.38
Nicaragua			3.69	1.78	2.75	5.47	6.69	6.38	6.75	6.80	6.61	6.86	7.00	7.01	6.81	6.76	6.88
Niger			4.63	5.07	5.16	4.33	5.44	5.07	5.03	5.24	5.63	5.62	5.70	5.64	5.59	5.67	5.90
Nigeria	3.55	3.36	3.25	3.68	3.31	3.76	5.30	5.03	5.53	5.57	5.56	6.03	6.42	6.28	5.98	5.84	6.01
Norway	5.93	5.58	5.79	6.46	7.13	7.56	7.27	7.12	7.03	7.60	7.53	7.69	7.54	7.69	7.59	7.56	7.53
Oman				6.78	6.34	6.99	7.53	7.57	7.53	7.58	7.45	7.39	7.42	7.72	7.61	7.71	8.00
Pakistan	4.20	3.54	4.30	4.91	4.87	5.67	5.41	5.42	5.62	5.40	5.41	5.86	5.93	5.89	5.72	5.93	5.94
Panama		6.67	5.55	6.12	6.45	7.44	7.56	7.53	7.52	7.59	7.51	7.60	7.56	7.64	7.13	7.15	7.44
Papua New Guinea				5.89	6.06	6.37	5.83	5.80	5.74	5.69	5.75	6.16	6.14	6.42	6.48	6.53	6.68
Paraguay			5.68	4.82	5.60	6.53	6.44	6.47	6.32	6.27	6.14	6.36	6.33	6.30	6.43	6.49	6.65
Peru	4.42	3.54	3.90	2.61	3.97	6.50	7.30	7.29	7.29	7.30	7.23	7.30	7.33	7.33	7.44	7.43	7.52
Philippines	5.29	5.22	5.33	5.07	5.79	7.30	6.97	6.81	6.92	6.94	6.64	7.00	7.05	6.93	6.82	6.78	7.06
Poland				3.46	3.55	5.37	6.34	6.13	6.45	6.50	6.89	6.89	6.99	7.04	7.14	7.28	7.29
Portugal	5.89	3.73	5.53	5.37	6.25	7.46	7.55	7.41	7.64	7.63	7.65	7.43	7.49	7.46	7.36	7.18	7.22
Romania				4.39	4.31	3.81	5.27	5.24	5.83	6.19	6.17	7.08	6.82	7.33	7.15	7.34	7.27
Russia						4.43	5.15	5.14	5.62	5.73	5.91	6.08	6.09	6.27	6.31	6.23	6.35
Rwanda					5.02	3.78	5.40	5.51	5.85	5.64	5.62	5.85	6.17	6.44	6.75	6.73	7.25

## Exhibit 1.6 (continued): Chain-linked summary ratings from 1970 to 2010

	1970	1975	1980	1985	1990	1995	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Senegal			4.43	5.17	5.31	4.56	5.88	5.65	5.73	5.63	5.67	5.72	5.62	5.73	5.64	5.73	5.63
Sierra Leone		4.97	4.97	3.67	3.86	4.33	5.23	4.99	5.50	5.93	5.77	6.06	6.19	6.62	6.21	6.28	6.43
Singapore	7.61	7.41	7.76	8.00	8.59	8.90	8.61	8.51	8.74	8.68	8.58	8.73	8.64	8.65	8.62	8.59	8.56
Slovak Republic						5.55	6.20	6.53	6.55	6.92	7.47	7.64	7.54	7.55	7.59	7.39	7.46
Slovenia						5.15	6.72	6.91	6.87	6.97	6.93	6.95	7.02	7.02	7.08	7.04	6.62
South Africa	6.30	5.71	5.85	5.49	5.50	6.57	7.08	7.05	7.04	7.20	7.02	7.00	6.94	6.95	6.67	6.61	6.88
Spain	6.41	5.85	6.10	6.08	6.57	7.25	7.54	7.26	7.31	7.72	7.65	7.60	7.55	7.52	7.44	7.32	7.40
Sri Lanka			4.77	4.95	4.81	6.07	6.16	6.12	6.08	6.26	6.05	6.21	6.39	6.20	6.04	6.15	6.25
Sweden	5.51	5.35	5.68	6.47	7.11	7.28	7.62	7.31	7.56	7.70	7.51	7.59	7.54	7.53	7.49	7.48	7.62
Switzerland	7.45	7.46	7.99	8.15	8.15	8.19	8.63	8.37	8.53	8.42	8.32	8.19	8.17	8.20	8.02	8.04	8.07
Syria	3.96	4.19	3.31	3.07	3.53	4.23	4.92	5.20	4.83	4.76	5.23	5.46	5.20	5.46	5.27	5.46	5.53
Taiwan	6.65	5.83	6.58	6.84	7.30	7.41	7.45	7.34	7.53	7.54	7.62	7.70	7.74	7.67	7.63	7.54	7.81
Tanzania	4.41	3.19	3.65	3.47	3.87	5.43	6.07	6.14	5.94	5.98	6.03	6.44	6.56	6.47	6.36	6.22	6.44
Thailand	6.05	6.01	6.09	6.17	6.83	7.18	6.51	6.16	6.63	6.68	6.56	6.68	6.80	6.80	6.78	6.69	6.66
Togo			4.07	5.15	5.73	5.46	5.81	5.99	6.16	5.93	5.76	6.13	6.29	5.57	5.55	5.56	5.79
Trinidad & Tobago		4.57	4.83	4.80	5.52	7.29	7.55	7.49	7.33	7.21	7.08	7.14	7.25	7.26	7.20	7.06	6.90
Tunisia	4.54	4.57	4.82	4.60	5.32	5.73	6.08	6.08	5.94	5.94	5.96	6.02	6.36	6.35	6.28	6.26	6.21
Turkey	3.49	3.87	3.77	4.85	5.06	5.89	5.81	5.20	5.48	5.93	6.07	6.09	6.20	6.33	6.65	6.57	6.56
Uganda			3.14	2.82	2.86	5.15	6.83	6.76	6.90	7.00	6.92	7.13	7.29	7.41	7.38	7.31	7.47
Ukraine						3.39	4.56	4.69	5.32	5.22	5.43	5.74	5.87	5.84	5.79	5.82	5.87
United Arab Emirates			6.03	6.83	7.20	6.95	7.28	7.30	7.52	7.43	7.26	7.50	7.65	7.74	7.70	7.42	7.61
United Kingdom	5.98	5.92	6.57	7.53	8.08	8.20	8.50	8.38	8.41	8.52	8.38	8.38	8.25	8.15	8.08	7.97	7.87
United States	7.60	7.73	7.92	8.11	8.35	8.50	8.65	8.44	8.40	8.36	8.37	8.21	8.13	8.21	7.99	7.72	7.70
Uruguay			6.07	5.97	6.34	6.47	7.08	6.85	7.09	6.92	7.00	7.02	6.98	7.08	7.12	7.16	7.25
Venezuela	7.31	6.17	6.69	6.08	5.69	4.40	5.83	5.71	4.57	4.18	4.57	4.52	4.54	4.15	4.10	4.16	3.88
Zambia		4.00	4.60	3.54	3.09	4.76	6.90	6.75	6.78	7.02	7.08	7.37	7.74	7.85	7.76	7.79	7.85
Zimbabwe			4.57	4.51	4.83	5.77	4.60	3.64	3.63	3.71	3.24	2.88	2.94	3.19	4.30	4.32	4.26

## Economic freedom and human progress

As is customary, this chapter concludes with some graphs illustrating simple relationships between economic freedom and various other indicators of human and political progress (Exhibits 1.7–1.12, pp. 22–24). The graphs use the average of the chain-linked EFW index for the period from 1990 to 2010, breaking the data into four quartiles ordered from low to high. Because persistence is important and the impact of economic freedom will be felt over a lengthy time period, it is better to use the average rating over a fairly long time span rather than the current rating to observe the impact of economic freedom on performance.

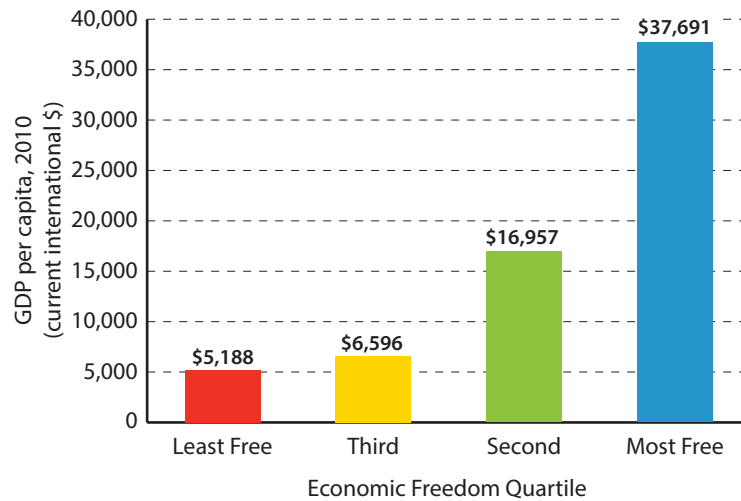
The graphs begin with the data on the relationship between economic freedom and the level of per-capita GDP and economic growth. In recent years, numerous scholarly studies have analyzed these relationships in detail and, almost without exception, have found that countries with higher and improving economic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

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

### Exhibit 1.7: Economic Freedom and Income per Capita, 2010

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

Sources: Fraser Institute, *Economic Freedom of the World: 2012 Annual Report*; World Bank, *World Development Indicators 2011*.

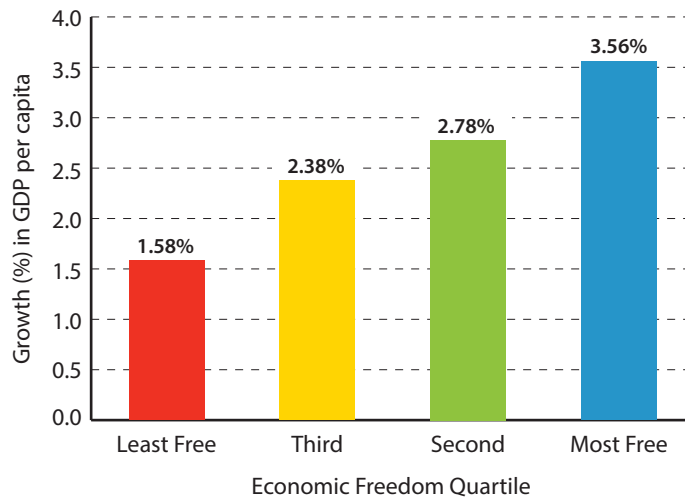


### Exhibit 1.8: Economic Freedom and Economic Growth, 1990–2010

*Countries with more economic freedom tend to grow more rapidly.*

Sources: Fraser Institute, *Economic Freedom of the World: 2012 Annual Report*; World Bank, *World Development Indicators 2011*.

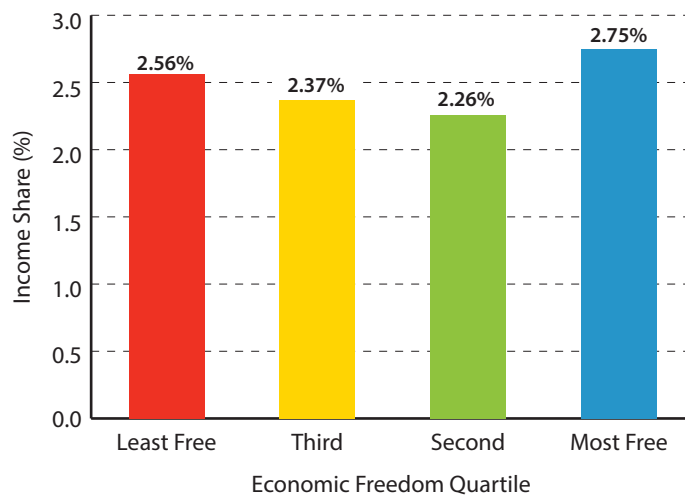
Note: The growth data were adjusted to control for the initial level of income.



### Exhibit 1.9: Economic Freedom and the Income Share of the Poorest 10%, 2000–2010

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

Sources: Fraser Institute, *Economic Freedom of the World: 2012 Annual Report*; World Bank, *World Development Indicators 2011*.

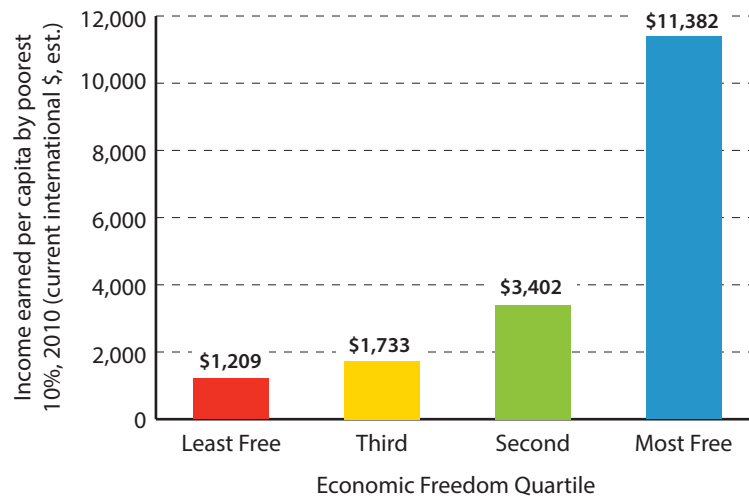




**Exhibit 1.10: Economic Freedom and the Income Level of the Poorest 10%, 2010**

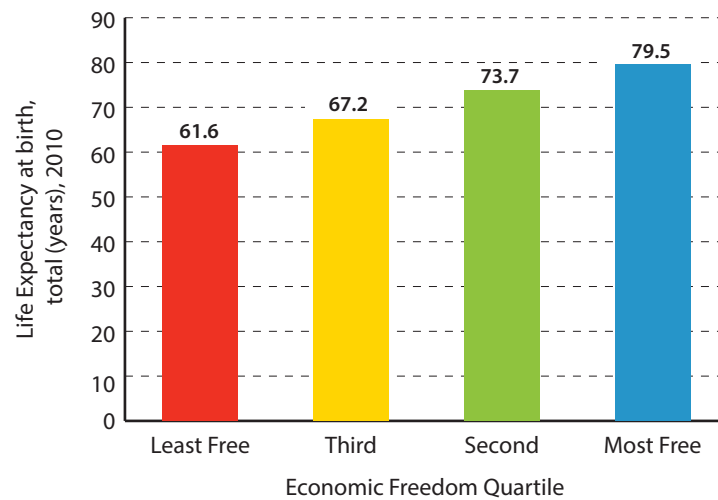
*The amount of income, as opposed to the share, earned by the poorest 10% of the population is much higher in countries with higher economic freedom.*

Sources: Fraser Institute, *Economic Freedom of the World: 2012 Annual Report*; World Bank, *World Development Indicators 2011*.

**Exhibit 1.11: Economic Freedom and Life Expectancy, 2010**

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

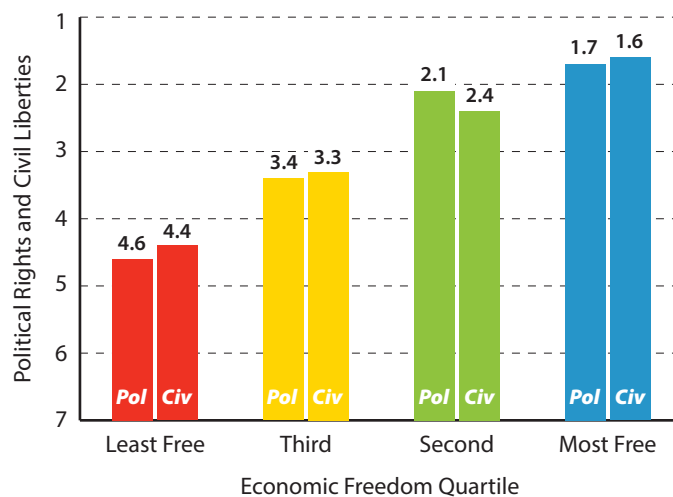
Sources: Fraser Institute, *Economic Freedom of the World: 2012 Annual Report*; World Bank, *World Development Indicators 2011*.

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

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

Sources: Fraser Institute, *Economic Freedom of the World: 2012 Annual Report*; Freedom House, *Freedom in the World 2011*.

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.



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## Data available to researchers

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

If you have problems downloading the data, please contact Jean-François Minardi via e-mail to <[freetheworld@fraserinstitute.org](mailto:freetheworld@fraserinstitute.org)> or via telephone +1.514.281.9550, ext. 306. If you have technical questions about the data itself, please contact Robert Lawson via e-mail to <[robert.a.lawson@gmail.com](mailto:robert.a.lawson@gmail.com)>. Please cite the data set as:

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## Published work using research ratings from *Economic Freedom of the World*

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