Chapter 1: Economic Freedom of the World, 2002

Beginning in 1986, Michael Walker of The Fraser Institute and Nobel Laureate Milton Friedman hosted a series of conferences that focused on the measurement of economic freedom. Several other leading scholars, including Nobel Prize winners Gary Becker and Douglass North, also participated in the series. Six meetings were held during the period from 1986 to 1994, and dozens of papers were presented and several approaches were analyzed.[1] Eventually, these conferences led to the development of the Economic Freedom of the World (EFW) index. The index, currently available for 123 countries, measures the consistency of a nation's policies and institutions with economic freedom.

What Is Economic Freedom?

The key ingredients of economic freedom are personal choice, voluntary exchange, freedom to compete, and protection of person and property. Institutions and policies are consistent with economic freedom when they provide an infrastructure for voluntary exchange and protect individuals and their property from aggressors seeking to use violence, coercion, and fraud to seize things that do not belong to them. Legal and monetary arrangements are particularly important: governments promote economic freedom when they provide a legal structure and a law-enforcement system that protect the property rights of owners and enforce contracts in an even-handed manner. They also enhance economic freedom when they facilitate access to sound money. In some cases, the government itself may provide a currency of stable value. In other instances, it may simply remove obstacles that retard the use of sound money that is provided by others, including private organizations and other governments.

However, economic freedom also requires governments to refrain from many activities. They must refrain from actions that interfere with personal choice, voluntary exchange, and the freedom to enter and compete in labor and product markets. Economic freedom is reduced when taxes, government expenditures, and regulations are substituted for personal choice, voluntary exchange, and market coordination. Restrictions that limit entry into occupations and business activities also retard economic freedom.

Measurement of Economic Freedom

We are confident that the Economic Freedom of the World (EFW) index is the best available and that it provides a reliable measure of cross-country differences in economic freedom, using third-party data to help ensure objectivity.[2] However, as Milton Friedman noted following the publication of the first annual report, *Economic Freedom of the World, 1975–1995,* it is still a work in progress. We are constantly searching for ways to improve the measure and make it more valuable to both researchers and policy makers.

Differences among countries in the quality of the legal system and regulatory policies have proven particularly difficult to measure. Nonetheless, they exert a major impact on economic freedom. The *Economic Freedom of the World: 2001 Annual Report* contained a special chapter that used survey data to measure several of these dimensions of economic freedom that are difficult to quantify. Beginning with the 2002 report, several components based on survey data have been incorporated into the main EFW index. While we would prefer to have objective variables, we believe that the information provided by the survey data enhances our measurement of cross-country differences in the consistency of legal structure and regulation with economic freedom and thereby improves the overall quality of the index.

The survey data are from two annual publications: the *Global Competitiveness Report* and the *International Country Risk Guide*.[3] In some cases, countries in the EFW index are omitted from the *Global Competitiveness Report.* Thus, these data will not be available for all countries covered by *Economic Freedom of the World*.

Exhibit 1.1 indicates the structure of the index used in *Economic Freedom of the World: 2004 Annual Report*. The index measures the degree of economic freedom present in five major areas:

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

Within the five major areas, 21 components are incorporated into the index but many of those components are themselves made up of several sub-components. Counting the various sub-components, the EFW index utilizes 38 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 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.[4] Methodological details are found in the Appendix 1: Explanatory Notes and Data Sources (page 171).

As previously discussed, the new survey data (18 sub-components) are not available for all of the countries covered by the EFW index. Thus, the ratings of the other countries are based on only a subset of the 38 different sub-components of this index. Two of the areas, Size of Government: Expenditures, Taxes, and Enterprises (Area 1) and Access to Sound Money (Area 3), are unaffected by the omitted variables. The omissions, however, could be important in Legal Structure and Security of Property Rights (Area 2) and Regulation of Credit, Labor, and Business (Area 5) and, to a lesser extent, in Freedom to Trade Internationally (Area 4). In Legal Structure and Security of Property Rights, only two of the five components are available for the countries not covered by the *Global Competitiveness Report*.[5] Only five of the 15 sub-components in Regulation of Credit, Labor, and Business are available for these countries. While we have made statistical adjustments that enhance the overall comparability among the 123 countries, comparisons between the nations that have the survey data and the nations that do not should be made with a degree of caution.[6]

Following is a brief explanation of the components incorporated into each of the five areas and their relationship to economic freedom. See Exhibit 1.1 for a list of all areas and components.

Area 1: Size of Government: Expenditures, Taxes and Enterprises

The four components of Area 1 indicate the extent to which countries rely on individual choice and markets rather than 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 private 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. Thus, the greater the share of transfers and subsidies in an economy, the less economic freedom.[7]

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 that private enterprises are subject to. 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 both apply. 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 are rated lower.

Taken together, the four components measure the degree of a country's reliance 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.

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 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 two sources: the *International Country Risk Guide* and the *Global Competitiveness Report*. The ratings from both are based on surveys.[8] The correlation coefficient between the two sets of data for countries included in both sets was 0.748. This high correlation increases our confidence in the reliability of the country ratings in this area even when they are based solely on data from the *International Country Risk Guide*.

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 mutually agreeable 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. Furthermore, poor performance in this area is sure to deter investment. Therefore, it is highly unlikely that countries with low ratings in this area will be able to achieve and sustain high rates of growth.

Area 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 the 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.

Area 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. The vast majority of our current goods and services are now either produced abroad or contain resources supplied from abroad. Of course, 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 by administrative factors that delay the passage of goods through customs. Sometimes these delays are the result of 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, exchange rate and capital controls. The regulatory items of component 4B (regulatory trade barriers) and component 4Ei (capital market controls) are based on survey data from the *Global Competitiveness Report*. The other components in this area can be quantified objectively. In order to get a high rating in this area, a country must have low tariffs, a trade sector larger than expected, efficient administration of customs, a freely convertible currency, and few controls on capital.

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 as a percentage of total investment
- D Top marginal tax rate (and income threshold at which it applies)
  - i Top marginal income tax rate (and income threshold at which it applies)
  - ii Top marginal income and payroll tax rates (and income threshold at which they apply)

2 Legal Structure and Security of Property Rights

- A Judicial independence—the judiciary is independent and not subject to interference by the government or parties in disputes
- B Impartial courts—a trusted legal framework exists for private businesses to challenge the legality of government actions or regulation
- C Protection of intellectual property
- D Military interference in rule of law and the political process
- E Integrity of the legal system

3 Access to Sound Money

- A Average annual growth of the money supply in the last five years minus average annual growth of real GDP in the last ten years
- B Standard inflation variability in the last five years
- C Recent inflation rate
- D Freedom to own foreign currency bank accounts domestically and abroad

4 Freedom to Trade Internationally

- A Taxes on international trade
  - i Revenue from taxes on international trade as a percentage of exports plus imports
  - ii Mean tariff rate
  - iii Standard deviation of tariff rates
- B Regulatory trade barriers
  - i Hidden import barriers—no barriers other than published tariffs and quotas
  - ii Costs of importing—the combined effect of import tariffs, licence fees, bank fees, and the time required for administrative red-tape raises the costs of importing equipment (by 10% or less = score of 10; by more than 50% = score of 0)

Exhibit 1.1 continued: The Areas and Components of the EFW Index

C Actual size of trade sector compared to expected size

D Difference between official exchange rate and black-market rate

E International capital market controls

i Access of citizens to foreign capital markets and foreign access to domestic capital markets

ii Restrictions on the freedom of citizens to engage in capital market exchange with foreigners —index of capital controls among 13 IMF categories

5 Regulation of Credit, Labor, and Business

A Credit market regulations

i Ownership of banks—percentage of deposits held in privately owned banks

ii Competition—domestic banks face competition from foreign banks

iii Extension of credit—percentage of credit extended to private sector

iv Avoidance of interest rate controls and regulations that lead to negative real interest rates

v Interest rate controls—interest rate controls on bank deposits and/or loans are freely determined by the market

B Labor market regulations

i Impact of minimum wage—the minimum wage, set by law, has little impact on wages because it is too low or not obeyed

ii Hiring and firing practices—hiring and firing practices of companies are determined by private contract

iii Share of labor force whose wages are set by centralized collective bargaining

iv Unemployment benefits—the unemployment benefits system preserves the incentive to work

v Use of conscripts to obtain military personnel

C Business regulations

i Price controls—extent to which businesses are free to set their own prices

ii Administrative conditions and new businesses—administrative procedures are an important obstacle to starting a new business

iii Time with government bureaucracy—senior management spends a substantial amount of time dealing with government bureaucracy

iv Starting a new business—starting a new business is generally easy

v Irregular payments—irregular, additional payments connected with import and export permits, business licenses, exchange controls, tax assessments, police protection, or loan applications are very rare

Area 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 final area of the index focuses on this topic. Because of the difficulties involved in developing objective measures of regulatory restraints, a substantial number (10 of 15) of the sub-components in this area are based on survey data.

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 three 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 used a private banking system to allocate credit to private parties and refrained from controlling interest rates received higher ratings for this component of the regulatory area.

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, extensions of union contracts to nonparticipating parties, unemployment benefits that undermine the incentive to accept employment, and conscription.[9] 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 dismissal, avoid excessive unemployment benefits that undermine work incentives, and refrain from the use of conscription.

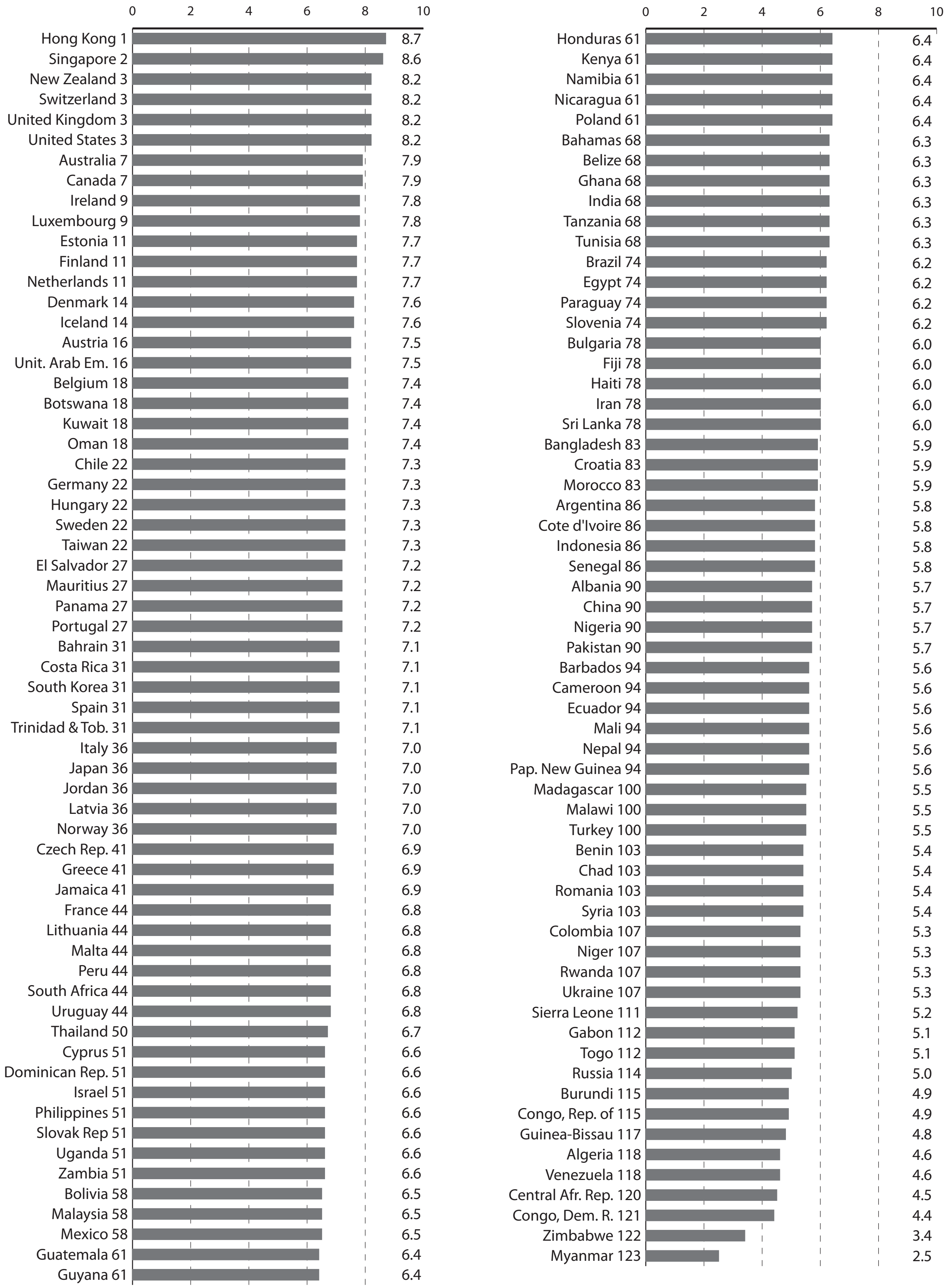
Like the regulation of the credit markets and labor markets, the regulation of business activities (component 5C) inhibits economic freedom. The regulation of business components are designed to identify the extent to which regulatory restraints and bureaucratic procedures limit competition and the operation 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—from using their power to extract financial payments and reward some businesses at the expense of others.

Summary Economic Freedom Ratings, 2002

Exhibit 1.2 presents summary economic freedom ratings, sorted from highest to lowest. These ratings are for the year 2002, the most recent year for which comprehensive data are available. Hong Kong and Singapore occupy the top two positions as usual. The other nations in the top 10 are New Zealand, Switzerland, United Kingdom, United States, Australia, Canada, Ireland, and Luxembourg. At the bottom of the list are the Republic of Congo, Guinea-Bissau, Algeria, Venezuela, Central African Republic, the Democratic Republic of Congo, Zimbabwe, and, in last place, Myanmar.

The EFW index is calculated back to 1970 as data availability allows; see the Country Data Tables (chapter 3, page 45) or our website <http://www.freetheworld.com> for information from past years. Since some data for earlier years may have been updated or corrected, readers are always encouraged to use the data from the most recent annual report to assure the best-quality data.

Exhibit 1.2: Summary Economic Freedom Ratings, 2002



Area Economic Freedom Ratings (and Rankings), 2002

Exhibit 1.3 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 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 was ranked 22nd in Size of Government: Expenditures, Taxes, and Enterprises (Area 1) and 12th for Access to Sound Money. However, Bolivia scored poorly in all the other categories, especially Legal Structure and Security of Property Rights, where it placed 111th. In Freedom to Trade Internationally, Bolivia ranked 58th, while in Regulation, Bolivia ranked 80th. Despite high rankings in a couple of areas, Bolivia's overall ranking is only 58th.

Weakness in the rule of law and property rights is particularly pronounced in sub-Sahara 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. For example, Estonia ranks 32nd in rule of law and property rights. However, 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 of these nations have reasonably sized governments and sound money.

The economies most open to foreign trade were Hong Kong, Singapore, and Ireland. Two former Soviet bloc nations also rank fairly high in openness to trade, Estonia in 6th place and Hungary in 14th. The least regulated countries—those at the top in Regulation of Credit, Labor, and Business (Area 5)—were Hong Kong, Iceland, and the United States.

Exhibit 1.3: Area Economic Freedom Ratings (and *Rankings*), 2002

	AREAS										COMPONENTS OF AREA 5					
	1 Size of Government: Expenditures, Taxes and Enterprises		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	5.5	*(75)*	5.0	*(70)*	7.3	*(79)*	4.6	*(114)*	6.0	*(53)*	6.4	*(98)*				
Algeria	4.1	*(110)*	2.7	*(114)*	6.7	*(102)*	5.6	*(97)*	3.7	*(123)*	4.5	*(121)*	3.4	*(88)*	3.4	*(92)*
Argentina	7.7	*(11)*	3.2	*(106)*	7.0	*(88)*	6.1	*(88)*	5.1	*(101)*	6.7	*(89)*	4.9	*(56)*	3.8	*(82)*
Australia	6.2	*(56)*	9.1	*(3)*	9.4	*(32)*	7.6	*(37)*	7.4	*(5)*	8.9	*(18)*	6.2	*(25)*	7.0	*(8)*
Austria	4.8	*(91)*	8.6	*(12)*	9.7	*(11)*	8.4	*(13)*	6.2	*(37)*	8.5	*(29)*	3.8	*(80)*	6.4	*(13)*
Bahamas	7.5	*(15)*	6.3	*(47)*	6.9	*(94)*	4.0	*(119)*	6.7	*(20)*	9.4	*(6)*				
Bahrain	6.6	*(41)*	5.9	*(57)*	8.8	*(55)*	7.5	*(44)*	6.6	*(23)*	8.8	*(23)*				
Bangladesh	8.1	*(7)*	3.2	*(105)*	6.9	*(90)*	5.9	*(92)*	5.4	*(89)*	5.8	*(108)*	6.8	*(12)*	3.7	*(86)*
Barbados	3.9	*(111)*	6.6	*(36)*	6.8	*(97)*	4.1	*(118)*	6.6	*(25)*	8.2	*(37)*				
Belgium	4.6	*(99)*	7.7	*(18)*	9.7	*(13)*	8.8	*(5)*	6.1	*(45)*	8.4	*(30)*	4.5	*(63)*	5.3	*(34)*
Belize	6.0	*(60)*	6.2	*(49)*	7.8	*(72)*	5.1	*(109)*	6.6	*(24)*	8.3	*(35)*				
Benin	6.5	*(48)*	4.3	*(85)*	6.7	*(99)*	4.6	*(115)*	5.1	*(103)*	7.7	*(53)*				
Bolivia	7.3	*(22)*	2.8	*(111)*	9.7	*(12)*	7.1	*(58)*	5.6	*(80)*	7.9	*(47)*	4.6	*(61)*	4.3	*(66)*
Botswana	5.3	*(83)*	7.3	*(25)*	9.3	*(38)*	7.8	*(33)*	7.2	*(10)*	9.8	*(1)*	6.6	*(19)*	5.2	*(36)*
Brazil	6.5	*(46)*	4.9	*(72)*	7.7	*(73)*	6.8	*(69)*	5.0	*(108)*	5.6	*(111)*	4.5	*(62)*	4.7	*(50)*
Bulgaria	4.6	*(100)*	4.7	*(75)*	8.3	*(62)*	6.8	*(68)*	5.8	*(72)*	7.9	*(48)*	5.1	*(44)*	4.3	*(71)*
Burundi	6.3	*(52)*	3.3	*(101)*	7.1	*(83)*	2.0	*(122)*	5.8	*(68)*	6.4	*(96)*				
Cameroon	5.3	*(82)*	4.2	*(88)*	6.7	*(100)*	5.9	*(90)*	5.9	*(60)*	7.1	*(77)*	6.8	*(13)*	3.8	*(83)*
Canada	6.5	*(49)*	8.3	*(15)*	9.5	*(29)*	8.0	*(25)*	7.3	*(9)*	9.0	*(16)*	6.5	*(21)*	6.4	*(12)*
Central Afr. Rep.	3.9	*(113)*	3.2	*(103)*	6.8	*(95)*	3.9	*(120)*	4.6	*(114)*	7.1	*(80)*				
Chad	6.7	*(40)*	2.7	*(113)*	6.3	*(110)*	5.9	*(91)*	5.2	*(100)*	5.8	*(109)*	5.9	*(32)*	3.8	*(84)*
Chile	6.1	*(58)*	6.4	*(46)*	9.2	*(45)*	8.4	*(11)*	6.3	*(33)*	8.3	*(34)*	4.2	*(73)*	6.3	*(15)*
China	3.1	*(121)*	5.2	*(66)*	8.5	*(60)*	7.5	*(43)*	4.4	*(117)*	4.7	*(120)*	4.5	*(64)*	4.2	*(76)*
Colombia	4.7	*(94)*	3.3	*(100)*	7.4	*(78)*	6.1	*(89)*	5.2	*(99)*	7.2	*(75)*	3.7	*(81)*	4.7	*(52)*
Congo, Dem. Rep..	5.6	*(69)*	2.4	*(118)*	3.4	*(121)*	5.1	*(110)*	5.6	*(82)*	6.3	*(99)*				
Congo, Rep. of	4.1	*(108)*	2.4	*(119)*	6.6	*(103)*	6.4	*(83)*	5.1	*(105)*	5.3	*(114)*				
Costa Rica	7.0	*(29)*	6.1	*(50)*	8.6	*(59)*	7.8	*(30)*	6.0	*(50)*	6.6	*(91)*	5.7	*(38)*	5.7	*(28)*
Côte d'Ivoire	7.2	*(25)*	3.9	*(95)*	7.1	*(82)*	5.5	*(101)*	5.4	*(91)*	7.3	*(65)*				
Croatia	4.1	*(109)*	5.1	*(67)*	7.7	*(75)*	6.5	*(81)*	6.2	*(41)*	8.9	*(20)*	5.0	*(50)*	4.6	*(56)*
Cyprus	7.0	*(27)*	6.9	*(31)*	8.2	*(65)*	5.2	*(108)*	5.7	*(75)*	9.5	*(5)*				
Czech Rep.	4.9	*(89)*	6.4	*(45)*	8.9	*(54)*	8.3	*(15)*	6.0	*(51)*	8.1	*(42)*	4.7	*(58)*	5.1	*(42)*
Denmark	3.9	*(112)*	9.3	*(2)*	9.7	*(9)*	8.1	*(22)*	6.8	*(17)*	9.4	*(7)*	4.6	*(60)*	6.4	*(14)*
Dominican Rep.	8.2	*(5)*	4.2	*(87)*	8.2	*(67)*	6.4	*(82)*	5.9	*(64)*	7.5	*(60)*	5.5	*(40)*	4.6	*(58)*
Ecuador	9.0	*(2)*	2.9	*(109)*	4.4	*(118)*	6.8	*(67)*	4.8	*(111)*	6.5	*(94)*	3.6	*(82)*	4.4	*(63)*
Egypt	6.9	*(33)*	4.9	*(71)*	9.6	*(16)*	4.9	*(112)*	4.6	*(115)*	5.3	*(113)*	4.2	*(72)*	4.2	*(77)*
El Salvador	8.7	*(3)*	4.3	*(82)*	9.6	*(25)*	7.4	*(49)*	6.1	*(46)*	7.3	*(70)*	4.7	*(59)*	6.2	*(20)*
Estonia	6.6	*(42)*	6.9	*(32)*	9.3	*(39)*	8.7	*(6)*	7.0	*(14)*	9.0	*(14)*	5.1	*(48)*	6.8	*(9)*
Fiji	6.1	*(59)*	5.5	*(63)*	7.0	*(85)*	5.7	*(95)*	5.9	*(58)*	6.7	*(90)*				
Finland	4.6	*(98)*	9.3	*(1)*	9.6	*(19)*	8.1	*(23)*	6.8	*(16)*	9.2	*(10)*	3.8	*(79)*	7.5	*(3)*
France	2.8	*(122)*	7.4	*(23)*	9.6	*(17)*	8.1	*(24)*	6.2	*(38)*	8.2	*(40)*	5.1	*(45)*	5.4	*(33)*
Gabon	4.2	*(106)*	4.3	*(86)*	5.8	*(116)*	5.5	*(102)*	5.9	*(61)*	7.3	*(67)*				

Exhibit 1.3 (continued): Area Economic Freedom Ratings (and Rankings), 2002

	AREAS										COMPONENTS OF AREA 5					
	1 Size of Government: Expenditures, Taxes and Enterprises		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	
Germany	4.2	*(107)*	8.7	*(9)*	9.6	*(20)*	8.6	*(8)*	5.6	*(84)*	7.9	*(49)*	2.5	*(94)*	6.3	*(18)*
Ghana	5.6	*(68)*	4.5	*(79)*	7.7	*(74)*	7.6	*(35)*	6.2	*(40)*	7.0	*(81)*	6.9	*(10)*	4.7	*(51)*
Greece	6.1	*(57)*	6.0	*(52)*	9.6	*(24)*	7.4	*(48)*	5.4	*(92)*	7.7	*(55)*	3.5	*(87)*	4.9	*(45)*
Guatemala	8.6	*(4)*	2.6	*(117)*	9.0	*(50)*	6.7	*(76)*	5.2	*(97)*	7.6	*(56)*	3.3	*(90)*	4.8	*(47)*
Guinea-Bissau	3.6	*(115)*	2.6	*(116)*	6.4	*(107)*	5.8	*(93)*	5.6	*(81)*	7.3	*(66)*				
Guyana	3.1	*(119)*	5.7	*(60)*	8.2	*(68)*	8.4	*(10)*	6.5	*(27)*	8.0	*(44)*				
Haiti	7.2	*(24)*	1.9	*(122)*	8.4	*(61)*	5.5	*(100)*	6.8	*(15)*	9.0	*(15)*	8.1	*(2)*	3.5	*(90)*
Honduras	7.4	*(20)*	2.9	*(110)*	9.1	*(49)*	7.2	*(56)*	5.7	*(74)*	8.2	*(38)*	4.9	*(55)*	4.1	*(80)*
Hong Kong	9.1	*(1)*	7.3	*(24)*	9.3	*(40)*	9.7	*(1)*	8.1	*(1)*	8.9	*(19)*	7.7	*(3)*	7.6	*(2)*
Hungary	5.7	*(66)*	6.7	*(34)*	9.1	*(48)*	8.3	*(14)*	6.4	*(30)*	7.9	*(52)*	5.4	*(43)*	5.9	*(24)*
Iceland	5.6	*(72)*	9.0	*(7)*	9.3	*(41)*	6.6	*(77)*	7.8	*(2)*	8.9	*(21)*	6.8	*(11)*	7.7	*(1)*
India	7.1	*(26)*	6.0	*(51)*	6.9	*(91)*	6.2	*(86)*	5.4	*(88)*	5.9	*(106)*	6.1	*(28)*	4.3	*(68)*
Indonesia	6.8	*(37)*	4.1	*(90)*	6.4	*(108)*	7.5	*(45)*	4.2	*(120)*	5.2	*(115)*	4.2	*(71)*	3.3	*(93)*
Iran	6.5	*(44)*	5.9	*(54)*	8.2	*(66)*	5.3	*(105)*	3.9	*(121)*	4.8	*(118)*				
Ireland	6.0	*(61)*	7.9	*(17)*	9.6	*(18)*	9.0	*(3)*	6.7	*(22)*	8.2	*(39)*	5.7	*(37)*	6.0	*(23)*
Israel	2.6	*(123)*	7.6	*(19)*	9.2	*(44)*	8.2	*(20)*	5.5	*(85)*	7.2	*(74)*	3.6	*(86)*	5.9	*(25)*
Italy	4.7	*(93)*	7.4	*(22)*	9.6	*(22)*	7.9	*(27)*	5.3	*(94)*	7.5	*(58)*	3.6	*(85)*	4.9	*(46)*
Jamaica	7.7	*(12)*	5.0	*(69)*	9.0	*(53)*	7.1	*(57)*	5.8	*(70)*	6.6	*(93)*	6.5	*(20)*	4.3	*(69)*
Japan	5.6	*(70)*	7.1	*(26)*	9.4	*(31)*	6.5	*(80)*	6.2	*(35)*	7.3	*(69)*	6.0	*(29)*	5.5	*(31)*
Jordan	4.8	*(92)*	6.9	*(29)*	9.7	*(6)*	7.6	*(40)*	6.1	*(43)*	6.4	*(97)*	6.2	*(26)*	5.7	*(29)*
Kenya	6.9	*(31)*	3.2	*(104)*	9.4	*(36)*	6.7	*(73)*	5.9	*(62)*	6.0	*(104)*	7.4	*(6)*	4.2	*(75)*
Kuwait	6.3	*(51)*	6.9	*(28)*	9.8	*(4)*	7.0	*(64)*	6.7	*(19)*	8.8	*(24)*				
Latvia	5.8	*(65)*	6.4	*(44)*	9.3	*(42)*	7.6	*(38)*	6.2	*(36)*	8.4	*(33)*	4.9	*(54)*	5.4	*(32)*
Lithuania	5.5	*(74)*	5.3	*(65)*	9.4	*(34)*	7.8	*(28)*	5.8	*(69)*	7.9	*(51)*	4.5	*(65)*	5.1	*(42)*
Luxembourg	4.7	*(96)*	8.4	*(13)*	9.8	*(5)*	8.9	*(4)*	7.4	*(6)*	9.2	*(9)*	6.3	*(24)*	6.6	*(11)*
Madagascar	7.0	*(30)*	3.0	*(108)*	7.0	*(86)*	5.2	*(107)*	5.1	*(102)*	7.7	*(54)*	4.2	*(74)*	3.5	*(89)*
Malawi	3.9	*(114)*	5.6	*(62)*	5.8	*(115)*	6.5	*(79)*	5.9	*(57)*	5.1	*(116)*	7.6	*(4)*	5.2	*(40)*
Malaysia	5.4	*(79)*	6.6	*(37)*	6.6	*(104)*	7.5	*(41)*	6.1	*(42)*	5.8	*(107)*	6.6	*(18)*	5.9	*(26)*
Mali	5.1	*(86)*	4.3	*(82)*	6.7	*(101)*	6.7	*(71)*	5.1	*(104)*	7.5	*(59)*	3.3	*(91)*	4.5	*(62)*
Malta	5.8	*(63)*	7.0	*(27)*	7.2	*(81)*	7.0	*(60)*	7.0	*(13)*	8.7	*(27)*	6.7	*(16)*	5.6	*(30)*
Mauritius	7.6	*(14)*	6.5	*(39)*	9.5	*(26)*	6.7	*(72)*	5.6	*(79)*	7.3	*(68)*	5.1	*(49)*	4.6	*(59)*
Mexico	8.1	*(6)*	4.2	*(88)*	7.4	*(77)*	7.4	*(46)*	5.3	*(96)*	7.2	*(73)*	4.4	*(68)*	4.2	*(78)*
Morocco	5.5	*(77)*	5.9	*(53)*	7.0	*(89)*	5.6	*(98)*	5.6	*(83)*	7.2	*(72)*	5.1	*(46)*	4.3	*(65)*
Myanmar	3.5	*(116)*	3.2	*(102)*	1.7	*(122)*	0.0	*(123)*	4.3	*(119)*	2.8	*(123)*				
Namibia	4.5	*(103)*	7.5	*(21)*	6.1	*(113)*	7.0	*(62)*	7.1	*(11)*	9.7	*(3)*	6.5	*(22)*	5.2	*(37)*
Nepal	5.1	*(85)*	4.8	*(73)*	7.0	*(87)*	5.4	*(103)*	5.9	*(55)*	6.8	*(87)*				
Netherlands	4.6	*(101)*	9.1	*(4)*	9.5	*(27)*	8.6	*(9)*	6.7	*(21)*	9.1	*(13)*	5.0	*(52)*	6.1	*(22)*
New Zealand	6.7	*(39)*	9.0	*(6)*	9.4	*(35)*	8.4	*(12)*	7.6	*(4)*	9.7	*(2)*	5.9	*(33)*	7.3	*(5)*
Nicaragua	5.9	*(62)*	3.1	*(107)*	9.0	*(52)*	7.8	*(31)*	6.0	*(54)*	7.2	*(71)*	6.4	*(23)*	4.2	*(74)*
Niger	5.5	*(78)*	4.0	*(92)*	6.9	*(92)*	5.3	*(106)*	5.0	*(109)*	6.9	*(83)*				
Nigeria	6.3	*(53)*	3.4	*(99)*	6.6	*(105)*	6.3	*(84)*	6.1	*(44)*	7.5	*(61)*	7.0	*(9)*	3.7	*(85)*

Exhibit 1.3 (continued): Area Economic Freedom Ratings (and Rankings), 2002

	AREAS										COMPONENTS OF AREA 5					
	1 Size of Government: Expenditures, Taxes and Enterprises		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	
Norway	4.6	(97)	8.3	(14)	9.0	(51)	7.0	(63)	6.3	(32)	9.0	(17)	3.6	(83)	6.3	(16)
Oman	5.8	(64)	6.9	(30)	9.9	(2)	7.8	(32)	6.8	(18)	9.6	(4)				
Pakistan	7.2	(23)	2.7	(115)	6.9	(93)	5.7	(94)	6.0	(49)	7.1	(79)	7.1	(8)	3.9	(81)
Panama	7.8	(10)	4.6	(76)	9.9	(1)	7.4	(47)	6.3	(34)	8.7	(26)	5.4	(42)	4.6	(55)
Pap. New Guinea	6.5	(47)	4.0	(94)	6.4	(109)	5.4	(104)	5.9	(63)	6.6	(92)				
Paraguay	8.1	(8)	2.1	(120)	8.6	(58)	7.4	(50)	4.8	(112)	6.5	(95)	3.2	(92)	4.8	(49)
Peru	7.4	(18)	4.0	(93)	9.7	(10)	7.2	(54)	5.8	(73)	8.5	(28)	4.0	(76)	4.8	(48)
Philippines	6.9	(35)	3.7	(98)	9.4	(37)	7.3	(51)	5.8	(67)	7.6	(57)	5.6	(39)	4.2	(73)
Poland	5.6	(71)	5.9	(55)	7.9	(69)	7.0	(59)	5.5	(86)	8.1	(41)	4.1	(75)	4.1	(79)
Portugal	5.0	(87)	7.6	(20)	9.6	(23)	7.8	(34)	6.0	(52)	8.4	(32)	4.3	(70)	5.2	(35)
Romania	4.5	(102)	4.5	(77)	6.2	(111)	6.7	(75)	5.2	(98)	7.2	(76)	5.0	(51)	3.4	(91)
Russia	5.3	(81)	4.4	(81)	3.8	(120)	6.9	(65)	4.5	(116)	6.0	(103)	4.3	(69)	3.1	(94)
Rwanda	5.5	(76)	2.0	(121)	7.9	(70)	4.9	(111)	6.0	(48)	7.1	(78)				
Senegal	6.5	(45)	4.1	(91)	7.0	(84)	6.1	(87)	5.0	(107)	8.4	(31)	2.4	(95)	4.3	(70)
Sierra Leone	5.7	(67)	4.7	(74)	5.5	(117)	4.9	(113)	5.3	(93)	4.8	(119)				
Singapore	8.0	(9)	8.6	(10)	9.7	(14)	9.5	(2)	7.0	(12)	7.9	(50)	5.8	(36)	7.5	(4)
Slovak Rep	4.5	(104)	5.7	(61)	8.2	(64)	8.7	(7)	5.8	(65)	7.9	(46)	4.4	(66)	5.2	(41)
Slovenia	3.1	(120)	6.7	(35)	8.7	(56)	7.2	(55)	5.4	(90)	8.0	(45)	3.6	(84)	4.7	(52)
South Africa	5.6	(73)	6.5	(40)	7.8	(71)	7.5	(42)	6.5	(28)	8.8	(25)	5.5	(41)	5.2	(39)
South Korea	7.4	(19)	6.2	(48)	9.2	(43)	7.2	(53)	5.3	(95)	7.4	(63)	3.9	(78)	4.6	(57)
Spain	4.9	(88)	6.5	(42)	9.6	(21)	8.0	(26)	6.4	(31)	8.3	(36)	5.1	(47)	5.8	(27)
Sri Lanka	7.4	(21)	3.8	(96)	6.5	(106)	6.7	(74)	5.7	(78)	6.7	(88)	5.9	(31)	4.4	(64)
Sweden	3.1	(118)	8.9	(8)	9.6	(15)	8.2	(18)	6.5	(26)	9.1	(12)	3.3	(89)	7.1	(7)
Switzerland	6.9	(32)	8.6	(11)	9.7	(7)	8.3	(16)	7.3	(8)	8.9	(22)	5.9	(34)	7.2	(6)
Syria	5.1	(84)	5.1	(68)	8.3	(63)	4.5	(116)	3.9	(122)	4.1	(122)				
Taiwan	6.2	(54)	6.4	(43)	9.7	(8)	8.2	(19)	5.8	(71)	6.3	(101)	4.8	(57)	6.3	(17)
Tanzania	4.9	(90)	5.9	(56)	9.1	(46)	5.7	(96)	5.7	(77)	5.7	(110)	6.8	(14)	4.5	(61)
Thailand	6.6	(43)	6.5	(40)	6.7	(98)	7.6	(36)	5.9	(56)	7.0	(82)	6.2	(27)	4.6	(54)
Togo	4.4	(105)	3.7	(97)	6.8	(96)	5.5	(99)	4.9	(110)	6.8	(86)				
Trinidad & Tob.	6.9	(34)	5.8	(58)	9.4	(30)	6.7	(70)	6.4	(29)	7.4	(64)	6.7	(15)	5.2	(38)
Tunisia	5.3	(80)	6.9	(33)	7.2	(80)	6.2	(85)	6.0	(47)	8.1	(43)	3.9	(77)	6.1	(21)
Turkey	7.0	(28)	4.5	(77)	4.0	(119)	6.9	(66)	5.0	(106)	6.1	(102)	4.4	(67)	4.6	(60)
Uganda	6.2	(55)	4.3	(82)	9.4	(33)	7.0	(61)	5.8	(66)	4.9	(117)	8.3	(1)	4.3	(67)
Ukraine	3.3	(117)	4.4	(80)	6.0	(114)	7.3	(52)	5.5	(87)	6.9	(84)	5.9	(30)	3.5	(87)
Unit. Arab Em.	7.6	(13)	6.6	(38)	9.1	(47)	8.2	(21)	6.2	(39)	6.8	(85)				
United Kingdom	6.8	(36)	9.0	(5)	9.5	(28)	8.3	(17)	7.4	(7)	9.2	(11)	6.7	(17)	6.2	(19)
United States	7.4	(16)	8.2	(16)	9.8	(3)	7.8	(29)	7.7	(3)	9.2	(8)	7.3	(7)	6.7	(10)
Uruguay	7.4	(17)	5.8	(59)	8.7	(57)	6.6	(78)	5.7	(76)	6.3	(100)	5.8	(35)	5.0	(44)
Venezuela	6.8	(38)	1.6	(123)	6.1	(112)	4.3	(117)	4.4	(118)	7.5	(62)	2.8	(93)	2.9	(95)
Zambia	6.4	(50)	5.4	(64)	7.5	(76)	7.6	(39)	5.9	(59)	6.0	(105)	7.4	(5)	4.3	(72)
Zimbabwe	4.7	(95)	2.8	(112)	1.6	(123)	3.2	(121)	4.6	(113)	5.5	(112)	4.9	(53)	3.5	(87)

A Chain-Linked Summary Index

One of the most valuable aspects of this economic freedom index is that, for many countries, it can be calculated back to 1970. We rate 53 countries in 1970; 70 in 1975; 102 in 1980, 109 in 1985, 113 in 1990, and 123 for 1995 and 2000 to 2002. Using this longitudinal data, researchers are better able to examine 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 similar to comparing GDP or a price index over time when we know that the underlying goods and services used to calculate these statistics are constantly changing. The problem of missing components threatens the comparability of the index ratings over time.

In order to correct for this problem, we have constructed a 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 over-lapping components between the two years, then the 1995 summary rating was adjusted downward proportionately to reflect this fact. Correspondingly, in cases where the 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 2002. 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 both of the over-lapping years. This is precisely what one would want when making comparisons across time periods.

Exhibit 1.4 presents this "chain-linked" economic freedom index for years from 1970 to 2002. Researchers doing longitudinal studies of economic freedom should use these chain-linked data.

Has Economic Freedom Been Increasing or Decreasing?

The chain-linked index sheds light on this question. There are 104 countries for which we had summary ratings from 1980 to 2002. This group includes all of the major economies except Russia, which had to be omitted because of discontinuity resulting from the breakup of the Soviet Union. Exhibit 1.5 presents the mean summary rating of these countries for selected years in the period from 1980 to 2002. As the graphic illustrates, the mean EFW rating rose from 5.1 in 1980 and 5.2 in 1985 to 5.6 in 1990, 6.1 in 1995 and 6.5 from 2000 to 2002. Thus, the summary rating has risen almost a point and a half since 1980.

Closer inspection of the components makes it clear why the summary ratings have increased substantially during the last two decades. Consider the following:

- Monetary policy was more stable. The mean rating in the Access to Sound Money area rose from 6.0 in 1980 to 8.0 in 2002. In 2002, only 15 of the 104 countries had double-digit inflation rates compared to 76 in 1980.
- The use of extremely high marginal tax rates fell sharply. In 2002, not a single country imposed a 60% marginal tax rate on personal income; in 1980, 49 did so.
- Exchange-rate controls were liberalized substantially. In 2002, there were only four countries with black-market exchange rate premiums of 25% or more compared to 36 countries with such a premium in 1980.
- Tariff rates were reduced. In 2002, the mean tariff rate was 10.4% compared to 26.1% in 1980.
- The size of the trade sector expanded. Between 1980 and 2002, on average, exports plus imports as a share of GDP increased by 25.2%.
- Controls on both capital markets and interest rates were relaxed. The average rating for the capital controls component was 5.3 in 2002 compared to 2.2 in 1980. For the interest-rate control component, the average rating was 9.1 in 2002, up from 5.4 in 1980.

Exhibit 1.4: A Chain-Linked Summary Index

	1970	1975	1980	1985	1990	1995	2000	2001	2002
Albania					3.3	4.1	5.7	5.8	5.8
Algeria			3.8	3.8	3.4	3.6	4.3	4.8	4.7
Argentina	4.4	2.8	3.9	3.5	4.4	6.7	7.2	6.5	5.8
Australia	6.6	5.8	6.4	6.8	7.3	7.8	8.0	7.9	7.9
Austria	6.0	5.7	6.2	6.2	6.9	7.0	7.5	7.6	7.5
Bahamas		6.1	5.8	5.8	6.2	6.3	6.5	6.5	6.5
Bahrain			7.0	6.5	6.8	6.9	7.2	7.1	7.2
Bangladesh		2.8	3.1	3.3	4.2	5.0	5.7	5.7	5.9
Barbados		5.0	5.1	5.4	5.8	5.8	5.6	5.5	5.8
Belgium	7.3	6.6	6.8	6.9	7.2	7.2	7.5	7.4	7.4
Belize			5.0	4.8	5.7	6.3	6.2	6.2	6.5
Benin			4.9	4.6	4.9	4.5	5.6	5.8	5.5
Bolivia			4.4	3.5	5.2	6.5	6.7	6.5	6.5
Botswana			5.0	5.1	5.4	6.0	7.2	7.1	7.4
Brazil	4.8	4.0	3.7	3.2	3.9	4.1	5.9	5.9	6.2
Bulgaria				4.7	3.7	4.5	5.1	5.7	6.0
Burundi		3.9	4.0	4.5	4.7	4.3	5.1	5.3	5.1
Cameroon			5.4	5.6	5.7	5.2	5.5	5.9	5.7
Canada	7.4	6.6	7.0	7.0	7.7	7.8	8.1	8.1	7.9
Central Afr. Rep.				4.5	5.0	4.7	4.9	5.0	4.9
Chad				4.8	4.6	4.5	5.4	5.8	5.6
Chile	3.6	3.6	5.3	5.8	6.8	7.5	7.5	7.3	7.3
China			3.8	4.8	4.2	4.9	5.8	5.9	5.7
Colombia	5.4	5.0	4.8	5.2	5.0	5.6	5.4	5.5	5.3
Congo, Dem. R.	4.7	4.2	3.0	3.9	3.7	4.1	3.5	3.6	4.9
Congo, Rep. of			5.1	5.0	5.6	5.5	4.4	4.7	5.0
Costa Rica		5.6	5.0	4.7	6.5	6.7	7.3	7.2	7.1
Côte d'Ivoire			5.1	5.7	5.5	5.5	5.7	5.8	5.9
Croatia						3.8	5.8	6.2	5.9
Cyprus		5.3	5.3	5.2	5.9	6.1	6.2	6.2	6.8
Czech Rep.						5.9	6.7	6.9	6.9
Denmark	6.6	5.9	6.0	6.2	7.0	7.4	7.7	7.6	7.6
Dominican Rep.			4.8	4.6	4.4	6.2	6.5	6.5	6.6
Ecuador	3.6	4.7	5.0	4.1	5.0	5.9	5.4	5.3	5.6
Egypt		3.9	4.6	5.0	4.8	5.9	6.7	6.5	6.2
El Salvador			4.3	4.1	4.5	6.8	7.3	7.3	7.2
Estonia						5.3	7.1	7.4	7.7
Fiji		5.1	5.4	5.6	5.8	6.0	6.1	6.0	6.2
Finland	6.6	5.8	6.4	6.5	7.0	7.5	7.7	7.7	7.7
France	6.2	5.4	5.7	5.7	6.8	6.8	7.0	6.7	6.8
Gabon			4.0	4.7	5.0	5.0	5.0	5.3	5.2
Germany	7.3	6.8	7.0	7.1	7.3	7.5	7.6	7.3	7.3

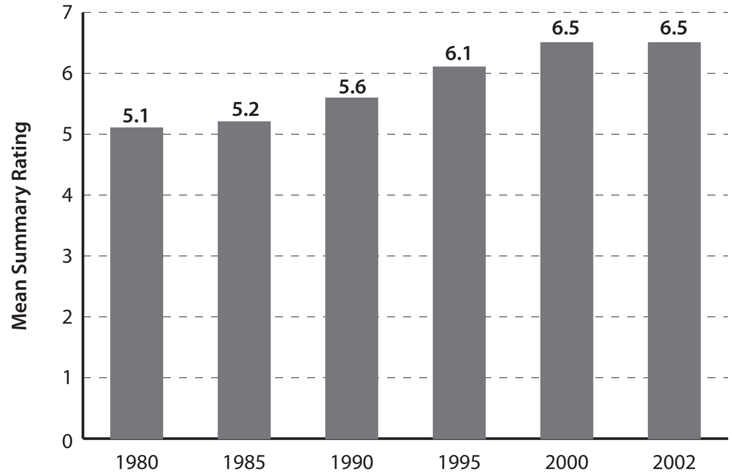
Exhibit 1.4 (continued): A Chain-Linked Summary Index

	1970	1975	1980	1985	1990	1995	2000	2001	2002
Ghana		3.0	2.3	2.5	4.3	5.0	5.9	5.6	6.4
Greece	6.1	5.6	5.6	5.1	5.7	6.2	6.9	6.8	6.9
Guatemala	5.8	6.4	5.9	4.7	5.6	6.7	6.4	6.4	6.4
Guinea-Bissau					2.7	3.5	4.4	5.2	4.9
Guyana						4.8	6.6	6.7	6.4
Haiti			5.6	5.8	5.5	5.4	6.4	5.9	6.0
Honduras			5.5	5.3	5.2	6.0	6.4	6.3	6.4
Hong Kong	8.3	8.3	8.6	8.3	8.6	9.1	8.7	8.7	8.7
Hungary			4.2	4.9	4.8	6.2	6.7	7.1	7.3
Iceland	6.1	4.2	4.9	5.1	6.6	7.3	7.7	7.7	7.6
India	4.9	4.1	4.9	4.6	4.8	5.5	6.2	6.2	6.3
Indonesia	4.8	5.3	5.2	6.2	6.6	6.7	5.9	5.5	5.8
Iran	5.8	5.7	3.5	3.7	4.1	4.0	5.6	6.2	6.1
Ireland	6.5	5.8	6.2	6.2	7.0	8.2	8.1	7.9	7.8
Israel	4.9	4.2	3.7	4.3	4.4	6.0	6.5	6.5	6.6
Italy	5.8	5.1	5.2	5.4	6.4	6.5	7.1	7.0	7.0
Jamaica			3.9	4.3	5.4	6.3	7.0	6.9	6.9
Japan	6.2	5.9	6.4	6.5	7.1	6.9	7.3	7.0	7.0
Jordan		5.2	5.0	5.5	5.6	6.2	7.0	6.7	7.0
Kenya	4.7	4.5	4.7	5.0	5.3	5.7	6.5	6.6	6.7
Kuwait			5.8	7.9	5.1	6.6	6.7	7.3	7.4
Latvia						4.6	6.6	6.7	7.0
Lithuania						4.7	6.3	6.3	6.8
Luxembourg	7.0	6.9	6.8	7.2	7.4	7.6	7.8	7.7	7.7
Madagascar			3.8	4.1	3.9	4.0	5.8	6.2	5.7
Malawi		4.8	4.3	4.4	4.7	4.4	4.7	5.4	5.4
Malaysia	6.0	5.9	6.4	6.5	7.1	7.2	6.8	6.4	6.5
Mali		4.9	5.0	4.7	4.8	4.9	6.0	5.8	5.7
Malta			5.0	4.8	5.2	6.4	6.5	6.5	6.6
Mauritius		4.6	4.7	5.9	6.1	7.3	7.3	7.3	7.2
Mexico	6.0	5.3	5.1	4.3	5.7	6.2	6.3	6.3	6.5
Morocco	5.5	4.9	4.3	4.9	4.8	5.8	6.0	6.0	5.9
Myanmar			4.5	4.1	2.8	3.5	3.6	3.5	2.8
Namibia					5.3	6.6	6.3	6.5	6.3
Nepal			5.2	4.8	5.1	5.2	5.8	5.9	5.8
Netherlands	7.0	6.4	6.8	7.0	7.4	7.8	8.0	7.8	7.7
New Zealand	6.0	5.4	6.1	5.9	7.3	8.5	8.4	8.2	8.2
Nicaragua			3.7	1.7	2.4	5.3	6.6	6.4	6.4
Niger			4.9	5.3	4.7	4.6	5.8	5.6	5.4
Nigeria	3.4	3.6	3.5	3.7	3.5	3.8	5.3	5.5	5.7
Norway	6.0	5.5	5.8	6.3	7.0	7.5	7.2	7.1	7.0
Oman				6.2	6.1	6.8	7.4	7.4	7.4

Exhibit 1.4 (continued): A Chain-Linked Summary Index

	1970	1975	1980	1985	1990	1995	2000	2001	2002
Pakistan	4.3	3.7	4.5	5.1	5.0	5.7	5.4	5.6	5.8
Panama		6.4	5.2	5.7	6.3	7.2	7.1	7.1	7.2
Pap. New Guinea				5.9	6.3	6.3	5.9	5.9	5.7
Paraguay			5.5	4.9	5.5	6.6	6.3	6.4	6.2
Peru	4.6	3.8	3.9	2.9	3.6	6.2	6.9	6.9	6.8
Philippines	5.2	4.8	4.9	4.8	5.4	7.2	7.1	6.6	6.6
Poland				3.4	3.3	4.8	6.3	6.2	6.4
Portugal	6.0	3.7	5.6	5.3	6.0	7.2	7.3	7.2	7.2
Romania				4.5	4.0	3.6	4.9	5.0	5.4
Russia						3.7	4.9	4.9	5.0
Rwanda					4.6	3.6	5.1	5.4	5.4
Senegal			4.6	4.9	5.3	4.6	5.8	5.8	5.8
Sierra Leone		5.6	5.3	3.5	3.8	4.4	5.1	5.2	5.4
Singapore	7.4	7.3	7.5	7.9	8.5	8.8	8.5	8.5	8.6
Slovak Rep						5.1	6.3	6.3	6.6
Slovenia						4.7	5.9	6.0	6.2
South Africa	5.9	5.5	5.4	5.0	5.2	6.3	6.8	6.7	6.8
South Korea	5.3	5.3	5.6	5.6	6.2	6.7	6.7	7.1	7.1
Spain	6.1	5.5	5.7	5.8	6.2	7.0	7.4	7.0	7.1
Sri Lanka			4.9	5.0	4.9	6.1	6.1	6.0	6.0
Sweden	5.5	5.2	5.6	6.2	6.6	7.1	7.4	7.2	7.3
Switzerland	7.4	7.2	7.7	7.8	7.9	7.9	8.3	8.1	8.2
Syria	4.7	4.9	4.0	3.6	3.5	4.3	4.9	5.7	5.2
Taiwan	6.6	5.9	6.7	6.9	7.1	7.3	7.2	7.1	7.3
Tanzania	4.4	3.8	3.9	3.4	3.7	4.8	5.8	6.7	6.2
Thailand	5.7	5.6	5.9	5.9	6.8	7.2	6.7	6.7	6.7
Togo			4.2	5.4	5.1	4.8	5.1	5.3	5.2
Trinidad & Tob.		4.3	4.6	4.4	5.5	6.7	7.0	7.0	7.1
Tunisia	4.5	4.6	4.9	4.7	5.3	6.0	6.1	6.2	6.2
Turkey	3.6	3.8	3.5	4.7	4.8	5.8	5.8	5.3	5.5
Uganda			2.9	2.5	2.6	4.9	6.7	6.7	6.6
Ukraine						3.7	4.7	5.0	5.3
Unit. Arab Em.			5.8	6.6	7.3	7.3	7.6	7.5	7.5
United Kingdom	5.9	5.8	6.1	7.0	7.7	8.2	8.3	8.3	8.2
United States	7.0	7.1	7.4	7.5	8.1	8.3	8.6	8.3	8.2
Uruguay			5.3	5.4	5.8	5.8	6.6	6.6	6.8
Venezuela	7.3	6.2	6.7	6.2	5.6	4.3	5.8	5.7	4.6
Zambia		4.0	4.4	3.5	2.8	4.4	6.6	6.7	6.6
Zimbabwe			4.7	4.6	4.9	6.0	4.3	3.4	3.4

Exhibit 1.5: Mean Summary Rating (Chain-Linked Method) in Selected Years, 1980 to 2002, for the 104 Countries for Which There Were Summary Ratings from 1980 to 2002



These components paint a clear picture. During the last two decades, many countries have followed a more stable monetary policy, cut marginal tax rates, reduced tariffs, and liberalized or eliminated controls on exchange rates, interest rates, and capital markets. As a result, the average EFW rating in 2002 is considerably higher than in 1980.

Changes in Country Ratings from 1980 to 2002

The chain-linked EFW index can also be used to track the economic freedom level of countries. Some countries have consistently registered high ratings throughout the last couple of decades. Hong Kong, Singapore, Switzerland, and the United States provide examples. The EFW rating of Germany has also been quite steady, between 7.0 and 7.6 from 1980 to 2002. Germany's rating in 2002 was 7.3, compared to 7.0 in 1980. However, because several other countries have made substantial improvements, Germany's ranking has been declining, receding to 22nd (tied with four other countries) in 2002. The experience of France has been similar. Since 1990, France's rating has been in the 6.7 to 7.0 range. Because other countries have been improving, France's ranking has receded. Its 6.8 rating in 2002 placed it 44th (tied with five other countries) among the 123 countries included in the index.

What countries have improved their rating the most? When did the changes take place? The chain-linked index provides answers to these questions. The following countries have registered substantial gains in economic freedom during the last couple of decades.

- Australia registered steady improvement from 1980 to 2000 as its rating rose from 6.4 in 1980 to 7.3 in 1990 and 8.0 in 2000 (and 7.9 in 2001 and 2002).
- Botswana increased its rating from 5.1 in 1985 to 6.0 in 1995 and 7.4 in 2002.
- Chile's rating improved from 3.6 in 1975 to 5.8 in 1985 and 7.5 in 1995. Chile's 2002 rating was 7.3, more than three points above its 1975 level.
- China's rating rose from 3.8 in 1980 to 4.2 in 1990 and 5.8 in 2000. China's 2001 rating was 5.7, almost 2 full points above its rating in 1980.
- El Salvador improved its rating substantially during the 1990s, moving from 4.5 in 1990 to 6.8 in 1995 and 7.3 in 2000 (and 7.2 in 2002).
- Ghana's rating has increased from 2.5 in 1985 to 5.1 in 1995 and 6.4 in 2002.
- Iceland increased its rating from 5.1 in 1985 to 7.3 in 1995 and 7.6 in 2002.
- India's rating has improved substantially since 1990. After stagnating between 4.1 and 4.9 from 1970 to 1990, India's rating rose to 5.5 in 1995, 6.2 in 2000, and 6.3 in 2002.
- Ireland's rating jumped between 1985 and 1995. It rose from 6.2 in 1985 to 7.0 in 1990 and 8.2 in 1995. During the last few years, Ireland's rating has receded slightly to 7.8 in 2002.
- Mauritius's rating has jumped from 4.7 in 1980 to 6.1 in 1990 and 7.3 in 2000 (and 7.2 in 2002).
- New Zealand's rating improved substantially between 1985 and 1995. It rose from 5.9 in 1985 to 7.3 in 1990 and 8.5 in 1995, before receding slightly to 8.2 in 2002.

- Trinidad and Tobago's rating rose from 4.4 in 1985 to 5.5 in 1990 and 6.7 in 1995. Its 2002 rating was 7.1, almost three points higher than in 1985.
- Uganda has improved its rating from 2.6 in 1990 to 4.9 in 1995, 6.7 in 2000 and 2001, and 6.6 in 2002. Thus, its rating jumped by 4 points during the 1990s.
- United Kingdom was a big gainer during the period from 1980 to 1995 as its rating rose from 6.1 in 1980 to 7.0 in 1985, 7.7 in 1990, 8.2 in 1995, and 8.3 in 2000 and 2001.

This is quite a geographically and economically diverse group. It contains the world's two most populous countries, India and China. It includes some of the world's poorest economies, as well as some that are relatively well-off. This diversity is an indication of the breadth of economic liberalization around the world.

In addition, several former centrally planned economies have made substantial moves toward economic liberalization since 1990. Among this group:

- Estonia's EFW rating has jumped from 5.3 in 1995 to 7.7 in 2002.
- Latvia's rating jumped from 4.6 in 1995 to 7.0 in 2002.
- Lithuania's rating has increased from 4.7 in 1995 to 6.8 in 2002.
- Hungary's rating rose from 4.8 in 1990 to 7.3 in 2002.
- The Czech Republic's rating increased from 5.9 in 1995 to 6.9 in 2002.
- Poland's rating rose from 3.3 in 1990 to 4.8 in 1995 and 6.4 in 2002.
- The Slovak Republic increased its rating from 5.1 in 1995 to 6.6 in 2002.

These countries now have relatively normal economies and they have established the foundation for further moves toward economic liberalization. While Bulgaria, Romania, Russia, and Ukraine lag behind the countries listed above, they too are showing some signs of movement toward economic freedom.

Because of the general trend toward liberalization, the EFW rating of most countries has risen over the last two decades. Only a few countries have experienced outright declines in their EFW rating since 1980. The following countries stand out for having less economic freedom today than 20 years ago: the Republic of Congo, Zimbabwe, Myanmar, and Venezuela. Astoundingly, Venezuela's rating in the chain-linked index has declined by over two full points since 1980!

Since 1995, the general trend has been somewhat less positive. The EFW rating of ten countries declined by 0.5 or more between 1995 and 2002. The following countries fall in this category:

- Zimbabwe's rating plunged from 6.0 in 1995 to 3.4 in 2002.
- Indonesia's rating fell sharply from 6.7 in 1995 to 5.8 in 2002.
- Argentina's rating fell from 6.7 in 1995 to 5.8 in 2002.
- Malaysia's rating fell from 7.2 in 1995 (and 7.1 in 1990) to 6.9 in 2000 and 6.8 in 2002.
- Myanmar, the least free economy among those included in our analysis, fell even lower from 3.5 in 1995 to 2.8 in 2002.
- Papua New Guinea's rating fell from 6.3 in both 1990 and 1995 to 5.7 in 2002.
- The Philippines' rating fell from 7.2 in 1995 to 6.6 in 2002.
- Thailand's rating declined from 7.2 in 1995 to 6.7 in 2002.
- The already low rating of the Republic of Congo fell from 5.5 in 1995 to 5.0 in 2002.
- Norway's 7.5 rating in 1995 receded to 7.0 in 2002.

While some of these changes are relatively small, these countries can expect to see their rankings continue to decline if the recent trend is not reversed.

Concluding Thoughts

Chapter 2 will provide a detailed analysis of the impact of economic freedom on investment, growth, and income levels. However, before we turn to that topic, we would like to present some graphics illustrating simple relationships between economic freedom by quintile and various other indicators of human and political progress (exhibits 1.6–1.18). No doubt, many of the relationships illustrated in these graphics reflect the impact of economic freedom through growth and income. In other cases, the observed relations may reflect the fact that some of the variables that influence economic freedom (rule of law, for example) may also influence political factors like corruption and protection of civil liberties. Thus, we are not arguing that there is a direct causal relation between economic freedom and the variables considered below. Nonetheless, we believe that the graphics provide additional information on the nature and characteristics of market economies. They also suggest potential fruitful areas for future research.

Exhibit 1.6: Economic Freedom and Per-Capita Income

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

Source: The World Bank, World Development Indicators 2004 (online).

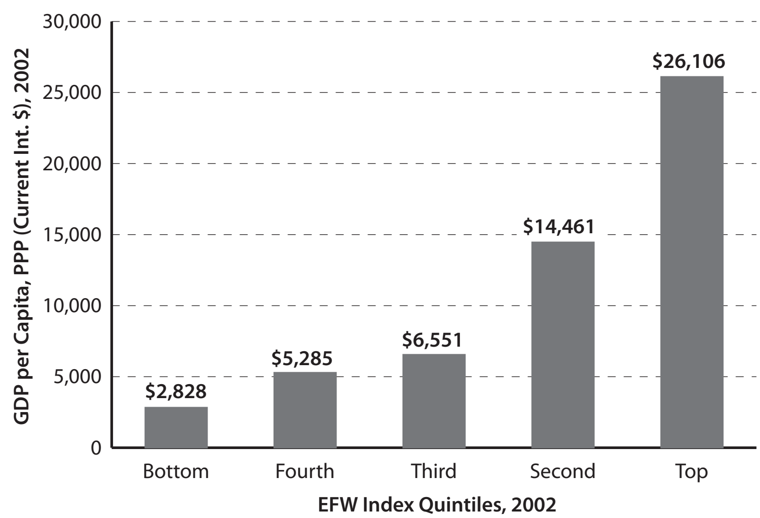


Exhibit 1.7: Economic Freedom and Economic Growth

Countries with more economic freedom have higher growth rates.

Source: The World Bank, World Development Indicators 2004 (online).

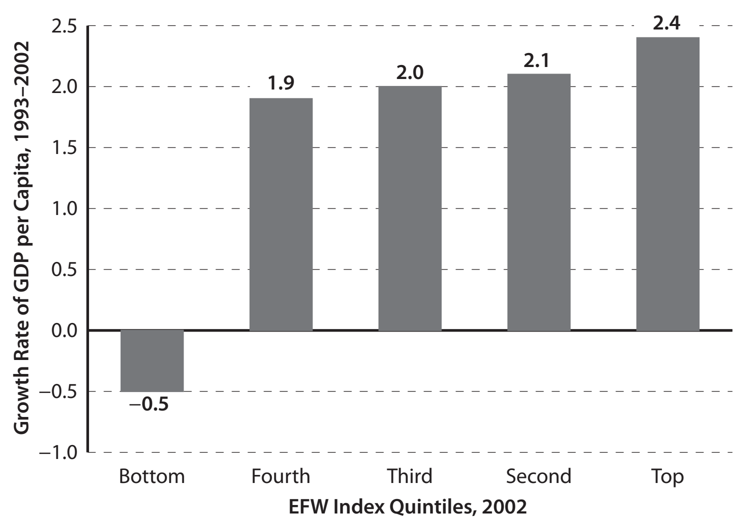


Exhibit 1.8: Economic Freedom and Life Expectancy

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

Source: The World Bank, World Development Indicators 2004 (online).

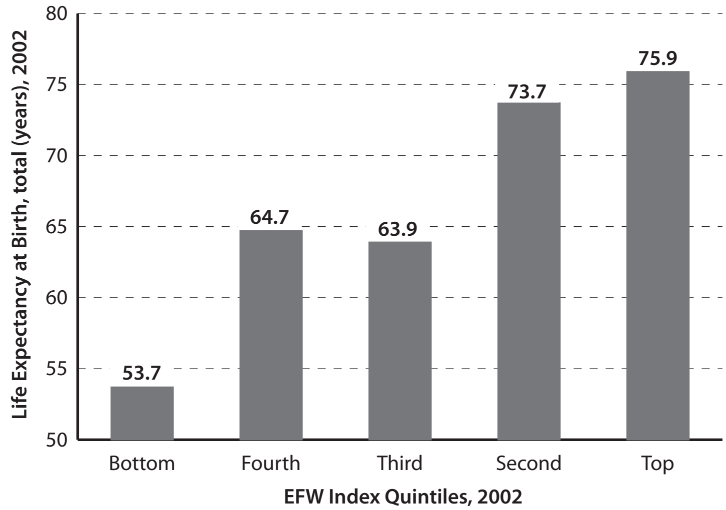


Exhibit 1.9: Economic Freedom and the Income Share of the Poorest 10%

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

Source: The World Bank, World Development Indicators 2004 (online).

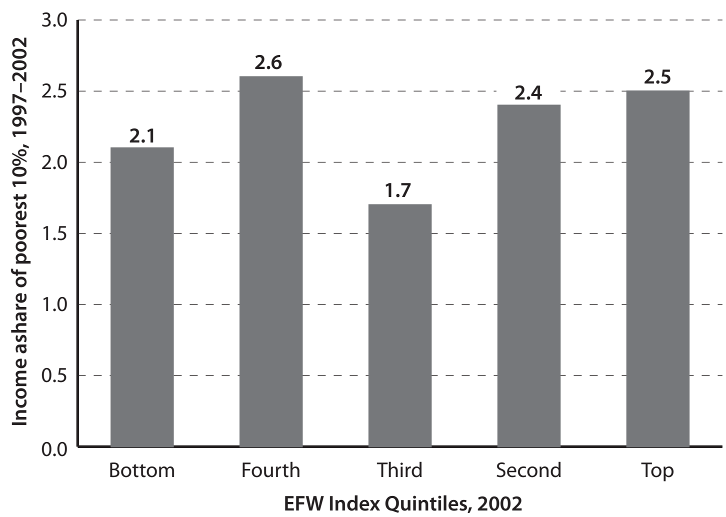


Exhibit 1.10: Economic Freedom and the Income Level of the Poorest 10%

The amount of income earned by the poorest 10% of the population is much greater in nations with the most economic freedom than it is in those with the least.

Source: The World Bank, World Development Indicators 2004 (online).

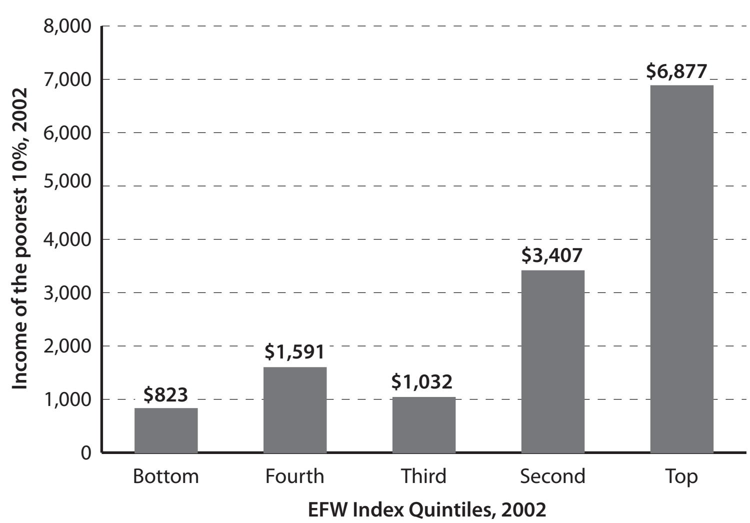


Exhibit 1.11: Economic Freedom and Adult Literacy

Adult literacy increases with economic freedom.

Source: The World Bank, World Development Indicators 2004 (online).

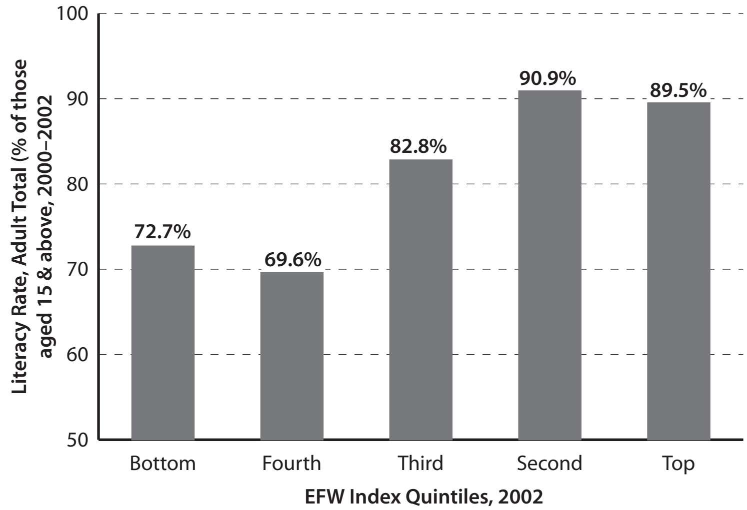


Exhibit 1.12: Economic Freedom and Infant Mortality

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

Source: The World Bank, World Development Indicators 2004 (online).

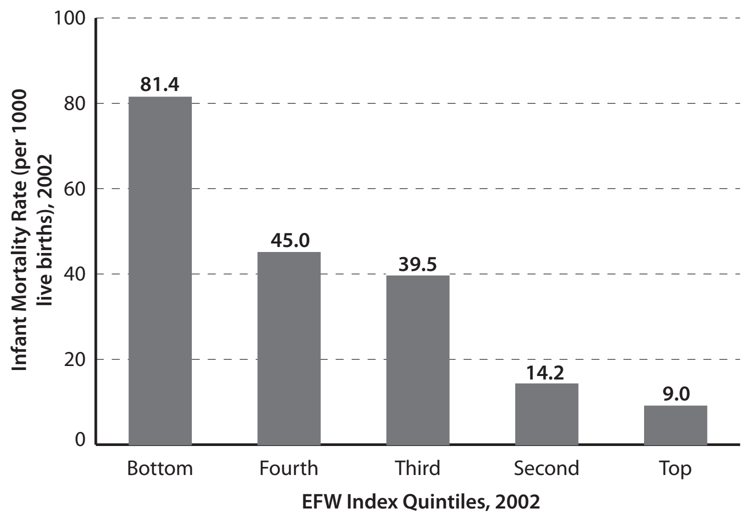


Exhibit 1.13: Economic Freedom and the Percentage of Children in the Labour Force

The incidence of child labour declines as economic freedom increases.

Source: The World Bank, World Development Indicators 2004 (online).

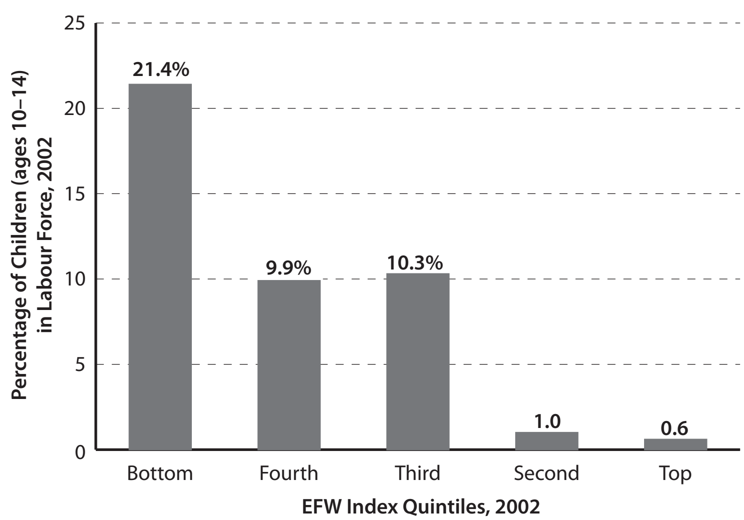


Exhibit 1.14: Economic Freedom and Access to Improved Water Sources

Access to improved (treated) water increases with economic freedom.

Source: The World Bank, World Development Indicators 2004 (online).

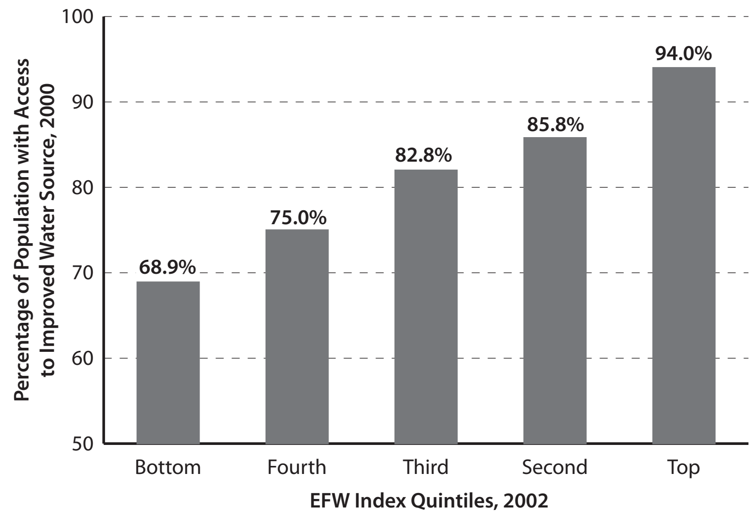


Exhibit 1.15: Economic Freedom and Human Development

More economic freedom is related to greater "human development" as measured by the United Nations.

Note: The United Nations' Human Development Index is measured on a scale from zero to one: zero = least developed; one = most developed.

Source: United Nations Development Programme, *Human Development Indicators 2003* (online).

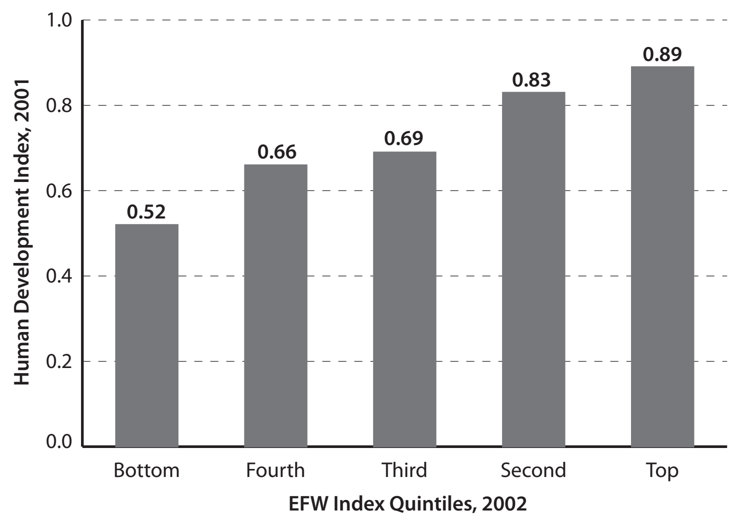


Exhibit 1.16: Economic Freedom and Corruption

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

Note: Corruption is measured on a scale from zero to 10: 10 = little or no corruption; zero = highly corrupt.

Source: Transparency International, *Corruption Perceptions Index 2003* (online).

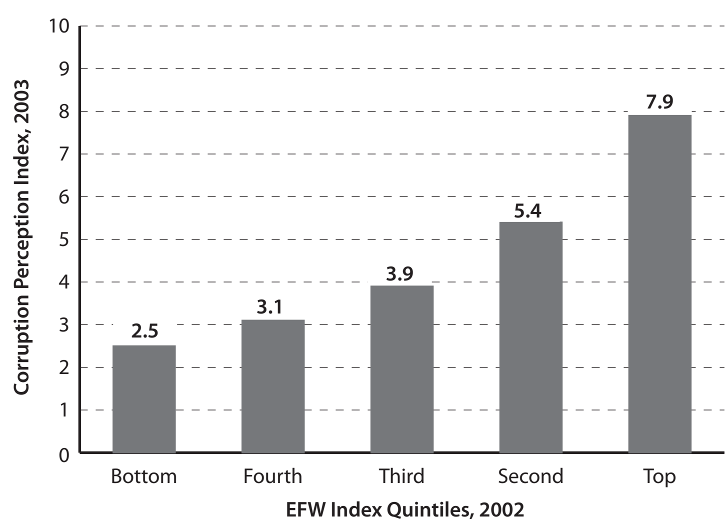


Exhibit 1.17: Economic Freedom and Political Rights and Civil Liberties

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 freedom; seven the lowest.

Source: Freedom House, *Freedom in the World Country Ratings*, 1972–2003 (online).

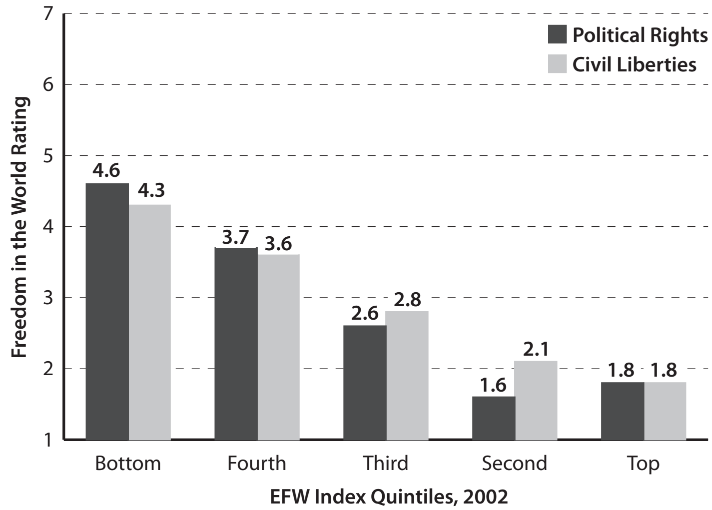
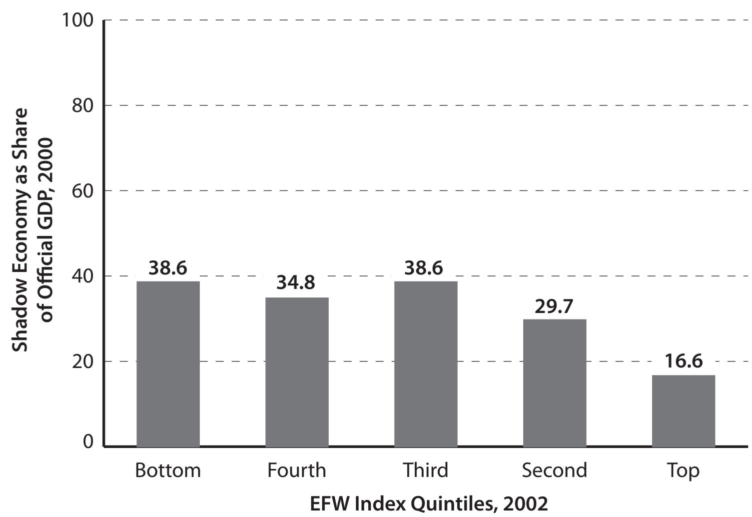


Exhibit 1.18: Economic Freedom and the Shadow Economy

The estimated size of the shadow (or underground) economy is lower in countries with more economic freedom.

Source: Friedrich Schneider and Robert Klinglmair (2004). *Shadow Economies around the World: What Do We Know?* CESifo Working Paper 1167. Munich: Center for Economic Studies & Ifo Institute for Economic Research.



Notes

1 See Michael A. Walker, ed., *Freedom, Democracy, and Economic Welfare* (Vancouver: The Fraser Institute, 1988); Walter Block, ed., *Economic Freedom: Toward a Theory of Measurement* (Vancouver: The Fraser Institute, 1991); and Stephen T. Easton and Michael A. Walker, eds., *Rating Global Economic Freedom* (Vancouver: The Fraser Institute, 1992).

2 Researchers can find all the data at <http://www.freetheworld.com>. See Appendix 1: Explanatory Notes and Data Sources for a list of sources used in constructing the index.

3 The focus of these reports differs substantially from the emphasis of the *Economic Freedom of the World*. The *International Country Risk Guide* is directed toward investors seeking information about financial and political risks that might affect their investments in different countries. The primary focus of the *World Competitiveness Report* is the use of technology, quality of the physical infrastructure, skill of the labor force, and other factors influencing the attractiveness of a country for business activity. However, the two reports also provide information on legal structure, security of property rights, and the regulatory environment. This is the information that is of value for our purposes.

4 Over the years, we have struggled with how to assign weights to various components and areas to construct a summary index. We have experimented with several different weighting methods ranging from the subjective views of "experts" to principal component analysis. In most cases, the choice of weighting method exerts little impact on the rating and ranking of countries. As a result, we have concluded that it is best to keep the procedure simple and transparent. Therefore, we now use a simple average to combine the components into area ratings and the area ratings into summary ratings. By use of this procedure, we do not mean to imply that all components and areas of economic freedom are equally important. For some purposes, clearly some of the components are more important than others. Readers who want to reweight the components and areas to suit themselves are invited to do so.

5 For 1970 to 1995, we report the same legal structure and property rights rating as in the 2001 report.

6 In Areas 2, 4, and 5, we ran a regression among the countries for which we had complete data. The dependent variable was the area rating *with the survey data* and the independent variable was the area rating *excluding the survey data*. The regression relationship indicates how the omission of the survey data affects the area rating. The regression estimates were used to adjust the area ratings for the countries without survey data and, thereby, make them more comparable with the ratings of the countries for which the survey data were available. The same adjustments were performed in all years.

7 Economists often speak of the protective and productive functions of government. The protective function involves protecting citizens and their property against aggressors. It includes the provision of national defense, police protection, and a system of justice. The productive function involves the provision of a limited set of public goods like sound money, flood control, and environmental quality that are difficult to provide through markets. Countries with high incomes currently spend only about 10% to 15% of GDP on these activities. For evidence on this point, see James Gwartney, Robert Lawson, and Randall Holcombe, "The Size and Scope of Government and Economic Growth," *Cato Journal* 18, 2 (Fall, 1998): 163–90.

8 The *International Country Risk Guide* data are computed from an in-house panel of experts whereas the *Global Competitiveness Report* data are based on a survey of business decision-makers. For our purposes here, however, we will refer to both sources as being survey-based.

9 For information on how centralized wage setting, restrictive dismissal regulations, and lucrative unemployment benefits have reduced employment and increased unemployment among OECD countries, see Edward Bierhanzl and James Gwartney, "Regulation, Unions, and Labor Markets," *Regulation* (Summer, 1998): 40–53, and Horst Siebert, "Labor Market Rigidities: At the Root of Unemployment in Europe," *Journal of Economic Perspectives* 11, 3 (1997): 37–54.