

Chapter 1

Economic Freedom of the World, 2009

This year's *Economic Freedom of the World* reflects a quarter of a century of research and development in the measurement of economic freedom. Numerous scholars, including Nobel Prize winners Milton Friedman, Douglass North, and Gary Becker, have contributed to this project. The EFW measure now covers 141 countries and provides reliable data for approximately 100 of them back to 1980.

The concept of economic freedom

The key ingredients of economic freedom are:

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

These four cornerstones imply that economic freedom is present when individuals are permitted to choose for themselves and engage in voluntary transactions as long as they do not harm the person or property of others. Individuals have a right to decide how they will use their time, talents, and resources, but they do not have a right to the time, talents, and resources of others. Put another way, individuals do not have a right to take things from others or demand that others provide things for them. Use of violence, theft, fraud, and physical invasions are not permissible but, otherwise, individuals are free to choose, trade, and cooperate with others, and compete as they see fit.

In an economically free society, the primary role of government is to protect individuals and their property from aggression by others. The EFW index is designed to measure the extent to which the institutions and policies of a nation are consistent with this protective function. 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.

Why economic freedom is important

Numerous scholarly articles have used the EFW data to examine the relationship between economic freedom and various measures of economic and social performance. This research indicates why economic freedom is vitally important to a society. We will mention just four areas of research below. Exhibit 1.1 provides a list of selected scholarly articles in each of these areas.

1 *Economic freedom and investment, income, and growth*

Economic freedom leads to more investment, higher per-capita incomes, and growth rates. Dozens of studies have investigated the relationship between economic freedom on the one hand and investment, economic growth, and per person income on the other. These studies typically control for geographic, locational, political, educational, and numerous other factors. Most of them have found that higher levels of economic freedom, or certain components of economic freedom, exert an independent positive impact on investment, economic growth, and income per capita.

2 *Economic freedom, reductions in poverty, and improvements in human welfare*

Economic freedom leads to less poverty and improvements in the general living conditions of a society. Critics sometimes charge that economic freedom and market allocation often result in the poor being left behind but research in this area is inconsistent with this view. As seen in exhibit 1.17 at the end of this chapter, countries with persistently high levels of economic freedom have lower poverty rates. Moreover, those that move toward more economic freedom enjoy better living standards across multiple dimensions.

3 *Economic freedom, cooperation, tolerance, and peaceful relations*

Economic freedom encourages cooperation, tolerance, and peaceful relations. Voluntary exchange is the centerpiece of economically free economies. Both parties to an exchange gain and therefore buyers and sellers are encouraged to interact with those who give them the best deal, regardless of their racial, religious, ethnic, gender, or

tribal characteristics. Markets reward those who serve others, including those they do not necessarily like. When markets thrive, people with vastly different characteristics often interact peacefully with each other. In turn, the peaceful interaction among diverse groups encourages tolerance and promotes understanding. In contrast, political allocation promotes divisiveness and polarization. When resources are allocated politically, individuals and groups get ahead by taking from others or imposing regulations that provide them with an advantage relative to others. This encourages various groups to bind together in order to gain advantages relative to other groups. Thus, political allocation leads to polarization and bitterness toward groups favored by the political process. In cases where a racial, religious, ethnic, or tribal group forms a majority, the political process is often used to oppress the minority. The empirical studies are consistent with this view. Countries with higher levels of economic freedom are less likely to experience both internal and external use of violence.

4 Economic freedom, entrepreneurship, and honesty in government

Economic freedom leads to entrepreneurial business activity; political allocation leads to crony capitalism and political corruption. When the function of government

is limited to protection of people and their property and even-handed enforcement of contracts and settlement of disputes, entrepreneurs will get ahead by discovering highly valued products and lower-cost methods of production. Profits will direct resources toward productive projects—those that increase the value of resources. Similarly, losses will channel resources away from wasteful projects that reduce the value of resources. When resources are allocated by political decision-making, a system of crony capitalism will emerge. Predictably, politicians will allocate resources toward the politically powerful—those who can provide them with the most votes, campaign funds, high-paying jobs for political allies and, yes, even bribes. Unlike true entrepreneurs, crony capitalists do not create wealth; instead they form a coalition with political officials to plunder wealth from taxpayers and other citizens.

Will goods and resources be directed by markets or political officials? This is the great debate of our time. This debate highlights the importance of an accurate and objective measure of economic freedom. The index published in *Economic Freedom of the World* provides a measure that will help one track the direction of this debate, which is sure to affect the prosperity of the world in the years immediately ahead.

Exhibit 1.1: Selected scholarly articles on the importance of economic freedom

1 Economic freedom and investment, income, and growth

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3 Economic freedom, cooperation, tolerance, and peaceful relations

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4 Economic freedom, entrepreneurship, and honesty in government

- Bjornskov, C., and N.J. Foss (2008). Economic Freedom and Entrepreneurial Activity: Some Cross-Country Evidence. *Public Choice* 134, 3-4: 307–328.
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The Economic Freedom of the World index, 2009

The construction of the index published in *Economic Freedom of the World* is based on three important methodological principles. First, objective components are always preferred to those that involve surveys or value judgments. Given the multi-dimensional nature of economic freedom and the importance of legal and regulatory elements it is sometimes necessary to use data based on surveys, expert panels, and generic case studies. To the fullest extent possible, however, the index uses objective components. Second, the data used to construct the index ratings are from external sources such as the International Monetary Fund, World Bank, and World Economic Forum that provide data for a large number of countries. Data provided directly from a source within a country are rarely used, and only when the data are unavailable from international sources. Importantly, the value judgments of the authors or others in the Economic Freedom Network are never used to alter the raw data or the rating of any country. Third, transparency is present throughout. The report provides information about the data sources, the methodology used to transform raw data into component ratings, and how the component ratings are used to construct both the area and summary ratings. Complete methodological

details can be found in the Appendix: Explanatory Notes and Data Sources (pp. 191). The entire data set used in the construction of the index is freely available to researchers at www.freetheworld.com.

Exhibit 1.2 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, and Taxes, 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. In total, the index comprises 42 distinct variables. Each component and sub-component is placed on a scale from 0 to 10 that reflects the distribution of the underlying data. The sub-component ratings are averaged to determine each component. The component ratings within each area are then averaged to derive ratings for each of the five areas. In turn, the five area ratings are averaged to derive the summary rating for each country. The following section provides an overview of the five major areas.

Exhibit 1.2: The Areas, Components, and Sub-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 Revenues from trade taxes (% of trade sector)
 - 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 & 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 Hiring regulations and minimum wage (DB)
- ii Hiring and firing regulations (GCR)
- iii Centralized collective bargaining (GCR)
- iv Hours regulations (DB)
- v Mandated cost of worker dismissal (DB)
- vi Conscriptation

C Business regulations

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

GCR = *Global Competitiveness Report*; ICRG = *International Country Risk Guide*; DB = *Doing Business*.

See Appendix: Explanatory Notes and Data Sources (page 191) for bibliographical information.

Area 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 capital. They often operate in protected markets. Thus, economic freedom is reduced as government enterprises produce a larger share of total output.

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

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

Area 2: Legal Structure and Security of Property Rights

Protection of persons and their rightfully acquired property is a central element of economic freedom and a civil society. Indeed, it is the most important function of government. Area 2 focuses on this issue. The key ingredients of a legal system consistent with economic freedom are rule of law, security of property rights, an independent judiciary, and

an impartial court system. Components indicating how well the protective function of government is performed were assembled from three primary sources: the *International Country Risk Guide*, the *Global Competitiveness Report*, and the World Bank's *Doing Business* project.

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

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 finance their expenditures by creating money, in effect, they are expropriating the property and violating the economic freedom of their citizens.

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

There are four components in Area 3 of the EFW index. All of them are objective and relatively easy to obtain and all have been included in the earlier editions of the index. The first three are designed to measure the consistency of monetary policy (or institutions) with long-term price stability. Component 3D is designed to

measure the ease with which other currencies can be used via domestic and foreign bank accounts. In order to earn a high rating in this area, a country must follow policies and adopt institutions that lead to low (and stable) rates of inflation and avoid regulations that limit the ability to use alternative currencies.

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. Many goods and services are now either produced abroad or contain resources supplied from abroad. Voluntary exchange is a positive-sum activity: both trading partners gain and the pursuit of the gain provides the motivation for the exchange. Thus, freedom to trade internationally also contributes substantially to our modern living standards.

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

The components in this area are designed to measure a wide variety of restraints that affect international exchange: tariffs, quotas, hidden administrative restraints, and 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.

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 fifth area of the index focuses on regulatory restraints that limit the freedom of exchange in credit, labor, and product markets. The first component (5A) reflects conditions in the domestic credit market. 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 market in credit. Countries that use a private banking system to allocate credit to private parties and refrain from controlling interest rates receive higher ratings for this regulatory component.

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

Like the regulation of credit and labor markets, the regulation of business activities (5C) inhibits economic freedom. The sub-components of 5C are designed to identify the extent to which regulations and bureaucratic procedures restrain entry and reduce competition. In order to earn a high score 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 Summary and Area 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 work together as 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. With regard to an automobile, which is more important for mobility: 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.

Summary Economic Freedom Ratings, 2009

Exhibit 1.3 presents summary economic freedom ratings, sorted from highest to lowest. These ratings are for the year 2009, the most recent year for which comprehensive data are available. Hong Kong and Singapore, once again, occupy the top two positions. The other nations in the top 10 are New Zealand, Switzerland, Australia, Canada, Chile, United Kingdom, Mauritius, and the United States. The rankings of other major countries include Germany (21st), Japan (22nd), Korea (30th), France (42nd), Spain (54th), Italy (70th), Mexico (75th), Russia (81st), China (92nd), India (94th), and Brazil (102nd). The ten lowest-rated

As the result of these two considerations, we organize the elements of the index in a manner that seems sensible to us but we make no attempt to weight the components in any special way when deriving either area or summary ratings. Of course, the data for the components and sub-components are available to researchers who would like to consider alternative weighting schemes and we encourage them to do so.

countries are Chad, Burundi, Republic of Congo, Guinea-Bissau, Central African Republic, Democratic Republic of Congo, Angola, Venezuela, Myanmar, and, again in last place, Zimbabwe.

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

Area Economic Freedom Ratings (and Rankings), 2009

Exhibit 1.4 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. 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 have a small fiscal size of government, but rate poorly in other areas. Madagascar and Togo illustrate this point. Madagascar ranks fourth and Togo second for size of government (Area 1). However, Madagascar ranks 132nd in Area 2, 89th in Area 4, 126th in Area 5, and its summary rating places it 96th. In a similar fashion, Togo ranks 139th in Area 2, 109th in Area 4, 140th in Area 5, and its overall summary ranking is 123rd. Clearly, a small size

of government is insufficient for the provision 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 also required.

Weakness in the rule of law and property rights is particularly pronounced in sub-Saharan Africa, among Islamic nations, and for several nations that were part of the 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 areas, even though several have reasonably sized governments and sound money.

The economies most open to foreign trade are Hong Kong and Singapore, while the most closed economies are Myanmar and Venezuela. The least regulated countries—those at the top in Regulation of Credit, Labor, and Business (Area 5)—are a diverse lot: Belize, Bahamas, Hong Kong, Fiji, New Zealand, and Singapore.

Exhibit 1.3: Summary Economic Freedom Ratings, 2009

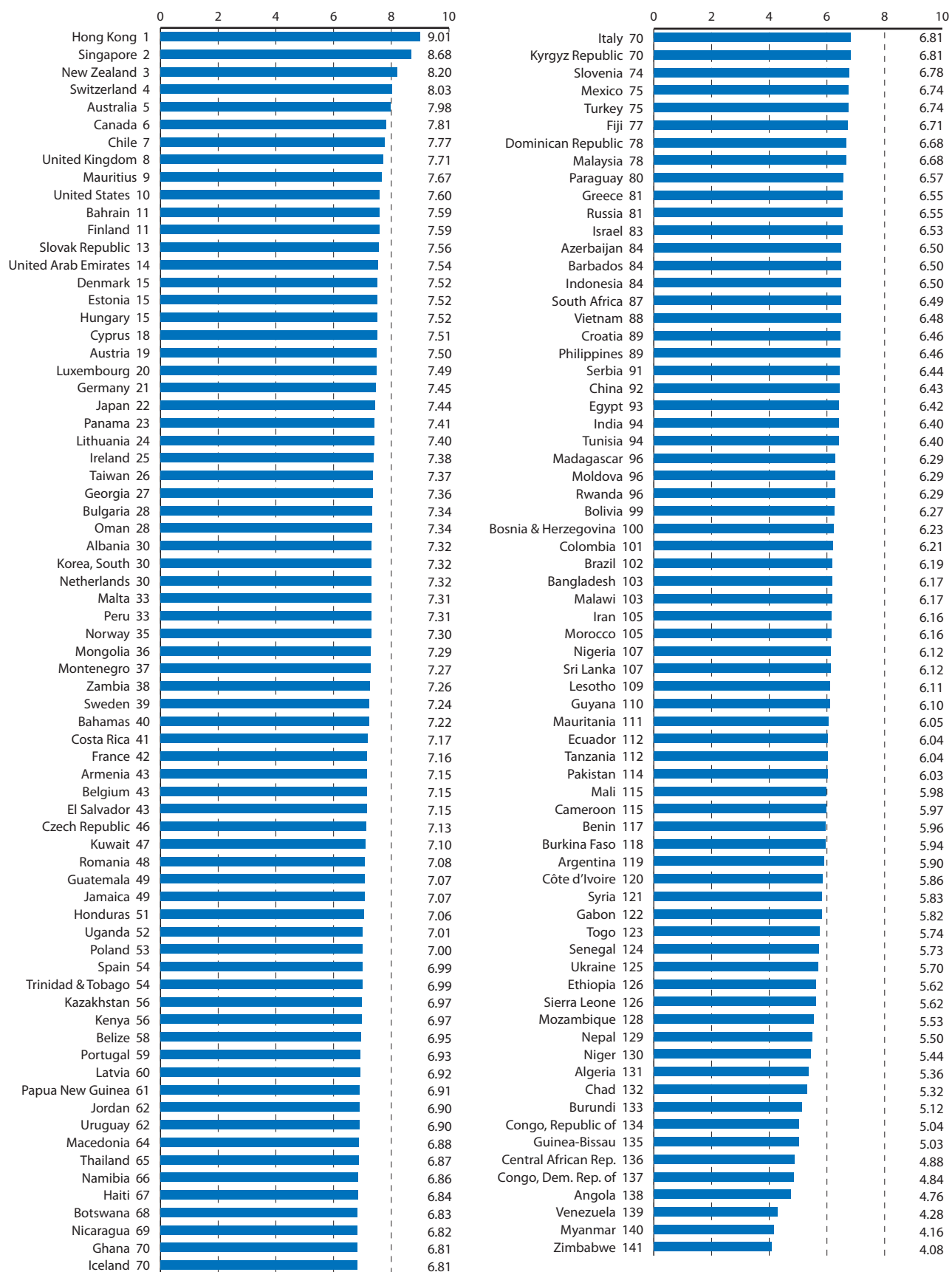


Exhibit 1.4: Area Economic Freedom Ratings (Ranks), 2009

	AREAS					COMPONENTS OF AREA 5		
	1	2	3	4	5	5A	5B	5C
	Size of Government	Legal System & Property Rights	Sound Money	Freedom to Trade Internationally	Regulation	Credit Market Regulation	Labor Market Regulations	Business Regulations
	Rating (Rank)	Rating (Rank)	Rating (Rank)	Rating (Rank)	Rating (Rank)	Rating (Rank)	Rating (Rank)	Rating (Rank)
Albania	8.2 (8)	5.4 (79)	9.6 (6)	6.6 (72)	6.7 (83)	8.1 (78)	5.9 (86)	6.1 (55)
Algeria	3.6 (138)	4.6 (100)	7.0 (105)	6.3 (94)	5.4 (131)	5.5 (136)	5.3 (111)	5.3 (105)
Angola	3.5 (139)	3.3 (130)	5.2 (139)	6.4 (85)	5.4 (133)	7.2 (114)	3.9 (136)	5.0 (118)
Argentina	6.2 (77)	4.5 (105)	7.0 (102)	5.8 (112)	6.0 (116)	8.2 (75)	5.3 (108)	4.4 (130)
Armenia	7.7 (21)	5.5 (78)	9.4 (30)	6.5 (79)	6.7 (86)	8.1 (83)	6.2 (77)	5.7 (88)
Australia	6.7 (58)	8.2 (11)	9.6 (9)	7.1 (38)	8.2 (9)	9.5 (14)	8.4 (16)	6.8 (25)
Austria	4.8 (119)	8.3 (9)	9.6 (14)	7.3 (26)	7.4 (34)	9.2 (33)	6.2 (79)	6.8 (20)
Azerbaijan	5.4 (106)	6.0 (54)	7.8 (87)	6.4 (80)	6.9 (66)	7.8 (96)	6.8 (60)	6.2 (51)
Bahamas	8.3 (7)	7.0 (28)	7.2 (98)	4.8 (135)	8.9 (2)	9.8 (8)	9.4 (3)	7.4 (8)
Bahrain	6.6 (62)	6.6 (37)	9.0 (50)	7.5 (21)	8.3 (7)	9.3 (28)	8.7 (8)	7.0 (16)
Bangladesh	8.1 (12)	3.6 (128)	6.7 (114)	5.7 (118)	6.8 (78)	8.1 (77)	6.5 (68)	5.7 (89)
Barbados	5.6 (96)	7.8 (18)	6.7 (117)	5.1 (128)	7.3 (44)	8.5 (62)	7.6 (35)	5.9 (77)
Belgium	4.1 (135)	6.8 (31)	9.6 (5)	7.7 (15)	7.5 (30)	8.9 (46)	7.4 (45)	6.3 (45)
Belize	6.6 (61)	5.5 (75)	8.3 (68)	5.4 (123)	8.9 (1)	9.4 (23)	9.3 (4)	8.1 (1)
Benin	7.0 (39)	4.4 (106)	6.7 (115)	5.0 (133)	6.6 (88)	9.2 (32)	5.8 (91)	4.8 (123)
Bolivia	6.3 (75)	3.8 (125)	8.7 (57)	6.8 (59)	5.7 (123)	8.0 (85)	4.6 (124)	4.5 (129)
Bosnia & Herzeg.	5.5 (103)	3.9 (121)	8.3 (69)	6.5 (77)	6.9 (65)	8.7 (58)	6.6 (66)	5.4 (99)
Botswana	4.4 (132)	6.9 (30)	8.4 (66)	6.7 (63)	7.8 (18)	9.5 (14)	7.2 (51)	6.6 (32)
Brazil	6.7 (59)	5.3 (82)	7.9 (84)	6.0 (105)	5.1 (136)	6.6 (124)	4.4 (130)	4.2 (132)
Bulgaria	7.3 (31)	5.1 (85)	9.4 (29)	7.2 (36)	7.7 (23)	9.7 (12)	7.8 (28)	5.5 (97)
Burkina Faso	6.4 (71)	4.1 (117)	6.7 (113)	5.2 (127)	7.3 (51)	8.5 (63)	7.2 (50)	6.0 (64)
Burundi	4.6 (124)	3.2 (133)	6.8 (110)	4.4 (138)	6.6 (90)	6.6 (125)	8.2 (20)	5.1 (115)
Cameroon	6.8 (51)	3.6 (126)	6.6 (120)	6.0 (103)	6.8 (79)	8.0 (85)	7.6 (38)	4.7 (126)
Canada	6.1 (80)	8.1 (15)	9.6 (19)	6.9 (51)	8.3 (8)	9.2 (31)	8.5 (12)	7.1 (12)
Central African Rep.	6.3 (73)	2.0 (141)	7.0 (100)	3.9 (139)	5.0 (137)	7.3 (110)	3.8 (138)	4.1 (133)
Chad	6.9 (43)	2.7 (136)	5.7 (134)	6.0 (104)	5.3 (135)	6.1 (128)	6.0 (83)	3.7 (139)
Chile	7.7 (23)	7.2 (25)	9.0 (51)	7.8 (9)	7.2 (55)	8.7 (56)	5.8 (93)	7.1 (13)
China	4.5 (128)	6.4 (45)	8.0 (79)	7.2 (30)	6.0 (115)	7.4 (106)	5.5 (103)	5.0 (119)
Colombia	6.0 (84)	4.4 (108)	8.1 (76)	5.7 (120)	6.9 (72)	8.5 (67)	5.9 (89)	6.2 (49)
Congo, Dem. Rep.	5.2 (110)	2.7 (137)	7.0 (107)	4.6 (136)	4.8 (139)	4.8 (139)	5.7 (98)	4.0 (134)
Congo, Rep. of	5.0 (115)	4.2 (115)	4.7 (140)	5.7 (119)	5.6 (127)	6.3 (127)	6.4 (73)	4.0 (135)
Costa Rica	7.4 (30)	6.5 (39)	7.9 (86)	7.3 (27)	6.9 (70)	7.6 (99)	6.7 (64)	6.4 (43)
Côte d'Ivoire	7.0 (40)	3.2 (135)	6.6 (119)	6.2 (97)	6.3 (106)	8.0 (85)	5.7 (97)	5.2 (107)
Croatia	5.1 (111)	5.6 (74)	8.5 (64)	6.3 (91)	6.8 (75)	8.9 (48)	6.4 (72)	5.1 (114)
Cyprus	7.3 (32)	6.8 (32)	9.4 (31)	6.7 (67)	7.3 (49)	9.5 (14)	6.3 (74)	6.1 (58)
Czech Republic	4.9 (118)	6.4 (44)	9.5 (27)	7.6 (18)	7.3 (46)	8.7 (54)	7.6 (36)	5.6 (92)

Exhibit 1.4 (continued): Area Economic Freedom Ratings (Ranks), 2009

	AREAS					COMPONENTS OF AREA 5		
	1	2	3	4	5	5A	5B	5C
	Size of Government	Legal System & Property Rights	Sound Money	Freedom to Trade Internationally	Regulation	Credit Market Regulation	Labor Market Regulations	Business Regulations
	Rating (Rank)	Rating (Rank)	Rating (Rank)	Rating (Rank)	Rating (Rank)	Rating (Rank)	Rating (Rank)	Rating (Rank)
Denmark	4.1 (134)	8.5 (4)	9.5 (24)	7.4 (23)	8.1 (11)	9.3 (27)	7.5 (41)	7.4 (6)
Dominican Rep.	7.7 (20)	4.8 (93)	8.1 (77)	6.4 (87)	6.5 (98)	7.4 (104)	6.3 (75)	5.8 (85)
Ecuador	7.9 (14)	4.0 (119)	6.4 (125)	6.2 (98)	5.8 (120)	8.0 (90)	4.1 (135)	5.3 (102)
Egypt	6.0 (85)	5.5 (77)	8.7 (60)	6.4 (82)	5.6 (124)	6.0 (130)	5.0 (121)	5.8 (86)
El Salvador	8.9 (3)	4.4 (109)	9.3 (36)	6.5 (75)	6.7 (81)	8.7 (59)	5.0 (120)	6.5 (37)
Estonia	5.5 (102)	7.2 (26)	9.5 (22)	7.8 (10)	7.7 (22)	9.9 (5)	5.9 (87)	7.2 (11)
Ethiopia	6.0 (87)	5.2 (83)	5.7 (132)	5.0 (129)	6.2 (108)	4.4 (140)	7.6 (37)	6.5 (38)
Fiji	7.0 (42)	5.8 (62)	6.8 (112)	5.3 (126)	8.7 (4)	10.0 (1)	9.0 (6)	7.3 (10)
Finland	5.2 (109)	8.7 (3)	9.6 (18)	7.2 (35)	7.4 (40)	9.8 (9)	5.5 (100)	6.8 (21)
France	4.7 (123)	7.5 (22)	9.7 (4)	7.1 (41)	6.9 (71)	8.4 (71)	5.9 (88)	6.3 (46)
Gabon	6.0 (83)	4.4 (112)	5.7 (133)	5.8 (110)	7.2 (53)	7.5 (102)	8.7 (9)	5.4 (98)
Georgia	7.8 (15)	5.1 (86)	9.2 (40)	7.4 (24)	7.2 (56)	6.8 (119)	7.5 (40)	7.4 (7)
Germany	5.4 (105)	8.2 (14)	9.5 (21)	7.5 (20)	6.6 (92)	8.0 (89)	5.3 (112)	6.6 (33)
Ghana	6.7 (55)	5.5 (76)	8.2 (72)	6.9 (57)	6.7 (82)	7.8 (93)	6.2 (78)	6.1 (57)
Greece	6.0 (88)	5.6 (71)	9.6 (8)	6.1 (101)	5.4 (129)	6.0 (132)	4.5 (128)	5.8 (87)
Guatemala	7.8 (19)	4.6 (98)	9.4 (32)	7.2 (33)	6.4 (103)	8.6 (60)	4.5 (126)	6.0 (69)
Guinea-Bissau	4.3 (133)	3.3 (131)	6.3 (126)	5.0 (130)	6.3 (105)	9.3 (25)	3.8 (137)	5.8 (83)
Guyana	3.8 (137)	4.8 (92)	7.9 (83)	6.6 (73)	7.4 (42)	8.1 (81)	7.8 (27)	6.2 (48)
Haiti	8.5 (6)	2.5 (140)	8.6 (61)	6.9 (58)	7.6 (25)	8.6 (61)	9.7 (1)	4.7 (127)
Honduras	8.2 (9)	4.3 (113)	9.2 (41)	7.1 (42)	6.5 (99)	8.0 (84)	5.0 (119)	6.4 (40)
Hong Kong	9.4 (1)	8.2 (13)	9.3 (35)	9.3 (2)	8.8 (3)	9.3 (26)	9.5 (2)	7.8 (3)
Hungary	6.2 (79)	6.5 (40)	9.5 (20)	7.9 (8)	7.4 (35)	8.8 (51)	7.3 (46)	6.1 (56)
Iceland	5.0 (114)	8.3 (7)	7.8 (88)	5.4 (125)	7.6 (28)	7.3 (112)	7.8 (25)	7.6 (4)
India	6.7 (57)	5.7 (67)	6.6 (121)	6.5 (76)	6.5 (97)	6.7 (123)	7.9 (23)	4.9 (121)
Indonesia	7.6 (26)	4.4 (107)	7.7 (91)	6.7 (65)	6.1 (112)	8.1 (80)	4.8 (122)	5.3 (101)
Iran	6.5 (67)	5.8 (64)	8.2 (75)	5.0 (134)	5.4 (130)	6.7 (122)	4.4 (131)	5.2 (110)
Ireland	4.6 (125)	7.8 (17)	9.1 (46)	8.3 (4)	7.0 (60)	6.5 (126)	7.8 (30)	6.8 (24)
Israel	4.6 (127)	6.0 (53)	8.8 (55)	7.1 (45)	6.2 (107)	7.0 (117)	5.3 (109)	6.4 (41)
Italy	5.3 (108)	5.8 (63)	9.6 (12)	6.9 (55)	6.6 (94)	7.5 (103)	6.8 (62)	5.5 (96)
Jamaica	8.7 (5)	5.4 (80)	8.2 (73)	6.1 (102)	6.9 (69)	7.3 (113)	7.7 (32)	5.7 (91)
Japan	6.5 (68)	7.5 (21)	9.8 (1)	5.8 (114)	7.7 (19)	8.9 (47)	8.4 (18)	6.0 (70)
Jordan	4.4 (130)	6.3 (47)	9.3 (38)	7.2 (32)	7.4 (43)	7.3 (107)	8.4 (15)	6.3 (44)
Kazakhstan	6.8 (49)	5.9 (58)	8.3 (71)	6.2 (95)	7.5 (31)	9.3 (24)	7.2 (53)	6.1 (54)
Kenya	7.7 (22)	4.6 (101)	8.6 (62)	6.7 (66)	7.3 (50)	8.4 (73)	7.8 (26)	5.7 (90)
Korea, South	6.8 (50)	6.6 (36)	9.5 (26)	7.1 (40)	6.6 (93)	9.3 (28)	4.4 (129)	6.0 (63)
Kuwait	5.1 (112)	7.0 (27)	9.3 (39)	6.2 (100)	8.0 (13)	10.0 (1)	7.3 (48)	6.6 (34)

Exhibit 1.4 (continued): Area Economic Freedom Ratings (Ranks), 2009

	AREAS					COMPONENTS OF AREA 5		
	1 Size of Government	2 Legal System & Property Rights	3 Sound Money	4 Freedom to Trade Internationally	5 Regulation	5A Credit Market Regulation	5B Labor Market Regulations	5C Business Regulations
	Rating (Rank)	Rating (Rank)	Rating (Rank)	Rating (Rank)	Rating (Rank)	Rating (Rank)	Rating (Rank)	Rating (Rank)
Kyrgyz Republic	7.1 (37)	4.7 (95)	8.2 (74)	6.7 (68)	7.4 (41)	9.0 (37)	6.4 (71)	6.7 (28)
Latvia	4.8 (120)	6.4 (43)	8.9 (53)	7.1 (44)	7.4 (38)	8.9 (45)	7.2 (54)	6.1 (61)
Lesotho	4.4 (129)	4.6 (99)	7.7 (92)	6.4 (81)	7.4 (39)	9.8 (9)	7.1 (55)	5.3 (104)
Lithuania	6.7 (54)	6.5 (41)	9.2 (45)	6.9 (53)	7.7 (21)	9.5 (20)	7.1 (56)	6.5 (35)
Luxembourg	4.4 (131)	8.3 (10)	9.6 (17)	8.0 (7)	7.3 (48)	9.4 (21)	5.5 (102)	7.0 (15)
Macedonia	6.9 (46)	5.0 (90)	8.0 (82)	6.7 (70)	7.9 (17)	9.1 (35)	7.9 (24)	6.6 (31)
Madagascar	8.8 (4)	3.2 (132)	7.5 (93)	6.3 (89)	5.6 (126)	5.6 (134)	5.2 (113)	5.9 (79)
Malawi	5.7 (92)	5.6 (73)	7.0 (106)	5.7 (117)	6.9 (68)	7.8 (94)	7.0 (59)	5.8 (82)
Malaysia	5.5 (101)	6.5 (38)	6.5 (124)	7.2 (29)	7.6 (26)	9.0 (40)	7.8 (31)	6.1 (59)
Mali	6.4 (70)	4.4 (111)	6.8 (111)	5.9 (108)	6.5 (100)	8.0 (88)	5.5 (101)	5.9 (75)
Malta	5.8 (90)	7.5 (20)	9.5 (28)	7.0 (50)	6.9 (67)	8.5 (65)	7.7 (33)	4.5 (128)
Mauritania	6.5 (66)	4.5 (103)	5.6 (136)	6.4 (86)	7.2 (52)	9.2 (34)	7.1 (57)	5.4 (100)
Mauritius	7.8 (18)	6.3 (46)	9.2 (44)	7.2 (34)	7.9 (15)	9.5 (14)	7.5 (42)	6.7 (29)
Mexico	6.8 (48)	5.1 (89)	8.0 (81)	6.9 (54)	7.0 (62)	9.9 (6)	5.5 (104)	5.6 (93)
Moldova	5.6 (97)	5.6 (70)	7.7 (89)	6.3 (88)	6.1 (110)	7.7 (97)	5.4 (106)	5.3 (103)
Mongolia	7.6 (24)	5.7 (68)	8.0 (80)	7.5 (19)	7.6 (29)	9.0 (41)	7.2 (49)	6.5 (39)
Montenegro	6.0 (86)	6.1 (52)	9.5 (25)	6.8 (62)	8.0 (12)	9.8 (7)	8.3 (19)	5.9 (71)
Morocco	6.3 (72)	5.9 (56)	7.0 (104)	6.0 (106)	5.6 (125)	6.8 (119)	4.1 (134)	5.9 (80)
Mozambique	4.7 (121)	4.1 (116)	6.5 (122)	6.3 (92)	6.0 (114)	9.0 (42)	3.1 (140)	6.0 (68)
Myanmar	6.3 (73)	3.2 (134)	5.7 (135)	1.3 (141)	4.3 (141)	3.9 (141)		
Namibia	6.5 (63)	7.5 (19)	6.1 (129)	6.2 (96)	7.9 (14)	10.0 (1)	7.7 (34)	6.1 (53)
Nepal	6.1 (81)	3.9 (124)	6.1 (128)	5.4 (124)	6.0 (117)	6.9 (118)	5.9 (90)	5.2 (112)
Netherlands	3.4 (140)	8.1 (16)	9.5 (23)	8.1 (6)	7.4 (36)	9.0 (43)	6.7 (63)	6.5 (36)
New Zealand	6.1 (82)	8.8 (1)	9.7 (2)	7.7 (13)	8.7 (5)	10.0 (1)	8.5 (11)	7.6 (5)
Nicaragua	7.0 (41)	4.4 (110)	8.7 (58)	7.0 (47)	7.0 (61)	8.4 (68)	6.8 (61)	5.8 (84)
Niger	6.7 (56)	4.2 (114)	6.5 (123)	4.5 (137)	5.3 (134)	7.7 (98)	3.3 (139)	4.9 (122)
Nigeria	7.1 (38)	3.9 (122)	6.2 (127)	6.3 (93)	7.2 (54)	8.9 (44)	8.4 (17)	4.3 (131)
Norway	4.9 (116)	8.8 (2)	9.2 (42)	6.5 (78)	7.1 (59)	9.5 (14)	5.1 (117)	6.6 (30)
Oman	5.6 (99)	7.4 (23)	8.9 (54)	7.2 (37)	7.7 (20)	7.4 (105)	8.8 (7)	6.9 (18)
Pakistan	8.0 (13)	4.0 (118)	6.0 (130)	5.7 (116)	6.4 (102)	8.5 (66)	5.6 (99)	5.2 (106)
Panama	7.8 (16)	5.1 (87)	9.1 (48)	8.2 (5)	6.8 (76)	9.3 (28)	5.3 (110)	5.9 (76)
Papua New Guinea	7.2 (33)	4.7 (96)	7.0 (101)	7.7 (12)	7.9 (16)	8.2 (76)	8.6 (10)	6.8 (22)
Paraguay	7.4 (28)	3.6 (127)	8.7 (59)	7.2 (31)	5.9 (119)	7.3 (109)	4.3 (132)	6.0 (67)
Peru	7.6 (27)	5.4 (81)	9.2 (43)	7.5 (22)	6.9 (73)	7.3 (108)	7.3 (47)	5.9 (73)
Philippines	7.8 (17)	4.6 (102)	6.8 (109)	6.5 (74)	6.6 (87)	8.8 (52)	6.0 (84)	5.2 (113)
Poland	5.6 (95)	6.3 (48)	9.3 (33)	6.8 (60)	6.9 (64)	8.4 (69)	7.5 (43)	5.0 (120)

Exhibit 1.4 (continued): Area Economic Freedom Ratings (Ranks), 2009

	AREAS					COMPONENTS OF AREA 5		
	1 Size of Government	2 Legal System & Property Rights	3 Sound Money	4 Freedom to Trade Internationally	5 Regulation	5A Credit Market Regulation	5B Labor Market Regulations	5C Business Regulations
	Rating (Rank)	Rating (Rank)	Rating (Rank)	Rating (Rank)	Rating (Rank)	Rating (Rank)	Rating (Rank)	Rating (Rank)
Portugal	5.6 (100)	6.7 (35)	9.6 (10)	7.1 (46)	5.7 (122)	6.1 (129)	5.2 (116)	5.9 (72)
Romania	6.3 (76)	5.9 (61)	9.0 (49)	7.4 (25)	6.8 (74)	7.5 (101)	7.0 (58)	5.9 (74)
Russia	6.8 (52)	5.7 (66)	8.3 (70)	5.8 (111)	6.1 (111)	8.3 (74)	6.1 (81)	4.0 (136)
Rwanda	5.6 (98)	6.2 (50)	7.5 (94)	5.0 (131)	7.1 (58)	6.0 (131)	8.5 (13)	6.8 (23)
Senegal	5.4 (104)	3.9 (123)	7.0 (103)	6.2 (99)	6.2 (109)	8.8 (50)	4.6 (125)	5.1 (117)
Serbia	6.9 (47)	4.7 (97)	7.7 (90)	6.3 (90)	6.6 (89)	9.1 (36)	5.7 (94)	5.1 (116)
Sierra Leone	5.9 (89)	3.9 (120)	7.5 (95)	5.0 (132)	5.7 (121)	5.7 (133)	5.4 (105)	6.2 (50)
Singapore	8.1 (11)	8.3 (8)	9.1 (47)	9.4 (1)	8.5 (6)	9.8 (9)	7.8 (29)	8.0 (2)
Slovak Republic	6.4 (69)	6.0 (55)	9.7 (3)	8.3 (3)	7.3 (45)	9.4 (22)	7.4 (44)	5.2 (108)
Slovenia	4.6 (126)	6.2 (49)	9.6 (7)	6.7 (64)	6.7 (80)	8.4 (72)	6.0 (85)	5.9 (78)
South Africa	5.0 (113)	6.2 (51)	7.9 (85)	6.4 (84)	7.0 (63)	8.7 (57)	6.1 (80)	6.1 (60)
Spain	5.6 (94)	6.5 (42)	9.6 (15)	6.9 (56)	6.4 (101)	8.4 (70)	5.0 (118)	5.8 (81)
Sri Lanka	6.7 (60)	5.1 (88)	6.7 (116)	5.7 (121)	6.5 (96)	7.5 (100)	6.5 (69)	5.5 (95)
Sweden	3.2 (141)	8.4 (5)	9.6 (16)	7.6 (17)	7.3 (47)	9.5 (14)	5.4 (107)	7.1 (14)
Switzerland	7.6 (25)	8.4 (6)	9.3 (34)	6.6 (71)	8.1 (10)	9.0 (38)	8.5 (14)	7.0 (17)
Syria	6.2 (78)	4.5 (104)	7.3 (97)	5.8 (113)	5.4 (132)	4.8 (137)	6.1 (82)	5.2 (111)
Taiwan	6.9 (44)	6.7 (34)	9.3 (37)	7.2 (28)	6.7 (85)	8.5 (64)	5.2 (115)	6.4 (42)
Tanzania	4.7 (122)	5.9 (59)	7.5 (96)	5.7 (115)	6.3 (104)	7.9 (91)	5.8 (92)	5.2 (109)
Thailand	7.1 (36)	5.7 (65)	7.1 (99)	7.7 (16)	6.8 (77)	8.7 (55)	5.7 (96)	6.0 (66)
Togo	9.0 (2)	2.6 (139)	6.6 (118)	5.9 (109)	4.6 (140)	4.8 (138)	4.2 (133)	4.8 (124)
Trinidad & Tobago	7.4 (29)	5.2 (84)	8.1 (78)	6.8 (61)	7.5 (32)	8.8 (53)	7.5 (39)	6.2 (52)
Tunisia	5.3 (107)	6.8 (33)	6.8 (108)	5.9 (107)	7.2 (57)	8.1 (82)	6.6 (65)	6.8 (19)
Turkey	6.9 (45)	5.6 (72)	8.9 (52)	6.4 (83)	5.9 (118)	6.7 (121)	4.8 (123)	6.2 (47)
Uganda	7.1 (34)	4.9 (91)	8.4 (67)	7.0 (49)	7.7 (24)	8.9 (49)	8.1 (22)	6.0 (62)
Ukraine	5.7 (91)	4.7 (94)	5.3 (138)	6.7 (69)	6.0 (113)	8.1 (79)	6.2 (76)	3.8 (138)
United Arab Emir.	7.1 (35)	6.9 (29)	8.4 (65)	7.8 (11)	7.5 (33)	7.8 (95)	7.2 (52)	7.4 (9)
United Kingdom	5.7 (93)	8.2 (12)	9.6 (13)	7.7 (14)	7.4 (37)	7.3 (111)	8.2 (21)	6.7 (26)
United States	6.5 (65)	7.3 (24)	9.6 (11)	7.0 (48)	7.6 (27)	7.0 (116)	9.1 (5)	6.7 (27)
Uruguay	6.5 (64)	5.7 (69)	8.8 (56)	6.9 (52)	6.5 (95)	7.0 (115)	6.6 (67)	6.0 (65)
Venezuela	4.9 (117)	2.6 (138)	5.4 (137)	3.0 (140)	5.6 (128)	9.0 (38)	4.5 (127)	3.2 (140)
Vietnam	6.7 (53)	5.9 (57)	5.9 (131)	7.1 (43)	6.7 (84)	9.6 (13)	5.7 (95)	4.8 (125)
Zambia	8.1 (10)	5.9 (60)	8.5 (63)	7.1 (39)	6.6 (91)	7.9 (92)	6.5 (70)	5.5 (94)
Zimbabwe	4.1 (136)	3.5 (129)	2.5 (141)	5.5 (122)	4.9 (138)	5.6 (135)	5.2 (114)	3.8 (137)

The Chain-Linked Summary Index, 1970–2009

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

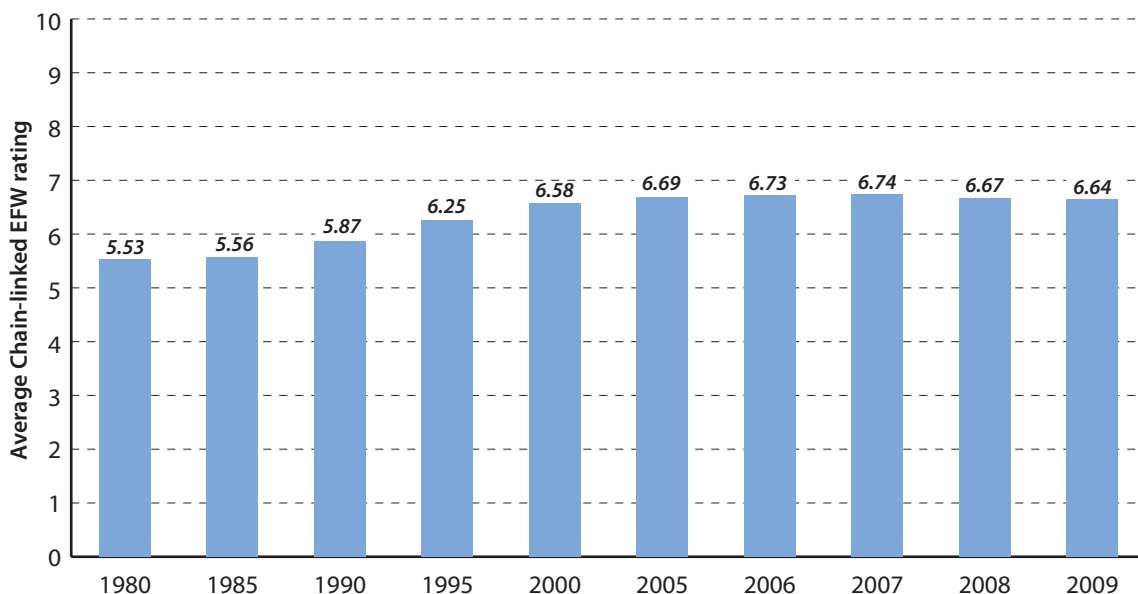
The base year for the chain-linked index is 2000, and as a result the chain-linked index is not available for any countries added since that year. Changes in a country's chain-linked index through time are based only on changes in components that were present in adjoining years. For example, the 2005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

Correspondingly, in cases where the ratings for the common components were higher in 2005 than for 2004, the country's 2005 summary rating was adjusted upward proportionally. The chain-linked ratings were constructed by repeating this procedure backward in time to 1970 and forward in time to 2009. 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 1.5 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 6.64 in 2009 from 5.53 in 1980. During the past two years, however, the average summary rating has declined, slipping from 6.74 in 2007 to 6.64 in 2009. Much of the long-term increase since 1980 was driven by reductions in marginal income-tax rates, improvements in monetary policy, and global trade liberalization.

The Chain-Linked Summary ratings for all years are found in exhibit 1.6. Researchers using the data for long-term studies should use these chain-linked data. These longitudinal data make it possible to follow the changes in economic freedom and analyze their impact over a lengthy period of time.

Exhibit 1.5: Average Chain-linked EFW Rating for the 102 countries with ratings since 1980



The chain-linked methodology was also used to derive area ratings. The ratings (and rankings) for the chain-linked summary and area ratings are presented in the country tables. The country tables also present the unadjusted summary and area ratings, but when tracking ratings across time, the chain-linked ratings will present a more accurate picture.

Big movers

The chain-linked summary ratings of Uganda, Zambia, Nicaragua, Albania, and Peru have improved by three or more points since 1990. The summary ratings of eight other countries—Bulgaria, Poland, El Salvador, Romania, Ghana, Nigeria, Hungary, and Guinea-Bissau—improved

by between two and three points during this same period. The rankings of these countries improved substantially. In contrast, the summary ratings of Venezuela, Zimbabwe, United States, and Malaysia fell by eight tenths of a point or more between 1990 and 2009, causing their rankings to slip.

Several economies that were centrally planned for many years have made remarkable progress during the past decade. Eight of them—the Slovak Republic, Estonia, Hungary, Lithuania, Bulgaria, Albania, Mongolia, and Georgia—now rank in the top 40. By way of comparison, only three Latin American countries—Chile, Panama, and Peru—place in the top 40. All of these countries now rank higher than Sweden and France, for example.

Exhibit 1.6: The Chain-Linked Summary Index of Ratings, 1970–2009

	1970	1975	1980	1985	1990	1995	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Albania					4.24	4.87	6.04	6.10	6.40	6.87	6.60	7.06	7.23	7.38	7.38	7.54
Algeria			4.30	4.05	3.89	4.53	4.98	4.97	4.89	4.90	5.00	5.83	5.73	5.52	5.34	5.39
Angola																
Argentina	5.29	3.35	4.41	3.98	4.78	6.77	7.19	6.49	6.16	5.99	6.20	5.94	6.06	6.27	6.01	5.92
Armenia																
Australia	7.24	6.30	7.13	7.35	7.66	7.80	7.88	7.65	7.71	7.84	7.81	7.85	7.91	7.93	7.84	7.91
Austria	6.63	6.28	6.76	6.72	7.22	7.04	7.37	7.21	7.22	7.76	7.74	7.70	7.69	7.67	7.57	7.48
Azerbaijan																
Bahamas		6.67	6.57	6.51	6.54	6.40	6.63	6.69	6.67	6.78	6.88	7.10	6.95	7.07	7.11	7.10
Bahrain			7.46	6.85	6.85	6.93	7.28	7.18	7.16	7.19	7.07	6.92	7.22	7.35	7.27	7.24
Bangladesh		3.16	3.63	3.94	4.68	5.45	5.82	5.76	5.93	5.77	5.69	5.88	6.00	5.92	5.94	6.11
Barbados		5.69	5.86	6.23	6.14	6.08	6.09	6.08	6.00	6.07	6.16	6.26	6.01	6.21	5.95	6.06
Belgium	7.81	7.05	7.27	7.30	7.54	7.26	7.74	7.41	7.34	7.53	7.43	7.23	7.20	7.29	7.13	7.08
Belize			5.63	5.48	5.98	6.40	6.41	6.33	6.73	6.82	6.80	6.84	6.77	6.73	6.72	6.74
Benin			5.04	4.80	5.06	4.70	5.25	5.28	5.39	5.29	5.23	5.36	5.63	5.55	5.52	5.54
Bolivia			4.39	3.55	5.39	6.40	6.79	6.51	6.44	6.36	6.30	6.40	6.43	6.18	6.15	6.28
Bosnia & Herzeg.																
Botswana			5.55	5.80	6.04	6.29	7.10	7.05	7.06	6.85	6.86	6.74	6.71	7.14	6.89	6.64
Brazil	5.66	4.78	4.45	3.87	4.54	4.58	5.85	5.83	5.98	5.86	5.82	6.25	6.21	6.15	6.25	6.20
Bulgaria				5.51	4.23	4.58	5.27	5.79	6.38	6.60	6.54	6.94	7.08	7.17	7.18	7.21
Burkina Faso																
Burundi		4.31	4.44	4.74	4.88	4.39	4.78	4.96	4.89	4.38	4.28	4.59	4.95	5.11	4.62	4.87
Cameroon			5.74	5.77	5.70	5.58	5.84	6.03	6.04	6.06	6.10	5.94	6.00	5.90	5.86	6.00
Canada	8.05	7.13	7.67	7.75	8.07	7.90	8.15	8.03	8.04	8.13	8.11	8.06	8.03	7.98	7.92	7.78

Exhibit 1.6 (continued): The Chain-Linked Summary Index of Ratings, 1970–2009

	1970	1975	1980	1985	1990	1995	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Central African Rep.				4.70	5.11	4.68	5.09	5.15	5.01	5.55	5.44	4.96	5.20	5.25	5.16	5.26
Chad				5.05	5.05	5.02	5.47	5.95	6.06	5.95	5.83	5.69	5.77	5.37	5.28	5.63
Chile	4.31	3.93	5.56	6.18	7.02	7.47	7.28	7.47	7.59	7.75	7.67	7.94	7.97	8.08	8.08	7.83
China			4.23	5.15	4.96	5.30	5.73	5.79	5.79	5.85	5.66	6.08	6.13	6.23	6.20	6.24
Colombia	5.32	5.01	4.83	5.19	5.12	5.45	5.31	5.42	5.44	5.63	5.63	5.87	6.05	6.19	6.14	6.27
Congo, Dem. Rep.	4.47	4.02	3.00	3.87	3.39	3.56	4.10	4.05	4.69	4.56	4.68	4.66	5.27	4.95	4.86	4.77
Congo, Rep. of			4.63	4.43	5.12	5.24	4.50	4.83	4.68	4.71	4.73	4.66	4.79	4.61	4.77	5.06
Costa Rica		6.33	5.61	5.36	6.76	6.85	7.31	7.17	7.04	7.30	7.14	7.28	7.45	7.24	7.10	7.08
Côte d'Ivoire			5.59	6.15	5.60	5.24	6.07	6.14	5.99	5.93	5.92	6.03	6.07	6.03	5.67	5.88
Croatia						4.91	6.10	6.07	6.21	6.31	6.42	6.40	6.47	6.58	6.54	6.49
Cyprus		5.77	5.57	5.51	5.98	6.16	6.17	6.26	6.66	6.61	7.25	7.34	7.29	7.42	7.50	7.48
Czech Republic						5.79	6.48	6.55	6.66	6.82	6.85	6.70	6.69	6.92	6.87	6.82
Denmark	7.05	6.33	6.53	6.68	7.41	7.46	7.65	7.44	7.57	7.78	7.76	7.72	7.72	7.74	7.70	7.54
Dominican Rep.			5.33	4.98	4.60	5.86	6.54	6.49	6.46	6.08	5.41	6.30	6.15	6.26	6.25	6.58
Ecuador	4.07	5.03	5.40	4.63	5.31	5.98	5.69	5.48	5.97	5.92	5.28	5.79	5.85	5.81	6.04	6.02
Egypt		3.97	4.83	5.36	5.01	5.84	6.60	6.43	6.16	6.07	6.16	6.63	6.77	6.92	6.79	6.55
El Salvador			4.84	4.49	4.77	7.00	7.30	7.28	7.22	7.25	7.32	7.60	7.56	7.60	7.58	7.29
Estonia						5.70	7.36	7.42	7.50	7.58	7.57	7.84	7.81	7.77	7.55	7.45
Ethiopia																
Fiji		5.34	5.70	6.03	5.90	6.09	6.23	6.09	6.02	5.99	6.06	6.48	6.62	6.56	6.57	6.56
Finland	7.13	6.39	6.95	7.15	7.40	7.32	7.51	7.39	7.43	7.70	7.62	7.72	7.66	7.67	7.56	7.58
France	6.86	6.01	6.22	6.13	7.07	6.80	7.06	6.73	6.87	7.11	7.16	6.97	7.01	7.18	7.20	7.05
Gabon			4.55	5.09	5.33	5.26	5.75	5.57	5.51	5.50	5.52	5.49	5.68	5.60	5.64	5.66
Georgia																
Germany	7.69	7.11	7.37	7.40	7.80	7.52	7.52	7.31	7.39	7.71	7.65	7.64	7.60	7.54	7.47	7.45
Ghana		4.10	3.27	3.41	5.04	5.43	5.86	5.98	6.21	6.68	6.43	6.73	7.33	7.25	7.26	7.15
Greece	6.35	5.99	5.97	5.38	6.04	6.18	6.66	6.57	6.66	7.00	6.87	7.00	6.91	6.96	6.82	6.53
Guatemala	6.17	6.63	6.03	4.90	5.56	6.67	6.38	6.43	6.49	6.61	6.68	7.09	7.16	7.28	7.14	7.10
Guinea-Bissau					3.15	3.71	4.51	4.96	5.05	4.89	4.84	4.78	5.22	4.91	4.89	5.16
Guyana						5.27	6.66	6.56	6.35	6.30	6.09	6.66	6.51	6.71	6.74	6.59
Haiti			6.29	5.66	5.36	5.29	6.54	6.36	6.33	6.49	6.51	6.61	6.62	6.50	6.66	6.84
Honduras			6.06	5.46	5.52	6.07	6.51	6.38	6.65	6.68	6.73	6.85	7.17	7.34	7.14	6.92
Hong Kong	8.99	8.85	9.21	8.81	8.76	9.11	8.82	8.76	8.76	8.81	8.75	8.94	8.95	9.00	9.04	8.98
Hungary			4.63	5.24	5.39	6.14	6.55	6.82	6.82	7.39	7.50	7.39	7.34	7.32	7.38	7.47
Iceland	6.45	4.78	5.43	5.75	7.03	7.40	7.76	7.67	7.60	7.72	7.73	7.71	7.61	7.46	6.89	6.72
India	5.43	4.56	5.41	5.08	5.13	5.76	6.27	6.11	6.32	6.42	6.43	6.55	6.49	6.45	6.45	6.38
Indonesia	4.74	5.39	5.24	6.16	6.53	6.57	6.04	5.72	5.98	6.26	6.19	6.41	6.38	6.55	6.56	6.53
Iran	5.64	5.48	3.75	4.07	4.77	4.50	5.76	6.17	6.10	6.04	6.18	6.30	6.28	6.15	6.15	6.22
Ireland	7.12	6.20	6.73	6.75	7.32	8.20	8.16	7.96	7.99	7.93	8.02	8.07	7.94	7.87	7.71	7.32

Exhibit 1.6 (continued): The Chain-Linked Summary Index of Ratings, 1970–2009

	1970	1975	1980	1985	1990	1995	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Israel	5.11	4.44	3.79	4.34	4.79	5.87	6.55	6.49	6.95	6.90	6.92	7.03	6.88	6.61	6.55	6.43
Italy	6.08	5.33	5.53	5.68	6.59	6.50	7.11	6.96	7.03	6.81	6.91	7.01	6.92	6.84	6.75	6.67
Jamaica			4.22	5.03	5.59	6.43	7.23	7.06	7.09	7.08	7.23	7.26	7.23	7.08	6.89	6.86
Japan	7.04	6.57	7.08	7.12	7.47	7.11	7.45	7.08	7.16	7.53	7.43	7.47	7.48	7.58	7.46	7.37
Jordan		5.46	5.50	5.84	6.05	6.42	7.24	6.97	7.14	7.11	7.03	7.38	7.29	7.41	7.14	6.84
Kazakhstan																
Kenya	5.11	4.84	5.04	5.41	5.58	5.88	6.68	6.76	6.72	6.92	6.74	7.28	7.20	7.37	6.99	7.17
Korea	5.49	5.37	5.71	5.65	6.19	6.42	6.58	6.90	7.00	7.09	7.18	7.36	7.52	7.56	7.39	7.37
Kuwait			5.01	6.88	5.47	6.69	6.72	7.06	7.10	7.22	7.21	7.25	7.47	7.46	7.55	7.13
Kyrgyz Republic																
Latvia						5.19	6.62	6.66	6.97	6.83	6.89	7.18	7.21	7.03	6.88	6.73
Lesotho																
Lithuania						5.10	6.28	6.32	6.77	6.74	6.68	7.11	7.09	7.15	7.08	7.02
Luxembourg	7.59	7.64	7.58	7.94	7.88	7.70	7.87	7.85	7.71	7.73	7.76	7.47	7.49	7.51	7.52	7.42
Macedonia																
Madagascar			4.55	4.79	4.68	4.67	5.94	6.27	5.82	6.07	5.90	5.94	6.00	6.29	6.28	6.40
Malawi		5.38	4.94	5.16	5.48	4.69	5.01	5.52	5.58	6.00	5.68	5.46	5.33	5.79	5.95	6.00
Malaysia	6.63	6.42	7.07	7.12	7.49	7.55	6.72	6.35	6.55	6.64	6.80	6.89	6.92	6.96	6.71	6.68
Mali		5.68	5.78	4.93	5.16	5.26	6.23	6.07	5.73	6.12	5.93	6.03	6.28	6.35	5.98	6.03
Malta			5.57	5.23	5.42	6.56	6.45	6.42	6.49	6.18	6.94	7.10	7.09	7.25	7.02	6.98
Mauritania																
Mauritius		5.21	5.16	6.25	6.23	7.29	7.39	7.16	7.01	6.89	6.83	7.17	7.16	7.53	7.61	7.47
Mexico	6.53	5.80	5.69	4.91	6.28	6.46	6.39	6.24	6.52	6.48	6.61	7.00	6.97	6.92	6.87	6.75
Moldova																
Mongolia																
Montenegro																
Morocco	5.76	5.16	4.54	5.25	5.27	6.15	6.12	6.10	6.11	6.28	6.09	6.31	6.29	6.29	6.29	6.25
Mozambique																
Myanmar			4.84	4.42	3.46	4.02	4.00	3.77	3.41	3.21	3.54	3.67	3.87	3.36	3.49	3.59
Namibia					5.33	6.28	6.47	6.49	6.49	6.59	6.32	6.56	6.51	6.75	6.63	6.63
Nepal			5.75	5.31	5.42	5.37	5.75	5.78	5.70	5.21	5.27	5.38	5.42	5.58	5.44	5.40
Netherlands	7.64	6.96	7.51	7.65	7.82	7.80	8.05	7.76	7.78	7.70	7.69	7.59	7.50	7.52	7.45	7.25
New Zealand	6.72	6.02	6.73	6.57	7.95	8.64	8.35	8.22	8.37	8.38	8.38	8.37	8.16	8.30	8.22	8.15
Nicaragua			4.17	2.11	2.96	5.38	6.50	6.30	6.57	6.67	6.57	6.82	6.92	7.09	6.83	6.76
Niger			4.69	5.06	5.06	4.43	5.42	5.05	5.02	5.09	5.47	5.40	5.49	5.42	5.35	5.47
Nigeria	3.82	3.76	3.76	4.04	3.73	4.20	5.52	5.31	5.77	5.82	5.84	6.01	6.21	6.21	5.96	5.84
Norway	6.38	5.90	6.17	6.70	7.26	7.34	7.04	6.84	6.78	7.35	7.32	7.47	7.42	7.45	7.36	7.24
Oman				6.70	6.23	6.73	7.03	7.11	7.07	7.30	7.26	7.33	7.37	7.50	7.40	7.64
Pakistan	4.57	3.83	4.65	5.09	5.13	5.73	5.55	5.61	5.70	5.49	5.49	5.90	5.92	5.94	5.83	6.00

Exhibit 1.6 (continued): The Chain-Linked Summary Index of Ratings, 1970–2009

	1970	1975	1980	1985	1990	1995	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Panama		6.68	5.66	6.22	6.53	7.36	7.41	7.38	7.36	7.40	7.38	7.47	7.53	7.52	7.32	7.30
Papua New Guinea				6.16	6.31	6.53	5.96	5.99	5.91	5.89	5.93	6.51	6.51	6.92	6.94	6.98
Paraguay			5.76	5.12	5.78	6.50	6.28	6.35	6.23	6.22	6.15	6.46	6.53	6.49	6.62	6.65
Peru	4.75	4.03	4.27	3.11	4.13	6.31	7.07	7.05	7.06	7.07	7.09	7.19	7.18	7.24	7.36	7.29
Philippines	5.73	5.42	5.42	5.11	5.85	7.24	6.98	6.81	6.91	6.95	6.72	7.09	7.00	6.91	6.77	6.45
Poland				4.07	4.00	5.30	6.19	5.97	6.30	6.26	6.71	6.78	6.80	6.85	6.88	6.90
Portugal	6.37	4.28	5.99	5.74	6.54	7.32	7.37	7.25	7.41	7.38	7.48	7.11	7.16	7.16	7.07	6.90
Romania				4.64	4.54	3.90	5.19	5.25	5.75	6.04	6.01	6.82	6.73	6.95	6.72	6.93
Russia						4.49	5.27	5.15	5.57	5.64	5.93	6.37	6.36	6.50	6.57	6.50
Rwanda					5.08	3.89	5.45	5.65	5.96	5.49	5.48	5.70	6.00	6.22	6.61	6.43
Senegal			4.65	5.31	5.41	4.83	5.90	5.72	5.81	5.70	5.73	5.70	5.61	5.67	5.56	5.67
Serbia																
Sierra Leone		5.43	5.51	3.89	4.04	4.47	5.31	5.12	5.42	5.68	5.49	5.35	5.43	5.79	5.42	5.44
Singapore	7.89	7.58	7.93	8.13	8.73	8.81	8.53	8.44	8.66	8.57	8.57	8.82	8.75	8.79	8.75	8.73
Slovak Rep						5.54	6.16	6.49	6.47	6.81	7.36	7.67	7.56	7.56	7.55	7.53
Slovenia						4.76	6.36	6.49	6.47	6.56	6.55	6.41	6.49	6.47	6.52	6.46
South Africa	6.69	5.97	6.12	5.78	5.62	6.44	6.96	6.92	6.98	7.10	6.93	6.77	6.75	6.79	6.53	6.39
Spain	6.71	6.02	6.19	6.18	6.51	7.04	7.31	7.06	7.10	7.50	7.50	7.35	7.28	7.27	7.19	6.92
Sri Lanka			5.10	5.17	5.02	6.02	6.10	6.02	5.95	6.11	5.93	5.97	6.04	6.02	5.90	5.98
Sweden	5.77	5.64	5.95	6.66	7.08	7.14	7.44	7.16	7.39	7.52	7.29	7.35	7.31	7.29	7.26	7.22
Switzerland	7.95	7.78	8.18	8.28	8.22	7.96	8.39	8.14	8.28	8.26	8.21	8.07	8.07	8.11	7.91	7.93
Syria	4.27	4.47	3.67	3.36	3.87	4.53	4.91	5.22	4.96	4.82	5.21	5.46	5.20	5.48	5.08	5.31
Taiwan	6.88	6.10	6.92	7.10	7.39	7.33	7.31	7.19	7.38	7.39	7.60	7.69	7.74	7.68	7.54	7.42
Tanzania	4.79	3.72	4.06	3.73	4.24	5.53	5.95	6.05	5.89	5.91	6.02	6.02	6.10	5.99	5.89	6.02
Thailand	6.06	6.05	6.19	6.21	6.97	7.19	6.52	6.20	6.67	6.66	6.68	6.92	7.02	7.04	7.04	6.96
Togo			4.22	5.16	5.65	5.38	5.84	6.07	6.22	5.84	5.67	5.87	6.00	5.70	5.65	5.63
Trinidad & Tobago		4.80	5.07	4.92	5.64	6.93	7.18	7.11	6.89	6.77	6.78	6.75	6.85	6.81	6.83	6.68
Tunisia	4.80	4.78	5.09	4.80	5.48	5.75	6.03	6.05	5.95	5.93	5.97	6.05	6.03	6.01	5.98	5.96
Turkey	4.06	4.19	3.95	5.08	5.14	5.72	5.75	5.25	5.51	6.00	6.12	6.36	6.47	6.53	6.91	6.84
Uganda			3.42	3.01	3.00	5.17	6.57	6.51	6.52	6.62	6.61	6.85	7.01	7.15	7.12	7.10
Ukraine						3.72	4.70	4.80	5.39	5.29	5.55	5.60	5.68	5.76	5.60	5.69
United Arab Emir.			5.92	6.79	7.18	6.77	7.02	6.99	7.07	7.11	6.96	7.22	7.35	7.27	7.38	7.26
United Kingdom	6.56	6.29	6.73	7.66	8.14	8.04	8.25	8.11	8.15	8.25	8.10	8.04	7.96	7.84	7.78	7.68
United States	7.74	7.83	8.03	8.18	8.43	8.32	8.45	8.23	8.22	8.17	8.15	8.07	8.01	8.08	7.89	7.58
Uruguay			5.95	5.86	6.17	6.11	6.68	6.50	6.75	6.63	6.74	6.74	6.67	6.69	6.67	6.64
Venezuela	6.81	5.80	6.29	5.95	5.45	4.34	5.61	5.50	4.51	4.07	4.53	4.74	4.82	4.37	4.30	4.23
Vietnam																
Zambia		4.60	5.08	3.97	3.52	4.87	6.63	6.58	6.56	6.72	6.76	6.99	7.31	7.36	7.30	7.35
Zimbabwe			4.93	4.85	5.05	5.81	4.59	3.62	3.59	3.77	3.32	3.37	3.39	2.96	4.03	4.06

Exhibit 1.7 shows the five countries whose ratings on the Chain-Linked Summary Index have improved the most since 2000. Cyprus and Ghana achieved the greatest improvement: Cyprus jumped from a rating of 6.17 in 2000 to 7.48 in 2009, pushing its ranking to 18th; Ghana's rating improved from 5.86 in 2000 to 7.15 in 2009, pushing its ranking up from 90th to 70th. The ratings of Colombia, Malawi, and Turkey improved by approximately one point between 2000 and 2009. Clearly, the countries with the greatest improvements were a diverse group.

Exhibit 1.8 shows the five countries, among the 123 for which the data were available, whose ratings on the Chain-Linked Summary Index declined the most since

2000: Argentina, Iceland, Ireland, United States, and Venezuela. Argentina's rating fell from 7.19 in 2000 to 5.92 in 2009, causing its ranking to plummet from 32nd to 102nd. Venezuela's rating declined from 5.61 in 2000 to 4.23 in 2009, pushing its ranking down from 101st to 121st. The ratings of Iceland and Ireland fell sharply beginning in 2005 as they both ran into financial difficulties.

The chain-linked rating of the United States fell from 8.45 in 2000 to 7.58 in 2009, causing the accompanying ranking to slip from 3rd to 10th. Lower ratings in the legal structure area and government borrowing that dominated the credit market (5Aiii) were primarily responsible for the decline in the overall rating of the United States.

Exhibit 1.7: Countries showing the greatest improvement on the chain-linked EFW index, 2000–2009

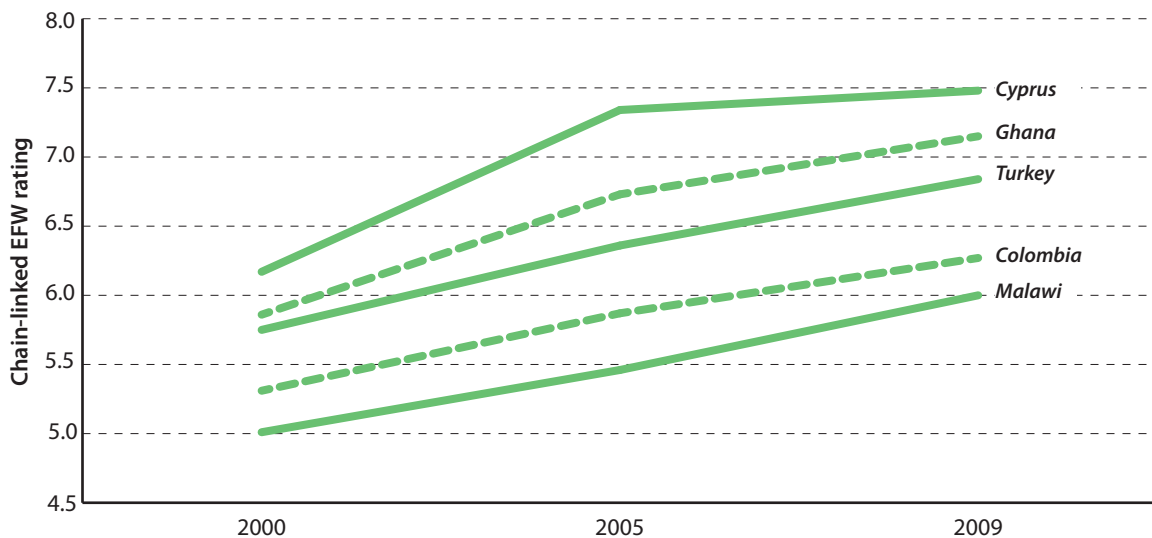
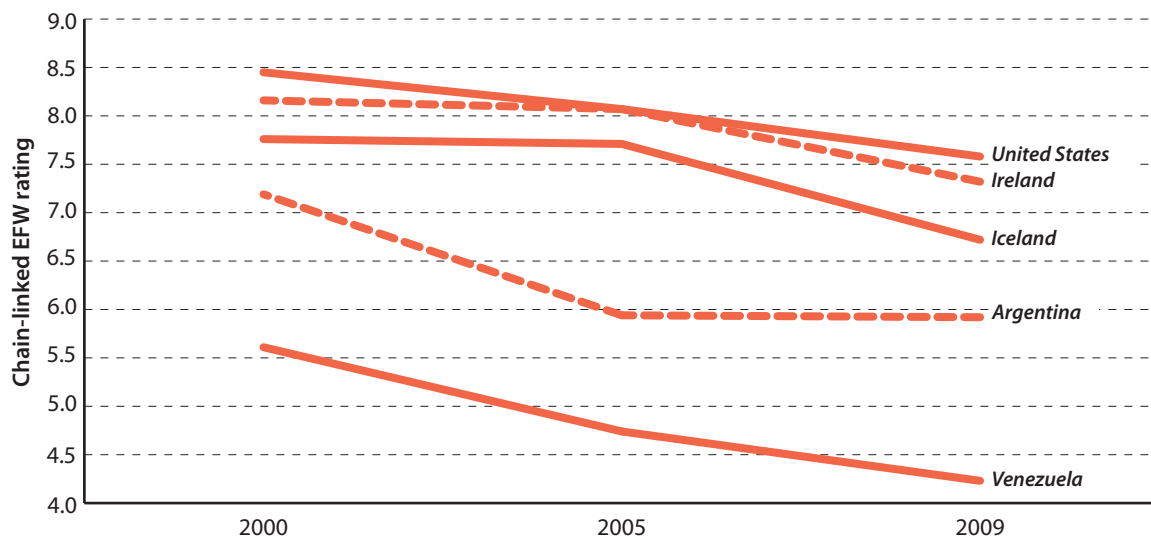


Exhibit 1.8: Countries showing the greatest decline on the chain-linked EFW index, 2000–2009



Economic Freedom and other indicators of human and political progress

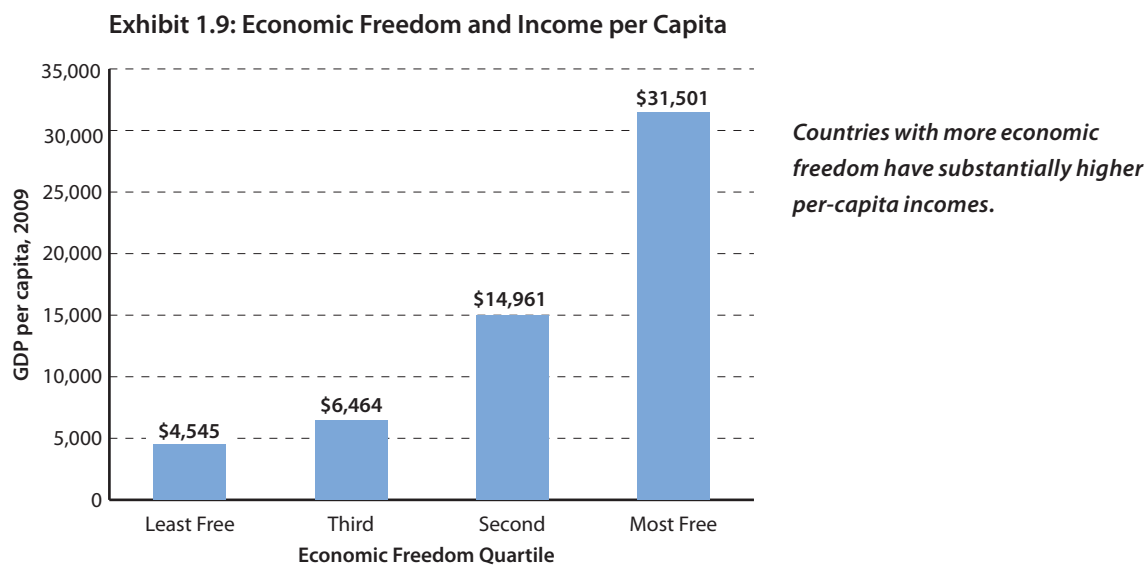
This graphs shown in exhibits 1.9 to 1.17 illustrate simple relationships between economic freedom and some other indicators of human and political progress. They use the average of the chain-linked EFW index for the period from 1990 to 2009, breaking the data into four quartiles ordered from least free to most free. Because persistence is important and the impact of economic freedom will be felt over a lengthy time period, it is better to use the average rating over a fairly long time span rather than the current rating to observe the impact of economic freedom on performance.

The graphs begin with the data on the relationship between economic freedom and the level of per-capita GDP and economic growth.¹ In recent years, numerous scholarly

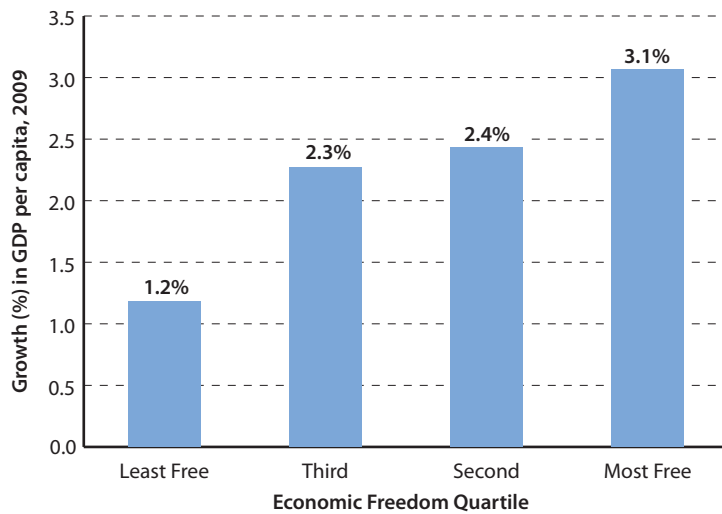
studies have analyzed these relationships in detail. Almost without exception, these studies have found that countries with higher and improving economic freedom grow more rapidly and achieve higher levels of per-capita GDP.

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

¹ The bar chart in exhibit 1.10, Economic Freedom and Economic Growth, is based on a regression in which we controlled for the initial level of development. The regression was: $(\text{Growth, 1990–2009}) = 3.06 (\text{Most Free Quartile}) + 2.43 (\text{Second Quartile}) + 2.27 (\text{Third Quartile}) + 1.18 (\text{Least Free Quartile}) - 0.046 (\text{GDP per capita, 1990})$.



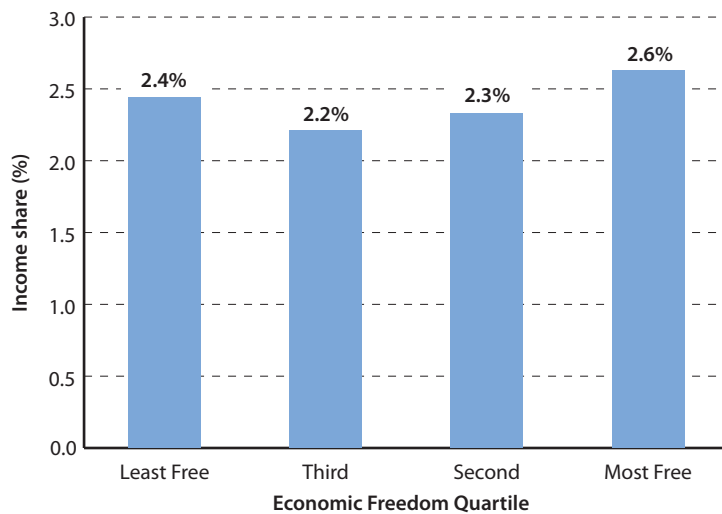
Sources: Fraser Institute, *Economic Freedom of the World: 2011 Annual Report*; World Bank, *World Development Indicators*.

Exhibit 1.10: Economic Freedom and Economic Growth

The economies of countries with more economic freedom tend to grow more rapidly.

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

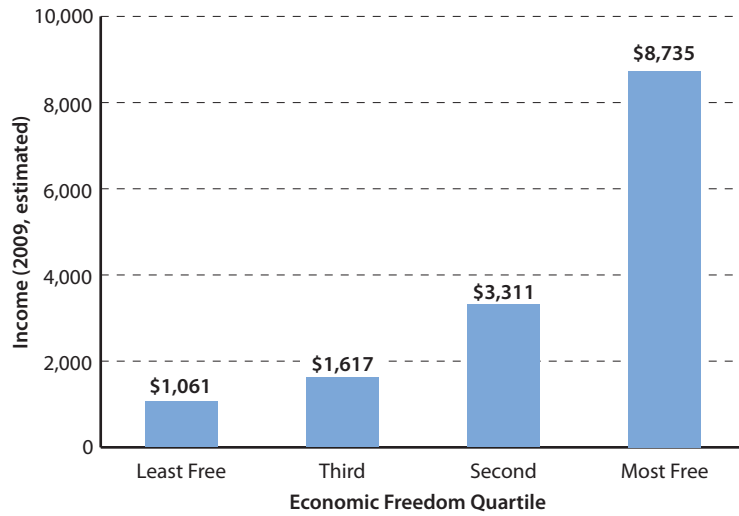
Sources: Fraser Institute, *Economic Freedom of the World: 2011 Annual Report*; World Bank, *World Development Indicators*.

Exhibit 1.11: Economic Freedom and the Income Share of the Poorest 10%, 1990–2009

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

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

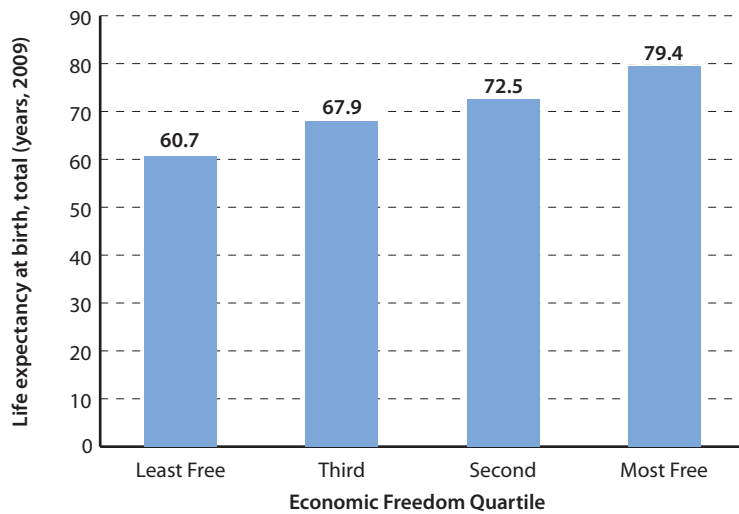
Exhibit 1.12: Economic Freedom and Income per Capita among the Poorest 10%, 2009



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

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

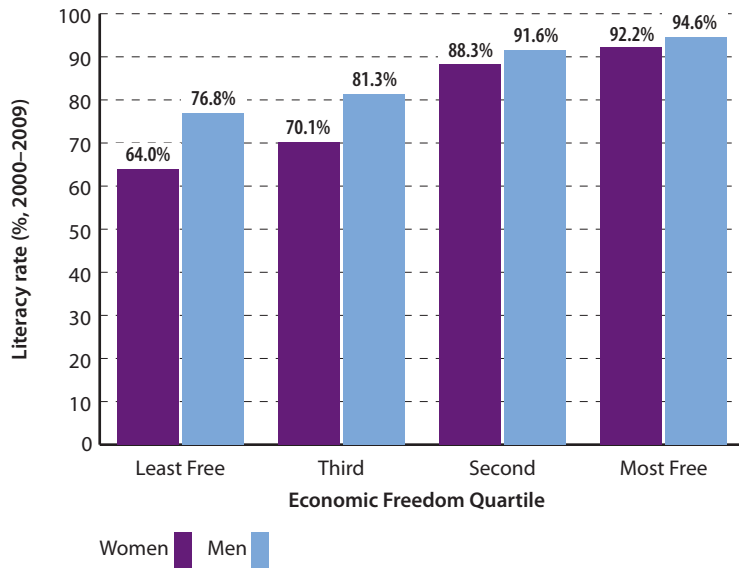
Exhibit 1.13: Economic Freedom and Life Expectancy, 2009



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

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

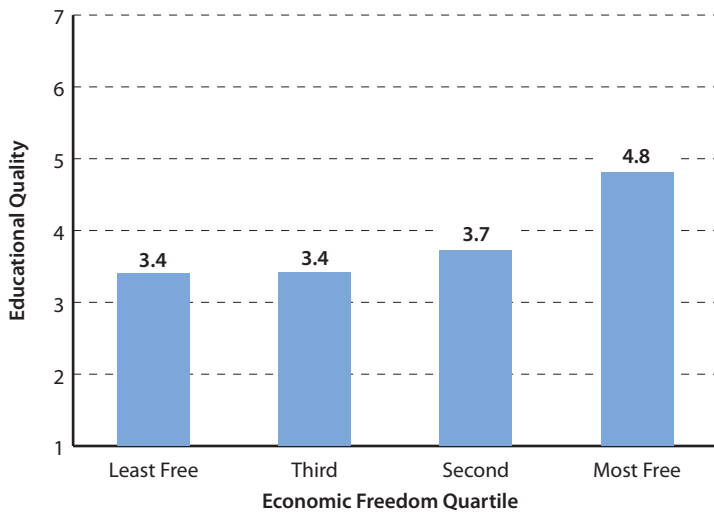
Exhibit 1.14: Economic Freedom and Literacy, 2000–2009



Literacy increases as economic freedom increases, especially for women.

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

Exhibit 1.15: Economic Freedom and Educational Quality, 2009

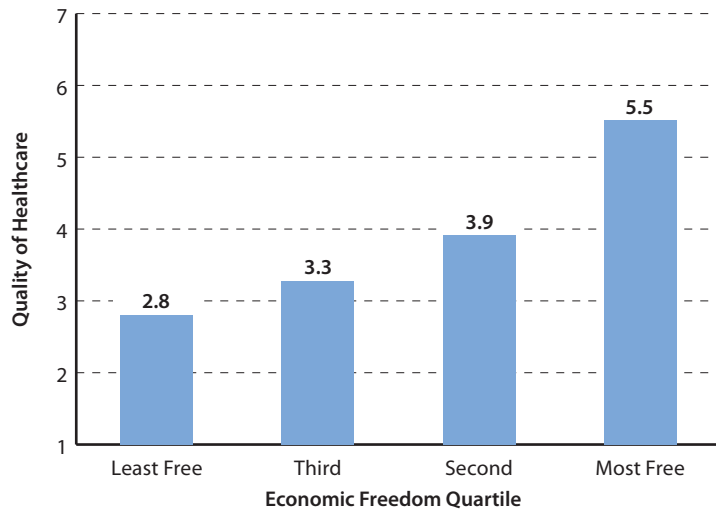


Perceived educational quality increases with economic freedom.

Based on the question: "How well does the educational system in your country meet the needs of a competitive economy? 1 = Not well at all; 7 = Very well" (*Executive Opinion Survey*).

Sources: Fraser Institute, *Economic Freedom of the World: 2011 Annual Report*; World Economic Forum, *Executive Opinion Survey*.

Exhibit 1.16: Economic Freedom and Quality of Healthcare, 2009

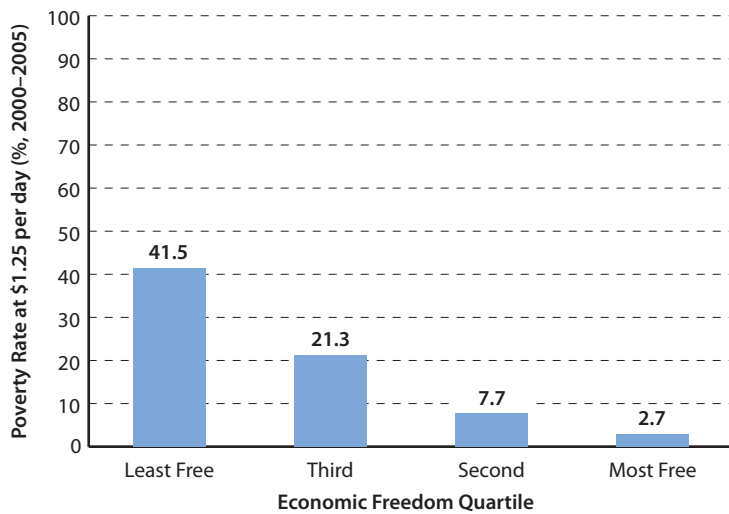


Perceived quality of healthcare increases with economic freedom.

Based on the question: "How would you assess the quality of healthcare provided for ordinary citizens in your country? 1 = Very poor, 7 = Excellent, among the best" (*Executive Opinion Survey*).

Sources: Fraser Institute, *Economic Freedom of the World: 2011 Annual Report*; World Economic Forum, *Executive Opinion Survey*.

Exhibit 1.17: Economic Freedom and Poverty, 2000–2005



The rate of extreme poverty decreases as economic freedom increases.

Sources: Fraser Institute, *Economic Freedom of the World: 2011 Annual Report*; World Bank, *World Development Indicators* and calculations by Joe Connors (Duke University).