

Chapter 1: Economic Freedom of the World, 2005

More than two decades ago, The Fraser Institute began a series of conferences that focused on defining and measuring economic freedom for a large number of countries. Milton and Rose Friedman and Michael Walker spearheaded the project that led to the publication of *Economic Freedom of the World, 1975–1995*. Eleven years have now passed since the publication of the initial report but the objective remains the same: the measurement of economic freedom in an accurate, comprehensive, and objective manner. The report is now published annually by a network of institutes in more than 70 countries.

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
- ◆ protection of persons and their property from aggression by others.

Using these four cornerstones as a compass, the Economic Freedom of the World (EFW) index is designed to measure the consistency of a nation's institutions and policies with economic freedom. In order to achieve a high EFW rating, a country must provide secure protection of privately owned property, even-handed enforcement of contracts, and a stable monetary environment. It also must keep taxes low, refrain from creating barriers to both domestic and international trade, and rely more fully on markets rather than the political process to allocate goods and resources.

Institutions and policies are consistent with economic freedom when they provide an infrastructure for voluntary exchange, and protect individuals and their property from aggressors. Personal ownership of self is an underlying postulate of economic freedom. Because of this self ownership, individuals have a right to choose—to

decide how they will use their time and talents. On the other hand, they do not have a right to the time, talents, and resources of others. Thus, they do not have a right to take things from others or demand that others provide things for them.

Economic Freedom and Democracy

People often use “democracy” and “economic freedom” in incorrect ways. Sometimes their incorrect usage may reflect misunderstanding but, in other cases, it is almost certainly a deliberate effort to confuse. Economic freedom and political democracy are not the same thing. In fact, they are substantially different.

First, they differ with regard to the area of human interaction covered. Put simply, democracy relates to political decision-making while economic freedom relates to interaction through exchange and markets. Democracy is present when all adult citizens are free to participate in the political process (vote, lobby, and choose among candidates), and when political outcomes are determined by voting in fair and open elections. Economic freedom is about the freedom of individuals to decide how they will develop and use their productive abilities, exchange goods and services with others, compete in markets, and keep the fruits of their labor. Political restrictions that inhibit voluntary actions and personal choice in these areas conflict with economic freedom, even when they are adopted democratically. A country can be democratic and still severely restrict the economic freedom of its citizens. The experiences of India and Israel during the period from 1960 to 1990 illustrate this point. Correspondingly, it is also possible for a country with very little democracy to have a substantial degree of economic freedom nonetheless. Hong Kong during the last several decades provides an example.

Second, the basis for economically free action is fundamentally different than that for political democracy. Agreement and mutual gain provide the basis for

economically free activities. Unless both parties to an exchange agree, the transaction will not occur. On the other hand, democratic political action is based on “majority rule.” The majority, either directly or through their representatives, decides and the minority must submit.

It makes a huge difference whether mutual agreement or majority rule underpins economic activities. When mutual agreement forms the basis for economic activity, both buyers and sellers will be “winners” and there will be a strong tendency for resources to be used productively—that is, to produce goods people value more than the resources required for their production. In contrast, there is no such tendency under majority rule. When a project is undertaken politically, even if the process is democratic, the minority must pay taxes for its support even if the project makes them worse off. The political process creates “losers” as well as “winners.” Furthermore, there is no assurance that the gains of the winners will exceed the costs imposed on the losers. In fact, as the public-choice literature highlights, there are several circumstances under which there is good reason to expect that the cost imposed on the losers will be greater than the benefits derived by the winners.

The political process 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. Furthermore, when the government is 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 seeking political favor. Predictably, the shift of resources away from production and toward such favor seeking will generate economic inefficiency.

It is the “special-interest effect” that provides the most important reason that the political process will often go awry—why it will often lead to policies that do more harm than good. Elected political officials will often find it attractive to support the positions of well-organized interest groups at the expense of consumers and taxpayers. This will be true even when the gains derived by an interest group are substantially less than the cost imposed on other voters. Well-organized interest groups provide politicians with a readily available source of campaign contributions and other political resources that will help them win subsequent elections. In contrast, those harmed by special-interest policies are unlikely to provide much political assistance because they are largely unorganized and frequently poorly informed.

Thus, the democratic political process is characterized by politicians who “trade” programs that benefit special-interest groups at the expense of the general populace in exchange for political contributions that will help them win the next election. In contrast with market actions based on mutual agreement, there is no assurance that political action will be productive, that it will expand output and enhance the income levels of the citizenry.¹

Unconstrained democracy is not the political system that is most complementary with economic freedom; limited constitutional government is. Constitutional restraints, structural procedures designed to promote agreement and reduce the ability of interest groups to exploit consumers and taxpayers, and competition among governmental units (federalism) can help restrain the impulses of the majority and promote political action more consistent with economic freedom. It is widely recognized that the protection of civil liberties requires political constraints capable of controlling the excesses of the majority. Thus, we do not count on majority rule to protect civil liberties such as the right to free speech, freedom of the press, the right to assembly, and religious freedom. Rather, it is recognized that constitutional and structural protections are needed to secure these liberties. The same thing is true of economic freedom. Basic economic freedoms such as (a) the right to trade with others, including foreigners, at mutually agreeable terms, (b) the right to enter and compete in the business or occupation of your choice, (c) the right to keep what you earn, and (d) protection of your property from confiscation by others, including the government, are too important to be left to the “rule of the majority.” Like other basic liberties, they deserve constitutional, procedural, and structural protection.

The Economic Freedom of the World Index

From the very beginning, the construction of the Economic Freedom of the World (EFW) index was based on three important methodological principles. First, objective components are preferred to those that involve surveys or value judgments. However, given the

¹ For additional analysis of why democratic political decision making will often lead to counterproductive economic activities, see Chapter 6 of James Gwartney, Richard Stroup, Russell Sobel, and David Macpherson, *Economics: Private and Public Choice* (11th edition), (Thomson South-Western, 2006).

multi-dimensional nature of economic freedom and the importance of legal and regulatory elements, it is sometimes necessary to use data based on surveys and expert panels. But, to the fullest extent possible, the index will use objective components. Second, the data used to construct index ratings are from external sources such as the International Monetary Fund (IMF), 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 used only rarely and only when the data are unavailable from international sources. Importantly, the value judgments of neither the authors nor others in the EFW network are 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 Appendix 1: Explanatory Notes and Data Sources (page 183). The entire data set used in the construction of the index is freely available to researchers at <<http://www.freetheworld.com>>.

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: Expenditures, Taxes, and Enterprises
- 2 Legal Structure and Security of Property Rights
- 3 Access to Sound Money
- 4 Freedom to Trade Internationally
- 5 Regulation of Credit, Labor, and Business.

Within the five major areas, there are 23 components in this year's index. Many of those components are themselves made up of several sub-components. Counting the various sub-components, this year's index is based on 42 distinct pieces of data. 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 averaged to derive ratings for each of the five areas; in turn, the summary rating is the average of the five area ratings. The following section provides an overview of the five major areas.

1 Size of Government: Expenditures, Taxes and Enterprises

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 rather than government enterprises to produce goods and services. Government firms 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 risk 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 (Di) the top marginal income tax rate and (Dii) the top marginal income and payroll tax rate and the income threshold at which the top marginal income-tax rate applies. These two sub-components are averaged to calculate 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 Structure and Security of Property Rights

Protection of persons and their rightfully acquired property is a central element of both economic freedom and a civil society. Indeed, it is the most important function of government. Area 2 focuses on this issue. The key

Exhibit 1.1: The Areas and Components of the EFW Index

1 Size of Government: Expenditures, Taxes, and Enterprises

- A General government consumption spending as a percentage of total consumption
- B Transfers and subsidies as a percentage of GDP
- C Government enterprises and investment
- D Top marginal tax rate
 - i Top marginal income tax rate
 - ii Top marginal income and payroll tax rates

2 Legal Structure and Security of Property Rights

- A Judicial independence (GCR)
- B Impartial courts (GCR)
- C Protection of property rights (GCR)
- D Military interference in rule of law and the political process (ICRG)
- E Integrity of the legal system (ICRG)
- F Legal enforcement of contracts (DB)
- G Regulatory restrictions on the sale of real property (DB)

3 Access to Sound Money

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

4 Freedom to Trade Internationally

- A Taxes on international trade
 - i Revenue from taxes on international trade as a percentage of exports and imports
 - ii Mean tariff rate
 - iii Standard deviation of tariff rates

B Regulatory trade barriers

- i Non-tariff trade barriers (GCR)
- ii Compliance cost of importing and exporting (DB)

C Size of trade sector relative to expected

D Black-market exchange rates

E International capital market controls

- i Foreign ownership / investment restrictions (GCR)
- ii Capital controls

5 Regulation of Credit, Labor, and Business

A Credit market regulations

- i Ownership of banks
- ii Foreign bank competition
- iii Private sector credit
- iv Interest rate controls/negative real interest rates

B Labor market regulations

- i Minimum wage (DB)
- ii Hiring and firing regulations (GCR)
- iii Centralized collective bargaining (GCR)
- iv Mandated cost of hiring (DB)
- v Mandated cost of worker dismissal (DB)
- vi Conscription

C Business regulations

- i Price controls
- ii Administrative requirements (GCR)
- iii Bureaucracy costs (GCR)
- iv Starting a business (DB)
- v Extra payments / bribes (GCR)
- vi Licensing restrictions (DB)
- vii Cost of tax compliance (DB)

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* data set.

Security of property rights, protected by the rule of law, is essential to economic freedom. Freedom to exchange, for example, is meaningless if individuals do not have secure rights to property, including the fruits of their labor. Failure of a country's legal system to provide for the security of property rights, enforcement of contracts, and the fair and peaceful settlement of disputes will undermine the operation of a market-exchange system. If 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 will be eroded.

3 Access to 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 use money creation to finance their expenditures, in effect, they are expropriating the property and violating the economic freedom of their citizens.

It makes little difference who provides sound money. The important thing is that individuals have access to it. 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 use of alternative currencies should citizens want to use them.

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. Of course, 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.

Responding to protectionist critics and special-interest politics, 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 retard 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.

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

5 Regulation of Credit, Labor, and Business

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 this topic.

Regulatory restraints that limit the freedom of exchange in credit, labor, and product markets are included

in the index. The first component (5A) reflects conditions in the domestic credit market. The first two sub-components provide evidence on the extent to which the banking industry is dominated by private firms and whether foreign banks are permitted to compete in the market. 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 credit market. 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 nonparticipating parties, and conscription. The labor-market component (5B) is designed to measure the extent to which these restraints upon economic freedom are present across countries. 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 regulatory restraints and bureaucratic procedures limit competition and the operation of markets. 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 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 whether they work together like a team. Put another way, they may be linked more like the wheels, motor, transmission, drive shaft, and frame of a car. Just as it is the bundle of these factors that underlies the mobility of an auto, it may be a bundle of factors that underlies the composition of 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.

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 may 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 prudent.

There have been 38 components and sub-components in the EFW index for the past several years. Two of these components (interest-rate controls and unemployment benefits) have been dropped from this year’s index because they are no longer available from either their original source or elsewhere. In two other cases, (compliance costs of clearing customs and the cost of starting a business) a measure that we believe is superior has been substituted for the prior components. Finally, six new components are incorporated into this year’s index. The six additions along with the two deletions and two replacements mean that the index now has 42 components and sub-components

rather than 38. All of these changes relate to the legal and regulatory elements of the index, the elements that are most difficult to measure.

The methodology and basic structure of the index remain unchanged. As in recent years, the index will continue to provide both a summary rating and ratings for the same five major areas. The components for Areas 1 and 3 remain the same, and only minor changes were made to two sub-components in area 4.

The World Bank's *Doing Business* Data Set

All of the eight new and substitute components incorporated into the index involve the use of ratings from the World Bank's *Doing Business* data set. In Exhibit 1.1, the DB label indicates these components. The *Doing Business* project has generated one of the most useful cross-country data sets developed in many years. The project focuses on the nature and quality of the legal and regulatory environment.

The methodology of the DB project is a modified form of that employed by Hernando de Soto almost two decades ago.² De Soto had associates go through the required procedures to start a generic business legally in several locations and kept track of the time and monetary cost. Like de Soto, the World Bank begins with a generic experiment, such as starting a business, dismissing a worker, or collecting a contractual debt. The various requirements that must be met in order to legally undertake the activity are identified and leading law firms and other professionals that generally handle such matters are contacted and asked to provide estimates of both the time (measured in days) and money cost that would typically be incurred complying with the mandated regulations. Special care is taken to ensure that the generic cases are comparable across both countries and time periods. The focus of the cases is on business activities that are highly relevant to small and medium-size domestic companies rather than foreigners doing business in the country. In this respect, the data are reflective of how the legal and regulatory environment affects the activities of domestic entrepreneurs.

How consistent the legal and regulatory environment is with economic freedom is particularly difficult to measure. In the past, we have relied extensively on survey data to address these highly important areas. Compared to survey data, the DB data are more objective. From our viewpoint, this makes the data more attractive. The DB data are

available for almost all of the countries covered by the EFW index. In our judgment, inclusion of the eight components from this source into this year's EFW index enhances both the breadth and depth of the EFW measure.

Summary Economic Freedom Ratings, 2005

Exhibit 1.2 presents summary economic freedom ratings, sorted from highest to lowest. These ratings are for the year 2005, 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 ten are New Zealand, Switzerland, United States, United Kingdom, Canada, Estonia, Ireland, and Australia. The rankings of other major countries include Germany (18th), Japan (22nd), South Korea (32nd), Spain and Mexico (44th), France and Italy (52nd), India (69th), China (86th), Brazil (101st), Russia (112th), and Nigeria (117th). The ten lowest-rated countries are Niger, Togo, Burundi, Venezuela, Central African Republic, Republic of Congo, Angola, Democratic Republic of Congo, Myanmar, and in last place, Zimbabwe.

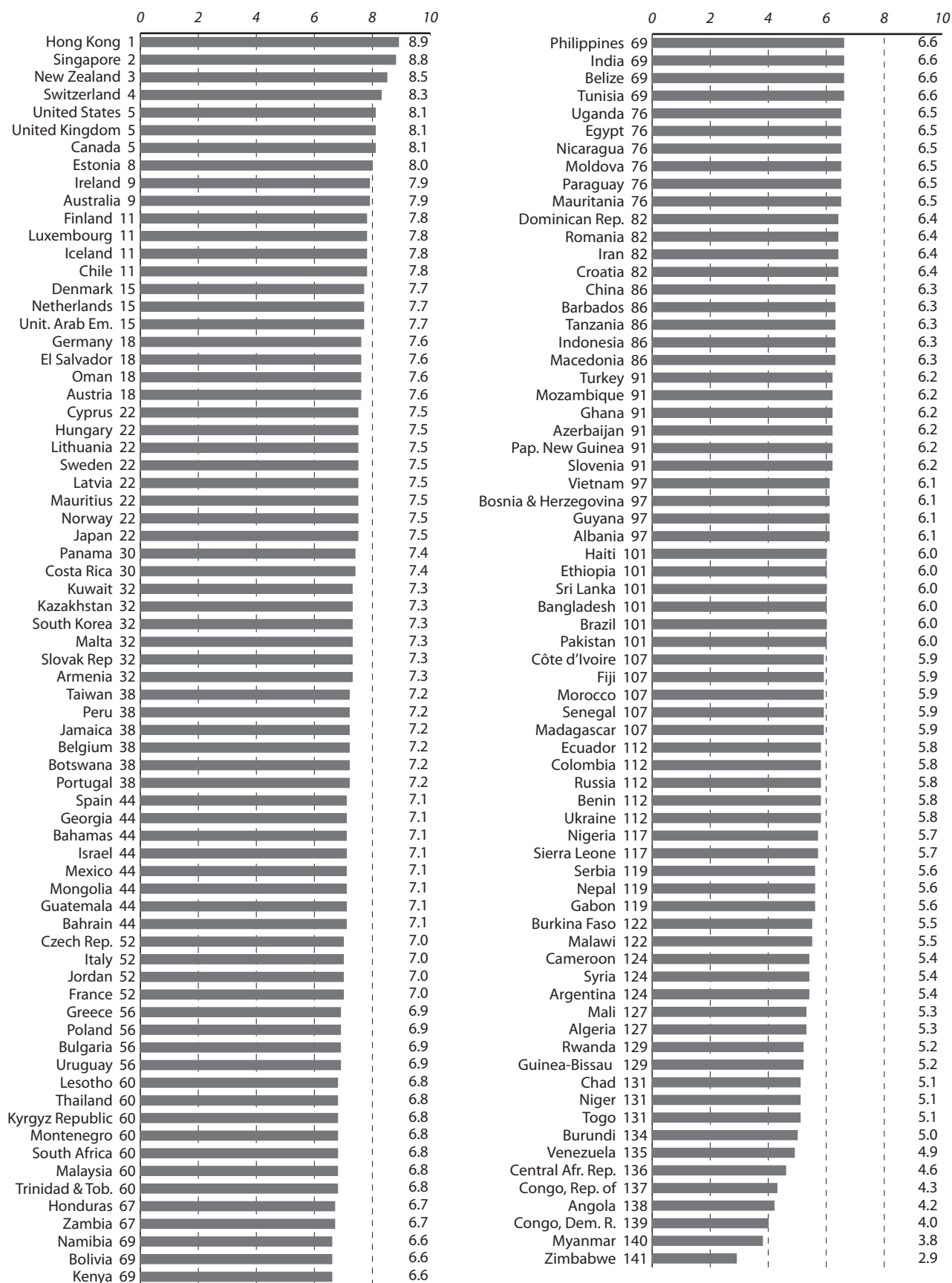
This year 11 additional countries have been added to the index. These countries are Angola (4.2, 138th), Bosnia and Herzegovina (6.1, 97th), Burkina Faso (5.5, 122nd), Ethiopia (6.0, 101st), Kazakhstan (7.3, 32nd), Kyrgyz Republic (6.9, 60th), Lesotho (6.8, 60th), Mauritania (6.5, 76th), Moldova (6.5, 76th), Montenegro (6.8, 60th), and Serbia (5.6, 119th).³ This brings the total number of countries rated to 141.

The criteria for adding new countries are fairly strict and the decision is dictated by the availability of the requisite data. In particular, countries that are not reported in the IMF's standard statistical reports, covered by the *Global Competitiveness Report*, or in the World Bank's *Doing Business* data set are unlikely to be included in the EFW index. Nevertheless, we expect to add additional countries as the data become available.

³ Montenegro was in a loose confederation with Serbia until it became independent in June 2006. Most of the data sources report information for the combined "Serbia and Montenegro" in 2005 but we believe most of the data reflect the situation in Serbia rather than the comparatively smaller and mostly independent Montenegro. Hence we are denoting this entry simply as "Serbia." Montenegro's 2005 ratings were provided by The Center for Entrepreneurship and Economic Development in Montenegro.

² Hernando de Soto, *The Other Path: The Economic Answer to Terrorism* (Basic Books, 1989).

Exhibit 1.2: Summary Economic Freedom Ratings, 2005



The EFW index is calculated back to 1970 as the availability of data allows; see the Country Data Tables (Chapter 3, page 39 ff) 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), 2005

Exhibit 1.3 (pages 16–18) presents the ratings (and, in parentheses, the 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. The high-income industrial economies generally rank quite high for Legal Structure and Security of Property Rights (Area 2), Access to Sound Money (Area 3), and Freedom to Trade Internationally (Area 4). Their ratings were lower, however, for Size of Government: Expenditures, Taxes, and Enterprises (Area 1) and Regulation of Credit, Labor, and Business (Area 5). This was particularly true for western European countries.

On the other hand, a number of developing nations show the opposite pattern. Bolivia makes an interesting case study. It shows that reasonably sized government alone is not enough to reap the benefits of 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 required. Bolivia ranked quite highly at 33rd in Size of Government: Expenditures, Taxes, and Enterprises (Area 1) but scored poorly in all the other categories, especially Legal Structure and Security of Property Rights (Area 2), where it placed 113th, and in Regulation (Area 5), where it ranked 101st. Despite relatively high rankings in a couple of areas, Bolivia's overall ranking was only 69th.

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 former Soviet bloc, though some of these nations have made strides toward improvement. Many Latin American and Southeast Asian nations 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 categories, even though several have reasonably sized governments and sound money.

The economies most open to foreign trade were Hong Kong and Singapore, followed by a number of European nations such as Ireland, the Netherlands, and Belgium. Some former Soviet-bloc nations also rank fairly high in openness to trade: Slovak Republic (6th), Estonia (8th), and Czech Republic (10th). Chile is also highly open to foreign trade, ranking 4th in this area. The least regulated countries—those at the top in Regulation of Credit, Labor, and Business (Area 5)—were New Zealand, Hong Kong, Singapore, and Iceland.

The Chain-Linked Summary Index, 1970–2005

One of the most valuable aspects of this index of economic freedom is that, for many countries, it can be calculated back to 1970: 53 countries have ratings in 1970; 70 in 1975; 102 in 1980, 109 in 1985, 113 in 1990, 123 for 1995 through 2002, 127 in 2003, 130 in 2004, and 141 in 2005. These longitudinal data are useful for examining the impact of economic freedom over time.

One problem that arises, however, is that the underlying data are more complete in recent years than in earlier years. As a result, changes in the index ratings over time may reflect the fact that some components are missing in some years but not in others. This is especially important to note this year because of the changes being made to the index. The problem is similar to comparing GDP or a price index over time when we know that the underlying goods and services are constantly changing. The problem of missing or changing components threatens the comparability of the index ratings over time.

In order to correct for this problem, we have constructed a chain-linked, summary economic freedom index that is based on the 2000 rating as a base year. Changes to the index going backward (and forward) in time are then based only on changes in components that were present in adjacent years. For instance, the 1995 chain-linked rating is based on the 2000 rating but is adjusted based on the changes in the underlying data between 1995 and 2000 for those components that were present in both years. If the common components in 1995 were the same as in 2000, then no adjustment was made to the 1995 summary rating. However, if the 1995 components were lower than those for 2000 for the overlapping components between the two years, then the 1995 summary rating was adjusted downward proportionally to reflect this fact. Correspondingly, in cases where the

Exhibit 1.3: Area Economic Freedom Ratings (and Rankings), 2005

	AREAS															
	1 Size of Government		2 Legal Structure & Security of Property Rights		3 Access to Sound Money		4 Freedom to Trade Internationally		5 Regulation of Credit, Labor, & Business		5A Credit Market Regulations		5B Labor Market Regulations		5C Business Regulations	
Albania	5.4	(91)	4.9	(97)	9.2	(41)	5.4	(124)	5.6	(112)	6.7	(114)	5.3	(96)	5.0	(94)
Algeria	3.7	(135)	5.3	(87)	6.8	(108)	5.7	(112)	4.9	(130)	4.6	(139)	4.9	(105)	5.2	(85)
Angola			3.4	(131)	1.3	(140)	7.2	(47)	4.9	(129)	5.9	(127)	6.5	(42)	2.4	(136)
Argentina	6.1	(68)	4.6	(106)	5.4	(134)	5.9	(103)	4.8	(134)	5.9	(125)	3.6	(135)	4.9	(100)
Armenia	7.7	(15)	5.6	(79)	9.4	(33)	6.7	(68)	6.8	(50)	8.8	(36)	7.0	(22)	4.7	(104)
Australia	6.4	(55)	8.8	(10)	9.4	(30)	7.1	(49)	7.6	(17)	8.7	(37)	6.7	(35)	7.5	(10)
Austria	5.2	(100)	8.7	(13)	9.5	(16)	7.7	(19)	6.7	(57)	8.5	(54)	4.6	(112)	7.2	(17)
Azerbaijan	5.7	(81)	5.6	(75)	7.2	(95)	6.4	(85)	6.0	(102)	7.0	(104)	6.3	(49)	4.6	(112)
Bahamas	7.9	(13)	8.5	(15)	6.8	(109)	4.4	(135)	8.1	(6)	9.5	(8)				
Bahrain	6.6	(50)	5.6	(76)	8.7	(58)	7.4	(30)	6.9	(48)	9.3	(15)	6.8	(30)	4.6	(110)
Bangladesh	8.0	(9)	3.7	(126)	6.7	(117)	5.5	(121)	6.1	(93)	7.0	(105)	6.8	(29)	4.5	(115)
Barbados	5.3	(96)	8.0	(20)	6.4	(121)	5.1	(129)	6.8	(56)	8.3	(59)	6.7	(36)	5.3	(82)
Belgium	4.3	(128)	7.5	(27)	9.5	(18)	8.1	(9)	6.5	(74)	7.8	(85)	4.8	(109)	7.0	(21)
Belize	4.6	(121)	6.4	(53)	8.4	(70)	5.0	(133)	8.6	(2)	9.3	(16)				
Benin	5.9	(72)	4.8	(100)	6.7	(114)	5.2	(127)	6.4	(80)	9.1	(27)	5.5	(85)	4.7	(107)
Bolivia	7.2	(33)	4.3	(113)	8.8	(56)	6.9	(61)	6.0	(101)	7.8	(84)	5.4	(90)	4.8	(103)
Bosnia & Herz.	6.0	(69)	4.0	(120)	8.1	(77)	5.9	(101)	6.6	(67)	9.5	(9)	5.4	(86)	5.0	(97)
Botswana	5.0	(107)	7.4	(32)	9.0	(47)	6.9	(60)	7.6	(18)	9.4	(12)	7.2	(21)	6.1	(46)
Brazil	6.4	(56)	5.2	(88)	7.6	(91)	6.3	(87)	4.3	(140)	4.9	(138)	3.7	(134)	4.3	(119)
Bulgaria	5.8	(75)	5.7	(71)	8.9	(50)	7.2	(46)	6.7	(59)	9.2	(24)	5.9	(64)	5.0	(93)
Burkina Faso			4.1	(119)	6.9	(103)	5.1	(130)	5.9	(103)	8.7	(42)	4.6	(114)	4.6	(109)
Burundi	5.6	(83)	2.9	(135)	6.6	(119)	3.3	(138)	6.6	(70)	7.8	(80)	7.4	(15)	4.5	(116)
Cameroon	5.5	(86)	3.7	(124)	6.9	(106)	5.5	(120)	5.5	(118)	7.3	(97)	6.0	(57)	3.2	(133)
Canada	6.8	(47)	8.6	(14)	9.7	(5)	7.5	(22)	7.8	(15)	8.6	(49)	7.0	(23)	7.8	(9)
Central Afr. Rep.	4.3	(130)	2.8	(136)	7.1	(98)	3.2	(139)	5.4	(122)	7.2	(100)	4.8	(108)	4.1	(128)
Chad	6.4	(54)	2.7	(137)	6.0	(128)	5.7	(113)	4.9	(131)	5.7	(130)	4.9	(106)	4.1	(127)
Chile	6.3	(58)	7.1	(35)	9.3	(39)	8.2	(4)	7.8	(13)	9.0	(31)	7.3	(18)	7.1	(19)
China	5.1	(106)	5.8	(63)	8.2	(73)	7.6	(21)	5.0	(128)	6.5	(116)	4.5	(119)	3.8	(130)
Colombia	4.6	(119)	5.0	(92)	7.8	(86)	5.6	(115)	6.1	(94)	7.5	(92)	5.0	(102)	5.8	(59)
Congo, Dem. R.	5.3	(94)	1.8	(141)	4.0	(138)	5.4	(122)	3.3	(141)	2.7	(141)	4.3	(126)	3.0	(135)
Congo, Rep. of	4.3	(129)	2.6	(138)	4.4	(137)	5.6	(117)	4.5	(138)	5.4	(133)	5.0	(103)	3.3	(132)
Costa Rica	7.8	(14)	6.9	(41)	8.7	(59)	7.3	(34)	6.0	(100)	6.9	(109)	5.2	(97)	5.9	(53)
Côte d'Ivoire	8.1	(8)	2.5	(140)	6.9	(104)	5.8	(107)	6.2	(87)	7.4	(94)	5.3	(94)	6.0	(49)
Croatia	4.4	(125)	5.6	(74)	8.2	(75)	6.5	(77)	7.0	(42)	9.2	(21)	6.4	(44)	5.3	(79)
Cyprus	7.4	(25)	7.6	(25)	9.4	(34)	6.9	(57)	6.4	(82)	8.3	(61)	5.6	(78)	5.1	(88)
Czech Rep.	4.5	(124)	6.8	(44)	9.1	(44)	8.0	(10)	6.8	(51)	9.3	(18)	5.9	(63)	5.2	(84)
Denmark	4.0	(132)	9.4	(1)	9.5	(23)	7.7	(17)	8.1	(7)	8.6	(46)	7.4	(14)	8.2	(4)
Dominican Rep.	8.5	(3)	4.5	(107)	6.0	(127)	6.5	(79)	6.4	(78)	7.8	(79)	5.6	(80)	5.9	(55)
Ecuador	7.3	(28)	4.1	(118)	5.9	(131)	6.6	(74)	5.3	(124)	6.4	(121)	4.4	(120)	5.0	(92)
Egypt	7.1	(34)	5.7	(70)	8.9	(51)	6.3	(88)	4.6	(136)	5.3	(135)	4.5	(118)	4.1	(123)
El Salvador	9.3	(1)	5.3	(86)	9.6	(11)	6.7	(64)	7.2	(32)	9.3	(14)	6.0	(58)	6.3	(36)
Estonia	7.0	(38)	7.7	(23)	9.5	(28)	8.1	(8)	7.8	(16)	9.7	(3)	6.3	(48)	7.4	(14)
Ethiopia	7.5	(21)	4.4	(111)	6.9	(105)	5.1	(131)	6.2	(89)	5.9	(128)	7.4	(16)	5.4	(76)
Fiji	4.5	(122)	5.3	(84)	7.0	(101)	5.6	(119)	7.2	(35)	7.6	(88)	6.4	(43)	7.4	(13)
Finland	5.0	(112)	9.0	(7)	9.6	(10)	7.5	(24)	8.0	(8)	9.4	(13)	5.6	(81)	9.0	(1)
France	3.7	(134)	7.5	(26)	9.6	(13)	7.2	(40)	6.7	(58)	8.2	(66)	5.1	(98)	6.8	(25)
Gabon	3.8	(133)	4.3	(114)	7.0	(102)	5.4	(123)	7.3	(31)	7.4	(95)				

Exhibit 1.3 (continued): Area Economic Freedom Ratings (and Rankings), 2005

	AREAS									
	1 Size of Government	2 Legal Structure & Security of Property Rights	3 Access to Sound Money	4 Freedom to Trade Internationally	5 Regulation of Credit, Labor, & Business	5A Credit Market Regulations	5B Labor Market Regulations	5C Business Regulations		
Georgia	7.9 (11)	4.7 (103)	9.0 (48)	6.7 (67)	7.5 (21)	9.2 (22)	7.4 (13)	5.9 (54)		
Germany	5.7 (76)	8.9 (8)	9.5 (22)	7.8 (15)	6.2 (88)	7.0 (106)	4.3 (124)	7.3 (15)		
Ghana	6.4 (57)	5.0 (93)	7.3 (93)	5.3 (126)	6.9 (47)	7.9 (75)	6.6 (39)	6.3 (37)		
Greece	6.1 (65)	6.7 (45)	9.6 (12)	6.3 (93)	5.8 (107)	7.2 (99)	4.1 (129)	6.0 (48)		
Guatemala	8.2 (5)	5.2 (89)	9.1 (43)	6.3 (86)	6.5 (73)	8.1 (71)	5.7 (75)	5.8 (58)		
Guinea-Bissau	5.0 (108)	3.6 (128)	6.0 (130)	4.8 (134)	6.6 (71)	9.1 (29)				
Guyana	3.0 (137)	4.8 (98)	8.0 (81)	7.4 (32)	7.3 (29)	8.2 (67)	8.1 (6)	5.7 (63)		
Haiti	6.3 (61)	3.0 (133)	7.8 (85)	6.2 (95)	6.8 (54)	9.0 (32)	7.2 (20)	4.1 (125)		
Honduras	7.3 (29)	4.2 (117)	8.9 (52)	6.8 (63)	6.4 (79)	8.7 (43)	5.6 (82)	5.1 (90)		
Hong Kong	9.2 (2)	8.0 (19)	9.5 (20)	9.4 (1)	8.6 (3)	9.2 (23)	8.7 (1)	7.8 (8)		
Hungary	6.3 (59)	6.7 (47)	9.4 (35)	7.9 (13)	7.3 (27)	9.5 (6)	5.9 (65)	6.5 (32)		
Iceland	6.9 (40)	9.2 (4)	8.7 (62)	5.8 (109)	8.3 (5)	8.2 (65)	7.9 (9)	8.6 (2)		
India	7.7 (17)	6.7 (46)	6.9 (107)	6.4 (84)	5.4 (123)	5.9 (126)	4.8 (107)	5.3 (77)		
Indonesia	6.9 (39)	3.9 (121)	7.5 (92)	7.5 (26)	5.5 (117)	6.7 (113)	5.3 (91)	4.5 (114)		
Iran	6.4 (53)	6.5 (51)	8.6 (67)	5.2 (128)	5.2 (125)	6.5 (115)	3.8 (133)	5.2 (87)		
Ireland	6.1 (67)	8.3 (18)	9.7 (8)	8.4 (3)	7.3 (28)	8.7 (39)	5.8 (72)	7.5 (11)		
Israel	5.3 (93)	6.6 (50)	9.3 (36)	7.8 (16)	6.7 (64)	6.7 (111)	6.1 (54)	7.1 (20)		
Italy	5.9 (70)	6.4 (52)	9.5 (17)	7.1 (51)	6.1 (95)	7.9 (78)	4.4 (122)	5.9 (51)		
Jamaica	7.7 (18)	6.1 (58)	8.7 (63)	6.9 (58)	6.7 (62)	8.4 (58)	6.0 (59)	5.6 (67)		
Japan	6.2 (63)	8.3 (17)	9.5 (21)	6.4 (83)	7.0 (44)	6.9 (108)	6.8 (28)	7.1 (18)		
Jordan	4.8 (116)	6.9 (43)	9.3 (37)	7.5 (28)	6.5 (75)	8.3 (64)	5.5 (83)	5.6 (65)		
Kazakhstan	8.2 (6)	6.1 (59)	7.9 (84)	7.1 (50)	7.4 (23)	8.6 (44)	7.5 (12)	6.2 (43)		
Kenya	7.1 (36)	4.9 (95)	8.6 (66)	6.3 (90)	6.3 (83)	7.6 (89)	5.8 (73)	5.6 (68)		
Kuwait	6.5 (51)	7.4 (31)	8.9 (49)	6.6 (71)	7.3 (30)	8.6 (50)	7.5 (11)	5.7 (62)		
Kyrgyz Republic	7.9 (10)	3.7 (123)	8.6 (64)	6.6 (72)	7.2 (34)	8.7 (38)	7.3 (19)	5.5 (72)		
Latvia	6.8 (43)	7.0 (39)	8.7 (60)	7.4 (31)	7.5 (22)	9.1 (28)	6.9 (25)	6.4 (33)		
Lesotho	7.7 (16)	5.5 (80)	8.2 (76)	6.4 (81)	6.4 (81)	9.0 (30)	5.8 (70)	4.3 (121)		
Lithuania	6.8 (46)	6.9 (42)	8.9 (53)	7.5 (23)	7.5 (20)	9.7 (2)	6.2 (53)	6.7 (30)		
Luxembourg	5.3 (95)	8.7 (11)	9.7 (4)	7.9 (12)	7.4 (24)	8.7 (41)	6.6 (38)	6.9 (23)		
Macedonia	5.2 (102)	4.2 (116)	8.3 (72)	6.4 (80)	7.1 (36)	9.3 (20)	5.9 (67)	6.2 (41)		
Madagascar	7.0 (37)	3.7 (125)	7.0 (100)	6.0 (99)	5.6 (115)	7.5 (91)	5.1 (99)	4.2 (122)		
Malawi	4.3 (127)	5.3 (85)	6.3 (122)	5.6 (114)	5.7 (110)	7.2 (101)	5.4 (89)	4.6 (111)		
Malaysia	5.4 (92)	7.3 (33)	6.8 (110)	7.4 (29)	7.1 (38)	8.6 (47)	6.9 (26)	5.6 (64)		
Mali	4.6 (120)	4.9 (96)	6.3 (123)	5.8 (105)	5.1 (127)	6.4 (120)	4.7 (111)	4.1 (124)		
Malta	5.8 (74)	7.7 (24)	8.8 (55)	7.5 (27)	6.8 (55)	8.8 (35)	6.7 (33)	4.8 (102)		
Mauritania		5.4 (83)	7.7 (88)	6.3 (89)	6.4 (77)	9.4 (11)	5.8 (68)	4.0 (129)		
Mauritius	7.4 (24)	6.2 (56)	9.5 (25)	7.2 (45)	7.2 (33)	8.6 (51)	6.9 (27)	6.1 (47)		
Mexico	7.9 (12)	5.7 (72)	8.1 (79)	7.2 (48)	6.7 (63)	9.1 (25)	5.8 (71)	5.1 (89)		
Moldova	6.8 (44)	5.6 (77)	6.7 (115)	6.8 (62)	6.6 (69)	7.9 (77)	6.3 (46)	5.6 (66)		
Mongolia	6.3 (60)	5.8 (66)	8.7 (61)	7.2 (39)	7.4 (26)	9.3 (17)	7.0 (24)	5.8 (57)		
Montenegro	5.0 (111)	6.1 (57)	9.4 (32)	7.3 (37)	6.3 (84)	9.7 (4)	4.3 (125)	5.0 (95)		
Morocco	5.2 (104)	6.3 (54)	7.1 (97)	5.8 (108)	5.2 (126)	6.5 (117)	4.4 (123)	4.7 (108)		
Mozambique	5.7 (80)	4.5 (109)	9.1 (45)	6.1 (96)	5.7 (109)	8.1 (69)	4.2 (127)	4.9 (98)		
Myanmar	5.1 (105)	2.6 (139)	3.9 (139)	1.4 (141)	6.2 (86)	5.3 (134)				
Namibia	5.2 (97)	7.4 (28)	6.5 (120)	6.2 (94)	7.8 (14)	9.6 (5)	7.9 (10)	5.8 (56)		
Nepal	5.2 (103)	4.7 (104)	6.6 (118)	5.6 (118)	5.7 (111)	6.8 (110)	4.9 (104)	5.3 (78)		
Netherlands	4.9 (115)	9.2 (5)	9.5 (26)	8.1 (7)	6.9 (46)	8.4 (57)	6.0 (60)	6.4 (34)		

Exhibit 1.3 (continued): Area Economic Freedom Ratings (and Rankings), 2005

	AREAS															
	1 Size of Government		2 Legal Structure & Security of Property Rights		3 Access to Sound Money		4 Freedom to Trade Internationally		5 Regulation of Credit, Labor, & Business		5A Credit Market Regulations		5B Labor Market Regulations		5C Business Regulations	
New Zealand	6.7	(48)	9.3	(3)	9.6	(9)	7.9	(14)	8.8	(1)	9.9	(1)	8.1	(5)	8.2	(3)
Nicaragua	5.6	(84)	4.6	(105)	8.8	(54)	6.9	(59)	6.7	(60)	8.0	(73)	6.5	(41)	5.5	(71)
Niger	5.4	(90)	4.5	(108)	6.7	(113)	4.3	(136)	4.6	(137)	6.0	(123)	3.5	(136)	4.3	(120)
Nigeria	6.2	(62)	3.0	(134)	6.7	(116)	6.7	(66)	6.0	(98)	7.5	(90)	6.4	(45)	4.1	(126)
Norway	4.7	(118)	9.3	(2)	9.3	(38)	6.6	(75)	7.6	(19)	8.7	(40)	6.2	(52)	7.8	(7)
Oman	5.7	(79)	7.7	(22)	9.4	(31)	7.3	(38)	8.0	(9)	9.3	(19)	8.0	(8)	6.7	(29)
Pakistan	7.3	(30)	4.4	(112)	6.0	(126)	5.8	(106)	6.3	(85)	8.3	(62)	6.1	(55)	4.6	(113)
Panama	8.3	(4)	5.6	(73)	9.5	(24)	6.9	(56)	6.8	(52)	8.9	(33)	5.7	(76)	5.8	(60)
Pap. New Guinea	6.1	(64)	4.4	(110)	7.2	(96)	6.1	(97)	7.0	(40)	8.0	(74)	6.3	(47)	6.7	(27)
Paraguay	7.5	(23)	3.8	(122)	8.5	(69)	7.2	(41)	5.5	(120)	7.1	(103)	4.2	(128)	5.2	(86)
Peru	7.5	(20)	5.1	(91)	9.7	(6)	7.2	(44)	6.6	(68)	8.4	(56)	6.1	(56)	5.3	(80)
Philippines	7.1	(35)	5.0	(94)	7.9	(82)	7.4	(33)	5.8	(108)	7.3	(98)	4.6	(113)	5.5	(73)
Poland	5.9	(71)	5.8	(67)	9.3	(40)	6.7	(65)	6.6	(65)	8.3	(60)	6.0	(62)	5.6	(69)
Portugal	5.7	(77)	7.4	(30)	9.5	(27)	7.0	(53)	6.2	(90)	8.1	(68)	4.5	(117)	5.9	(52)
Romania	5.5	(88)	5.7	(69)	8.1	(78)	7.1	(52)	5.5	(119)	6.5	(118)	4.4	(121)	5.6	(70)
Russia	5.2	(98)	5.5	(81)	6.0	(129)	6.3	(92)	6.1	(92)	6.9	(107)	6.6	(40)	4.8	(101)
Rwanda	5.0	(109)	3.6	(129)	7.7	(89)	4.2	(137)	5.6	(113)	5.4	(132)	5.4	(88)	6.1	(45)
Senegal	6.1	(66)	4.3	(115)	7.1	(99)	5.9	(102)	5.9	(105)	7.5	(93)	5.3	(95)	5.0	(96)
Serbia	5.7	(78)	4.7	(102)	4.7	(136)	6.0	(100)	6.6	(66)	8.6	(48)	6.2	(50)	5.1	(91)
Sierra Leone	5.5	(87)	4.8	(101)	7.9	(83)	5.4	(125)	4.8	(133)	5.2	(136)	3.9	(132)	5.5	(74)
Singapore	8.1	(7)	8.4	(16)	9.8	(2)	9.3	(2)	8.3	(4)	8.3	(63)	8.4	(2)	8.1	(5)
Slovak Rep	5.0	(110)	6.7	(48)	9.2	(42)	8.2	(6)	7.4	(25)	9.1	(26)	6.7	(32)	6.3	(38)
Slovenia	2.4	(138)	6.0	(60)	8.8	(57)	7.2	(43)	6.4	(76)	7.8	(81)	5.5	(84)	6.0	(50)
South Africa	5.5	(89)	7.0	(37)	8.0	(80)	6.6	(73)	6.8	(53)	8.5	(53)	5.6	(77)	6.2	(44)
South Korea	6.4	(52)	7.2	(34)	9.5	(19)	6.5	(78)	7.0	(45)	8.8	(34)	5.8	(74)	6.3	(40)
Spain	5.2	(101)	7.1	(36)	9.6	(14)	7.2	(42)	6.7	(61)	8.4	(55)	5.0	(101)	6.6	(31)
Sri Lanka	6.9	(41)	5.1	(90)	6.1	(125)	6.3	(91)	5.6	(116)	6.7	(112)	4.7	(110)	5.2	(83)
Sweden	4.2	(131)	8.9	(9)	9.7	(3)	7.7	(18)	7.0	(41)	8.6	(52)	4.6	(116)	7.9	(6)
Switzerland	7.4	(26)	9.0	(6)	9.7	(7)	7.3	(36)	7.9	(12)	8.1	(70)	8.1	(3)	7.4	(12)
Syria	4.8	(117)	4.8	(99)	7.7	(87)	5.0	(132)	4.8	(135)	4.4	(140)	4.6	(115)	5.3	(81)
Taiwan	5.7	(82)	7.0	(38)	9.6	(15)	8.0	(11)	6.0	(97)	5.5	(131)	5.8	(69)	6.7	(28)
Tanzania	4.9	(114)	5.8	(64)	9.0	(46)	5.7	(111)	6.0	(99)	7.9	(76)	5.3	(92)	4.7	(106)
Thailand	6.9	(42)	6.3	(55)	6.8	(111)	7.3	(35)	6.9	(49)	7.6	(87)	6.7	(31)	6.2	(42)
Togo	4.5	(123)	3.5	(130)	6.7	(112)	5.9	(104)	4.9	(132)	5.7	(129)	3.9	(131)	4.9	(99)
Trinidad & Tob.	6.8	(45)	5.7	(68)	8.4	(71)	6.9	(55)	6.0	(96)	7.2	(102)	6.2	(51)	4.7	(105)
Tunisia	5.2	(99)	7.4	(29)	7.3	(94)	6.0	(98)	7.0	(43)	8.0	(72)	6.0	(61)	6.9	(22)
Turkey	7.3	(27)	6.6	(49)	4.9	(135)	6.7	(69)	5.6	(114)	6.5	(119)	4.0	(130)	6.3	(39)
Uganda	5.9	(73)	5.4	(82)	8.5	(68)	5.8	(110)	7.1	(37)	7.8	(83)	8.1	(7)	5.5	(75)
Ukraine	5.0	(113)	5.6	(78)	5.8	(133)	6.6	(76)	5.8	(106)	7.3	(96)	5.9	(66)	4.3	(118)
Unit. Arab Em.	7.5	(22)	6.9	(40)	8.6	(65)	8.2	(5)	7.1	(39)	7.8	(82)	6.6	(37)	6.7	(26)
United Kingdom	6.7	(49)	8.7	(12)	9.4	(29)	7.7	(20)	7.9	(11)	9.5	(10)	7.4	(17)	6.8	(24)
United States	7.6	(19)	7.7	(21)	9.8	(1)	7.5	(25)	8.0	(10)	8.6	(45)	8.1	(4)	7.2	(16)
Uruguay	7.2	(32)	5.9	(61)	8.2	(74)	7.0	(54)	5.9	(104)	6.0	(124)	5.4	(87)	6.4	(35)
Venezuela	4.3	(126)	3.3	(132)	5.8	(132)	5.6	(116)	5.4	(121)	7.7	(86)	5.3	(93)	3.1	(134)
Vietnam	5.6	(85)	5.8	(65)	6.2	(124)	6.6	(70)	6.5	(72)	9.5	(7)	5.6	(79)	4.4	(117)
Zambia	7.3	(31)	5.9	(62)	7.6	(90)	6.4	(82)	6.2	(91)	6.1	(122)	6.7	(34)	5.7	(61)
Zimbabwe	3.4	(136)	3.7	(127)	0.0	(141)	2.8	(140)	4.5	(139)	5.1	(137)	5.0	(100)	3.3	(131)

rating for the common components was higher in 1995 than for 2000, the 1995 summary rating was adjusted upward proportionally. The chain-linked ratings were constructed by repeating this procedure backward in time to 1970 and forward through 2005. 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.

Exhibit 1.4 shows the average chain-linked economic freedom index rating for the 102 countries with ratings since 1980. The average level of economic freedom, as measured by the chain-linked EFW index, has increased to 6.6 in 2005 from 5.4 in 1980. Much of this increase was driven by reductions in marginal income-tax rates, if not aggregate taxation; improvements in monetary policy; and global trade liberalization.

The full Chain-Linked Summary Index for the years 1970, 1975, 1980, 1985, 1990, 1995, and 2000 to 2005 is found in exhibit 1.5 (pages 20–22). Researchers using the data for long-term studies should use these chain-linked data. The chain-link summary index is computed only for the 123 countries receiving ratings in the base year of 2000.

Because the eight components (or sub-components) added to the index this year were not present during the 2000 base year, they will not affect the 2005 ratings derived by the chain-link method. How much difference does this make? In order to address this question, we calculated the correlation coefficient between the 2005 summary ratings (based on the 42 components of this year's index) and the 2005 chain-linked ratings. The correlation coefficient between the two was 0.986. Clearly, this indicates that for most countries the difference between the summary and the chain-linked ratings was small in 2005.

Concluding Thoughts

This chapter concludes with some graphs illustrating simple relationships between economic freedom by quartile and various other indicators of human and political progress (exhibits 1.6–1.19; pages 23–27). The graphs use the average of the chain-linked EFW index for the years 1990, 1995, 2000, and 2005. 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 if you want to observe the impact of economic freedom on performance.

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

Many of the relationships illustrated in these graphs 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 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 information about the contrast between the nature and characteristics of market-oriented economies and those of controlled economies. At the very least, these figures suggest potentially fruitful areas for future research.

Exhibit 1.4: Average Chain-linked EFW Rating for the 102 Countries with Ratings since 1980

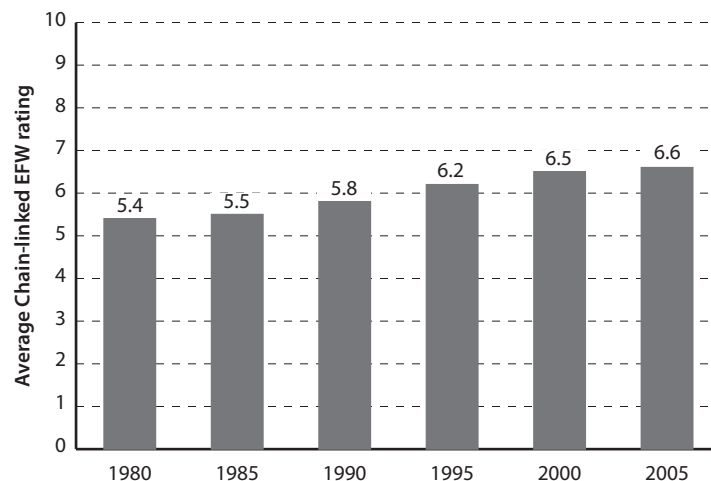


Exhibit 1.5: The Chain-Linked Summary Index, 1970–2005

	1970	1975	1980	1985	1990	1995	2000	2001	2002	2003	2004	2005
Albania					4.13	4.50	5.72	5.69	5.94	6.13	5.81	5.95
Algeria			4.07	4.13	3.72	3.81	4.29	4.47	4.52	4.51	4.76	5.36
Argentina	5.06	3.25	4.28	3.86	4.89	6.68	7.19	6.50	5.86	5.73	5.76	5.31
Australia	7.31	6.40	7.12	7.45	7.64	7.80	8.02	7.91	7.87	7.80	7.83	7.86
Austria	6.46	6.16	6.65	6.64	7.21	7.04	7.50	7.59	7.58	7.64	7.67	7.66
Bahamas		6.64	6.37	6.28	6.24	6.33	6.50	6.57	6.51	6.65	6.73	7.01
Bahrain			7.34	6.86	6.82	6.94	7.24	7.16	7.11	7.14	7.00	7.07
Bangladesh		3.34	3.55	3.86	4.60	5.38	5.74	5.66	5.75	5.60	5.62	5.79
Barbados		5.37	5.43	5.72	5.76	5.78	5.59	5.48	5.65	5.55	5.65	5.79
Belgium	7.66	6.96	7.22	7.25	7.52	7.21	7.46	7.36	7.36	7.33	7.26	7.21
Belize			5.59	5.44	5.81	6.32	6.22	6.16	6.56	6.66	6.65	6.95
Benin			4.94	4.61	4.99	4.59	5.43	5.53	5.44	5.41	5.38	5.80
Bolivia			4.50	3.56	5.25	6.52	6.70	6.51	6.51	6.49	6.54	6.57
Botswana			5.52	5.68	5.77	6.38	7.19	7.16	7.19	6.98	6.98	6.95
Brazil	5.43	4.52	4.20	3.70	4.47	4.47	5.87	5.90	6.21	5.92	5.87	5.93
Bulgaria				5.17	4.08	4.48	5.07	5.66	6.12	6.25	6.35	6.64
Burundi		4.28	4.31	4.72	4.88	4.51	5.12	5.27	5.07	4.53	4.49	4.95
Cameroon			5.50	5.72	5.74	5.28	5.44	5.67	5.68	5.67	5.65	5.62
Canada	7.97	7.14	7.58	7.65	7.97	7.80	8.12	8.06	7.91	8.00	8.05	8.04
Central Afr. Rep.				4.27	4.92	4.69	4.86	4.96	5.00	5.18	5.02	5.07
Chad				4.52	4.62	4.58	5.45	5.55	5.60	5.60	5.52	5.28
Chile	4.08	3.91	5.56	6.16	6.93	7.48	7.48	7.27	7.25	7.41	7.41	7.71
China			4.23	5.11	4.91	5.30	5.73	5.80	5.72	5.79	5.48	5.90
Colombia	5.31	5.00	4.76	5.16	4.94	5.45	5.39	5.46	5.40	5.45	5.48	5.57
Congo, Dem. R.	4.64	4.23	3.07	3.76	3.45	3.72	3.41	3.56	4.54	4.37	4.35	3.80
Congo, Rep. Of			4.69	4.68	4.93	4.95	4.37	4.61	4.46	4.45	4.40	4.51
Costa Rica		6.22	5.53	5.23	6.66	6.76	7.30	7.22	7.21	7.35	7.21	7.33
Cote d'Ivoire			5.23	5.77	5.52	5.44	5.72	5.71	5.61	5.40	5.79	6.14
Croatia						4.38	5.79	6.05	6.02	6.07	6.21	6.46
Cyprus		5.63	5.54	5.47	5.99	6.16	6.23	6.32	6.75	6.72	7.32	7.47
Czech Rep.						5.81	6.69	6.80	6.86	6.84	6.93	6.99
Denmark	7.08	6.31	6.52	6.66	7.34	7.46	7.67	7.59	7.60	7.61	7.63	7.75
Dominican Rep.			5.34	4.97	4.46	5.96	6.46	6.54	6.61	6.21	5.50	6.27
Ecuador	3.96	4.96	5.31	4.50	5.26	5.97	5.60	5.48	5.92	5.82	5.23	5.57
Egypt		4.02	4.72	5.28	5.03	5.87	6.66	6.49	6.18	6.10	6.25	6.77
El Salvador			4.68	4.49	4.77	7.00	7.25	7.28	7.21	7.21	7.29	7.49
Estonia						5.43	7.09	7.43	7.57	7.57	7.57	7.75
Fiji		5.42	5.71	5.88	5.94	6.09	6.13	6.03	6.09	6.01	6.04	6.27
Finland	7.12	6.25	6.89	7.06	7.37	7.56	7.71	7.68	7.69	7.62	7.69	7.82
France	6.58	5.79	6.06	6.06	7.06	6.80	6.99	6.72	6.89	6.87	7.00	6.92
Gabon			3.92	4.56	4.81	4.78	5.23	5.10	5.03	5.04	5.34	5.63
Germany	7.70	7.17	7.42	7.43	7.66	7.50	7.61	7.30	7.32	7.42	7.59	7.69
Ghana		3.63	2.83	3.02	4.82	5.39	5.82	5.65	6.31	6.54	6.32	6.40
Greece	6.37	5.86	5.83	5.34	6.00	6.28	6.93	6.77	6.84	6.87	6.80	6.83
Guatemala	6.13	6.65	6.12	5.06	5.62	6.69	6.42	6.40	6.42	6.55	6.69	7.11
Guinea-Bissau					3.29	3.86	4.39	5.04	5.13	5.02	5.07	5.29

Exhibit 1.5 (continued): The Chain-Linked Summary Index, 1970–2005

	1970	1975	1980	1985	1990	1995	2000	2001	2002	2003	2004	2005
Guyana						5.07	6.76	6.57	6.46	6.33	6.10	6.41
Haiti			5.84	6.08	5.80	5.76	5.91	5.46	5.44	5.29	5.31	5.79
Honduras			5.87	5.71	5.51	6.16	6.37	6.25	6.43	6.53	6.48	6.48
Hong Kong	8.93	8.93	9.18	8.89	8.74	9.09	8.79	8.72	8.72	8.77	8.71	8.96
Hungary			4.61	5.23	5.35	6.36	6.72	7.12	7.26	7.22	7.45	7.57
Iceland	6.57	4.72	5.36	5.56	6.95	7.38	7.72	7.66	7.63	7.67	7.90	7.76
India	5.35	4.44	5.28	4.97	5.00	5.63	6.22	6.17	6.32	6.38	6.48	6.70
Indonesia	4.89	5.35	5.21	6.14	6.52	6.59	5.89	5.51	5.76	6.10	6.03	6.36
Iran	5.87	5.71	3.80	4.12	4.66	4.55	5.58	6.10	6.08	5.92	6.05	6.49
Ireland	7.08	6.29	6.69	6.74	7.31	8.19	8.12	7.94	7.84	7.84	7.95	7.88
Israel	4.92	4.29	3.68	4.23	4.49	5.81	6.51	6.47	6.79	6.69	6.96	7.37
Italy	6.06	5.29	5.38	5.66	6.57	6.50	7.08	6.96	6.98	6.72	6.94	6.92
Jamaica			4.28	4.68	5.43	6.35	6.99	6.87	6.78	6.74	6.84	7.04
Japan	6.76	6.39	6.91	6.96	7.36	6.97	7.33	7.04	6.94	7.43	7.39	7.36
Jordan		5.48	5.30	5.78	5.57	6.07	7.02	6.75	7.06	6.89	6.84	6.94
Kenya	5.11	4.84	5.01	5.39	5.42	5.78	6.50	6.60	6.64	6.80	6.73	6.86
Kuwait			5.17	7.13	5.11	6.43	6.70	6.98	6.97	7.07	7.11	7.42
Latvia						4.84	6.59	6.75	7.08	6.79	7.01	7.30
Lithuania						4.84	6.28	6.32	6.80	6.65	6.88	7.25
Luxembourg	7.67	7.63	7.54	7.93	7.83	7.70	7.75	7.74	7.60	7.64	7.76	7.66
Madagascar			4.52	4.73	4.62	4.67	5.64	5.93	5.54	5.90	5.83	5.77
Malawi		5.08	4.59	4.76	4.84	4.44	4.66	5.25	5.53	5.47	5.30	5.51
Malaysia	6.61	6.43	7.04	7.13	7.49	7.43	6.85	6.39	6.45	6.51	6.67	6.82
Mali		5.40	5.45	5.08	5.17	5.27	6.03	5.70	5.57	5.61	5.63	5.51
Malta			5.40	5.19	5.42	6.56	6.51	6.48	6.52	6.29	6.93	7.07
Mauritius		5.03	5.16	6.29	6.14	7.26	7.27	7.31	7.21	7.02	7.05	7.62
Mexico	6.47	5.76	5.60	4.71	6.02	6.32	6.27	6.29	6.47	6.43	6.53	7.03
Morocco	5.77	5.12	4.51	5.04	5.03	5.90	6.00	5.91	5.91	6.09	5.87	6.05
Myanmar			4.82	4.42	3.43	4.07	3.88	3.74	3.39	3.21	3.39	3.53
Namibia					5.40	6.40	6.25	6.38	6.29	6.52	6.23	6.43
Nepal			5.70	5.28	5.37	5.37	5.76	5.79	5.71	5.21	5.28	5.00
Netherlands	7.54	6.85	7.31	7.47	7.80	7.82	8.04	7.74	7.69	7.70	7.71	7.77
New Zealand	6.72	6.00	6.72	6.54	7.71	8.64	8.35	8.22	8.18	8.20	8.25	8.34
Nicaragua			4.10	2.09	3.05	5.35	6.44	6.24	6.34	6.27	6.24	6.25
Niger			5.07	5.45	5.09	4.85	5.83	5.55	5.42	5.20	5.22	5.26
Nigeria	3.68	3.76	3.69	3.92	3.75	3.95	5.30	5.43	5.48	5.67	5.57	5.71
Norway	6.32	5.83	6.13	6.61	7.25	7.44	7.16	7.13	7.07	7.27	7.09	7.38
Oman				6.75	6.30	7.00	7.14	7.17	7.13	7.35	7.40	7.89
Pakistan	4.44	3.80	4.59	5.08	4.96	5.61	5.43	5.52	5.78	5.57	5.66	5.83
Panama		6.76	5.52	6.04	6.31	7.14	7.14	7.21	7.18	7.19	7.17	7.25
Pap. New Guinea				6.23	6.37	6.47	5.82	5.84	5.77	5.73	5.80	6.29
Paraguay			5.75	5.16	5.65	6.52	6.27	6.35	6.18	6.18	6.10	6.26
Peru	4.75	4.05	4.03	3.08	4.16	6.32	6.93	6.87	6.91	6.79	6.82	7.06
Philippines	5.73	5.30	5.35	5.17	5.53	7.22	7.11	6.64	6.59	6.63	6.34	6.51
Poland				3.93	4.00	5.30	6.29	6.14	6.40	6.19	6.72	6.83
Portugal	6.32	4.10	5.87	5.64	6.36	7.27	7.34	7.23	7.44	7.31	7.46	7.28

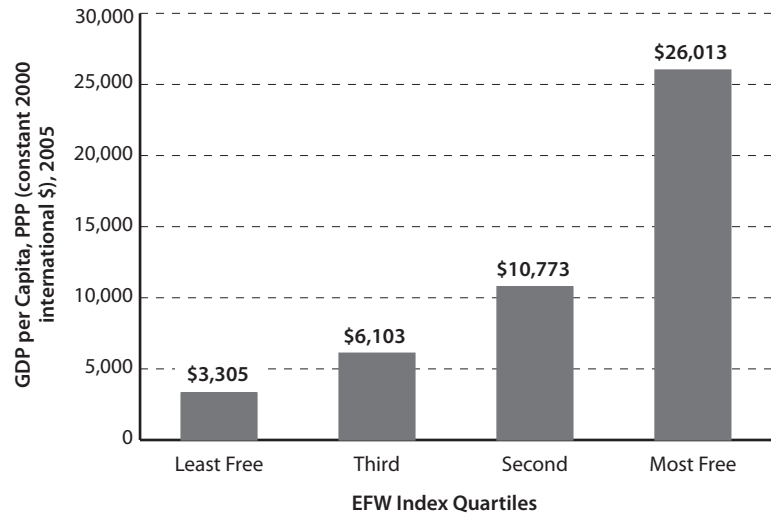
Exhibit 1.5 (continued): The Chain-Linked Summary Index, 1970–2005

	1970	1975	1980	1985	1990	1995	2000	2001	2002	2003	2004	2005
Romania				4.60	4.70	3.96	4.86	5.04	5.56	5.69	5.64	6.30
Russia						4.09	4.94	4.85	5.21	5.15	5.63	5.54
Rwanda					5.11	4.14	5.01	5.11	5.26	4.67	4.83	5.08
Senegal			4.71	5.04	5.41	4.79	5.87	5.76	5.83	5.78	5.75	6.12
Sierra Leone		5.64	5.43	3.63	3.89	4.34	5.07	5.10	5.37	5.38	5.57	5.51
Singapore	7.88	7.63	7.92	8.27	8.69	8.79	8.51	8.46	8.55	8.46	8.56	8.65
Slovak Rep						5.51	6.30	6.30	6.39	6.41	7.01	7.24
Slovenia						4.79	5.93	5.96	5.99	5.92	6.03	6.05
South Africa	6.68	5.95	5.87	5.46	5.46	6.34	6.78	6.73	6.77	6.88	6.71	6.74
South Korea	5.40	5.33	5.63	5.67	6.10	6.42	6.63	6.96	6.93	6.92	7.07	7.15
Spain	6.55	5.87	6.04	6.16	6.46	7.03	7.36	7.04	7.08	7.14	7.20	7.06
Sri Lanka			5.17	5.30	5.00	6.09	6.08	6.04	5.86	6.00	5.88	5.79
Sweden	5.75	5.62	6.05	6.63	6.93	7.18	7.40	7.15	7.31	7.51	7.30	7.43
Switzerland	8.02	7.79	8.19	8.32	8.30	8.04	8.43	8.17	8.28	8.21	8.22	8.20
Syria	4.32	4.50	3.68	3.38	3.71	4.39	4.82	5.32	5.05	4.94	5.19	5.37
Taiwan	6.86	6.06	6.90	7.13	7.29	7.31	7.20	7.09	7.22	7.23	7.28	7.21
Tanzania	4.46	3.87	3.99	3.57	4.01	4.90	5.83	6.26	6.41	6.34	6.48	6.43
Thailand	5.99	5.86	6.16	6.20	6.88	7.19	6.66	6.67	6.67	6.55	6.64	6.69
Togo			4.18	5.39	5.13	4.82	5.04	5.14	5.22	4.89	4.91	5.05
Trinidad & Tob.		4.77	4.98	4.87	5.66	6.69	7.01	6.93	6.77	6.64	6.66	6.59
Tunisia	4.78	4.79	5.16	4.93	5.40	5.95	6.08	6.14	6.03	5.94	5.99	6.16
Turkey	4.00	4.12	3.83	4.93	5.04	5.73	5.78	5.29	5.47	5.84	5.94	6.20
Uganda			3.25	2.84	3.04	5.12	6.54	6.56	6.60	6.50	6.45	6.42
Ukraine						3.87	4.67	4.82	5.32	5.10	5.37	5.58
Unit. Arab Em.			5.86	6.76	7.14	7.13	7.39	7.38	7.45	7.51	7.41	7.50
United Kingdom	6.49	6.21	6.53	7.45	7.83	8.08	8.22	8.21	8.16	8.13	8.08	8.12
United States	7.61	7.74	7.99	8.14	8.41	8.33	8.56	8.33	8.22	8.14	8.18	7.97
Uruguay			5.67	5.73	5.96	5.93	6.62	6.59	6.66	6.53	6.68	6.67
Venezuela	6.85	5.80	6.31	5.98	5.35	4.26	5.51	5.49	4.45	3.99	4.47	4.59
Zambia		4.57	5.04	3.96	3.33	4.78	6.69	6.85	6.73	6.68	6.78	6.77
Zimbabwe			4.54	4.46	4.71	5.41	4.14	3.36	3.29	3.35	3.06	2.81

Exhibit 1.6: Economic Freedom and Income per Capita

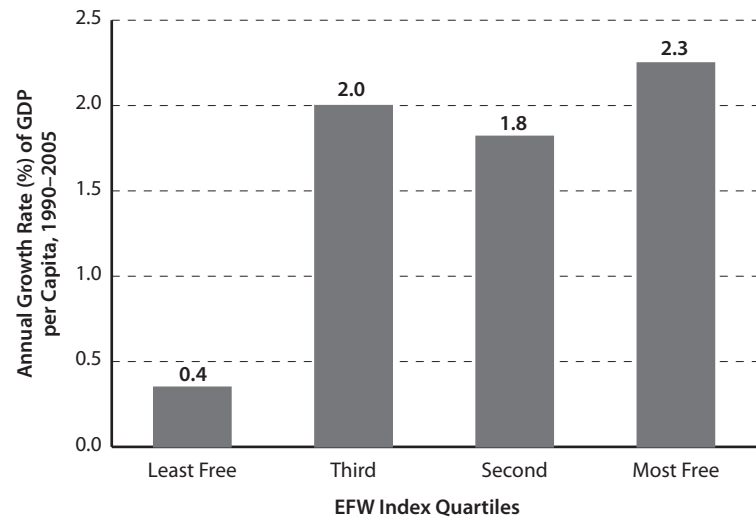
Countries with more economic freedom have substantially higher per-capita incomes.

Sources: The Fraser Institute; The World Bank, *World Development Indicators 2007* CD ROM.

**Exhibit 1.7: Economic Freedom and Economic Growth**

Countries with more economic freedom have higher growth rates.

Sources: The Fraser Institute; The World Bank, *World Development Indicators 2007* CD ROM.

**Exhibit 1.8: Economic Freedom and Foreign Direct Investment**

Countries with more economic freedom attract more foreign investment.

Sources: The Fraser Institute; The World Bank, *World Development Indicators 2007* CD ROM.

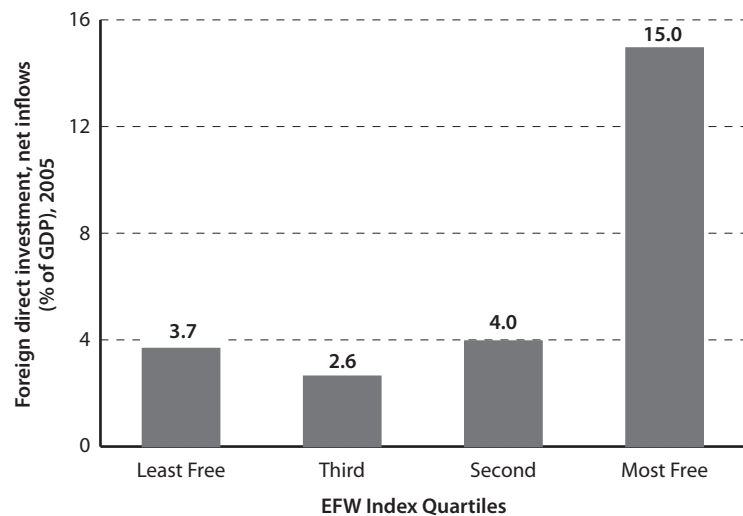


Exhibit 1.9: Economic Freedom and the Income Share of the Poorest 10%

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

Sources: The Fraser Institute; The World Bank, *World Development Indicators 2007* CD ROM.

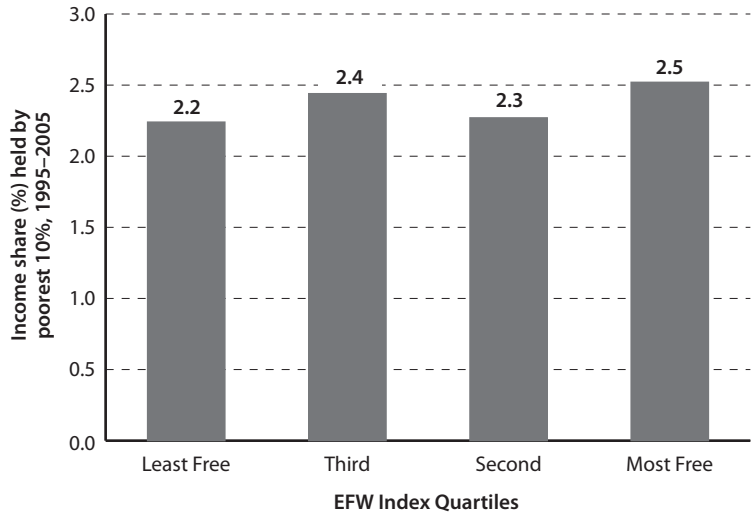


Exhibit 1.10: Economic Freedom and the Income Level of the Poorest 10%

The amount per capita, as opposed to the share, of income going to the poorest 10% of the population is much greater in nations with the most economic freedom than it is in those with the least.

Sources: The Fraser Institute; The World Bank, *World Development Indicators 2007* CD ROM.

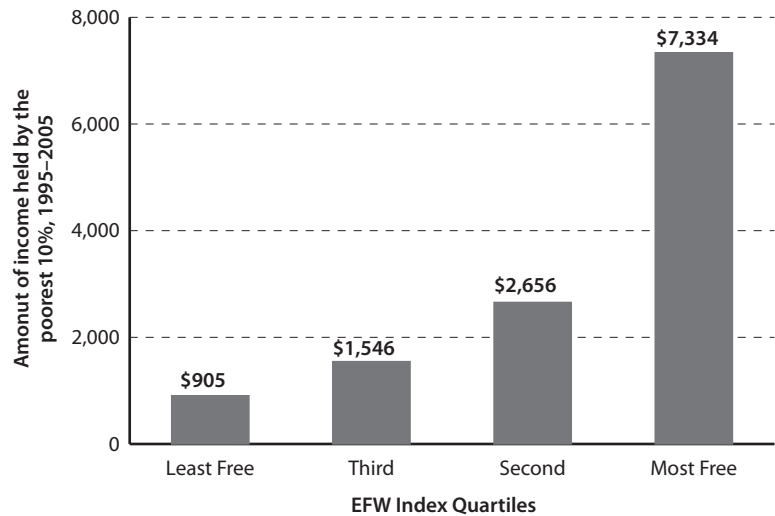


Exhibit 1.11: Economic Freedom and Life Expectancy

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

Sources: The Fraser Institute; The World Bank, *World Development Indicators 2007* CD ROM.

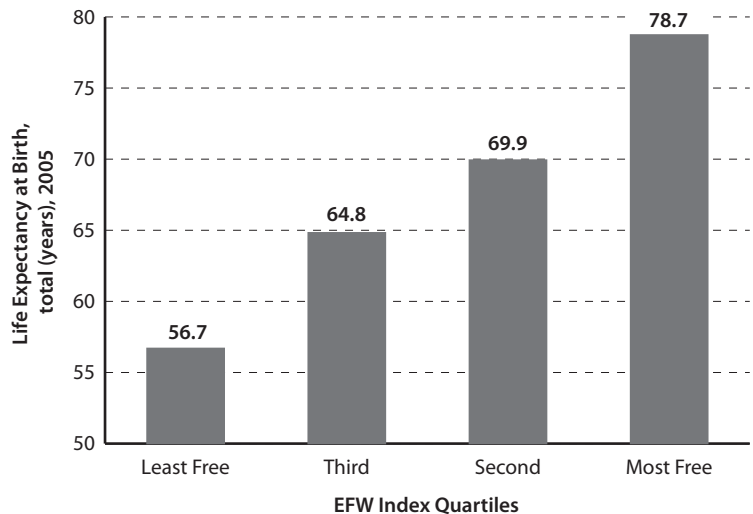
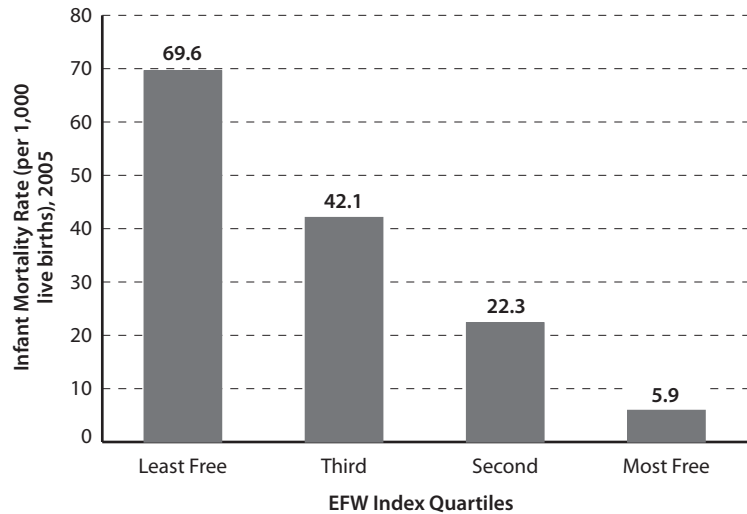


Exhibit 1.12: Economic Freedom and Infant Mortality

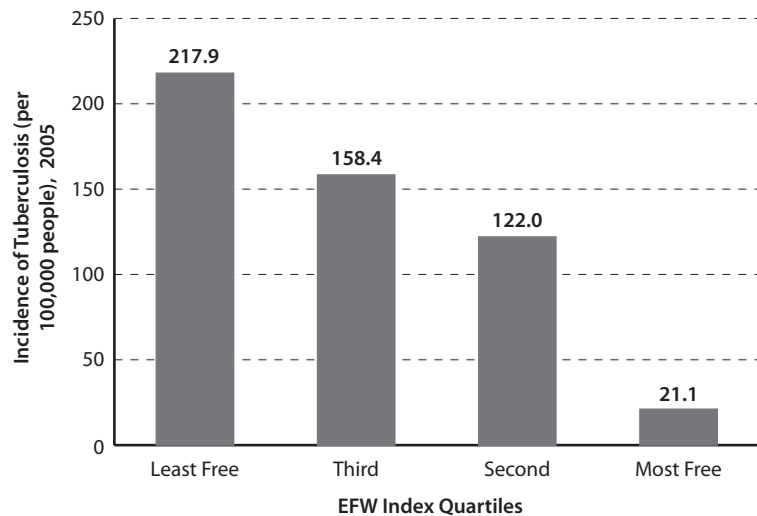
Infant mortality is much lower in countries with high levels of economic freedom.

Sources: The Fraser Institute; The World Bank, *World Development Indicators 2007* CD ROM.

**Exhibit 1.13: Economic Freedom and the Incidence of Tuberculosis**

Tuberculosis is less prevalent in countries with high levels of economic freedom.

Sources: The Fraser Institute; The World Bank, *World Development Indicators 2007* CD ROM.

**Exhibit 1.14: Economic Freedom and the Number of Telephone Subscribers**

Countries with more economic freedom have more telephone subscribers.

Sources: The Fraser Institute; The World Bank, *World Development Indicators 2007* CD ROM.

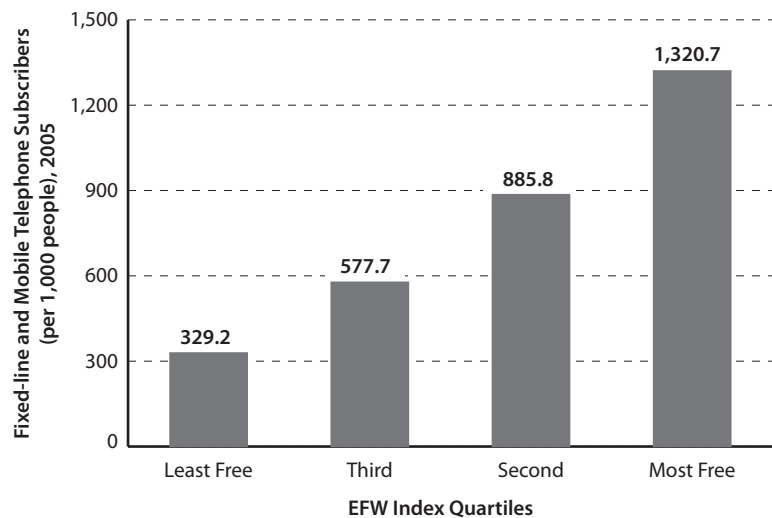
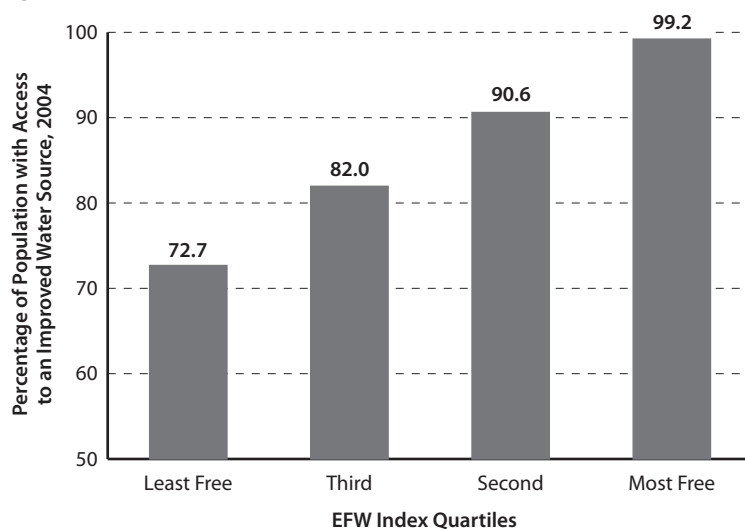


Exhibit 1.15: Economic Freedom and Access to Improved Water Sources

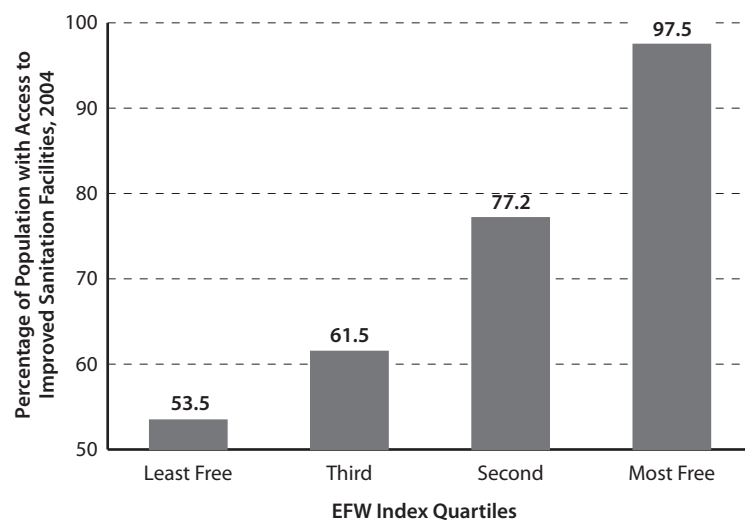
Access to improved water increases with economic freedom.

Sources: The Fraser Institute; The World Bank, *World Development Indicators 2007* CD ROM.

**Exhibit 1.16: Economic Freedom and Improved Sanitation Facilities**

Access to sanitation facilities increases with economic freedom.

Sources: The Fraser Institute; The World Bank, *World Development Indicators 2007* CD ROM.

**Exhibit 1.17: Economic Freedom and Corruption**

With fewer regulations, taxes, and tariffs, economic freedom reduces the opportunities for corruption on the part of public officials.

Note: "The scores in the 2005 *Corruption Perceptions Index* (CPI) are derived from the perceptions of the degree of corruption as seen by business people and country analysts and ranges between 10 (highly clean) and 0 (highly corrupt)."

Sources: The Fraser Institute; Transparency International, *2005 Corruption Perceptions Index* <http://www.transparency.org/policy_research/surveys_indices/cpi/2005/>.

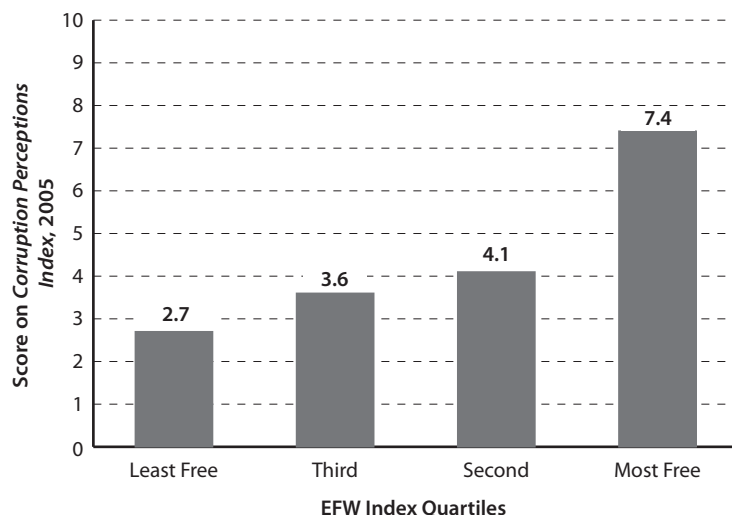
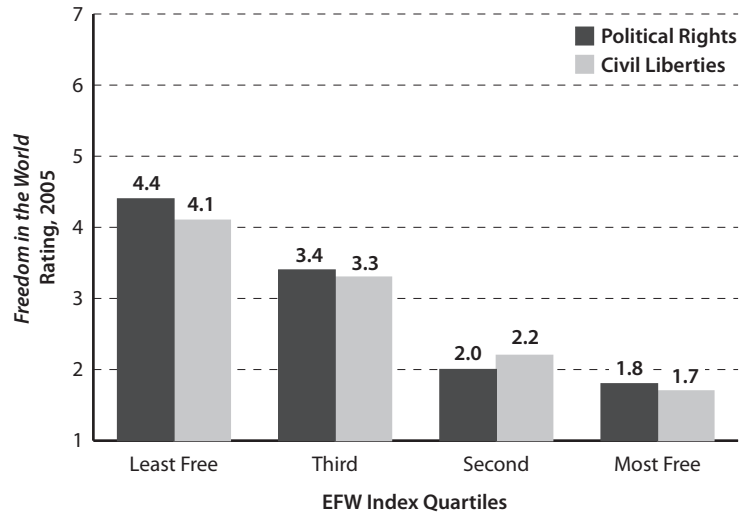


Exhibit 1.18: Economic Freedom and Political Rights and Civil Liberties

Political rights (e.g., free and fair elections) and civil liberties (e.g., freedom of speech) go hand in hand with economic freedom.

Note: Political rights and civil liberties are measured on a scale from one to seven: one = the highest degree of political rights/civil liberties; seven = the lowest.

Sources: The Fraser Institute; Freedom House, *Freedom in the World Country Ratings* (2005) <<http://www.freedomhouse.org/template.cfm?page=15&year=2007>>.

**Exhibit 1.19: Economic Freedom and Environmental Performance**

Environmental stresses on human health are lower and ecosystem vitality is greater in countries with more economic freedom.

Note: Higher index values indicate greater environmental performance.

Sources: The Fraser Institute; Yale Center for Environmental Law and Policy (YCELP) and Center for International Earth Science Information Network (CIESIN), Columbia University, with the World Economic Forum, and Joint Research Centre (JRC) of the European Commission, *Pilot 2006 Environmental Performance Index*, <<http://sedac.ciesin.columbia.edu/es/epi/>>.

