Chapter 1
Economic Freedom of the United States and Canada

Economic Freedom and the Index

Economic Freedom of North America is an attempt to gauge the extent of the restrictions on economic freedom imposed by governments in North America. The index published here measures economic freedom at two levels, the subnational and the all-government. At the subnational level, it measures the impact on economic freedom of state and local governments in the United States, and of provincial and municipal governments in Canada. At the all-government level, it measures the impact of all levels of government—federal, state/provincial, and local/municipal—in the United States and Canada. All 50 states and 10 provinces are included. [1]

The study examines the impact of economic freedom on both the level of economic activity and the growth of economic activity. The econometric testing presented in this publication shows that in the United States and Canada economic freedom fosters prosperity and growth. Economic freedom increases the affluence of individuals. This finding is consistent with other studies of economic freedom. [2] The results are highly significant and remarkably stable through a number of different sensitivity tests.

Most US states have high levels of economic freedom and prosperity, but Canadian provinces are poorly positioned to benefit from economic freedom. Figures 1.1 and 1.2 show scores for economic freedom and the large differences between the US states and the Canadian provinces. Perhaps the most significant finding for the United States comes from comparing this year's report to previous years: between 2000 and 2005, per-capita GDP grew by 18% in the states with the best record for growth of economic freedom but just 5% in the states with the worst growth record (see tables 3.1 to 3.3).

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[1] *Economic Freedom of North America* examines only US states and Canadian provinces due to the limitations of the data available for the Mexican states. Our ultimate goal, however, is to include all three North American nations. Chapter 4 by Nathan J. Ashley (University of Texas at El Paso) is a major step towards this goal although the results are preliminary and subject to revision.

[2] See Easton and Walker, 1997; De Haan and Sturm, 2000; and related papers at <http://www.freetheworld.com>. For the latest summary of literature on economic freedom at an international level, see Doucouliagos and Ulubasoglu, 2006.

Figure 1.1: Summary of 2005 Ratings at the All-Government Level

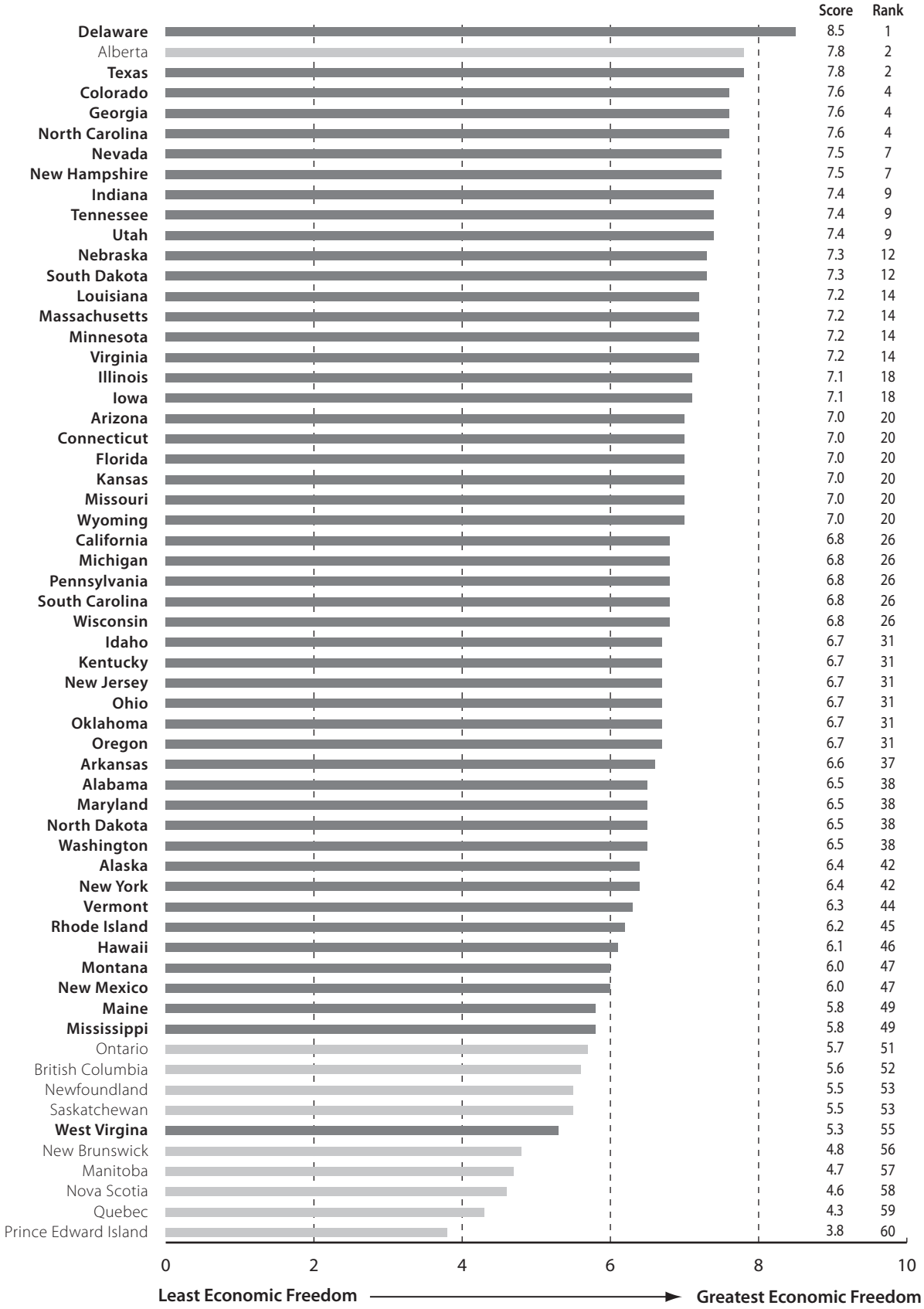
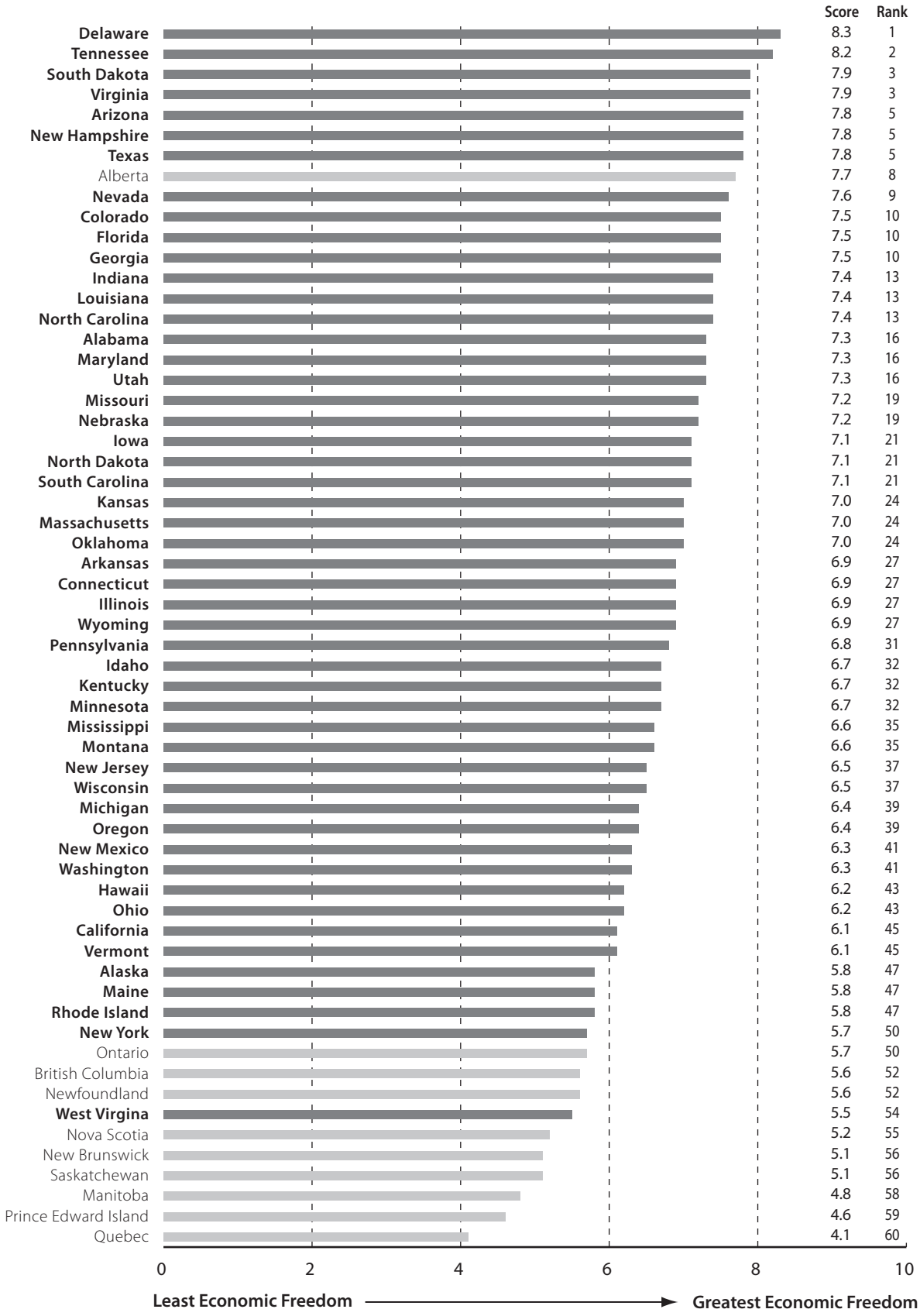


Figure 1.2: Summary of 2005 Ratings at the Subnational Level



What Is Economic Freedom?

Writing in *Economic Freedom of the World, 1975–1995,* James Gwartney and his co-authors defined economic freedom in the following way.

> Individuals have economic freedom when (a) property they acquire without the use of force, fraud, or theft is protected from physical invasions by others and (b) they are free to use, exchange, or give their property as long as their actions do not violate the identical rights of others. Thus, an index of economic freedom should measure the extent to which rightly acquired property is protected and individuals are engaged in voluntary transactions. (Gwartney, Lawson, and Block, 1996: 12)

The freest economies operate with minimal government interference, relying upon personal choice and markets to answer the basic economic questions such as what is to be produced, how it is to be produced, how much is produced, and for whom production is intended. As government imposes restrictions on these choices, there is less economic freedom.

The research flowing from the data generated by the annually published report, *Economic Freedom of the World*, [3] a project The Fraser Institute initiated over 20 years ago, shows that economic freedom is important to the well-being of a nation's citizens. This research has found that economic freedom is positively correlated with per-capita income, economic growth, greater life expectancy, lower child mortality, the development of democratic institutions, civil and political freedoms, and other desirable social and economic outcomes. Just as *Economic Freedom of the World* seeks to measure economic freedom on an international basis, *Economic Freedom of North America* has the goal of measuring differences in economic freedom among the Canadian provinces and US states.

In 1999, The Fraser Institute published *Provincial Economic Freedom in Canada: 1981–1998* (Arman, Samida, and Walker, 1999), a measure of economic freedom in 10 Canadian provinces. *Economic Freedom of North America* updates and, by including the 50 US states, expands this initial endeavor. This study looks at 10 Canadian provinces—excluding Yukon, the Northwest Territories, and Nunavut—and the 50 US states from 1981 to 2005. Each province and state is ranked on economic freedom at both the subnational and the all-government levels. This helps isolate the impact of different levels of government on economic freedom in Canada and the United States.

In extending the work on economic freedom, it would seem obvious to include the tried and tested measures used in *Economic Freedom of the World*. This is not as easy as it sounds. Some categories of the world index have too little variance from one jurisdiction to another in Canada and the United States to be measured accurately. For example, the stability of the legal system (one of the areas used in

[3] A list of many of these articles and additional information can be found at <http://www.freetheworld.com>.

Economic Freedom of the World) does not differ much among states and provinces. Components such as the private ownership of banks, avoidance of negative interest rates, monetary policy, freedom to own foreign currency, the right to international exchange, structure of capital markets, and black-market exchange rates are ineffective for an inquiry into the state of economic freedom within Canada and the United States, particularly at a subnational level.

However, economic freedom varies throughout Canada and the United States in three important aspects, which we attempt to capture in this index: size of government; takings and discriminatory taxation; and labor-market freedom. A fourth, potentially important, area of difference, restriction on the movement of goods within North America, had to be left out due to lack of data. This may be particularly important in the Canadian context, since Canada retains a number of internal trade barriers (Knox, 2002).

Data limitations also create difficulties in testing relationships between economic freedom and key economic components. For example, we are able to construct only a partial model of growth, as data on investment for individual states, an important part of any growth model, are not available. Fortunately, as discussed later, the effect of omitting an investment component on the estimated economic-freedom coefficient is likely to be of little quantitative significance. High-school graduation rates are used as a proxy for human capital, but in our testing this indicator often does not have the expected sign and is seldom significant in the regressions in which it is included.

Due to data limitations and revisions, some time periods are either not directly comparable or are not available. When necessary, we have used the data closest to the missing time period as an estimate for the missing data. If there have been changes in this component during this period, this procedure would introduce some amount of measurement error in the estimate of economic freedom for the particular data point. However, omitting the component in the cases when it is missing and basing the index score on the remaining components may create more bias in the estimate of overall economic freedom.

The theory of economic freedom [4] is no different at the subnational and all-government level than it is at the global level, although different proxies consistent with the theory of economic freedom must be found that suit subnational and all-government measures. The 10 components chosen fall into three areas: Size of Government, Takings and Discriminatory Taxation, and Labor Market Freedom. Most of the components we use are calculated as a ratio of gross domestic product (GDP) in each jurisdiction and thus do not require the use of exchange rates or purchasing power parities (PPP). The exception is component *2B, Top Marginal Income Tax Rate and the Income Threshold at Which It Applies*, where purchasing power parity is used to calculate equivalent top thresholds in Canada in US dollars.

[4] See Gwartney and Lawson, 2007. The website, <http://www.freetheworld.com>, has references to a number of important papers and books that explore the theory of economic freedom.

Description of Components

Using a simple mathematical formula to reduce subjective judgments, a scale from zero to 10 was constructed to represent the underlying distribution of the 10 components in the index. The highest possible score is 10, which indicates a high degree of economic freedom. [5] Thus, this index is a relative ranking. The rating formula is consistent across time to allow an examination of the evolution of economic freedom. To construct the overall index without imposing subjective judgments about the relative importance of the components, each area was equally weighted and each component within each area was equally weighted (see Appendix A: Methodology, page 95, for more details).

The index of economic freedom for Canada and the United States assigns a higher score when component *1A, General Consumption Expenditures by Government as a Percentage of GDP*, is smaller in one state or province relative to another. This would seem to contradict the theory of economic freedom, which does not predict that a government size of zero maximizes freedom. Indeed, important government functions, such as the enforcement of the rule of law, are necessary for economic freedom and freedom more broadly. However, all that the theory of economic freedom requires is that governments be large enough to undertake an adequate but minimal level of the "protective" and "productive" functions of government, discussed in the next section. It is unlikely that any government considered in this sample is too small to perform these functions at the minimum required level.

Area 1: Size of Government

1A: General Consumption Expenditures by Government as a Percentage of GDP

As the size of government expands, less room is available for private choice. While government can fulfill useful roles in society, there is a tendency for government to undertake superfluous activities as it expands: "there are two broad functions of government that are consistent with economic freedom: (1) protection of individuals against invasions by intruders, both domestic and foreign, and (2) provision of a few selected goods—what economists call public goods" (Gwartney et al., 1996: 22). These two broad functions of government are often called the "protective" and "productive" functions of government. Once government moves beyond these two functions into the provision of private goods, goods that can be produced by private firms and individuals, it restricts consumer choice and, thus, economic freedom (Gwartney et al., 1996). In other words, government spending, independent of taxation, by itself reduces economic freedom once this spending exceeds what is necessary to provide a minimal level of protective and productive functions. Thus, as the size of government consumption grows, a jurisdiction receives a lower score in this component.

[5] Due to the way scores for economic freedom are calculated, a mini-max procedure discussed in Appendix A: Methodology (page 95), 10 is not indicative of perfect economic freedom.

1B: Transfers and Subsidies as a Percentage of GDP

When the government taxes one person in order to give money to another, it separates individuals from the full benefits of their labor and reduces the real returns of such activity (Gwartney et al., 1996). These transfers represent the removal of property without providing a compensating benefit and are, thus, an infringement on economic freedom. Put another way, when governments take from one group in order to give to another, they are violating the same property rights they are supposed to protect. The greater the level of transfers and subsidies, the lower the score a jurisdiction receives.

1C: Social Security Payments as a Percentage of GDP

When private, voluntary arrangements for retirement, disability insurance, and so on are replaced by mandatory government programs, economic freedom is diminished.

Area 2: Takings and Discriminatory Taxation

2A: Total Tax Revenue as a Percentage of GDP

2B: Top Marginal Income Tax Rate [6] *and the Income Threshold at Which It Applies*

2C: Indirect Tax Revenue as a Percentage of GDP

2D: Sales Taxes Collected as a Percentage of GDP

Some form of government funding is necessary to support the functions of government but, as the tax burden grows, the restrictions on private choice increase and thus economic freedom declines. Taxes that have a discriminatory impact and bear little reference to services received infringe on economic freedom even more: "High marginal tax rates discriminate against productive citizens and deny them the fruits of their labor" (Gwartney et al., 1996: 30). In each of components except 2B, a higher ratio lowers a jurisdiction's score in this component. Top personal income-tax rates are rated by the income thresholds at which they apply. Higher thresholds result in a better score.

Examining the separate sources of government revenue gives the reader more information than just examining a single tax source or overall taxes. Nonetheless, total tax revenue is included to pick up the impact of taxes, particularly various corporate and capital taxes, not included in the other three components.

In examining the two areas above, it may seem that Areas 1 and 2 create a double counting, in that they capture the two sides of the government ledger sheet, revenues and expenditures, which presumably should balance over time. However, in examining subnational jurisdictions, this situation does not hold. In the United States, and even more so in Canada, a number of intergovernmental transfers break the link between taxation and spending at the subnational level. [7] The break between

[6] See Appendix A: Methodology (page 95) for further discussion of how the rating for the top marginal tax rate and its threshold was derived.

[7] Most governments have revenue sources other than taxation and national governments also have international financial obligations so that the relation between taxation and spending will not be exactly one to one, even at the national level. Nevertheless, over time, the relationship will be close for most national governments, except those receiving large amounts of foreign aid.

revenues and spending is even more pronounced at the all-government level, which includes the federal government. Obviously, what the federal government spends in a state or a province does not necessarily bear a strong relationship to the amount of money it raises in that jurisdiction. Thus, to take examples from both Canada and the United States, the respective federal governments spend more in Newfoundland and West Virginia than they raise through taxation in these jurisdictions, while the opposite pattern occurs for Alberta and Connecticut.

As discussed above, both taxation and spending can suppress economic freedom. Since the link between the two is broken when examining subnational jurisdictions, it is necessary to examine both sides of the government's balance sheet.

Area 3: Labor Market Freedom

3A: Minimum Wage Legislation

High minimum wages restrict the ability of employees and employers to negotiate contracts to their liking. In particular, minimum wage legislation restricts the ability of low-skilled workers and new entrants to the workforce to negotiate for employment they might otherwise accept and, thus, restricts the economic freedom of these workers and the employers who might have hired them.

This component measures the annual income earned by someone working at the minimum wage as a ratio of per-capita GDP. Since per-capita GDP is a proxy for the average productivity in a jurisdiction, this ratio takes into account differences in the ability to pay wages across jurisdictions. As the minimum wage grows relative to productivity, thus narrowing the range of employment contracts that can be freely negotiated, there are further reductions in economic freedom, resulting in a lower score for the jurisdiction. For example, minimum wage legislation set at 0.1% of average productivity is likely to have little impact on economic freedom; set at 50% of average productivity, the legislation would limit the freedom of workers and firms to negotiate employment to a much greater extent. Put another way, a minimum wage requirement of $2 an hour for New York will have little impact but, for a third-world nation, it might remove most potential workers from the effective workforce. The same idea holds, though in a narrower range, for jurisdictions within Canada and the United States.

3B: Government Employment as a Percentage of Total State/Provincial Employment

Economic freedom decreases for several reasons as government employment increases beyond what is necessary for government's productive and protective functions. Government, in effect, is using expropriated money to take an amount of labor out of the labor market. This restricts the ability of individuals and organizations to contract freely for labor services since potential employers have to bid against their own tax dollars in attempting to obtain labor. High levels of government employment may also indicate that government is attempting to supply goods and services that individuals contracting freely with each other could provide on their own. It may also be that the government is attempting to provide goods and services that individuals would not care to obtain if able to contract freely. It may also indicate that government is

engaging in regulatory and other activities that restrict the freedom of citizens. Finally, high levels of government employment suggest government is directly undertaking work that could be contracted privately. When government, instead of funding private providers, decides to provide a good or service directly, it reduces economic freedom by limiting choice and by typically creating a governmental quasi-monopoly in provision of services. For instance, the creation of school vouchers may not decrease government expenditures but it will reduce government employment, eroding government's monopoly on the provision of publicly funded education services while creating more choice for parents and students and, thus, enhancing economic freedom.

3C: Union Density

Workers should have the right to form and join unions, or not to do so, as they choose. However, laws and regulations governing the labor market often force workers to join unions when they would rather not, permit unionization drives where coercion can be employed (particularly when there are undemocratic provisions such as union certification without a vote by secret ballot), and may make decertification difficult even when a majority of workers would favor it. On the other hand, with rare exceptions, a majority of workers can always unionize a workplace and workers are free to join an existing or newly formed union.

To this point in time, there is no reliable compilation of historical data about labor-market laws and regulations that would permit comparisons across jurisdictions. In this report, therefore, we attempt to provide a proxy for this component. We begin with union density, that is, the percentage of unionized workers in a state or province. However, a number of factors affect union density: laws and regulations, size of government employment, and manufacturing density. In measuring economic freedom, our goal is to capture the impact of policy factors, laws and regulations, and so on, not other factors. We also wish to exclude government employment—although it is a policy factor that is highly correlated with levels of unionization—since government employment is captured in component 3B above.

Thus, we ran statistical tests to determine how significant an effect government employment had on unionization—a highly significant effect—and held this factor constant in calculating the component. We also ran tests to determine if the size of the manufacturing sector was significant. It was not and, therefore, we did not correct for this factor in calculating the component. It may also be that the size of the rural population has an impact on unionization. Unfortunately, consistent data from Canada and the United States are not available. Despite this limitation, the authors believe this proxy component is the best available at the moment. Its results are consistent with the published information that is available (see, for example, Godin, Palacios, Clemens, Veldhuis, and Karabegović, 2006).

Most of the components above exist for both the subnational and the all-government levels. Total revenue from own sources, for example, is calculated first for local/municipal and provincial/state governments, and then again counting all levels of government that capture revenue from individuals living in a given province or state.

Overview of the Results

Following are some graphs that demonstrate dramatically the important links between prosperity and economic freedom, links that are more fully explored in the section on econometric testing, Economic Freedom and Economic Well-Being (page 30). Figure 1.3 breaks economic freedom into quintiles at the all-government level. For example, the category on the far left of the chart, "Least Free," represents the jurisdictions that score in the lowest fifth of the economic freedom ratings, the 12 lowest of the 60 Canadian and American jurisdictions. Nine of these are Canadian provinces—all except Alberta. The jurisdictions in this least free quintile have an average per-capita GDP of just US$30,786 (CA$37,251). [8] This compares to an average per-capita GDP of US$44,159 (CA$53,433) for the 12 top-ranked jurisdictions. Figure 1.4 is the same type of chart as Figure 1.3 but shows economic freedom at the subnational level. Here, the least free quintile has an average per-capita GDP of US$34,759 (CA$42,058) compared to the most free quintile, which has an average per-capita GDP of US$44,651 (CA$54,028).

Another useful way to review economic freedom is through deviation from the mean. This examines the impact on economic activity of a jurisdiction's being above or below the average ranking of other national jurisdictions, comparing Canadian provinces with the Canadian average and US states with the US average. Here scatter charts help illustrate the point, though a quick visual inspection will show these diagrams could easily be translated into column graphs like Figures 1.3 and 1.4. Figures 1.5 and 1.6 relate prosperity to economic freedom, with economic freedom plotted along the horizontal axis and per-capita GDP plotted along the vertical axis. Once again these charts illustrate the connection between economic freedom and prosperity. As one might expect, the subnational relationship is weaker than the all-government one because only at the all-government level are all government restrictions on economic freedom captured.

Finally, in this illustrative section, we look at the relationship between the growth of economic freedom and the growth of a jurisdiction's economy, another topic more fully explored in the section on econometric testing. In Figures 1.7 and 1.8, growth in economic freedom is plotted along the horizontal axis while growth in GDP per capita is plotted along the vertical axis. Again, the expected relationships are found, with economic growth strongly linked to growth in economic freedom.

Comparing the All-Government Level and the Subnational Level

In general, rankings at an all-government level are not drastically different from rankings at a subnational level when US states, as a group, are compared with Canadian provinces, as a group. This is partly due to the way the subnational component is constructed. Subnational responsibilities in Canada and the United States differ. Thus, government spending and taxation patterns cannot be directly

[8] The most recent data available are from 2005. Note that an exchange rate of 1.21 was used throughout the study, based on the 2005 average exchange rate (Sauder School of Business, 2008).

Figure 1.3: Economic Freedom at the All-Government Level and GDP per Capita, 2005

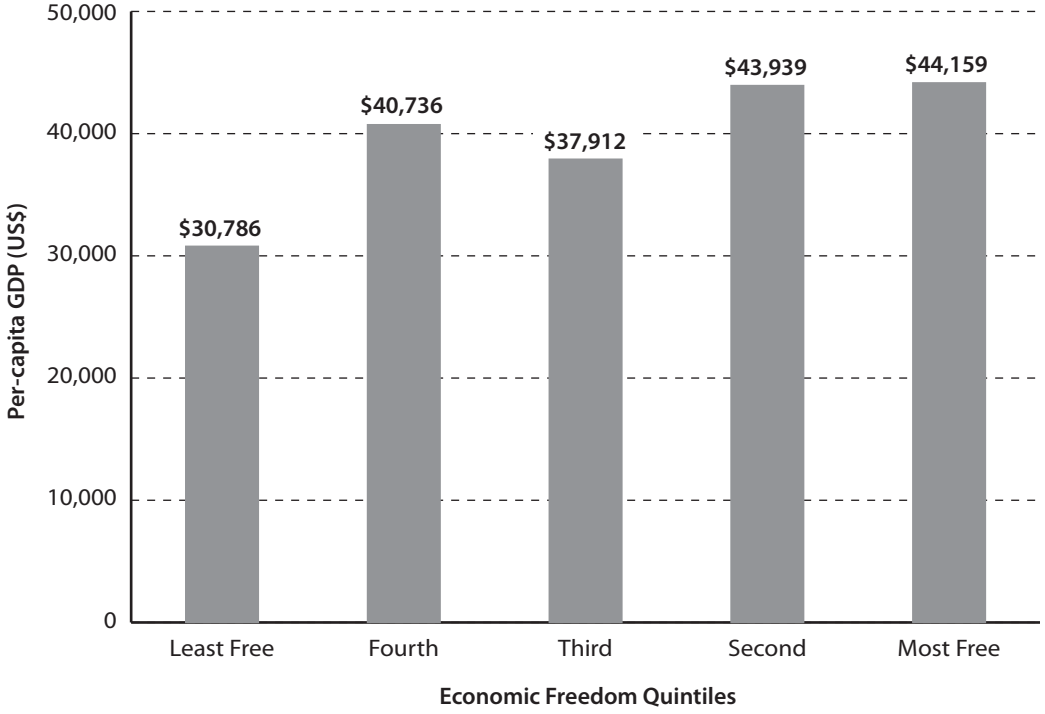


Figure 1.4: Economic Freedom at the Subnational Level and GDP per Capita, 2005

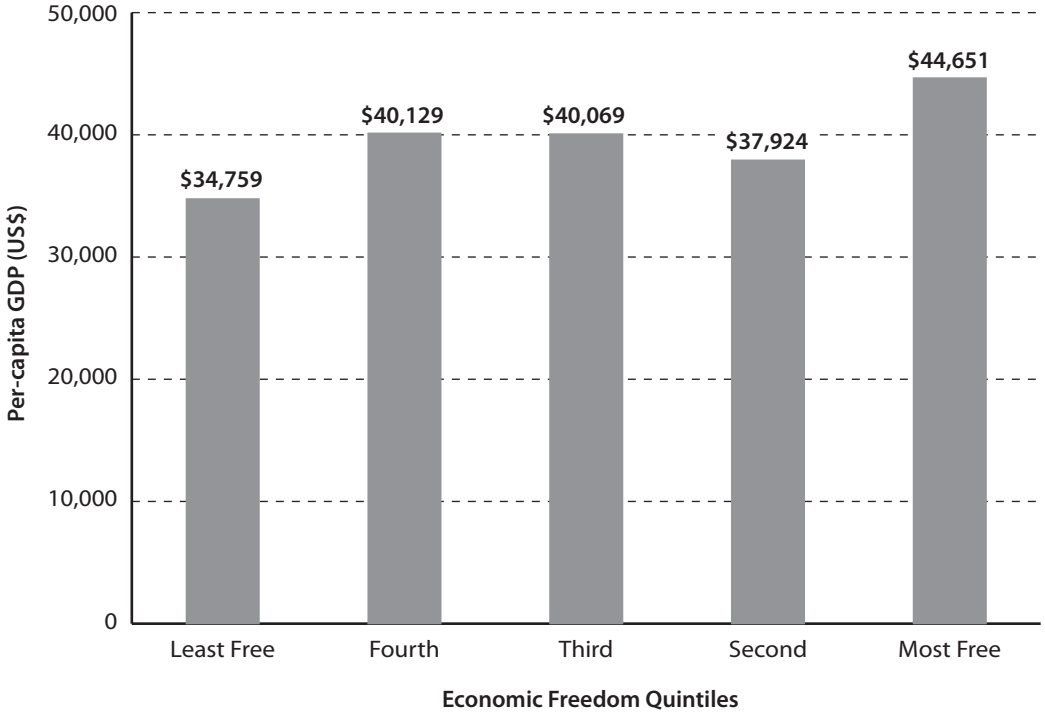


Figure 1.5: Average GDP per Capita and Average Economic Freedom at the All-Government Level, 1981–2005

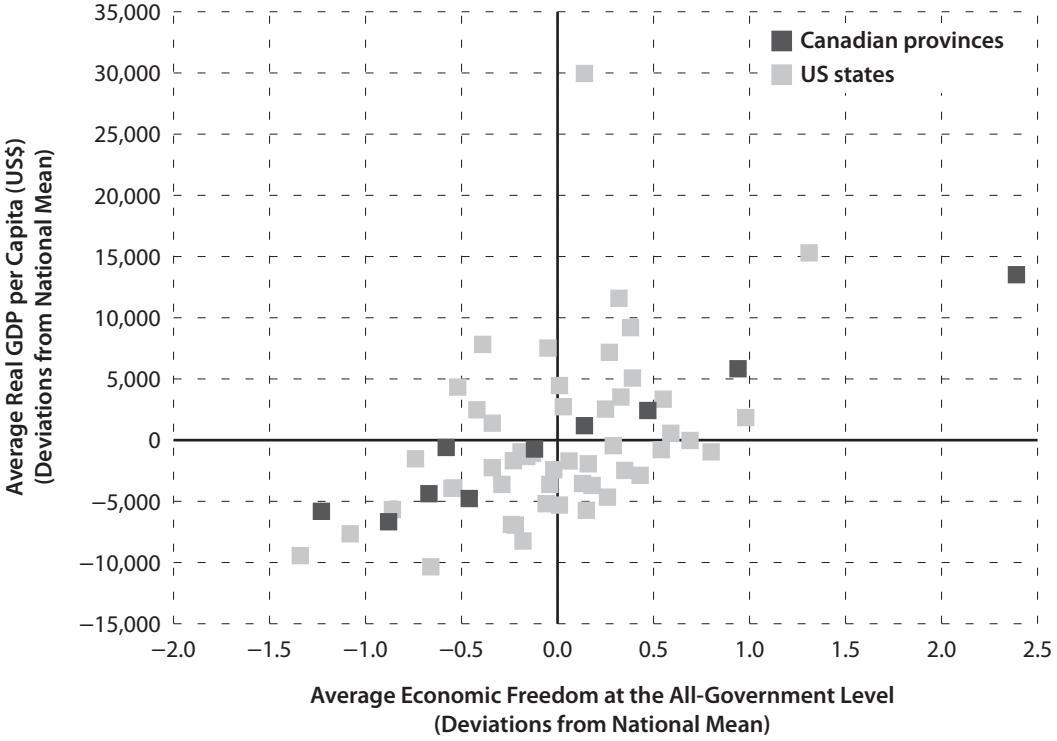


Figure 1.6: Average GDP per Capita and Average Economic Freedom at the Subnational Level, 1981–2005

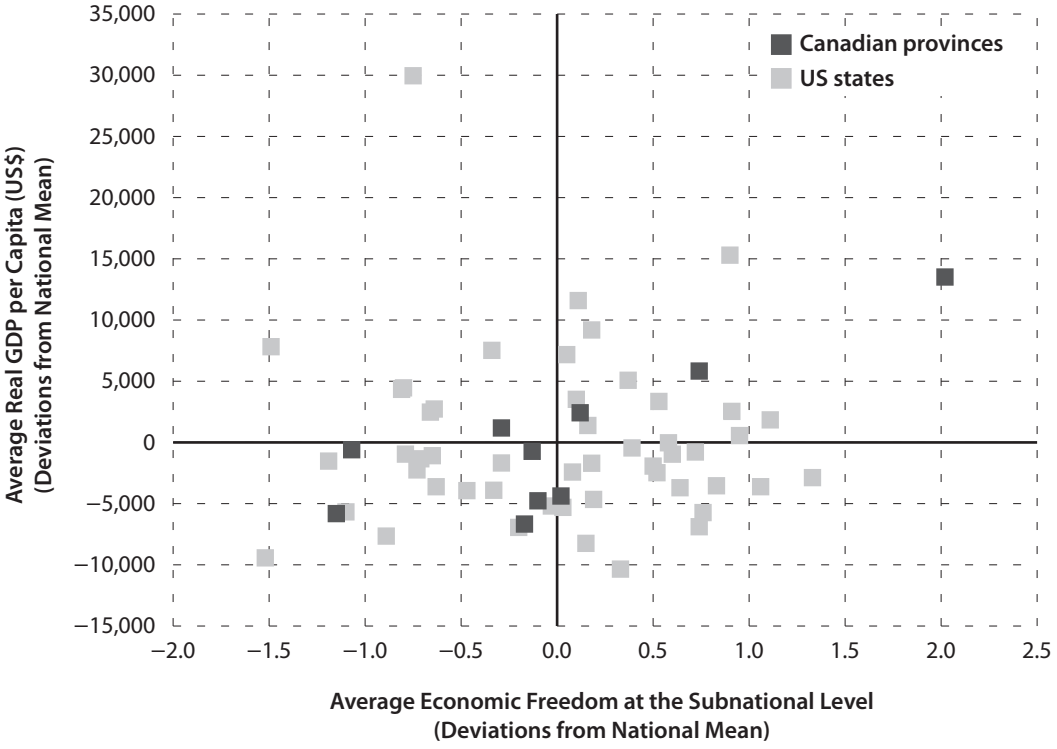


Figure 1.7: Average Growth in GDP per Capita and Average Growth in Economic Freedom at the All-Government Level, 1982–2005

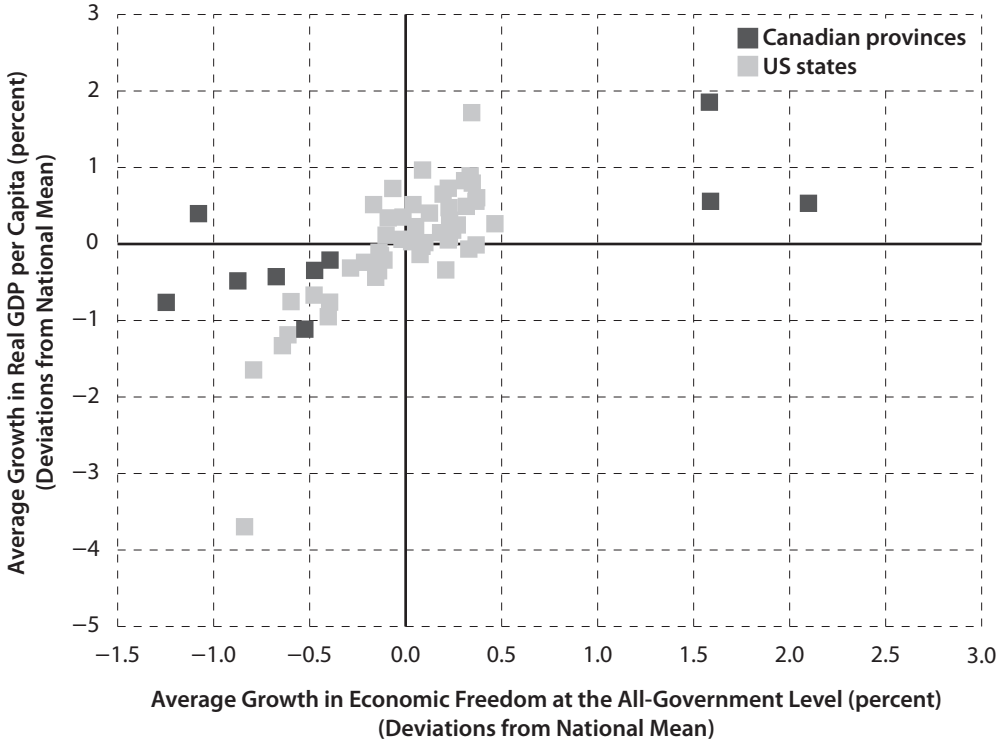
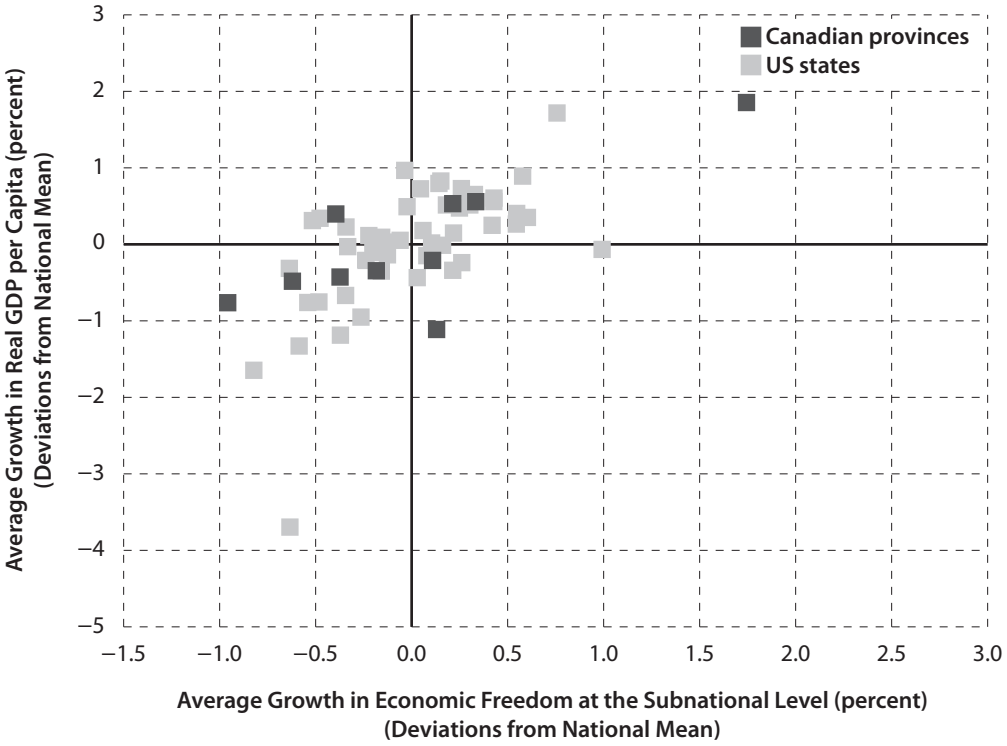


Figure 1.8: Average Growth in GDP per Capita and Average Growth in Economic Freedom at the Subnational Level, 1982–2005



compared. Instead, we use an "adjustment factor" (see Appendix A: Methodology, page 95). The rankings at both the all-government level and the subnational level are very similar, with correlation matrixes of 0.91 for the scores at both levels and 0.88 for the ranks at both levels in 2005. (Correlation between two identical data streams is 1.00.)

The Evolution of Economic Freedom in the United States and Canada

As can be seen from Tables 1.1 and 1.2, the evolution of economic freedom in the United States and Canada follows an expected pattern. In the United States, at the all-government level, economic freedom increases through the 1980s, coinciding with the Reagan era. It then falls in the early 1990s, following tax increases under the first President Bush and the early administration of President Clinton, and then begins to rise again, particularly in the new century. At the subnational level, the pattern is similar but less pronounced, again as one might expect. Many states embarked upon Reagan-like government restructuring, but not all, and often not at the same level of intensity, or in the same time frame. [9]

In Canada through the 1980s, economic freedom remained fairly constant at the subnational level, save for a significant decline at the beginning of the decade, while it increased somewhat at the all-government level, perhaps as a result of a change of federal government, and a resulting change in policy, in 1984. At both the all-government and the subnational levels, economic freedom falls in Canada in the early 1990s and then begins to rise. In early 1990s, federal, provincial, and municipal governments began to address their debts and deficits but more often through increased taxation than through lower spending. However, as debts and deficits were brought under control, governments began to reduce some tax rates through the mid-1990s and the late 1990s. Also in this period, fiscally conservative governments were elected in Canada's two richest provinces, Alberta and Ontario. In the early years of the new century, economic freedom rose in Canada at the all-government level while it remained fairly stable at the subnational level.

Overall patterns in the United States and Canada are similar. Both nations fought debts and deficits in the early 1990s with tax increases. However, Canada raised taxes more aggressively, as can be seen from changes in economic freedom during this period. From 1981 to 2005, the gap between economic freedom in Canada and that in the United States at both the subnational and the all-government levels first widened and then narrowed again until 2000, and has been roughly stable since.

Overview of the Results for the United States

Most US states have maintained a high degree of economic freedom and only a handful have consistently not done so. West Virginia has the worst record but

[9] Gwartney and Lawson (2007) show rising scores for Canada and the United States from 1980 to 2000. This is because of components such as price levels that can only be examined at the national level. Obviously, states and provinces do not have their own independent monetary policy.

Table 1.1: Average Economic Freedom Scores at the All-Government Level

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
United States	5.9	6.0	6.1	6.3	6.3	6.3	6.6	7.0	7.0	7.0	6.7	6.6	6.5	6.5	6.5	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.7	6.8	6.9
Canada	4.5	4.6	4.6	4.7	4.6	4.6	4.6	4.9	4.9	4.7	4.2	4.0	4.1	4.3	4.4	4.5	4.5	4.6	4.8	5.0	5.0	5.0	5.1	5.2	5.2
Difference	1.3	1.4	1.5	1.7	1.7	1.7	2.0	2.1	2.1	2.3	2.5	2.6	2.4	2.2	2.1	2.1	2.0	1.9	1.8	1.6	1.6	1.5	1.7	1.7	1.6

Table 1.2: Average Economic Freedom Scores at the Subnational Level

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
United States	7.1	6.9	6.9	7.1	7.1	7.1	7.1	7.2	7.2	7.1	6.9	6.8	6.7	6.8	6.8	6.9	7.0	7.0	7.0	7.0	6.9	6.9	6.9	6.9	6.9
Canada	5.2	4.9	4.8	4.9	4.9	4.9	4.9	5.0	5.0	4.8	4.6	4.3	4.3	4.6	4.7	4.8	4.9	5.0	5.3	5.4	5.3	5.3	5.3	5.3	5.3
Difference	1.9	2.0	2.1	2.3	2.2	2.2	2.2	2.2	2.1	2.3	2.3	2.5	2.4	2.2	2.1	2.1	2.1	2.0	1.8	1.6	1.6	1.6	1.6	1.6	1.6

Hawaii, Maine, Montana, New Mexico, North Dakota, and Rhode Island also have consistently low levels of economic freedom at both the all-government and subnational levels. Their average per-capita GDP was more than US$4,300 below the US average in 2005 and their total growth from 1981 to 2005 is 10 percentage points below the US average of 45% total growth in real terms. This is particularly remarkable because poorer states under normal conditions will grow faster than rich states due to the well-known and empirically verified "convergence" effect. (See Barro and Sala-I-Martin, 1995 for American and international results on convergence.)

The states that have consistently strong records at both the all-government and the subnational levels are Colorado, Georgia, Delaware, North Carolina, New Hampshire, Tennessee, and Texas. Their GDP per capita was over US$4,300 above the US average in 2005 and their growth from 1981 to 2005 nearly 20 percentage points higher, a remarkable achievement given that economic theory and evidence show that richer states should grow more slowly than poorer states due to the convergence effect noted above.

Another way to look at economic freedom is through changes in economic freedom. The states that have had the worst record for growth in economic freedom between 2000 and 2005 at the all-government level are New Mexico (the only state with negative growth), Arizona and, tied for third worst, Connecticut, Michigan, South Carolina, New York, and Ohio. The states with the best record in economic freedom are predominately western states. The fastest growth was achieved by North Dakota; Wyoming and Montana are tied for second; South Dakota, Nevada, Nebraska, Iowa, and Florida are tied for fourth. Over that period, per-capita GDP in the United States grew by 9%, compared to 5% in the states with the worst growth record and 18% in the states with the best record.

It should be emphasized that this index measures economic freedom, not growth factors. The examples discussed here are for illustrative purposes, providing only a snapshot in time. The econometric testing is far more reliable and, as discussed in this report, shows a powerful, consistent, and robust relationship between economic freedom and growth.

Smaller Government and Lower Taxes

Some of the snapshots of economic freedom in the United States are especially interesting (see tables 3.11–3.22, pp. 76–86). Consider, for instance, the size of government. When US states are ranked according to size of government, encompassing all levels of government, Delaware claims the top spot, with a 9.0 ranking. In other words, it has the smallest size of government at the all-government level (table 3.11). Delaware (8.7) also is best when US states are ranked at the subnational level, that is, for size of state and local government (table 3.12). However, Nevada's 8.5 score and South Dakota's 8.3 score are indications that these two states are close to the US leader. Moreover, the fact that states in the Northeast, Midwest and West regions all rate highly on size of government serves to underscore that no region has a corner on smaller government.

The data also generally bear out the intuitive notion that lower taxes and smaller government go hand in hand. In both table 3.13 and table 3.14, the small-government state of Delaware has the smallest tax burden. Delaware's 8.6 score at the all-government level is a full point better than Alaska's, and Delaware's 9.1 at the state and local levels is almost a full point better than second-place New Hampshire (8.2).

Labor-Market Freedom

Tables 3.15 and 3.16 provide a snapshot of labor-market freedom among the 50 states at the all-government and state and local levels. States with the highest scores are predominantly found in the South and Southwest. With scores of 8.1, North Carolina and Texas sit atop the all-government rankings, although Georgia (8.0) and Virginia (8.0) are close behind. The scores indicate that there is a bit more separation between best and second-best at the state and local level, where Arizona (8.4), South Carolina (8.4) and Tennessee (8.4) all score a half-point better than second-place Louisiana.

Government Transfers and Subsidies

Tables 3.17 and 3.18 rank the states according to government transfers and subsidies as a percentage of GDP, with the highest-ranked state having the lowest percentage of overall government transfers and subsidies as a percentage of state GDP. In top-ranked Nevada, subsidies and transfers account for only 2.6% of state GDP. In runner-up Delaware, subsidies and transfers account for only 2.7% of state GDP. At the state and local level, Nevada, Colorado and South Dakota share the top spot, with transfers and subsidies representing just 0.1% of each state's GDP.

Marginal income-tax rates

A cluster of nine states enjoying the very lowest top marginal income-tax rates share first place in table 3.19. With a 0% top marginal rate, these include Alaska, Florida, Nevada, New Hampshire, South Dakota, Tennessee, Texas, Washington and Wyoming. They are followed, distantly according to this measure, by a number of states with top marginal tax rates in the three-percent range. With a 10.3% top marginal income-tax rate, California ranks last.

Government Employment

It may surprise some Americans that the percentage of government employment at the all-government level and at the state and local levels is as high as it is. Even the states with the lowest percentages (Nevada tops the all-government rankings with 12.1%) are still above 10%. The same holds at the state and local level, where Nevada (10.6%) and Rhode Island (10.7%) lead the rest of the country. Alaska (where government employment accounts for 24.3% of total state employment at the federal, state and local level) and Wyoming (where government employment represents 20.4% of total state employment at the state and local level) are at the other end of the scale. (tables 3.20 and 3.21).

Union Density

Although there are exceptions, union density (table 3.22) is lowest in the Southern and Southwestern parts of the United States, and generally higher in the Eastern, Midwestern, and Western states. South Carolina (3.3%) has the lowest union density in the nation, while New York (27.5%) has the highest.

States with Consistently Low Levels of Economic Freedom

Finally, these data-sets also add focus to the less-than-rosy picture of the states we singled out above—West Virginia, Hawaii, Maine, Montana, New Mexico, North Dakota, and Rhode Island—states with consistently low levels of economic freedom. In short, they generally rate low on measures that translate into low economic freedom. For example, none of these states ranks above 35 on size of government (at the all-government level). With the exception of North Dakota, all rate in the bottom 25 on the size of state and local government. None ranks higher than 33rd on overall taxation. All except Montana and North Dakota are in the bottom 20 on state and local taxation. All of these rank in the bottom 25 on labor-market freedom at the state and local level. All except Hawaii rank in the bottom 25 on overall transfers and subsidies as a percentage of state GDP. Aside from Montana, none ranks higher than 25th on the measure of state marginal tax rate. All of them, except for Rhode Island, have high levels of government employment as a percentage of total state employment at a federal, state and local level. And only North Dakota among this group ranks higher than 31st on the measure of union density.

Good Neighbors

To allow for further comparison, we have divided the United States into five geographic regions. Although it would be simpler to divide the country into four, equally sized, quadrants, states do not fit within tidy geographic lines. In other words, the boundary lines separating these regions are not the product of an exact science any more or less than the borders between states neatly separate the attitudes and characteristics of one group of Americans from another. To be sure, parts of what we have termed the "Southwest" could be shifted into what we call the "West" or "Midwest," just as the southern edge of our "Northeast" region and northern edge of our "Southeast" region could be shifted. Even so, the way we have divided the country maintains what might be called "a sense of neighborhood," which allows us to highlight possible advantages and disadvantages—and opportunities—states face vis-à-vis their regional neighbors and competitors.

Economic Freedom of the US Northeast

Given its strong showing in the overall categories, it is no surprise that Delaware dominates the top of the rankings in the economic freedom of the Northeast. Delaware's summary score of 8.5 is a full point better than New Hampshire, which rates second in both of the regional measures of economic freedom (see below). Within the Northeast region, Delaware ranks first in every category but one (labor-market freedom), and even then Delaware's score of 7.0 is just a shade behind Maryland's 7.2. At the other end of the spectrum, West Virginia (with a score of 5.3 on the all-government ranking and 5.5 on the state and local ranking) finds itself in last place on both summary rankings. Not surprisingly, West Virginia is in last or second to last place in every regional measure. (These measures can be found in tables 3.23–3.27.)

Figure 1.10: Summary of 2005 Ratings for the US Northeast at the Federal, State and Local Levels

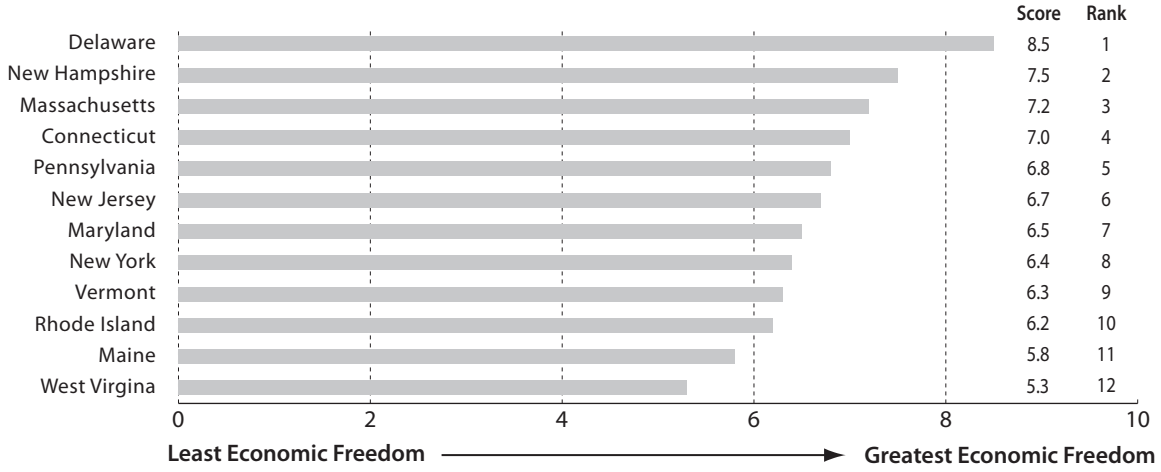
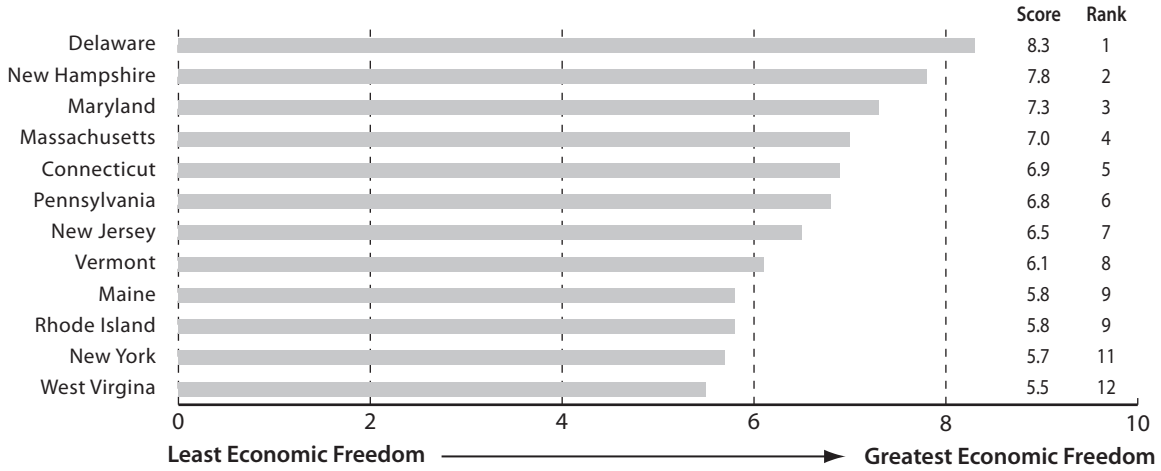


Figure 1.11: Summary of 2005 Ratings for the US Northeast at the State and Local Levels



Economic Freedom of the US Southeast

The picture is less static in the Southeast than in the Northeast, with North Carolina (7.6) scoring high enough for first in the all-government summary rankings but falling to fifth in the state and local level summary rankings. Tennessee (8.2) takes the top spot on this ranking (figure 1.14) and also ranks well on the first (figure 1.13). Mississippi ranks last on both lists. However, the parity within this region is brought into focus by the various category rankings (tables 3.28–3.32). Tennessee (taxation), Georgia (size of government), South Carolina (labor-market freedom), and Virginia (size of government) all claim a first-place ranking in at least one category. Moreover, North Carolina's competitive rankings in multiple categories position it atop the all-government summary rankings for the region, as referenced above. Even Mississippi, which places last in all but one category, scores 7.7 on labor-market freedom, which is good enough for fourth place out of the nine states in this region.

Figure 1.12: Summary of 2005 Ratings for the US Southeast at the Federal, State and Local Levels

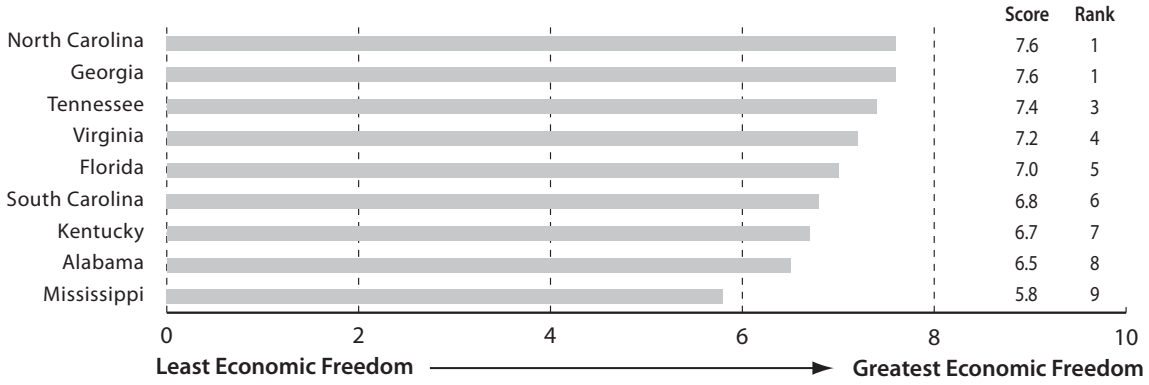
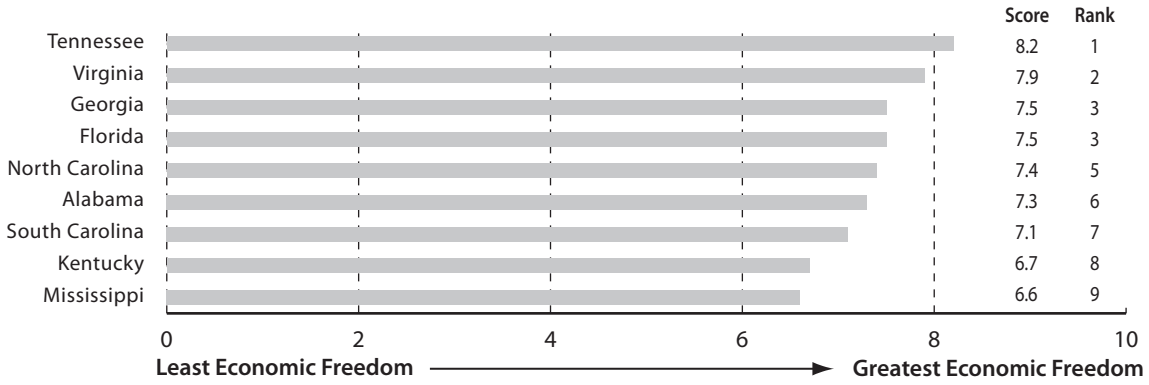


Figure 1.13: Summary of 2005 Ratings for the US Southeast at the State and Local Levels



Economic Freedom of the US Midwest

Indiana (7.4 on the all-government summary rankings) and South Dakota (7.9 on the state and local level summary rankings) share top billing in the Midwest region. South Dakota ranks first across three categories (size of government and both taxation measures), while Indiana ranks in the top four in every category. It is worth noting that North Dakota ranks dead last in the all-government summary rankings but a respectable fifth in the state and local summary rankings (6.5 and 7.1, respectively). Happily, no state in the Midwestern region claims last place more than twice. (These regional measures can be found in tables 3.33–3.37.)

Figure 1.14: Summary of 2005 Ratings for the US Midwest at the Federal, State and Local Levels

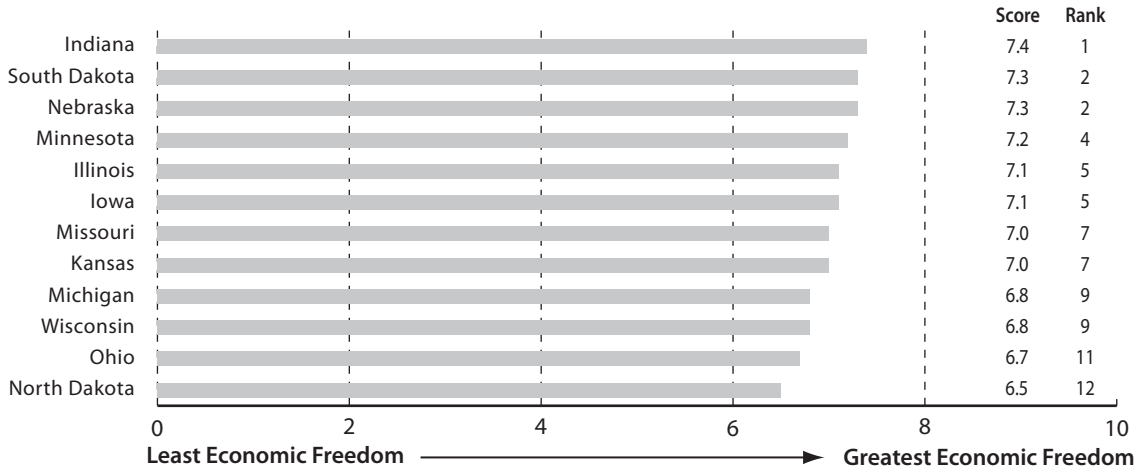
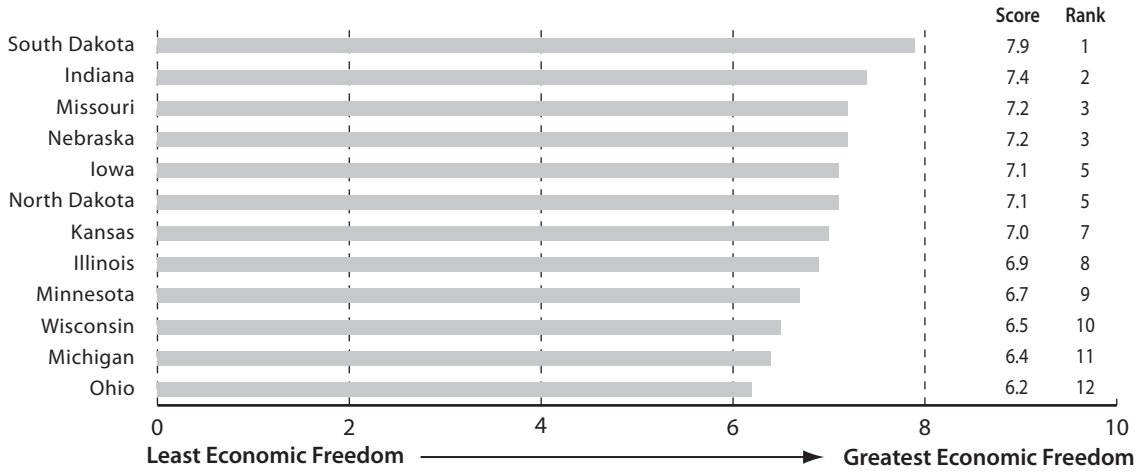


Figure 1.15: Summary of 2005 Ratings for the US Midwest at the State and Local Levels



Economic Freedom of the US Southwest

Within the Southwest region, Texas (7.8) places first on the all-government summary rankings. Texas and Arizona (7.8) share the top position in the region on the state and local level summary rankings. On both of these regional summary rankings, Arkansas (6.6 and 6.9) and New Mexico (6.0 and 6.3) trail the rest of the region. Likewise, one of these two states claims the bottom spot in every regional measure, with New Mexico ranking last in all but one (taxation at the state and local level). Texas, at the other end of the scale, claims the top position in all but one category—labor-market freedom, where Arizona (8.4) is best in the region. Also worth noting is Louisiana's consistently solid showing across all the categories, placing second in all but size of government at the all-government level. (These regional measures can be found in tables 3.38–3.42).

Figure 1.16: Summary of 2005 Ratings for the US Southwest at the Federal, State and Local Levels

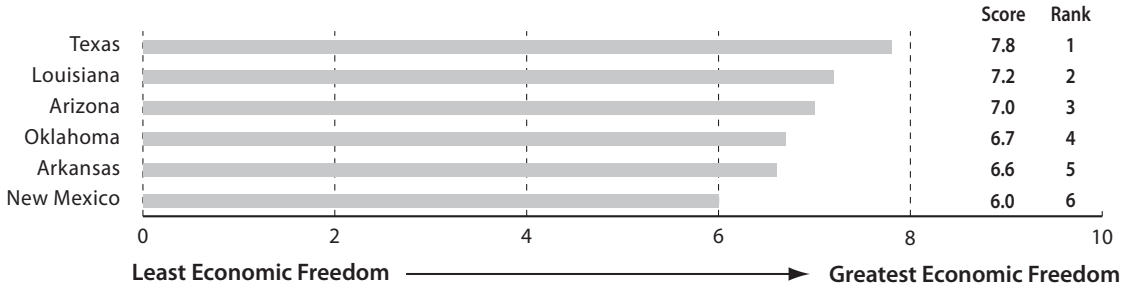
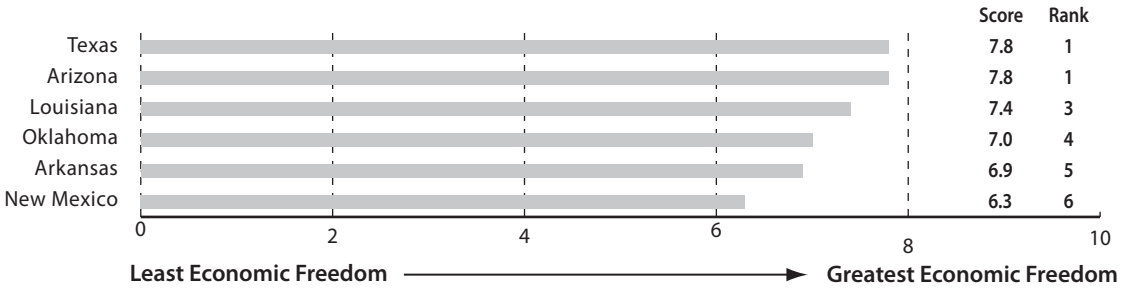


Figure 1.17: Summary of 2005 Ratings for the US Southwest at the State and Local Levels



Economic Freedom of the US West

In the West, the leading states—Colorado (7.6), Nevada (7.5) and Utah (7.4)—are separated by the narrowest of margins on the all-government summary rankings. This same trio of states also claims the top three spots on the state and local level summary rankings, although the order is slightly different (Nevada, 7.6; Colorado, 7.5; and Utah, 7.3). It is interesting that Montana (6.0 and 6.6) ranks last on the all-government summary rankings but in the upper half of the state and local level summary rankings. In fact, unlike many of the other regional category breakdowns, the West's category measures reveal a number of interesting juxtapositions: Alaska ranks first on both taxation measures but last on labor-market freedom and size of government at the state and local level. Nevada claims the top spot on both size-of-government measures but falls into the middle tier on both measures of taxation. (The regional measures for this very large swath of the US can be found in tables 3.43–3.47.)

Figure 1.18: Summary of 2005 Ratings for the US West at the Federal, State and Local Levels

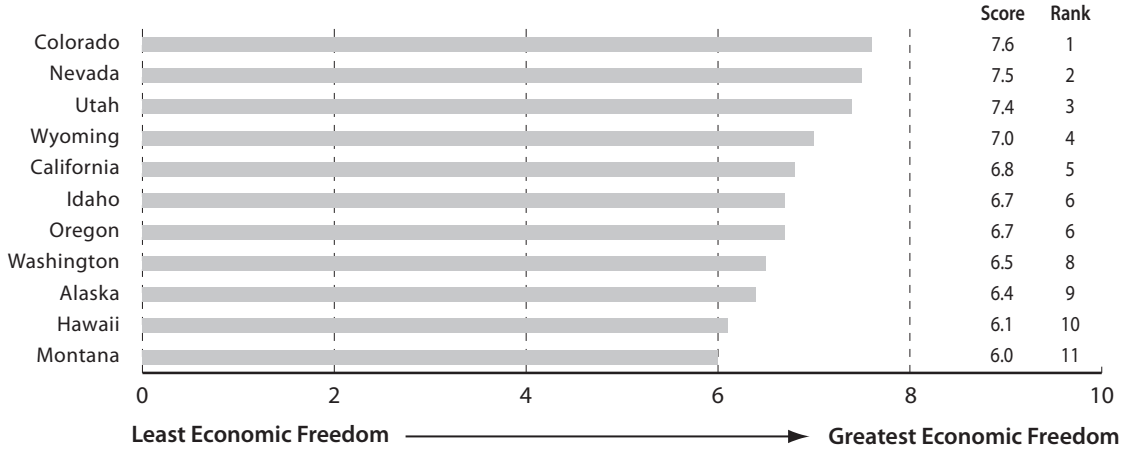
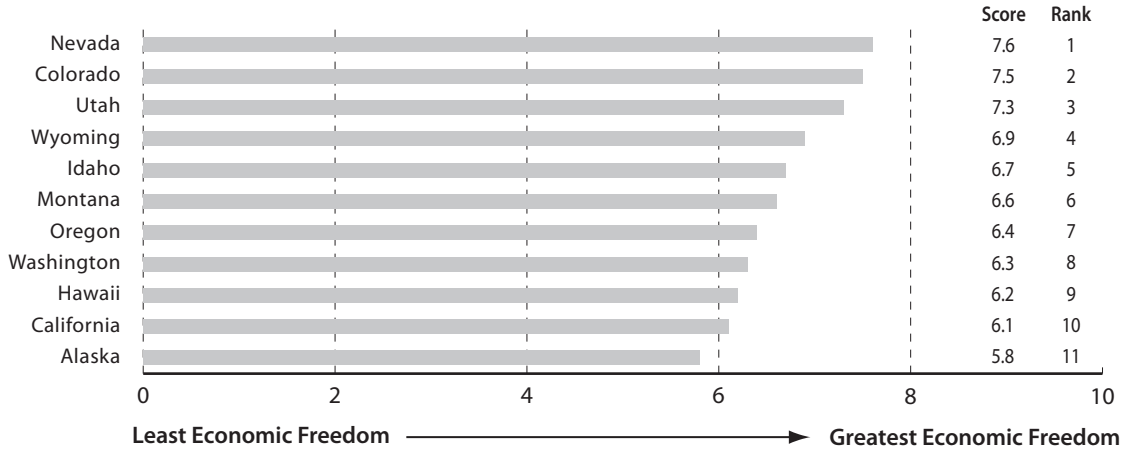


Figure 1.19: Summary of 2005 Ratings for the US West at the State and Local Levels



Economic Freedom in the District of Columbia

This year, we attempted to measure economic freedom in the District of Columbia. We collected the data back to 1981 but were not able to include the District in the formal rankings since it has only two levels of government, federal and local, unlike the Canadian provinces and US states, where there are three levels of government—federal, provincial/state, and local/municipal. Perhaps more importantly, even though the District of Columbia is governed by a municipal government, Congress has final authority over the District's budget and laws (Council of the District of Columbia, 2008; District of Columbia, 2008). These two factors make it impossible for us to compute a score for economic freedom at the subnational level that would be comparable to those of the Canadian provinces and US states.

We have computed the District of Columbia's score for economic freedom at the all-government level—federal and local—but the challenges still remain because of the atypical characteristics of the District. For instance, one of our components, 3B, measures government employment as a percentage of total employment. Government employment at the all-government level consists of employment by federal, provincial/state, and local/municipal governments including health and social service institutions, universities, colleges, vocational and trade institutions, local school boards, and government business enterprises (GBEs). Military employment is excluded. Our data indicates that this figure is close to 79% for the District in 2005. When compared to the Canadian provinces and US states, where the highest value is 27.4%, the District is clearly an outlier. However, given that the US federal government is located in the District, this is not surprising.

The District's overall score for economic freedom and scores for Areas 1, 2, and 3 are presented in table 1.DC. It received a score of 7.0 in 2005, the most recent year for which the data are available, which would place it in a tie with Arizona, Connecticut, Florida, Kansas, Missouri, and Wyoming for the 20th place. Readers should use caution, however, when comparing the scores of the District with those of the Canadian provinces and the US states because of its atypical characteristics.

References

Council of the District of Columbia (2008). [Official web site of the Council of the District of Columbia.] <http://www.dccouncil.us/> (January 4, 2008).

District of Columbia (2008). *DC Voting Rights and Representation*. <http://about.dc.gov/statehood.asp?portal_link=hr> (January 4, 2008).

Table 1.DC: Economic Freedom in the District of Columbia, 1981–2005—Scores at the Federal and Local Level

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Overall Scores	6.2	6.2	6.3	6.3	6.4	6.4	6.6	7.1	7.2	7.1	6.9	6.9	6.9	6.7	6.7	6.7	6.7	6.7	6.6	6.7	6.7	6.8	6.9	7.0	7.0
Scores for Area 1: Size of Government	5.3	5.3	5.3	5.2	5.4	5.4	5.7	5.9	6.2	5.8	5.4	5.6	5.7	5.5	5.5	5.4	5.5	5.5	5.3	5.5	5.5	5.5	5.6	5.7	5.7
Scores for Area 2: Takings and Discriminatory Taxation	7.1	7.1	7.1	7.1	7.1	7.1	7.8	8.9	8.9	8.9	8.6	8.6	8.4	8.0	7.9	8.0	8.0	7.9	7.9	7.9	8.0	8.3	8.5	8.5	8.5
Scores for Area 3: Labor Market Freedom	6.2	6.3	6.4	6.5	6.5	6.6	6.4	6.5	6.6	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7

Sources: Same data sources as for US states; see Appendix B.

Overview of the Results for Canada

Canadian provinces consistently have lower scores than US states and thus are clustered near the bottom of the ranking. Alberta is the only province that has consistently done better than at least some states. It ranked 2nd at the all-government level and 8th at the subnational level in 2005. Although Alberta's economic freedom declined through the 1980s and early 1990s before recovering after the mid-1990s, in all years it has remained ahead of at least one state, usually West Virginia, in the rankings at both the all-government and the subnational levels.

Ontario placed ahead of several states at the all-government level in 1981. However, in the late 1980s and early 1990s, Ontario's economic freedom declined sharply. Economic freedom recovered through the mid- and late 1990s but its economic freedom stabilized at the all-government level and fell at the subnational level in the new century. Over the same period, average scores in the United States rose at the all-government level, leaving Ontario further behind the US average than it was two decades ago. Ontario is now behind most of the states at both the all-government level and the subnational levels.

From 2000 to 2005, the province of Newfoundland & Labrador had the greatest increase in economic freedom at both the all-government and subnational levels, albeit from a low base. Newfoundland & Labrador has also had by far the fastest economic growth in Canada, 43%, during this period. However, the province has benefited from oil and gas development and it would be hazardous to draw any connection to economic freedom.

There is a clear connection between levels of economic freedom and prosperity throughout Canada: the five freest provinces had an average per-capita GDP for 2005 of US$39,233 compared to US$27,751 for the least-free provinces.

The results show that, while economic freedom has a powerful impact in Canada, its impact on US states is far greater. This is likely because of Canada's fiscal federalism, which transfers money from rich to poor provinces. Since economic freedom spurs prosperity and growth, fiscal federalism in effect transfers money from relatively free provinces to relatively unfree provinces, muting the impact of economic freedom and perversely creating incentives for provincial politicians to limit economic freedom and, thus, economic growth since this increases the flow of federal transfers, which are directly controlled by these politicians. This enhances their power and their ability to reward friends and penalize enemies.

Economic Freedom and Economic Well-Being

A number of studies have linked levels of economic freedom, as measured by the index published annually in *Economic Freedom of the World*, with higher levels of economic growth and income. For example, Easton and Walker (1997) found that changes in economic freedom have a significant impact on the steady-state level of income even after the level of technology, the level of education of the workforce, and the level of investment are taken into account. The results of this study imply that economic freedom is a separate determinant of the level of income. The Fraser Institute's series, *Economic Freedom of the World*, also shows a positive relationship between economic freedom and both the level of per-capita GDP and its growth rate.

Similarly, De Haan and Sturm (2000) show that positive and negative changes in economic freedom lead to positive and negative changes in rates of economic growth. Using the index of economic freedom from Gwartney et al. (1996) and per-capita GDP data for 80 countries, their results indicate that, after accounting for education level, investment, and population growth, changes in economic freedom have a significant impact on economic growth. [1]

The calculation of the index of the economic freedom of Canadian provinces and US states allows us to investigate, via econometric testing, the relationship between economic freedom and prosperity within North America. [2] To test whether or not there is a positive relationship between economic growth and economic freedom, we use annual observations on each of the components from 1981 to 2005. We run separate regressions for Canada and the United States to determine if economic freedom has different effects in the two nations. As the data for all US states and all Canadian provinces were used, the study is one of a defined population rather than a random sample of states and provinces, implying that the appropriate estimation technique is the fixed-effects, rather than the random-effects, model. Tables 1.3 and 1.4 show the regression results of the semi-growth models. Please note that the results of the regressions are in US dollars.

Average investment share of GDP is missing from the model because investment data for separate US states are not available. [3] The proxy component for human capital

[1] For a sample of empirical papers investigating the impact of economic freedom, as measured by the index published annually in *Economic Freedom of the World*, and economic prosperity, see <http://www.freetheworld.com>. For the latest summary of literature on the impact of economic freedom at an international level, see Doucouliagos and Ulubasoglu, 2006.

[2] Since the publication of the first edition of *Economic Freedom of North America* in 2002, academic articles exploring the relationship between our measure of economic freedom and other indicators such as economic growth and entrepreneurial activity have appeared. For a summary of those studies, see Appendix C, page 105.

[3] As already mentioned, the omission of the measure of investment does not seriously affect the coefficients on economic freedom. We tested the impact of the exclusion of the measure of investment from the model of Mankiw, Romer, and Weil (1992) enhanced by a measure of economic freedom from *Economic Freedom of the World*. The exclusion does not change the estimated coefficients on economic freedom nor their standard errors significantly.

in our model is not statistically significant. Since the investment component is missing from the model and the proxy component for human capital is not significant, the data have to be adjusted. The fixed-effects model captures the unobserved or ignorance effects. It does not, however, account for missing relevant components from a model.

To provide some adjustment for missing relevant components, the data are transformed into deviations from their national means. In other words, the national mean is subtracted from each of the components. Although this transformation does not adjust for the omission of the relevant components completely, to the extent that jurisdictions within a national context are similarly affected by the same economic factors, the transformation—which reveals how each jurisdiction performs in relation to the national average—helps adjust for the impact of the missing relevant components on other explanatory components in the model.

The results from the regression analysis in Table 1.3 indicate that the degree of economic freedom has a substantial impact on per-capita GDP at a subnational and all-government level. As mentioned before, the high-school component is not significant. The reader should also note the relatively small standard errors for the economic freedom variable, both in the regression results reported here and for those reported in the section on Sensitivity Analysis (see page 30ff). On the whole, the US results are more statistically significant than the Canadian results, though even the Canadian results typically have a *p*-value well below 1%, meaning that the results, roughly speaking, are statistically significant more than 99 times out of 100. Somewhat lower statistical significance on the Canadian tests may reflect both the nature of Canada's fiscal federalism, which mutes the effects of economic freedom, and the fact there are obviously more data points for 50 states than 10 provinces.

Table 1.3: Level of Economic Freedom and GDP per Capita

Regressions at All-Government Level (ALLG)					Regressions at Subnational Level (SUBN)				
Dependent Variable: Real GDP per Capita (1981–2005)					Dependent Variable: Real GDP per Capita (1981–2005)				
Method: Pooled Least Squares					Method: Pooled Least Squares				
United States									
Variable	Coefficient	Std. Error	t-Statistic	Prob.	Variable	Coefficient	Std. Error	t-Statistic	Prob.
HG	14.17	31.03	0.46	0.65	HG	0.56	29.65	0.02	0.99
ALLG	6231.61	628.57	9.91	0.00	SUBN	4824.84	664.67	7.26	0.00
Adjusted R^2: 0.98					Adjusted R^2: 0.98				
Canada									
Variable	Coefficient	Std. Error	t-Statistic	Prob.	Variable	Coefficient	Std. Error	t-Statistic	Prob.
HG	−66.72	70.06	−0.95	0.34	HG	−26.00	72.49	−0.36	0.72
ALLG	4473.74	589.40	7.59	0.00	SUBN	3846.08	643.76	5.97	0.00
Adjusted R^2: 0.98					Adjusted R^2: 0.98				

Note: HG is the number of high-school graduates 25 years and older as a percentage of total population 25 years and older from 1981 to 2005; ALLG is an economic freedom index at an all government level from 1981 to 2005; SUBN is an economic freedom index at a subnational level from 1981 to 2005.

At an all-government level, holding other components constant, an increase of one point in economic freedom in a US state will increase that state's per-capita income by US$6,232. An increase of one point in economic freedom in a Canadian province will increase its per-capita GDP by US$4,474 (CA$5,413). [4] At a subnational level, an increase of one point in economic freedom in a US state will increase its per-capita GDP by US$4,825, whereas an increase of one point in economic freedom in a Canadian province will increase its per-capita GDP by US$3,846 (CA$4,654). Canada's fiscal federalism—and the negative impact this has on the effects of economic freedom—is a key reason why the effects are stronger in the United States.

For both Canada and the United States, the impact of economic freedom on per-capita GDP is higher at an all-government level than it is at a subnational level. This is the expected result, since the all-government component captures the impact of restrictions on economic freedom imposed at both the subnational and all-government levels.

While the coefficients may appear quite large, it should be noted that the overall index varies much less than its individual components, so that a one-point overall increase in economic freedom may not be as easy to achieve as it might appear at first glance. The difference in scores between the highest and lowest rated state over the full period is only 3.40 points at the all-government level. Thus, a US state would have to improve its score by roughly one third within this range in order to achieve the one-point increase required to realize the US$6,232 per-capita gain in income. In Canada, at the all-government level, the range is 5.0. At the subnational level, the range in Canada is 4.4; in the United States, it is 4.0.

Table 1.4 summarizes the results of the regression analysis used to determine the relationship between growth in economic freedom and growth in per-capita GDP at the subnational and all-government levels. The main conclusion of the regression analysis is that growth in economic freedom has a significant impact on the growth in per-capita GDP.

A 1.00% increase in the growth rate of economic freedom at the all-government level (e.g., from 4.00% per year to 4.04% per year) will induce an increase of 1.08% in the growth rate of per-capita GDP for US states and an increase of 0.60% in the growth rate of per-capita GDP for Canadian provinces. A 1.00% increase in the growth rate of economic freedom at the subnational level will induce an increase of 0.77% in the growth rate of per-capita GDP for US states and 0.57% increase in the growth rate for Canadian provinces.

Sensitivity Analysis

In order to determine the stability of the regression results in the Tables 1.3 and 1.4, further testing was done using moving averages rather than annual data. These results can be found below. The use of moving averages (reported in Tables 1.5 and 1.6) is important. Annual data in regression analysis may lead to misleading results

[4] The most recently available data for this report is from 2005. The exchange rate used is $1.21, the average rate in 2005.

Table 1.4: Growth in Economic Freedom and Growth in GDP per Capita

Regressions at All-Government Level (ALLG)					Regressions at Subnational Level (SUBN)				
Dependent Variable: Growth in Real GDP per Capita (1982–2005)					Dependent Variable: Growth in Real GDP per Capita (1982–2005)				
Method: Pooled Least Squares					Method: Pooled Least Squares				
United States									
Variable	Coefficient	Std. Error	t-Statistic	Prob.	Variable	Coefficient	Std. Error	t-Statistic	Prob.
HGG	0.01	0.04	0.14	0.89	HGG	0.01	0.04	0.14	0.89
POPG	–0.49	0.18	–2.72	0.01	POPG	–0.05	0.22	–0.21	0.83
ALLGG	1.08	0.07	15.32	0.00	SUBNG	0.77	0.07	11.57	0.00
Adjusted R^2: 0.44					Adjusted R^2: 0.36				
Canada									
Variable	Coefficient	Std. Error	t-Statistic	Prob.	Variable	Coefficient	Std. Error	t-Statistic	Prob.
HGG	0.02	0.11	0.16	0.88	HGG	0.16	0.11	1.39	0.17
POPG	0.66	0.42	1.59	0.11	POPG	0.65	0.39	1.68	0.09
ALLGG	0.60	0.07	8.96	0.00	SUBNG	0.57	0.07	8.01	0.00
Adjusted R^2: 0.46					Adjusted R^2: 0.37				

Note: HGG is growth in the number of high-school graduates 25 years and older as a percentage of total population 25 years and older from 1982 to 2005; POPG is growth in population from 1982 to 2005; ALLGG is growth in economic freedom at an all government level from 1982 to 2005; SUBNG is growth in economic freedom at a subnational level from 1982 to 2005.

because, depending on the period of study, business cycles may inflate or deflate the estimated coefficients. The data used in the regression analyses in Tables 1.5 and 1.6 are smoothed out through use of a moving average, minimizing the impact of business cycles. The components are the same as before and significance levels remain high. The results are interesting in themselves in that they throw further light on the impact of fiscal federalism and the impact of economic freedom over time.

Results

The results of the regression in Table 1.5 indicate that the degree of economic freedom has a strong impact on per-capita GDP, regardless of period used for calculating the moving averages. Further, the significance of the coefficient stays extremely high, regardless of the number of periods in the moving average, at both subnational and all-government levels. The results are also consistent with the earlier finding that the degree of economic freedom has a stronger impact on US states than on the Canadian provinces.

Finally, the pattern differentiating all-government testing from subnational testing remains consistent regardless of period. For both Canada and the United States, the impact of economic freedom at the all-government level is greater than the impact at the subnational level throughout the period under consideration. The regression results in Table 1.6 indicate that the estimated coefficients on the growth in economic freedom using moving average data are very similar to the regression results using annual data.

Table 1.5: Level of Economic Freedom and GDP per Capita (Moving Averages)

Dependent Variable: Real GDP per Capita (1981–2005)

Method: Pooled Least Squares

	2-period backward moving average		3-period backward moving average		4-period backward moving average		5-period backward moving average		6-period backward moving average	
United States at the All-Government Level										
Variable	**Coefficient**	**t-Statistic**	**Coefficient**	**t-Statistic**	**Coefficient**	**t-Statistic**	**Coefficient**	**t-Statistic**	**Coefficient**	**t-Statistic**
HG	6.54	0.32	39.57	0.84	–6.65	–0.15	59.26	1.61	–36.86	–0.81
ALLG	5812.28	11.61	6419.45	9.15	7195.38	10.24	5729.27	14.49	6181.89	8.20
United States at the Subnational Level										
Variable	**Coefficient**	**t-Statistic**	**Coefficient**	**t-Statistic**	**Coefficient**	**t-Statistic**	**Coefficient**	**t-Statistic**	**Coefficient**	**t-Statistic**
HG	1.04	0.05	36.08	0.84	–34.78	–0.80	56.51	1.57	–54.47	–1.17
SUBN	4824.93	9.23	5254.71	6.80	5886.92	7.15	4234.98	10.47	4698.40	7.20
Canada at the All-Government Level										
Variable	**Coefficient**	**t-Statistic**	**Coefficient**	**t-Statistic**	**Coefficient**	**t-Statistic**	**Coefficient**	**t-Statistic**	**Coefficient**	**t-Statistic**
HG	–95.04	–1.34	36.89	0.73	–64.40	–0.93	126.41	2.64	39.08	0.72
ALLG	4738.76	9.81	3355.01	8.93	4127.72	8.76	3941.67	9.33	3926.03	7.87
Canada at the Subnational Level										
Variable	**Coefficient**	**t-Statistic**	**Coefficient**	**t-Statistic**	**Coefficient**	**t-Statistic**	**Coefficient**	**t-Statistic**	**Coefficient**	**t-Statistic**
HG	–82.82	–1.22	48.83	0.78	–97.88	–1.50	97.15	1.62	98.42	1.72
SUBN	4227.54	8.83	2683.17	7.75	3988.87	8.17	3506.43	8.49	3157.21	7.15

Note: HG is the number of high-school graduates 25 years and older as a percentage of total population 25 years and older from 1981 to 2005; ALLG is an economic freedom index at an all government level from 1981 to 2005; SUBN is an economic freedom index at a subnational level from 1981 to 2005.

The Importance of Economic Freedom

In this publication, we have focused on the measurement of economic freedom and on empirical testing of the impact of economic freedom. However, the reader may wonder why economic freedom is so clearly related to growth and prosperity, a finding not just of this paper but also of many other empirical explorations of economic freedom.

In many ways, this debate goes back to the beginnings of modern economics when Adam Smith famously argued that each of us, freely pursuing our own ends, create the wealth of nations and of the individual citizens. However, during the twentieth century there was continuous debate about whether planned or free economies produce the best outcomes. The results of the experiments of the twentieth century should now be clear: free economies produce the greatest prosperity

Table 1.6: Growth in Economic Freedom and Growth in GDP per Capita (Moving Averages)

Dependent Variable: Growth in GDP per Capita GDP (1982–2005)

Method: Pooled Least Squares

	2-period backward moving average		3-period backward moving average		4-period backward moving average		5-period backward moving average		6-period backward moving average	
United States at the All-Government Level										
Variable	**Coefficient**	**t-Statistic**	**Coefficient**	**t-Statistic**	**Coefficient**	**t-Statistic**	**Coefficient**	**t-Statistic**	**Coefficient**	**t-Statistic**
HGG	0.00	0.05	0.03	0.50	−0.06	−1.10	0.07	1.36	−0.04	−0.77
POPG	−0.37	−1.56	0.00	−0.01	−0.23	−1.08	0.07	0.44	−0.06	−0.39
ALLGG	0.94	16.68	1.02	16.65	1.18	14.83	0.97	18.69	0.98	15.83
United States at the Subnational Level										
Variable	**Coefficient**	**t-Statistic**	**Coefficient**	**t-Statistic**	**Coefficient**	**t-Statistic**	**Coefficient**	**t-Statistic**	**Coefficient**	**t-Statistic**
HGG	0.01	0.25	0.04	0.81	−0.08	−1.44	0.08	1.53	−0.05	−0.97
POPG	0.09	0.36	0.49	2.91	0.36	2.04	0.56	3.42	0.46	3.22
SUBNG	0.71	12.21	0.72	12.70	0.81	10.42	0.65	12.79	0.65	12.05
Canada at the All-Government Level										
Variable	**Coefficient**	**t-Statistic**	**Coefficient**	**t-Statistic**	**Coefficient**	**t-Statistic**	**Coefficient**	**t-Statistic**	**Coefficient**	**t-Statistic**
HGG	−0.02	−0.19	0.07	0.70	−0.06	−0.52	0.16	1.52	0.06	0.62
POPG	1.12	2.20	0.38	0.80	0.84	1.47	0.66	1.40	0.64	1.27
ALLGG	0.64	8.89	0.49	9.32	0.55	8.08	0.57	8.49	0.54	8.56
Canada at the Subnational Level										
Variable	**Coefficient**	**t-Statistic**	**Coefficient**	**t-Statistic**	**Coefficient**	**t-Statistic**	**Coefficient**	**t-Statistic**	**Coefficient**	**t-Statistic**
HGG	0.23	2.12	0.13	1.16	−0.15	−1.27	0.17	1.52	0.19	1.77
POPG	0.24	0.74	0.10	0.20	1.28	2.48	0.83	2.50	0.77	2.06
SUBNG	0.60	8.80	0.47	8.48	0.54	7.91	0.48	9.03	0.8	8.17

Note: HGG is growth in the number of high-school graduates 25 years and older as a percentage of total population 25 years and older from 1982 to 2005; POPG is growth in population from 1982 to 2005; ALLGG is growth in economic freedom at an all government level from 1982 to 2005; SUBNG is growth in economic freedom at a subnational level from 1982 to 2005.

in human history for their citizens. Even poverty in these economically free nations would have been considered luxury in unfree economies. This lesson was reinforced by the collapse of centrally planned states and, following this, the consistent refusal of their citizens to return to central planning, regardless of the hardships on the road to freedom. Among developing nations, those that adopted the centrally planned model have only produced lives of misery for their citizens. Those that adopted the economics of competitive markets have begun to share with their citizens the prosperity of advanced market economies.

While these comparisons are extreme examples, from opposite ends of the spectrum of economic freedom, a considerable body of research shows that the relationship between prosperity and economic freedom holds in narrower ranges of the spectrum. While sophisticated econometric testing backs up this relationship, examples are also interesting. So, taking for example two peripheral European nations, the relatively free Ireland does much better than the relatively unfree Greece. In the United States, the relatively free Georgia does much better than the relatively unfree West Virginia. In Canada, British Columbia, where economic freedom has been increasing in recent years, has been experiencing considerably greater growth on a per-capita basis than Ontario, where economic freedom has been decreasing in recent years. In contrast, during the latter half of the 1990s, economic freedom in Ontario increased at a much faster pace than in British Columbia. During that period, Ontario's economic growth outpaced that of British Columbia. As with anything in the real world, exceptions can be found but overall the strength of the statistical fit of this relationship is remarkable.

While this is hardly the place to review several centuries of economic debate, the mechanics of economic freedom are easy to understand. Any transaction freely entered into must benefit both parties; any transaction that does not benefit both parties would be rejected by the party that would come up short. This has consequences throughout the economy. Consumers who are free to choose will only be attracted by superior quality and price. Producers must constantly improve the price and quality of their products to meet customers' demands or customers will not freely enter into transactions with them. Many billions of mutually beneficial transactions occur every day, powering the dynamic that spurs increased productivity and wealth throughout the economy.

Restrictions on freedom prevent people from making mutually beneficial transactions. Such free transactions are replaced by government action. This is marked by coercion in collecting taxes and lack of choice in accepting services: instead of gains for both parties arising from each transaction, citizens must pay whatever bill is demanded in taxes and accept whatever service is offered in return. Moreover, while the incentives of producers in a competitive market revolve around providing superior goods and services in order to attract consumers, the public sector faces no such incentives. Instead, as public-choice theory reveals, incentives in the public sector often focus on rewarding interest groups, seeking political advantage, or even penalizing unpopular groups. This is far different from mutually beneficial exchange although, as noted earlier, government does have essential protective and productive functions.

In some ways it is surprising the debate still rages because the evidence and theory favoring economic freedom match intuition: it makes sense that the drive and ingenuity of individuals will produce better outcomes through the mechanism of mutually beneficial exchange than the designs of a small coterie of government planners, who can hardly have knowledge of everyone's values and who, being human, are likely to consider first their own well-being and that of the constituencies they must please when making decisions for all of us.

Conclusion

The worldwide evidence on economic freedom suggests that US states are well positioned to take advantage of economic growth and opportunity, while the Canadian provinces are clustered near the bottom of the rankings in all three areas of the index of economic freedom in North America, indicating that their governments have consumed and transferred more resources, imposed higher tax rates, and created more rigid labor markets than the governments of US states.

The regression analyses indicate that growth in economic freedom and the degree of economic freedom have a significant impact on the growth in per-capita GDP and the level of per-capita GDP. Since Canadian provinces have relatively low levels of economic freedom, Canadians are likely to continue to experience lower standards of living relative to American states.

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