

## Chapter 5

# Explaining the Factors of the *Index of Economic Freedom*

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Since 1995, the *Index of Economic Freedom* has offered the international community an annual in-depth examination of the factors that contribute most directly to economic freedom and prosperity. As the first comprehensive study of economic freedom ever published, the 1995 *Index* defined the method by which economic freedom can be measured in such vastly different places as Hong Kong and North Korea. Since then, other studies have joined the effort, analyzing such issues as trade or government intervention in the economy.<sup>1</sup>

There is overlapping coverage among these indices, but the *Index of Economic Freedom* includes the broadest array of institutional factors determining economic freedom:

- Corruption in the judiciary, customs service, and government bureaucracy;
- Non-tariff barriers to trade, such as import bans and quotas as well as strict labeling and licensing requirements;
- The fiscal burden of government, which encompasses income tax rates, corporate tax rates, and trends in government expenditures as a percent of output;
- The rule of law, efficiency within the judiciary, and the ability to enforce contracts;
- Regulatory burdens on business, including health, safety, and environmental regulation;
- Restrictions on banks regarding financial services, such as selling securities and insurance;
- Labor market regulations, such as established work weeks and mandatory separation pay; and
- Informal market activities, including corruption, smuggling, piracy of intellectual property rights, and the underground provision of labor and other services.

Analyzing economic freedom annually permits the authors of the *Index* to include the most recent information on these factors as it becomes available country by country. Not surprisingly, changes in government policy are occurring at a rapid rate in many less-developed countries. The *Index of Economic Freedom*, because it is published each year, enables readers around the world to see how recent changes in government policy affect economic freedom in any of 161 specific countries. The historical score graph on

each country page also permits readers to discriminate among those countries where economic freedom and opportunities are expanding and those where they are not. (This year, numerical grading was suspended for four countries: the Democratic Republic of Congo, Iraq, and Sudan, all of which are in a state of civil unrest or anarchy, and Serbia–Montenegro, for which data necessary to grade the country are not available. Information is provided, however, even for these countries. Grading was resumed for Angola and Burundi, for which grading had been suspended since 2001 due to civil unrest or anarchy.)

## MEASURING ECONOMIC FREEDOM

Economic freedom is defined as *the absence of government coercion or constraint on the production, distribution, or consumption of goods and services beyond the extent necessary for citizens to protect and maintain liberty itself*. In other words, people are free to work, produce, consume, and invest in the ways they feel are most productive.

All government action involves coercion. Some minimal coercion is necessary for the citizens of a community or nation to defend themselves, promote the evolution of civil society, and enjoy the fruits of their labor. This Lockean idea was embodied in the U.S. Constitution. For example, citizens are taxed to provide revenue for the protection of person and property as well as for a common defense. Most political theorists also accept that certain goods—what economists call “public goods”—can be supplied most conveniently by government.

When government coercion rises beyond that minimal level, however, it risks trampling on freedom. When it starts interfering in the market beyond the protection of person and property, it risks undermining economic freedom. Exactly where that line is crossed is open to reasoned debate. The goal in the scoring of economic freedom is not to define these extremes—either anarchy or utopia—but to describe the world’s economies as they are.

Throughout history, governments have imposed a wide array of constraints on eco-

nomics activity. Many constraints can be measured by assessing their impact on economic choices. Constraining economic choice distorts and diminishes the production, distribution, and consumption of goods and services (including, of course, labor services).<sup>2</sup>

One fact, however, is overridingly true: When governments restrict people, their behavior changes, and probably not for the best. Coercion alters choices that ordinary people make. Economic freedom is diminished, and economic growth suffers.

To measure economic freedom and rate each country, the authors of the *Index* study 50 independent economic variables. These variables fall into 10 broad categories, or factors, of economic freedom:

- Trade policy,
- Fiscal burden of government,
- Government intervention in the economy,
- Monetary policy,
- Capital flows and foreign investment,
- Banking and finance,
- Wages and prices,
- Property rights,
- Regulation, and
- Informal market activity.

A detailed discussion of each of these factors and their component variables follows this overview.

**Weighting.** In the *Index of Economic Freedom*, all 10 factors are equally important to the level of economic freedom in any country. Thus, to determine a country’s overall score, the factors are weighted equally.

This is a common-sense approach. It is also consistent with the purpose of the *Index*: to reflect the economic environment in every country surveyed. The *Index* is not designed to measure how much each factor adds to economic growth; that is ably done in the many empirical studies of economic growth. Rather, the authors of the *Index* identify institutional factors that, taken together, determine the degree to which economies are free to respond to changing world market conditions. It is this institutional environment that allows economies to grow and prosper.

While our approach appeals to common sense, recent research on the determinants of

growth indicates that some factors are statistically more important than others. In the 2004 *Index*, Professor Richard Roll illustrated that equally weighting the *Index* factors reveals as true a picture of economic freedom in a country as the best weighting system that statistics can devise.<sup>3</sup> In any event, it is clear that for a country to succeed in achieving long-term growth and economic well-being, it must perform well in *all* 10 factors.

**The Grading Scale.** Each country receives its overall economic freedom score based on the simple average of the 10 individual factor scores. Each factor is graded according to a unique scale. The scales run from 1 to 5: A score of 1 signifies an economic environment or set of policies that are most conducive to economic freedom, while a score of 5 signifies a set of policies that are least conducive to economic freedom.

In addition, following each factor score is a description—“better,” “worse,” or “stable”—to indicate, respectively, whether that factor of economic freedom has improved, worsened, or stayed the same compared with the country’s score last year.

Finally, the 10 factors are added and averaged, and an overall score is assigned to the country.

The four broad categories of economic freedom in the *Index* are:

- **Free**—countries with an average overall score of 1.99 or less;
- **Mostly Free**—countries with an average overall score of 2.00 to 2.99;
- **Mostly Unfree**—countries with an average overall score of 3.00 to 3.99; and
- **Repressed**—countries with an average overall score of 4.00 or higher.

**Previous Scores.** The *Index of Economic Freedom* includes a comprehensive listing of 161 countries with their scores for each of the 10 factors. Each country’s section also includes a graph of its overall score for each year the country has been graded since 1995. With this history, readers can easily discern whether a country’s economic freedom has improved or diminished over time, or simply has become stuck in the mud.

**Transparency.** To assist the reader, the

authors endeavor to make their scoring as transparent as possible. This chapter explains why each factor is an important element of economic freedom, how the five levels of economic freedom are broken down and scored, and what sources of data and information were used for this analysis.

Factor scoring is straightforward and consistent across countries. If a country’s banking system received a score of 3, for example, this means that its banking and financial system displays most of the characteristics for level 3, which are spelled out on page 68: The government exercises substantial influence on the financial sector; the government owns or operates some banks; the government influences credit allocation; foreign banks face restrictions that domestic banks do not; financial services face limitations or restrictions; and there are significant barriers to the formation of banks. Similarly, a country receiving a score of 5 in trade policy has the characteristics explained on page 59: The government imposes either an average tariff rate that is greater than 20 percent or a lower tariff coupled with very high non-tariff barriers that, for all practical purposes, close its markets to imports.

**Period of Study.** For the 2006 *Index of Economic Freedom*, the authors generally examined data for the period covering the second half of 2004 through the first half of 2005. To the extent possible, the information considered for each factor was current as of June 30, 2005.

It is important to understand, however, that some factors are based on historical information. For example, the monetary policy factor is a 10-year weighted average rate of inflation from January 1, 1995, to December 31, 2004. Other factors are current for the year in which the *Index* is published. For example, the taxation variable for this *Index* considers tax rates that apply to the taxable year 2005.

Occasionally, because the *Index* is published several months after the cutoff date for evaluation, major economic events occur that cannot be factored into the scores. In the past, such occurrences have been uncommon and isolated to one region of the world. The Asian financial crisis, for example, erupted

as the 1998 *Index of Economic Freedom* was ready to go to print. As a result, the effects of policy changes in response to that crisis were not considered in that year's scoring; however, they were considered in later editions. In the country write-ups, the authors and editors also note major events that might have a substantial impact on a country's score in the future.

**Sources.** In evaluating the criteria for each factor, the authors have used a range of authoritative sources. For example, a statement about the level of corruption in a country's customs service may be followed by a supporting quote from a source of demonstrated reliability. There also are innumerable lesser sources of information, including conversations with government officials and visits to Internet sites. These sources are indicated in the narrative where appropriate. It would be unnecessarily cumbersome to cite all the sources used in scoring every single variable of each factor; therefore, unless otherwise noted, the major sources used in preparing the country summaries may be found below, in the introduction to Chapter 6, and in the list of Major Works Cited.

## A SUMMARY OF FACTOR VARIABLES

To grade each country's level of economic freedom for the *Index*, the authors examined 50 independent variables. The information collected was analyzed to determine for each of the 10 factors which of the five grade levels most closely resembles that country's environment. Even though all of the variables were studied, not all are given an individual score or specific mention in the text. For example, it is not necessary to mention cases in which corruption in the judiciary is virtually nonexistent; in general, it is necessary to discuss judicial corruption only when it is a documented problem.

In other words, what is most important is accurately grading each of the 10 broad factors of economic freedom, not necessarily each of the 50 variables, of the 157 countries that are scored in this year's edition. Such a system keeps the *Index* to a manageable length. The independent variables used to evaluate each factor are summarized in the callout box within the factor's description.

## FACTORS OF ECONOMIC FREEDOM

### Factor #1: Trade Policy



Trade policy is a key factor in measuring economic freedom. The degree to which government hinders access to and the free flow of foreign commerce can have a direct bearing on the ability of individuals to pursue their economic goals.

For example, when a government taxes directly the importation of a product through tariffs, or impedes it through non-tariff barriers, incentives are distorted. Some groups of people in that country will now have an incentive to produce that product instead of another one that they may be better suited to producing. The import limitation reduces opportunities or economic freedom by discouraging individuals from applying their talents and skills in a manner that they know or believe will be better for them. In addition, it limits consumers' choices, thereby also limiting their well-being.

**Methodology.** The trade policy score is based on a country's weighted average tariff rate—weighted by imports from the country's trading partners. The higher the rate, the worse (or higher) the score. Gathering data on tariffs to make a consistent cross-country comparison can be a challenging task. Unlike data on inflation, for instance, countries do not report their weighted average tariff rate or simple average tariff rate every year; in some cases, the last time a country reported its tariff data could have been as far back as 1993. To preserve consistency in grading the trade policy factor, the authors have decided to use the most recently reported weighted average tariff rate for a country from our primary source. If another reliable source reports more updated information on the country's tariff rate, the authors note this fact and may review the grading of this factor if there is strong evidence that the most recently reported weighted average tariff rate is outdated.

The World Bank produces the world's most comprehensive and consistent information on weighted average applied tariff rates. When the weighted average applied

## Factor 1: Trade Policy Grading Scale

| Score | Levels of Protectionism | Criteria   |
|-------|-------------------------|--|
| 1     | Very low                | Weighted average tariff rate less than or equal to 2.5 percent.                              |
| 1.5   | Low                     | Weighted average tariff rate greater than 2.5 percent but less than or equal to 5 percent.   |
| 2     | Low                     | Weighted average tariff rate greater than 5 percent but less than or equal to 7.5 percent.   |
| 2.5   | Moderate                | Weighted average tariff rate greater than 7.5 percent but less than or equal to 10 percent.  |
| 3     | Moderate                | Weighted average tariff rate greater than 10 percent but less than or equal to 12.5 percent. |
| 3.5   | High                    | Weighted average tariff rate greater than 12.5 percent but less than or equal to 15 percent. |
| 4     | High                    | Weighted average tariff rate greater than 15 percent but less than or equal to 17.5 percent. |
| 4.5   | Very high               | Weighted average tariff rate greater than 17.5 percent but less than or equal to 20 percent. |
| 5     | Very high               | Weighted average tariff rate greater than 20 percent.  |

tariff rate is not available, the authors use the country's average applied tariff rate; and when the country's average applied tariff rate is not available, the authors use the weighted average or the simple average of most favored nation (MFN) tariff rates.<sup>4</sup> If neither applied tariff nor MFN tariff data are available, the authors base their grading on the revenue raised from tariffs and duties as a percentage of total imports of goods. The data for customs revenues and total imports may not be consolidated in just one source. In addition, in the very few cases in which data on duties and customs revenues are not available, the authors use data on international trade taxes instead. In all cases, the authors clarify the type of data used and the different sources for those data in the corresponding write-up for the trade policy factor. Sometimes, when none of this information is available, the authors simply analyze the overall tariff structure and estimate an effective tariff rate.

Tariffs, however, are not the only barriers to trade. Many countries impose import

### Variables for Factor #1

- Weighted average tariff rate
- Non-tariff barriers
- Corruption in the customs service

quotas, licensing requirements, and other mandates—known collectively as non-tariff barriers (NTBs)—to restrict imports. The trade analysis also considers corruption within the customs service. This is an important consideration because, even though countries may have low published tariff rates and no official NTBs, their customs officials may be corrupt and may require bribes to allow products to enter their ports. Alternatively, customs officials may steal goods for themselves, creating a cost or barrier to trade.

The circumstances are analyzed and documented whenever possible. If NTBs exist in sufficient quantity, or if there is ample evidence of corruption, a country's score based solely on tariff rates receives an additional

## Factor 2: Individual Income Tax Grading Scale

This scale lists a score from 1 through 5. The higher the tax rate, the higher the score.

| Score | Tax Rates | Criteria   |
|-------|-----------|--|
| 1     | Very low  | Top marginal income tax rate less than 10 percent.   |
| 1.5   | Low       | Top marginal income tax rate equal to or greater than 10 percent and less than 20 percent. |
| 2     | Low       | Top marginal income tax rate equal to or greater than 20 percent and less than 25 percent. |
| 2.5   | Moderate  | Top marginal income tax rate equal to or greater than 25 percent and less than 30 percent. |
| 3     | Moderate  | Top marginal income tax rate equal to or greater than 30 percent and less than 35 percent. |
| 3.5   | High      | Top marginal income tax rate equal to or greater than 35 percent and less than 40 percent. |
| 4     | High      | Top marginal income tax rate equal to or greater than 40 percent and less than 45 percent. |
| 4.5   | Very high | Top marginal income tax rate equal to or greater than 45 percent and less than 50 percent. |
| 5     | Very high | Top marginal income tax rate equal to or greater than 50 percent.                          |

point on the scale (representing decreased economic freedom).

**Sources.** Unless otherwise noted, the authors used the following sources to determine scores for trade policy, in order of priority: World Bank, *World Development Indicators 2005* and *Data on Trade and Import Barriers: Trends in Average Tariff for Developing and Industrial Countries 1981–2003*; World Trade Organization, *Trade Policy Reviews*, 1995 to March 2005; Office of the U.S. Trade Representative, *2005 National Trade Estimate Report on Foreign Trade Barriers*; U.S. Department of Commerce, *Country Commercial Guide*, 2004 and 2005;<sup>5</sup> Economist Intelligence Unit, *Country Report*, *Country Profile*, and *Country Commerce*, 2004–2005 and 2005–2006; and official government publications of each country.

### Factor #2: Fiscal Burden of Government



To measure the fiscal burden a government imposes on its citizens, the authors examined both marginal tax rates and the year-to-year change in

the level of government expenditures as a percent of gross domestic product (GDP). The marginal tax rate confronting an individual is in effect a “price” paid for supplying the next economic effort or engagement in an entrepreneurial venture. What remains after the tax is subtracted are the “rewards” of the effort. The higher the price of effort or entrepreneurship, the lower the rewards and the less of it will be undertaken. Higher tax rates interfere with the ability of individuals to pursue their goals in the marketplace.

The year-to-year change in the share of output diverted to government expenditures captures the incremental increase or decrease of the true cost of government in a society. When a government expends money, it acquires resources, diverting them away from potentially more productive private choices and goals. This is true whether the expenditure is to acquire resources for its own purposes (government consumption) or for transfer payments among citizens. As a government increases (decreases) its expen-

## Factor 2: Corporate Tax Grading Scale

This scale lists a score from 1 through 5. The higher the tax rate, the higher the score.

| Score | Tax Rates | Criteria  |
|-------|-----------|---|
| 1     | Very low  | Top marginal corporate tax rate less than 15 percent.   |
| 1.5   | Low       | Top marginal corporate tax rate equal to or greater than 15 percent and less than 18 percent. |
| 2     | Low       | Top marginal corporate tax rate equal to or greater than 18 percent and less than 21 percent. |
| 2.5   | Moderate  | Top marginal corporate tax rate equal to or greater than 21 percent and less than 24 percent. |
| 3     | Moderate  | Top marginal corporate tax rate equal to or greater than 24 percent and less than 27 percent. |
| 3.5   | High      | Top marginal corporate tax rate equal to or greater than 27 percent and less than 30 percent. |
| 4     | High      | Top marginal corporate tax rate equal to or greater than 30 percent and less than 33 percent. |
| 4.5   | Very high | Top marginal corporate tax rate equal to or greater than 33 percent and less than 36 percent. |
| 5     | Very high | Top marginal corporate tax rate equal to or greater than 36 percent.                          |

ditures, it necessarily reduces (increases) the level of economic freedom in a society.

The government's need to finance these year-to-year changes in expenditures creates a burden. The choice is whether to tax the public now or in the future. No matter how a given level of government expenditure is financed—by current taxation, or future (debt issuance or money creation), or varying amounts of each—resources are going to be diverted from the private sector. Hence, the expenditures reflect the total fiscal burden.

This perspective underlies Milton Friedman's belief that government expenditures are the most complete measure of a state's burden on the economy. Government expenditures capture the possibility of spending in excess of tax revenues, financed either by increased borrowing or by the printing of money, which imposes further costs on an economy.<sup>6</sup>

**Methodology.** The score for the fiscal burden of government has three components:

### Variables for Factor #2

- Top marginal income tax rate
- Top marginal corporate tax rate
- Year-to-year change in government expenditures as a percent of GDP

the top marginal income tax rate, the top marginal corporate tax rate, and the year-to-year change in government expenditures as a share of GDP. The authors followed several steps in scoring this factor. First, a country's individual income tax score was assigned a score between 1 and 5 based on the top marginal income tax rate. (See text box, "Individual Income Tax Grading Scale.") Second, a country's corporate tax score was assigned a score between 1 and 5 based on the top marginal corporate tax rate. (See text box, "Corporate Tax Grading Scale.") Third, a country was assigned a score between 1 and 5 based on the year-to-year change in government

## Factor 2: Change in Government Expenditures Scale

This scale lists a score from 1 through 5. The more the level of government expenditures as a percent of GDP increases, the higher the score.

| Score | Year-to-year Change in Government Expenditures as Percent of GDP | Criteria  |
|-------|--|---|
| 1     | Very high decrease   | Equal to or greater than -4 percentage points.                                    |
| 1.5   | High decrease  | Equal to or greater than -3 percentage points and less than -4 percentage points. |
| 2     | Moderate decrease  | Equal to or greater than -2 percentage points and less than -3 percentage points. |
| 2.5   | Low decrease   | Equal to or greater than -1 percentage point and less than -2 percentage points.  |
| 3     | Very low decrease  | Equal to or greater than 0 percentage point and less than -1 percentage point.    |
| 3.5   | Low increase   | Greater than 0 percentage point and less than or equal to 1 percentage point.     |
| 4     | Moderate increase  | Greater than 1 percentage point and less than or equal to 2 percentage points.    |
| 4.5   | High increase  | Greater than 2 percentage points and less than or equal to 3 percentage points.   |
| 5     | Very high increase   | Greater than 3 percentage points.   |

expenditures as a percent of GDP. (See text box, “Change in Government Expenditures Scale.”)

The authors then calculated a weighted average of the three components of the fiscal burden of government factor to arrive at a final score. The top income tax rate was assigned a 25 percent weight, the top corporate tax rate was assigned a 50 percent weight, and the year-to-year change in the share of government expenditures was assigned a 25 percent weight. The authors conducted a statistical analysis of the relationship between the individual components of the fiscal burden factor and the overall level of economic freedom and found that the correlation between the top corporate tax rate and overall economic freedom was about twice as great as the correlation between economic freedom and either the top income tax rate or the year-to-year change in gov-

ernment spending as a share of GDP. Thus, the authors chose to place the double weight on the top corporate tax rate.

**Sources.** Unless otherwise noted, the authors used the following sources for information on taxation, in order of priority: Ernst & Young, *2005 The Global Executive* and *2005 Worldwide Corporate Tax Guide*; Deloitte, *Country Snapshot*, May 2005, and *Corporate Tax Rates at a Glance*, January 2005; International Monetary Fund, Staff Country Report, *Selected Issues and Statistical Appendix*, 2002 to 2005; investment agencies; and other governmental authorities (i.e., embassy confirmations, treasury/tax authority). Sources other than Ernst & Young are noted in the text.

For information on government expenditures, the authors’ primary sources were Organisation for Economic Co-operation and Development data (for member countries); African Development Bank; Interna-

## Factor 3: Government Consumption Grading Scale

This scale lists a score from 1 through 5. The higher the level of government consumption as a percent of GDP, the higher the score.

| Score | Level of Government Consumption in the Economy | Criteria   |
|-------|--|--|
| 1     | Very low                                       | Less than or equal to 5 percent of GDP.                              |
| 2     | Low  | Greater than 5 percent but less than or equal to 10 percent of GDP.  |
| 3     | Moderate                                       | Greater than 10 percent but less than or equal to 20 percent of GDP. |
| 4     | High   | Greater than 20 percent but less than or equal to 40 percent of GDP. |
| 5     | Very high                                      | Greater than 40 percent of GDP.                                      |

tional Monetary Fund, Staff Country Report, *Selected Issues and Statistical Appendix*, 2002 to 2005; Asian Development Bank, *Development Outlook 2005* and *Key Indicators 2004*; and official government publications of each country and individual contacts from government agencies and multinational organizations such as the IMF and World Bank. Sources other than the OECD and the IMF are noted in the text. It should be noted that the sources at times revise their earlier estimates and issue amended data. Because the authors of the 2006 *Index* have used the most current and reliable data available in grading this factor, the data reported in this edition may vary from the data reported by these sources that were used in earlier editions of the *Index*.

### Factor #3: Government Intervention in the Economy



This factor measures government's direct use of scarce resources for its own purposes and government's control over resources through ownership. The measure comprises both government consumption and government production. Transfer payments (the difference between government expenditure and government consumption), which consist of compulsory exchange of the rights to resources from some people to others, are excluded from this measure.

### Variables for Factor #3

- Government consumption as a percentage of the economy
- Government ownership of businesses and industries
- Share of government revenues from state-owned enterprises and government ownership of property
- Economic output produced by the government

Government consumption totals net purchases of goods, services, and structures (for example, bridges and buildings); wages paid to government employees; net purchases of fixed assets; and inventory changes in government enterprises.<sup>7</sup> Government production is described below. The government intervention factor is distinct from government's regulatory role and complements the measure of fiscal burden.<sup>8</sup>

**Methodology.** Government consumption as a percentage of GDP is evaluated separately from government production. First, the level of government intervention in the economy is determined. The higher the rate of government consumption as a percentage of GDP, the more resources the government is pulling from the private or free market and, therefore, the lower its level of economic freedom and the higher its *Index* score (lower ranking).

### Factor 3: Share of Revenues from State-Owned Enterprises and Property

This scale lists a score from 1 through 5. The higher the share of revenues from state-owned enterprises and property as a percent of total government revenues, the higher the score.

| Score | Share of Revenues Received from State-Owned Enterprises and Property | Criteria   |
|-------|--|--|
| 1     | Very low   | Less than or equal to 5 percent of government revenues.                              |
| 2     | Low  | Greater than 5 percent but less than or equal to 10 percent of government revenues.  |
| 3     | Moderate   | Greater than 10 percent but less than or equal to 20 percent of government revenues. |
| 4     | High   | Greater than 20 percent but less than or equal to 40 percent of government revenues. |
| 5     | Very high  | Greater than 40 percent of government revenues.                                      |

Governments intervene in the economy not only by consuming scarce resources, but also to engage in business activities that generally could be carried out more efficiently in the private sector. Governments that operate state-owned enterprises crowd out private initiative and investment, and the resultant inefficiency deters economic growth. Economic freedom and the economy suffer. The authors measure the size of the state-owned sector using the share of revenues a country receives from both state-owned enterprises and government-owned property.

Grading employs two tables that assign one score for each level of government consumption as a percentage of GDP and one score for each level of the share of government revenues from state-owned enterprises and property. The two scores are then averaged to obtain the final government intervention score for each country.

The main source for revenues from state-owned enterprises is the International Monetary Fund's *Government Finance Statistics Yearbook*. When these data are not available, the authors rely on the country's economic or finance ministry's Web site, the International Monetary Fund's statistical appendix, or the country's embassy to the United

States. When the authors obtain the data on revenues from state-owned enterprises from more than one place, they note this fact in the country's write-up.

For countries in which the share of total revenues from state-owned enterprises and government ownership of property was not available, 1 point was added to the government intervention score (with a variety of sources used in making this judgment) when evidence of many state-owned enterprises was found.

The government intervention factor also examines the state of privatization programs. If a country's state-owned sector is being aggressively privatized, the authors note this fact, which puts into context any statements about the size of the state-owned sector. If the privatization program has stalled, or if one is not in place, the authors note that as well.

Additionally, in a few cases, there is strong reason to doubt either the reported measure of government consumption or the reported share of enterprise income. In these cases, when compelling evidence of heavy government involvement in the economy was found, the authors added 1 or more points to the score (making it worse).<sup>9</sup>

**Sources.** Unless otherwise noted, the

## Factor 4: Monetary Policy Grading Scale

| Score | Inflation Rate | Criteria   |
|-------|----------------|--|
| 1     | Very low       | Weighted rate of inflation less than or equal to 3 percent.                              |
| 2     | Low            | Weighted rate of inflation greater than 3 percent but less than or equal to 6 percent.   |
| 3     | Moderate       | Weighted rate of inflation greater than 6 percent but less than or equal to 12 percent.  |
| 4     | High           | Weighted rate of inflation greater than 12 percent but less than or equal to 20 percent. |
| 5     | Very high      | Weighted rate of inflation greater than 20 percent.                                      |

authors used the following sources for information on government intervention in the economy, in order of priority: World Bank, *World Development Indicators 2005* and *Country at a Glance* tables; official government publications of each country; Economist Intelligence Unit, *Country Report* and *Country Profile*, 2004–2005; International Monetary Fund, *Government Finance Statistics April 2005* CD-ROM; Organisation for Economic Co-operation and Development, *OECD Statistics*; United Nations, *National Account Statistics Databases*; and U.S. Department of Commerce, *Country Commercial Guide*, 2003, 2004, and 2005.<sup>10</sup>

Often, data for the share of total revenues from state-owned enterprises and government ownership of property are not readily available. In these cases, the authors look both for data on total revenues from state-owned enterprises and property and for data on total government revenues and then calculate the percentage of total revenues that is attributable to revenues from state-owned enterprises and property.

### Factor #4: Monetary Policy



The value of a country's currency is shaped largely by its monetary policy. With a stable monetary policy, people can rely on market prices for the foreseeable future. Hence, investment, savings, and other longer-term plans are easier to make, and individuals enjoy greater economic freedom. John Maynard Keynes observed about the opposite of stable money that, "by a continuing process of inflation,

### Variable for Factor #4

- Weighted average inflation rate from 1995 to 2004

governments can confiscate, secretly and unobserved, an important part of the wealth of their citizens."<sup>11</sup> Inflation not only confiscates wealth, but also distorts pricing, misallocates resources, raises the cost of doing business, and undermines a free society.

There is no singularly accepted theory of the right monetary institutions for a free society. At one time, the gold standard enjoyed widespread support, but this is no longer the case (though some continue to support that system). What characterizes almost all monetary theorists today, however, is support for low or zero inflation. A good way to gauge the influence of monetary policy on economic freedom is to analyze the inflation rate over a period of time.

**Methodology.** This factor's score is based on a country's weighted average annual rate of inflation from 1995 to 2004. First, the authors weighted inflation rates for each of the past 10 years, giving the year farthest from the present the least weight and the current year the greatest weight. Then they calculated an average of these weighted rates.<sup>12</sup> In some cases, data were not available for all 10 years; for these countries, the authors used as many years of data as were available.<sup>13</sup> The reader should be aware that when governments impose comprehensive

price and wage controls, measured inflation probably is distorted.

**Sources.** Unless otherwise noted, the authors used the following sources for data on monetary policy, in order of priority: International Monetary Fund, *International Financial Statistics On-line*; International Monetary Fund, *2005 World Economic Outlook*, available at [www.imf.org/external/pubs/ft/weo/2005/01/index.htm](http://www.imf.org/external/pubs/ft/weo/2005/01/index.htm); and Economist Intelligence Unit, *Country Report*, 1999 to 2005, and *Country Profile*, 2004–2005.

### Factor #5: Capital Flows and Foreign Investment



Restrictions on foreign investment limit the inflow of capital and thus hamper economic freedom. By contrast, little or no restriction of foreign investment enhances economic freedom because foreign investment provides funds for economic expansion. For this factor, the more restrictions a country imposes on foreign investment, the lower its level of economic freedom and the higher its score.

**Methodology.** This factor scrutinizes each country's policies toward foreign investment in order to determine its overall investment climate. Questions examined include whether there is a foreign investment code that defines the country's investment laws and procedures; whether the government encourages foreign investment through fair and equitable treatment of investors; whether there are restrictions on access to foreign exchange; whether foreign firms are treated the same as domestic firms under the law; whether the government imposes restrictions on payments, transfers, and capital transactions; and whether specific industries are closed to foreign investment. This analysis helps to develop an overall description of the country's investment climate. The authors then grade each country based on those variables.

**Sources.** Unless otherwise noted, the authors used the following sources for data on capital flows and foreign investment, in order of priority: International Monetary Fund, *Annual Report on Exchange Arrangements and Exchange Restrictions 2004*; official government publications of each country;

### Variables for Factor #5

- Foreign investment code
- Restrictions on foreign ownership of business
- Restrictions on industries and companies open to foreign investors
- Restrictions and performance requirements on foreign companies
- Foreign ownership of land
- Equal treatment under the law for both foreign and domestic companies
- Restrictions on repatriation of earnings
- Restrictions on capital transactions
- Availability of local financing for foreign companies

Economist Intelligence Unit, *Country Commerce*, *Country Profile*, and *Country Report*, 2004 and 2005; Office of the U.S. Trade Representative, *2005 National Trade Estimate Report on Foreign Trade Barriers*; and U.S. Department of Commerce, *Country Commercial Guide*, 2004 and 2005.<sup>14</sup>

### Factor #6: Banking and Finance



In most countries, banks provide the essential financial services that facilitate economic growth; they lend money to start businesses, purchase homes, and secure credit that is used to buy durable consumer goods, in addition to furnishing a safe place in which individuals can store their earnings. The more banks are controlled by the government, the less free they are to engage in these activities. Hence, heavy bank regulation reduces opportunities and restricts economic freedom; therefore, the more a government restricts its banking sector, the lower its level of economic freedom and the higher its score.

In developed economies, commercial banks are relatively less important because a higher proportion of credit is supplied in organized securities markets. Over the years, the authors have devoted more attention to the non-banking part of the financial services industry (insurance and securities). If the government intervenes in the stock market, it contravenes the choices of millions of individuals. It does so by interfer-

## Factor 5: Capital Flows and Foreign Investment Grading Scale

| Score | Barriers to Foreign Investment | Criteria  |
|-------|--------------------------------|---|
| 1     | Very low                       | Equal treatment of foreign investment; transparent foreign investment code and professional, efficient bureaucracy; no restrictions on foreign investments with rare exceptions, such as restrictions in sectors related to national security; country has legal guarantees against expropriation of property and permits international arbitrations of disputes; foreign investors may purchase real estate; both residents and non-residents have access to foreign exchange and may conduct international payments, transfers, or capital transactions freely.   |
| 2     | Low                            | Equal treatment of foreign investment; transparent foreign investment code, but process may face bureaucratic or other informal impediments; some restrictions on foreign investments through general rules or in a few specified sectors, such as utilities, natural resources, or national security; country has legal guarantees against expropriation of property and permits international arbitration of disputes; foreign investors may purchase real estate; residents and non-residents face few restrictions on access to foreign exchange or their ability to conduct international payments, transfers, or capital transactions.  |
| 3     | Moderate                       | Foreign investment is generally encouraged but may not receive equal treatment with domestic investors in all sectors; foreign investment code may be unclear, and the investment process may face some bureaucratic impediments or corruption; country restricts foreign investments through many requirements or in a significant number of sectors; expropriation of property is very unlikely, and country guarantees compensation; foreign investors may face restrictions on their ability to purchase real estate; residents and/or non-residents face some restrictions on access to foreign exchange or their ability to conduct international payments, transfers, or capital transactions. |
| 4     | High                           | Foreign investment is permitted only on a case-by-case basis; foreign investment code is discriminatory, and foreign investment does not receive equal treatment in all sectors; investment process is characterized by significant bureaucratic impediments and corruption; country restricts foreign investments in many sectors; expropriation of property is possible; foreign investors may purchase real estate only on a case-by case basis or only in restricted areas; residents and/or non-residents face strict restrictions on access to foreign exchange, and government imposes many controls on international payments, transfers, or capital transactions.                            |
| 5     | Very high                      | Foreign investors do not receive equal treatment; foreign investment code is discriminatory, and the approval process is opaque and corruption is widespread; foreign investment is very restricted, and few sectors are open to foreign investment; expropriation of property has occurred in the recent past; foreign investors may not purchase real estate; government controls or prohibits most international payments, transfers, and capital transactions.  |

## Factor 6: Banking and Finance Grading Scale

| Score | Restrictions on Banks | Criteria   |
|-------|-----------------------|--|
| 1     | Very low              | Government provides financial sector with prudent regulatory supervision by an independent central bank; government may be active in some financial institutions but must comprise a very minor role in terms of total market share; credit allocated on market terms; foreign financial institutions able to operate freely and treated the same as domestic financial institutions; banks may engage in all types of financial services. |
| 2     | Low                   | Limited government involvement in financial sector beyond providing prudent regulatory supervision by an independent central bank; few limits on foreign financial institutions; credit allocated on market terms; government may be active in some financial institutions but must comprise a limited role in terms of total market share; banks may engage in all types of financial services.   |
| 3     | Moderate              | Substantial government influence in financial sector; regulatory supervision of financial institutions may be insufficient; government owns or controls banks that have a significant role in terms of market share; government influences allocation of credit; foreign financial institutions face restrictions; country may maintain some limits on financial services; bank formation may face some barriers.                          |
| 4     | High                  | Heavy government involvement in financial sector; central bank not independent; regulatory supervision of financial institutions poor; banking system in transition or unstable; government owns or controls most financial institutions; government directs allocation of credit; possible corruption; foreign financial institutions discouraged; bank formation faces significant barriers.   |
| 5     | Very high             | Very heavy government involvement in financial sector; nearly all financial institutions owned or controlled by government; financial institutions in crisis or collapse, or banks operate on primitive basis; nearly all credit controlled by government; most credit extended to state-owned enterprises; corruption widespread; foreign financial institutions prohibited; bank formation virtually nonexistent.                        |

ing with the pricing of capital—the most critical function of a market economy. Equity markets measure, on a continual basis, the expected profits and losses in publicly held companies. This measurement is essential in allocating capital resources to their highest-valued uses and thereby satisfying consumers’ most urgent wants.

It should be noted that virtually all countries provide some type of prudential supervision of banks and other financial services. This supervision serves two major purposes: ensuring the safety and soundness of the

### Variables for Factor #6

- Government ownership of financial institutions
- Restrictions on the ability of foreign banks to open branches and subsidiaries
- Government influence over the allocation of credit
- Government regulations that inhibit financial activity
- Freedom to offer all types of financial services, securities, and insurance policies

## Factor 7: Wages and Prices Grading Scale

| Score | Wage and Price Controls | Criteria  |
|-------|-------------------------|---|
| 1     | Very low                | Market sets prices of goods and services, and either the country does not have a minimum wage or the evidence indicates that the minimum wage applies to a small portion of the workforce and is therefore not relevant in wage setting.  |
| 2     | Low                     | Government controls prices on some goods and services, such as utilities, or influences prices through subsidies in some industries, but such actions do not apply to a significant portion of national output. Government has a minimum wage that applies to a significant portion of the workforce. |
| 3     | Moderate                | Government controls prices or influences prices through ownership of parastatals or subsidies of goods and services that constitute a significant portion of national output, and/or government-set wages apply to a large portion of the workforce.  |
| 4     | High                    | Government determines most prices of goods and services and most wages.   |
| 5     | Very high               | Wages and prices of goods and services are almost completely controlled by the government.  |

financial system and ensuring that financial services firms meet basic fiduciary responsibilities. Ultimately, this task falls under a government's duty to enforce contracts and protect its citizens against fraud.

The marketplace provides some protection of this sort through such institutions as independent auditors and firms providing information services, and it arguably could take over even more of this oversight responsibility. The key point, however, is that markets demand independent oversight of financial services firms because of the high standards of fiduciary duty required in that industry. Such oversight is distinguished from burdensome government regulation or government ownership of banks, both of which interfere with market provision of financial services to consumers. It is the latter, not the former, that interferes with economic freedom and causes a country's grade on this factor to be better or worse.

**Methodology.** The banking and finance factor measures the relative openness of a country's banking and financial system. The authors score this factor by determining spe-

cifically whether foreign banks and financial services firms are able to operate freely, how difficult it is to open domestic banks and other financial services firms, how heavily regulated the financial system is, how great the presence of state-owned banks is, whether the government influences the allocation of credit, and whether banks are free to provide customers with insurance and invest in securities (and vice versa). The authors use this analysis to develop a description of the country's financial climate.

**Sources.** Unless otherwise noted, the authors used the following sources for data on banking and finance, in order of priority: Economist Intelligence Unit, *Country Commerce*, *Country Profile*, and *Country Report*, 2004 and 2005; official government publications of each country; and U.S. Department of Commerce, *Country Commercial Guide*, 2004 and 2005.<sup>15</sup>

### Factor #7: Wages and Prices



In a free-market economy, prices allocate resources to their highest use. A firm that needs more employ-

ees may signal this need to the market by offering a higher wage; an individual who greatly values a home on the market offers a higher price to purchase it. Prices also act as signals to producers and consumers by conveying information that it otherwise would be prohibitively costly to obtain. For example, increased demand for a good is reflected in the price of the product and is a signal to producers to increase production.

When prices are determined freely, resources go to their most productive use for satisfying consumers. As Nobel Laureate Friedrich A. Hayek put it, “We must look at the price system as...a mechanism for communicating information if we want to understand its real function—a function which, of course, it fulfills less perfectly as prices grow more rigid.”<sup>16</sup>

Some governments mandate wage and price controls. By so doing, they inhibit information, restrict economic activity, and curtail economic freedom. Government control can emanate not only from explicit price controls, but also from heavy involvement in the economy, which distorts pricing. Therefore, the more a government intervenes and controls prices and wages, the lower its level of economic freedom and the higher its score.

**Methodology.** The authors score this factor by the extent to which a government allows the market to set wages and prices. Specifically, this factor looks at which products have prices that are set by the government and whether the government has a minimum wage policy or otherwise influences wages. The factor’s scale measures the relative degree of government control over wages and prices. A “very low” score of 1 represents wages and prices that are set almost completely by the market, whereas a “very high” score of 5 means that wages and prices are set almost completely by the government.

**Sources.** Unless otherwise noted, the authors used the following sources for data on wages and prices, in order of priority: Economist Intelligence Unit, *Country Commerce, Country Profile, and Country Report*, 2004 and 2005; official government publications of each country; and U.S. Depart-

## Variables for Factor #7

- Minimum wage laws
- Freedom to set prices privately without government influence
- Government price controls
- Extent to which government price controls are used
- Government subsidies to businesses that affect prices

ment of Commerce, *Country Commercial Guide*, and U.S. Department of State, *Country Reports on Human Rights Practices*, 2004 and 2005.<sup>17</sup>

## Factor #8: Property Rights



The ability to accumulate private property is the main motivating force in a market economy, and the rule of law is vital to a fully functioning free-market economy. Secure property rights give citizens the confidence to undertake commercial activities, save their income, and make long-term plans because they know that their income and savings are safe from expropriation. This factor examines the extent to which the government protects private property by enforcing the laws and how safe private property is from expropriation. The less protection private property receives, the lower a country’s level of economic freedom and the higher its score.

**Methodology.** This factor scores the degree to which a country’s laws protect private property rights and the degree to which its government enforces those laws. It also assesses the likelihood that private property will be expropriated and analyzes the independence of the judiciary, the existence of corruption within the judiciary, and the ability of individuals and businesses to enforce contracts. The less certain the legal protection of property, the higher a country’s score; similarly, the greater the chances of government expropriation of property, the higher a country’s score.

**Sources.** Unless otherwise noted, the authors used the following sources for information on property rights, in order of priority:

## Factor 8: Property Rights Grading Scale

| Score | Protection of Private Property | Criteria  |
|-------|--------------------------------|---|
| 1     | Very high                      | Private property guaranteed by government; court system efficiently enforces contracts; justice system punishes those who unlawfully confiscate private property; corruption nearly nonexistent, and expropriation highly unlikely.   |
| 2     | High                           | Private property guaranteed by government; court system suffers delays and is lax in enforcing contracts; corruption possible but rare; expropriation unlikely.   |
| 3     | Moderate                       | Court system inefficient and subject to delays; corruption may be present; judiciary may be influenced by other branches of government; expropriation possible but rare.  |
| 4     | Low                            | Property ownership weakly protected; court system inefficient; corruption present; judiciary influenced by other branches of government; expropriation possible.  |
| 5     | Very low                       | Private property outlawed or not protected; almost all property belongs to the state; country in such chaos (for example, because of ongoing war) that property protection nonexistent; judiciary so corrupt that property not effectively protected; expropriation frequent. |

### Variables for Factor #8

- Freedom from government influence over the judicial system
- Commercial code defining contracts
- Sanctioning of foreign arbitration of contract disputes
- Government expropriation of property
- Corruption within the judiciary
- Delays in receiving judicial decisions and/or enforcement
- Legally granted and protected private property

Economist Intelligence Unit, *Country Commerce*, 2004 and 2005, and U.S. Department of Commerce, *Country Commercial Guide*, and U.S. Department of State, *Country Reports on Human Rights Practices*, 2004 and 2005.<sup>18</sup>

### Factor #9: Regulation



Regulations and restrictions are in effect a form of taxation that makes it difficult for entrepreneurs to cre-

ate and/or maintain new businesses. In some countries, government officials frown on any private-sector initiatives; in a few, they even make them illegal. Although many regulations hinder businesses, the most important are associated with licensing new companies and businesses. In some countries, as well as many states in the United States, the procedure for obtaining a business license can be as simple as mailing in a registration form with a minimal fee. In Hong Kong, for example, obtaining a business license requires filling out a single form, which can be completed in a few hours.<sup>19</sup> In other countries, such as India and countries in parts of South America, the process involved in obtaining a business license requires endless trips to government offices and can take a year or more.

Once a business is open, government regulation does not always subside; in some cases, it increases. Interestingly, two countries with the same set of regulations can impose different regulatory burdens. If one of them, for instance, applies its regulations evenly and transparently, it lowers the regu-

## Factor 9: Regulation Grading Scale

| Score | Levels of Regulation | Criteria   |
|-------|----------------------|--|
| 1     | Very low             | Existing regulations straightforward and applied uniformly to all businesses; regulations not much of a burden for business; corruption nearly nonexistent.  |
| 2     | Low                  | Simple licensing procedures; existing regulations relatively straightforward, applied uniformly most of the time, but burdensome in some instances; corruption possible but rare.  |
| 3     | Moderate             | Complicated licensing procedures; regulations impose substantial burden on business; existing regulations may be applied haphazardly and in some instances are not even published by the government; corruption may be present and poses minor burden on businesses. |
| 4     | High                 | Highly complicated licensing procedures; regulations impose heavy burden on business; existing regulations applied haphazardly and in some instances are not even published by the government; corruption present and poses a substantial burden on businesses.      |
| 5     | Very high            | Government-set production quotas and some state planning; government regulations virtually impede creation of new businesses; corruption widespread; regulations applied randomly.   |

### Variables for Factor #9

- Licensing requirements to operate a business
- Ease of obtaining a business license
- Corruption within the bureaucracy
- Labor regulations, such as established work-weeks, paid vacations, and parental leave, as well as selected labor regulations
- Environmental, consumer safety, and worker health regulations
- Regulations that impose a burden on business

latory burden because it enables businesses to make long-term plans more easily. If the other applies regulations inconsistently, it raises the regulatory burden on businesses by creating an unpredictable business environment. For example, in some countries, an environmental regulation may be used to shut down one business but not another. Business owners are uncertain about which regulations they must obey. In addition, the existence of excessive regulation can support corruption as confused and harassed

business owners attempt to navigate the red tape.

**Methodology.** This factor measures how easy or difficult it is to open and operate a business. The more regulations are imposed on business, the harder it is to establish one. The factor also examines the degree of corruption in government and whether regulations are applied uniformly to all businesses. Another consideration is whether the country has state planning agencies that set production limits and quotas. The scale establishes a set of conditions for each of the five possible grades. These conditions also include the extent of government corruption, how uniformly regulations are applied, and the extent to which regulations impose a burden on business. A “very low” score of 1 indicates that corruption is virtually nonexistent and regulations are minimal and applied uniformly; a “very high” score of 5 indicates that corruption is widespread, regulations are applied randomly, and the general level of regulation is very high. A country need only meet a majority of the conditions for a particular score to receive that score.

## Factor 10: Informal Market Grading Scale

(Countries Not Covered by Transparency International)

| Score | Informal Market Activity | Criteria  |
|-------|--------------------------|---|
| 1     | Very low                 | Country has free-market economy with informal market in such things as drugs and weapons.   |
| 2     | Low                      | Country may have some informal market involvement in labor or pirating of intellectual property.  |
| 3     | Moderate                 | Country may have some informal market activities in labor, agriculture, and transportation and moderate levels of intellectual property piracy.   |
| 4     | High                     | Country may have substantial levels of informal market activity in such areas as labor, pirated intellectual property, and smuggled consumer goods and in such services as transportation, electricity, and telecommunications. |
| 5     | Very high                | Country's informal market is larger than its formal economy.  |

**Sources.** Unless otherwise noted, the authors used the following sources for data on regulation, in order of priority: Economist Intelligence Unit, *Country Commerce and Country Report*, 2004 and 2005; official government publications of each country; U.S. Department of Commerce, *Country Commercial Guide*, 2004 and 2005;<sup>20</sup> and Office of the U.S. Trade Representative, *2005 National Trade Estimate Report on Foreign Trade Barriers*.

### Factor #10: Informal Market



At times, the existence of an informal market is positive: There is some ability to engage in entrepreneurship or to obtain scarce goods and services that otherwise would not exist. "In some circumstances," notes Harvard economist Robert Barro, "corruption may be preferable to honest enforcement of bad rules. For example, outcomes may be worse if a regulation that prohibits some useful economic activity is thoroughly enforced rather than circumvented through bribes."<sup>21</sup> Alejandro Chafuen and Eugenio Guzmán, however, point out that "corruption is the cost of obtaining privileges that only the State can 'legally' grant, such as favoritism in taxation, tariffs, subsidies, loans, government con-

### Variables for Factor #10

- Smuggling
- Piracy of intellectual property in the informal market
- Agricultural production supplied on the informal market
- Manufacturing supplied on the informal market
- Services supplied on the informal market
- Transportation supplied on the informal market
- Labor supplied on the informal market

tracting, and regulation."<sup>22</sup>

Informal markets are the direct result of some kind of government intervention in the marketplace. An informal market activity is one that the government has taxed heavily, regulated in a burdensome manner, or simply outlawed in the past. This factor captures the effects of government interventions that are not always fully measured elsewhere.

Many societies, of course, outlaw such activities as trafficking in illicit drugs, but others frequently limit individual liberty by outlawing such activities as private transportation and construction services. A government regulation or restriction in one area

may create an informal market in another. For example, a country with high barriers to trade may have laws that protect its domestic market and prevent the import of foreign goods, but these barriers create incentives for smuggling and an informal market for the barred products. In addition, governments that do not have strong property rights protection for intellectual property, for example, or that do not enforce existing laws encourage piracy and theft of these products.

For the purposes of this *Index*, the informal market reflects restrictions, taxes, or imperfections in the private market. Hence, the larger the informal market, the lower the country's level of economic freedom; and the more prevalent informal market activities are, the worse the country's score. Conversely, the smaller the informal market, the higher the country's level of economic freedom; and the less prevalent these activities are, the better the country's score.

**Methodology.** This factor relies on Transparency International's Corruption Perceptions Index (CPI), which measures the level of corruption in 146 countries, to determine the informal market scores of countries that are also listed in the *Index of Economic Freedom*.<sup>23</sup> As the level of corruption increases, the level of informal market activity rises as well. Citizens often engage in corrupt activity, such as bribing an official, so that they can enter the informal market.

Because the CPI is based on a 10-point scale in which 10 equals very little corruption and 1 equals a very corrupt government, it was necessary to transform the CPI to a five-point scale consistent with the other nine factors graded in the *Index*. To do this, the authors regressed the CPI on the informal market *Index of Economic Freedom* score. After estimating the relationship between the two variables, the authors substituted the CPI into the equation to arrive at a number between 1 and 5. They then rounded the numbers to the

nearest half point (0.5 point).<sup>24</sup> If 2004 Transparency International data were not available and 2003 or 2002 TI data were available, the authors used the earlier TI data.

For countries that are not covered in the CPI, the informal market score is determined by using the same procedure as in previous years. (See text box, "Informal Market Grading Scale.") This procedure considers the extent to which informal market activities occur. Although information on the size of informal markets in less-developed countries is difficult to obtain, information on the extent of smuggling, piracy of intellectual property, and informal labor can be found. When such information is available, the authors use it to determine the extent of informal market activities. The higher the level of informal market activity, the lower the level of overall economic freedom and the higher a country's score. As newer data become available, it may become possible to document the percentage of informal market activity in a country's overall economy.

Although this factor measures informal market activity in the production, distribution, or consumption of goods and services, it does not measure such things as informal market exchange rates or illegal provision of such "vices" as gambling, narcotics, prostitution, and related activities. Such activities are very difficult to quantify with objectivity.

**Sources.** Unless otherwise noted, the authors used the following sources for information on informal market activities, in order of priority: Transparency International, *Corruption Perceptions Index*, 2002 and 2004; U.S. Department of Commerce, *Country Commercial Guide*, 2004 and 2005;<sup>25</sup> Economist Intelligence Unit, *Country Commerce*, *Country Profile*, and *Country Report*, 2004 and 2005; Office of the U.S. Trade Representative, *2005 National Trade Estimate Report on Foreign Trade Barriers*; and official government publications of each country.

## Endnotes

1. See, for example, James D. Gwartney and Robert A. Lawson with Erik Gartzke, *Economic Freedom of the World, 2005 Annual Report* (Vancouver, Canada: Fraser Institute, 2005), and Richard E. Messick, *World Survey of Economic Freedom: 1995–1996* (New Brunswick, N.J.: Transaction Publishers, 1996).
2. “The property which every man has in his own labour, as it is the original foundation of all other property, so it is the most sacred and inviolable.” Adam Smith, *An Inquiry into the Nature and Causes of the Wealth of Nations* (New York: The Modern Library, 1937), pp. 121–122; first published in 1776.
3. Richard Roll, “Weighting the Components of the Index of Economic Freedom,” Chapter 3 in Marc A. Miles, Edwin J. Feulner, and Mary Anastasia O’Grady, *2004 Index of Economic Freedom* (Washington, D.C.: The Heritage Foundation and Dow Jones & Company, Inc., 2004).
4. The most favored nation tariff rate is the “normal,” non-discriminatory tariff charged on imports of a good. In commercial diplomacy, exporters seek MFN treatment; that is, the promise that they will be treated as well as the most favored exporter. The MFN rule requires that the concession be extended to all other members of the World Trade Organization.
5. The *Country Commercial Guides* are published by the U.S. Commercial Service but are based on data from U.S. embassies, the U.S. Department of State, and the U.S. Department of Commerce. Quotes from these publications are cited in the country write-ups as originating with the U.S. Department of Commerce.
6. Walter Block, ed., *Economic Freedom: Toward a Theory of Measurement* (Vancouver, Canada: Fraser Institute, 1991).
7. U.S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business*, March 1998, p. 31.
8. In a few cases, data on government consumption were not available for a country, but data on government expenditures were available, or vice versa. When information on government consumption was not available for the government intervention factor and data on government expenditures were available, the authors used government expenditures as a proxy for government consumption. Similarly, when data on government expenditures were not available for the fiscal burden of government factor and data on government consumption were available, the authors used government consumption as a proxy for government expenditures.
9. The countries for which data correction points were added include Bangladesh, Belarus, Burkina Faso, Burma, China, Cuba, Djibouti, Indonesia, Iran, Macedonia, Malawi, Niger, Syria, Tajikistan, Turkmenistan, and Vietnam.
10. See note 5.
11. John Maynard Keynes, *The Economic Consequences of the Peace* (London: Macmillan and Co., Ltd., 1919), pp. 102–103.
12. The weights were generated using an exponential weighting procedure and are as follows: The most recent year received a weight of 1.0, followed by 0.36788, 0.13534, 0.04979, 0.01832, 0.00674, 0.00248, 0.00091, 0.00034, and 0.00012.
13. In his cross-country study on growth, Robert J. Barro found that relatively recent inflation had the main explanatory power for growth. Robert J. Barro, *Determinants of Economic Growth: A Cross-Country Empirical Study* (Cambridge, Mass.: MIT Press, 1997).
14. See note 5.
15. See note 5.
16. Friedrich A. Hayek, “The Use of Knowledge in Society,” in *Individualism and Economic Order* (Chicago: University of Chicago Press, 1948), p. 86.
17. See note 5.
18. See note 5.
19. John Stossel, “Is America Number One?” ABC News, aired September 19, 1999.
20. See note 5.

21. Robert J. Barro, "Rule of Law, Democracy, and Economic Performance," Chapter 2 in Gerald P. O'Driscoll, Jr., Kim R. Holmes, and Melanie Kirkpatrick, *2000 Index of Economic Freedom* (Washington, D.C.: The Heritage Foundation and Dow Jones & Company, Inc., 2000), p. 36.
22. Alejandro A. Chafuen and Eugenio Guzmán, "Economic Freedom and Corruption," Chapter 3 in O'Driscoll, Holmes, and Kirkpatrick, *2000 Index of Economic Freedom*, p. 53.
23. This year, the authors graded the informal market factor using Transparency International's 2002, 2003, and 2004 Corruption Perceptions Index (CPI) reports.
24. The equation that the authors estimated is as follows:  $\text{informal market} = 5.227 - 0.4771 * \text{CPI}$ . The authors then substituted the country's CPI score into the equation to arrive at a number between 1 and 5. For example, substituting Denmark's CPI score of 9.5 into the equation yields an informal market score of 0.695 (which rounds up to a score of 1).
25. See note 5.