

Chapter 2

Economic Freedom, Entrepreneurship, and Economic Growth at the Subnational Level

by Russell S. Sobel

What key factors explain why some countries grow rich while others remain poor? This question has been at the heart of economic inquiry since the publication of Adam Smith's *An Inquiry into the Nature and Causes of the Wealth of Nations* in 1776. Smith concluded that "[l]ittle else is requisite to carry a state to the highest degree of opulence from the lowest barbarism, but peace, easy taxes, and a tolerable administration of justice; all the rest being brought about by the natural course of things" (Smith [1776] 1904: I.56). [1] Despite Adam Smith's conclusions, the literature on international economic development by the mid- to late 1900s was dominated by theories based on neoclassical growth and input-output models that attributed prosperity primarily to factors such as the abundance of resources, geographic location, and the availability of human and physical capital. [2]

Over the past few decades, however, the pioneering work of authors such as P.T. Bauer and Douglass North has led to a resurgence in the idea that a country's "institutions" rather than its factor endowments or location are primarily responsible for economic prosperity. According to Bauer, "Poor people can generate or secure sufficient funds to start on the road to progress if they are motivated to improve their material condition and are not inhibited by government policy or lack of public security" (2000: 45).

Within this literature, "institutions" are broadly defined as the formal and informal "rules of the game" governing action and interaction among individuals, and the enforcement of those rules (North, 1990, 1991). Simply put, making economic activity analogous to the board game Monopoly®, the behavior of the agents is influenced in predictable ways by the structure of the rules under which the game is played. Imagine, for example, that a new rule was created making it legitimate to steal the property cards of other players if they were not looking. The

[1] This quote was first attributed to Smith in 1755 by Stewart (1793).

[2] See, for examples, Gallup, Sachs and Mellinger, 1999; Sachs and Warner, 2001; Sachs, 2003.

play and outcomes from a game of Monopoly® would be significantly different under these different institutional rules as players would respond to them by altering their behavior. Not only would this rule change increase the rate of theft among players, it would also result in fewer properties being purchased, less investment (houses or hotels) on the properties, and more resources being devoted to trying to protect their property cards from being stolen (and more effort into trying to steal the property of other players).

Researchers have now unquestionably demonstrated the empirical link between prosperity and institutions at the international level, using multiple measures of both economic outcomes and institutions. [3] While this literature has blossomed in the international arena with applications to transition and less-developed economies, only recently has this logic been applied to explain *subnational* differences in economic prosperity, for example among the US states. Do differences in economic institutions also explain the differences in prosperity among these subnational areas as well?

From an empirical standpoint, the publication of *Economic Freedom of North America* is what made this question possible to address. Indeed, it is this index that provides the critical measure of institutional quality at the state and provincial level required for this type of analysis. Recent literature using this index has consistently demonstrated that, indeed, while the variance in institutional quality is significantly smaller among subnational regions when compared with cross-country differentials, the differences are still large enough to create significant differences in economic growth and prosperity. [4]

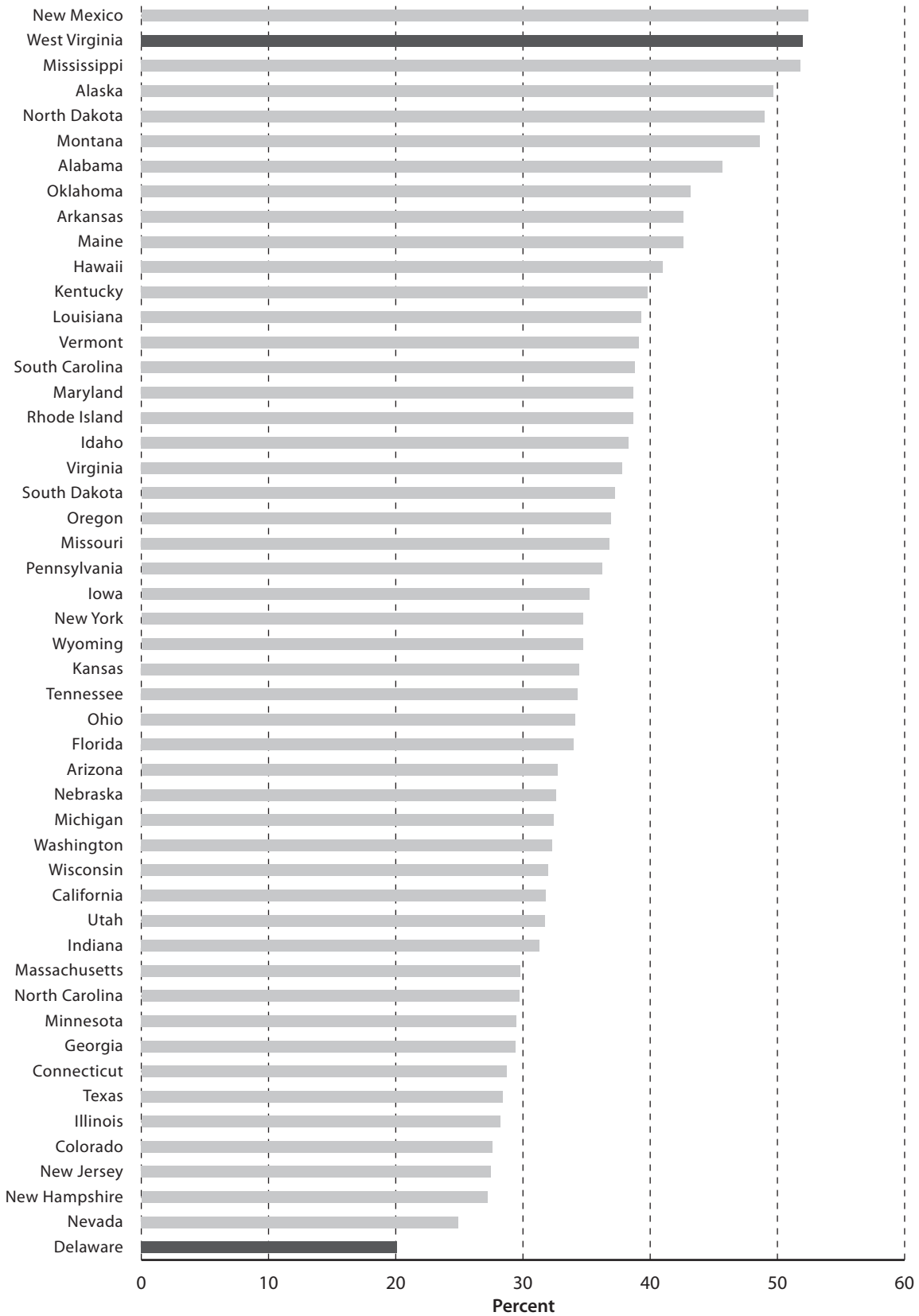
Subnational Differences in Institutional Quality

How large are the differences in institutional quality across US states? To help illustrate it is worthwhile to examine one of the major components of the index published in *Economic Freedom of North America*, government spending as a share of the state economy (figure 2.1). Government spending is, of course, only one component of the overall index of economic freedom, which also includes measures of government regulations, transfers, and relative tax rates. However, even looking at spending alone, there is substantial variation among the US states. In West Virginia (the upper dark grey bar in the figure), for example, 52% of all spending in the state is controlled by the government sector, more than twice the size of the government sector in states at the other end of the spectrum such as Delaware (the lower dark

[3] See, for examples, Acemoglu, Johnson, and Robinson, 2001, 2002; Glaeser, La Porta, Lopez-de-Silanes, and Shleifer, 2004; Rodrik, 2004; Acemoglu and Johnson, 2005; Farr, Lord, and Wolfenbarger, 1998; Gwartney, Lawson, and Holcombe, 1999; Cole, 2003; Powell, 2003; Ovaska and Sobel, 2005; and Sobel, Clark, and Lee, 2007.

[4] See Sobel, 2007; Kreft and Sobel, 2005; Sobel, forthcoming; Hall and Sobel, forthcoming.

Figure 2.1: All-Government Spending as a Percentage of GDP, by State



Source: Karabegović and McMahon, 2006.

grey bar in the figure), where government controls only 20% of the economy. [5] Once regulations and other forms of government control are included, far less than half of some US state economies are left in the hands of the private sector.

Perhaps the most striking example of the relevance of institutional economics to the subnational level is the state that has consistently scored in this report as having the worst institutional quality in the United States—West Virginia. Because of its poor institutional quality, it has gone from being a middle-income state in the early 1900s to one of the poorest, and slowest growing, US states (see Sobel, 2007). In essence, West Virginia has impoverished itself by failing to adopt policies consistent with economic freedom. At the other end of the spectrum, states at the top of the index, such as Delaware, consistently have the best economic records.

Chapter 1 of this report shows how the economic freedom scores correlate with measures of prosperity across the entire sample of states and provinces but it is worthwhile to revisit this relationship using specific states as examples. Table 2.1 shows a comparison between the economic performance of the five top-ranked, and the five bottom-ranked, US states. The bottom rows of the table show the averages for each group as well as the difference between them.

The states listed in the top of the table, those with the best institutions, are uniformly more prosperous than the states with the worst economic institutions. The differences in economic outcomes are striking. Looking at the averages given in the bottom of the table, average per-capita personal income is \$6,016 higher, and the poverty rate is 3.2 percentage points lower, on average, in those states with the best economic institutions.

Despite the clear evidence on the relationship between prosperity and institutions consistent with economic freedom, state and local economic development policy instead remains focused on trying to promote economic growth through increased government spending on education and roads; use of eminent domain for economic revitalization; new government programs (such as state-run venture funds to invest in new businesses); and the use of selective tax credits and subsidies to attract new business firms. Unfortunately, these types of policies are inconsistent with the basic principles of economic freedom and actually bring about a deterioration in economic institutions, which in turn leads to worse economic outcomes. The challenge over the coming decades is to create a change in thinking about state and local economic development analogous to what has happened in the international development literature. To do so requires a clear understanding of the process of economic growth, to which we now turn our attention.

[5] The data in figure 2.1 include all federal, state, and local government spending. Given that West Virginia's ability to secure federal pork barrel spending is better than average, it is worthwhile also to examine the data once federal spending is excluded. Even when excluding the federal government, state and local government control of the economy in West Virginia amounts to almost one-fourth of the state economy, again the second-highest level of government control in the nation. For comparison, Delaware's state and local share is 10%.

Table 2.1: Do Institutions Matter at the Subnational Level?

	Economic Freedom Index			Economic Performance Measures	
	Score	Overall Rank	Rank (among US states only)	Personal Income per Capita (2006)	Poverty Rate (2005)
Top 5 States					
Delaware	8.5	1	1	\$39,131	10.3%
Texas	7.8	2	2	\$35,166	17.5%
Colorado	7.6	4 (tie)	3 (tie)	\$39,491	10.9%
Georgia	7.6	4 (tie)	3 (tie)	\$32,095	14.5%
North Carolina	7.6	4 (tie)	3 (tie)	\$32,247	14.9%
Bottom 5 States					
Montana	6.0	47 (tie)	46 (tie)	\$30,790	14.6%
New Mexico	6.0	47 (tie)	46 (tie)	\$29,929	18.4%
Maine	5.8	49 (tie)	48 (tie)	\$32,095	12.3%
Mississippi	5.8	49 (tie)	48 (tie)	\$27,028	21.0%
West Virginia	5.3	55	50	\$28,206	18.0%
Averages and Difference					
top 5 states				\$35,626	13.6%
bottom 5 states				\$29,610	16.9%
Difference				\$6,016	-3.2%

Note: Economic freedom is measured on a scale from zero to 10; a higher score indicates a higher level of economic freedom.

Sources for economic data: Bureau of Economic Analysis, 2007; US Census Bureau, 2007.

The Process of Economic Growth

To understand economic growth and the best way for state and local government policy to promote it, we must delve deeper into the relationship between economic inputs, institutions, and outcomes. An economy is a *process* by which economic inputs and resources, such as skilled labor, capital, and funding for new businesses, are converted (by entrepreneurs) into economic outcomes (e.g., wage growth, job creation, and new businesses). This is illustrated in figure 2.2. As the large arrow in the middle of the figure shows, the economic outcomes generated from any specific set of economic inputs depend on the “institutions”—the political and economic “rules of the game”—under which an economy operates.

Current policy for state and local economic development focuses only on the relationship between inputs and outcomes, essentially ignoring the “rules of

Figure 2.2: The Process of Economic Growth—Inputs, Institutions, and Outcomes

the game.” Governments repeatedly attempt to promote better economic outcomes with programs aimed at subsidizing or expanding entrepreneurial inputs, such as financing through government loans and education programs. The fact that these types of programs have shown little or no success in actually promoting prosperity demonstrates why the more appropriate focus of policy is on improving institutions. Increasing inputs will have little, if any, impact on outcomes when the rules of the game are “poor.” It’s analogous to baking cakes with the ingredients being the inputs, the oven being the institutions, and the final cakes being the economic outcomes—throwing more ingredients into the oven won’t produce more cakes unless the oven is working properly.

Our model, on the other hand, makes it clear that by improving institutions, or the rules of the game under which a state economy operates, it is possible to change economic outcomes for the better. When institutions are weak, even places with abundant natural resources or other inputs have difficulty

becoming prosperous. West Virginia (and similarly the countries of Argentina and Venezuela) fit into this category of resource-rich areas that have not been able to sustain economic growth because, despite their abundance of inputs, institutions are weak.

The important point is that our daily economic lives are played out under a set of rules that are to a large extent determined by government-enacted laws and policies. These political and legal institutions are what create the incentive structures within the state economies. Good institutions create an environment where entrepreneurs can innovate and individuals can exchange, while weak institutions create an environment where these same innovations and exchanges either fail to take place or are used in an unproductive manner.

Entrepreneurship and Discovery

At any given point in time, a state's inputs could be used to produce a variety of different final goods and services. The key to prosperity is having a process in place that helps a state's resources *discover* which of these different goods or services have the highest value added in the marketplace. It is important to remember that this target is an ever shifting one, with new opportunities arising and others dwindling every day. One important reason that good institutions generate prosperity is that, with these institutions in place, a state's resources do a better job at chasing this ever-moving target through the continuous process of entrepreneurship and discovery. Kirzner (1973, 1997) stressed this process of entrepreneurial discovery, one in which previously unnoticed profit opportunities are discovered and acted upon by entrepreneurs, as an important factor in promoting growth and prosperity.

Sifting through these many, possible entrepreneurial combinations is a difficult task because the number of possible combinations of society's resources is almost limitless. As an illustration, think for a moment about the typical automobile license plate. Many have three letters, a space, and three numbers. There is a formula for calculating the total number of "combinations"—the total number of possible different license plates—that could be created using these three letters and three numbers. The answer may be more than you might think: 17,576,000. [6] Now, returning to the economy, there are more than just three letters and numbers to work with. Indeed there are thousands of different resources that could be combined into final products. With this many inputs to work with, the number of possible, different combinations of final products that could be produced is almost infinite.

[6] Some states limit the number of combinations by, for example, using the first digit of the standard license plate to indicate the month in which the plate expires each year. With only 12 possibilities for the first digit, the number of possible combinations is reduced by more than half, to 8,112,000. This provides a good illustration of why restrictions on trade and use of resources greatly diminish economic productivity—because they limit the inputs and drastically reduce the number of combinations.

Entrepreneurship is important because it is the competitive behavior of entrepreneurs that drives this search for new possible combinations of resources that create more value. A vibrant entrepreneurial climate is one that maximizes the number of new combinations attempted. Some of these new combinations will be more valuable than existing combinations and some will not. In competitive markets, it is the profit-and-loss system that is used to sort through these new resource combinations discovered by entrepreneurs, discarding bad ideas through losses and rewarding good ones through profits. A growing, vibrant economy depends not only on entrepreneurs discovering, evaluating, and exploiting opportunities to create new goods and services, but also on the speed at which ideas are labeled as failures or successes by the profit and loss system.

From an economic standpoint, then, business failure has a positive side: it gets rid of bad ideas, freeing up resources to be used in other endeavors. A vibrant economy will have both a large number of new business start-ups *and* a large number of business failures. *Minimizing business failures should not be a goal of public policy.* The goal instead should be to maximize the number of new combinations attempted, which implies having a lot of failures. When entrepreneurs are free to try new ideas, even those marginal ideas with only a small chance at succeeding, the business-failure rate will be high. Business failures are a natural result of the uncertainty involved in knowing whether a new idea will meet the “market test.” From an economic perspective, it is better to try 100 new ideas and have 60 fail than to try only 50 and have 30 fail. By doing so, we end up with 20 additional new businesses.

Noted Austrian economist Joseph Schumpeter (1934 [1911]) stressed the role of the entrepreneur as an innovator who carries out new combinations of resources to create products that did not previously exist. The result of these new combinations is entirely new industries that open considerable opportunities for economic advancement. In Schumpeter’s view, the entrepreneur is a disruptive but positive force in an economy because the introduction of these new combinations leads to the obsolescence of others, a process he termed “creative destruction.” The introduction of the compact disc, and the corresponding disappearance of the vinyl record, is just one of many examples of this process. Cars, electricity, aircraft, and personal computers are others. Each significantly advanced our way of life but, in the process of doing so, caused other industries to die or shrink considerably. Economists today accept Schumpeter’s insight that this process of creative destruction is an essential part of economic progress and prosperity and that economic freedom is uniquely suited to foster it.

The Market Test

It is much better to have a decentralized profit-and-loss system sorting through these new combinations of resources than a government-appointed board because the incentives facing public officials can be very different from the incentives facing venture capitalists and entrepreneurs. While each venture capitalist and

entrepreneur brings different motivations to the table, ultimately their success or failure is determined by whether their idea generates wealth. [7] This is the “market test.” The same is not true for public officials in charge of handing out tax incentives or low-interest loans. They may have other concerns beyond creating wealth. For example, officials may be concerned about *where* a new business is located in order to maximize political support among voters. But there is no reason to think that this decision corresponds with the most economically advantageous one.

In addition, there is no individual, or group of individuals, that could be in charge of this discovery process. There is nobody, not even those seemingly in the best position to know, who can predict which business opportunities are the most viable in advance. For example, Ken Olson, president, chairman, and founder of Digital Equipment Corporation, who was at the forefront of computer technology in 1977, stated: “There is no reason anyone would want a computer in their home.” Today his remark sounds funny because we all have computers in our homes. But, at the time, even those in the infant computer industry did not see this coming. An even better example might be the story of Fred Smith, the founder of Federal Express Corporation. He actually wrote the business plan for FedEx® as his senior project for his strategic management class at Yale. While we all know in retrospect that FedEx® was a successful business idea, Smith’s professor at Yale, one of the leading experts on business strategy, wrote on his paper in red ink: “The concept is interesting and well-formed, but in order to earn better than a C the idea must be feasible.”

Even smart professors, business leaders, and government officials cannot possibly pre-evaluate business ideas and identify those that will be most successful and those that will fail. A thriving economy is created when individual entrepreneurs have the economic freedom to try new ideas, risking their own assets, or the assets of their private investors, and the profit-and-loss system is used to decide their fate. Successful entrepreneurship expands the overall economic pie, generating more wealth and prosperity.

[7] It is important to recognize that from society’s perspective the profits earned by entrepreneurs represent gains to society as a whole. Because entrepreneurs must bid resources away from alternative uses, production costs reflect the value of those resources to society in their alternative uses. Thus, profit is only earned when an entrepreneur takes a set of resources and produces something worth more to consumers than the other goods that could have been produced with those resources. A loss happens when an entrepreneur produces something that consumers do not value as highly as the other goods that could have been produced with those same resources. For example, an entrepreneur who takes the resources necessary to produce a fleece blanket sold for \$50 and instead turns them into a pullover that sells for \$60 has earned a \$10 profit. Since the price of the resources used by entrepreneurs reflect the opportunity cost of their employment in other uses, the \$10 profit generated by the entrepreneur reflects the amount by which they have increased the value of those resources. By increasing the value created by our limited resources, entrepreneurs increase overall wealth in a society.

The Evidence

Now, let's examine the evidence. Earlier, table 2.1 illustrated the large differential in economic prosperity between the five states that score the best and the five states that score the worst in the index in *Economic Freedom of North America*. We now examine the underlying source of this differential, these states' records on promoting productive entrepreneurial activity. Table 2.2 shows how these same two groups of states differ on five measures of entrepreneurial activity: venture capital investments per capita, patents per capita, the growth rate of sole proprietorships, and the establishment birth rates for all firms and large firms only.

The data shown in the table clearly illustrate that the states with the most economic freedom have higher rates of entrepreneurial activity. Relative to the states with the least economic freedom, those with the most have venture capital investment of US\$123 higher per capita, an annual average rate of patents 21 higher per 100,000 residents, a growth rate of sole proprietorships 1.4% higher, an establishment birth rate almost 2% higher, and a birth rate of large establishments 2.4% higher.

Table 2.2: Economic Freedom and Entrepreneurial Activity

	Economic Freedom Index			Measures of Entrepreneurial Activity (annual averages)				
	Score	Overall Rank	Rank (among US states only)	Venture Capital Investment per Capita	Patents per Capita (per 100,000)	Growth Rate of Sole Proprietorships	Establishment Birth Rate	Establishment Birth Rate (Large Firms Only)
Top 5 States								
Delaware	8.5	1	1	\$60.97	52.6	5.5%	13.1%	14.2%
Texas	7.8	2	2	\$113.29	25.9	3.3%	12.8%	12.0%
Colorado	7.6	4 (tie)	3 (tie)	\$333.22	37.1	4.6%	14.2%	13.0%
Georgia	7.6	4 (tie)	3 (tie)	\$103.63	14.6	4.0%	13.5%	11.7%
North Carolina	7.6	4 (tie)	3 (tie)	\$82.57	19.5	3.5%	11.7%	10.3%
Bottom 5 States								
Montana	6.0	47 (tie)	46 (tie)	\$14.30	12.6	1.9%	12.0%	10.7%
New Mexico	6.0	47 (tie)	46 (tie)	\$10.08	16.3	2.7%	12.1%	10.8%
Maine	5.8	49 (tie)	48 (tie)	\$34.96	9.3	3.0%	11.2%	9.5%
Mississippi	5.8	49 (tie)	48 (tie)	\$18.53	5.6	3.4%	11.1%	9.7%
West Virginia	5.3	55	50	\$0.00	0.0	2.8%	9.5%	8.6%
Averages and Difference								
top 5 states				\$138.74	29.9	4.2%	13.1%	12.2%
bottom 5 states				\$15.57	8.8	2.8%	11.2%	9.9%
Difference				\$123.16	21.2	1.4%	1.9%	2.4%

Note: For data descriptions and sources, see Sobel, forthcoming.

Table 2.3: Economic Freedom and Productive Entrepreneurship: Regression Results

Independent Variable	Dependent Variable				
	Venture Capital Investment per Capita	Patents per Capita (per 100,000)	Growth Rate of Sole Proprietorships	Establishment Birth Rate	Establishment Birth Rate (Large Firms Only)
Constant	-836.182 (1.124)	-64.462 (0.382)	86.924 (1.327)	64.003*** (2.782)	46.180*** (3.076)
Economic Freedom Score	32.127** (2.041)	8.178** (2.348)	4.206** (2.999)	0.838* (1.823)	0.873*** (2.717)
Median Age	-1.251 (0.298)	-0.398 (0.425)	-0.266 (0.712)	-0.320 (2.653)	-0.146* (1.713)
Population Density	-0.0125 (0.308)	0.0201** (2.268)	-0.0003 (0.089)	0.0012 (0.998)	0.0030*** (3.688)
Percent College Degree	11.908*** (6.024)	1.246*** (2.896)	-0.252 (1.443)	0.009 (0.145)	0.042 (1.048)
Percent Male	8.836 (0.621)	0.222 (0.069)	-1.741 (1.376)	-0.928** (2.079)	-0.736 (2.538)
Observations	48	48	48	48	48
R-squared	0.875	0.659	0.347	0.504	0.571

Notes: Absolute t-statistics in parentheses; asterisks indicate significance as follows: ***=1%, **=5%, *=10%. For details, sources, and notes on the estimation procedures, see Sobel (forthcoming).

While table 2.2 shows this comparison for two selected groups of states, readers might wonder whether this relationship holds among all states, especially after controlling for other factors that may affect entrepreneurial activity. Table 2.3 shows regression results, from Sobel (forthcoming), that do indeed show that economic freedom is a statistically significant determinant of all of these measures of entrepreneurial activity, even after controlling for other factors, across the entire sample of US states. [8]

The ordinary least squares (OLS) regression results shown in table 2.3 show how economic freedom is related to each measure of productive entrepreneurial activity, holding constant the other factors listed in the table. These control variables include the percentage of the state's population that is male, the percent with a college degree, the state's population density, and median age. The coefficients can be interpreted as the impact of a one-unit change in economic freedom on the dependent variable; so, for example, a state with a one-unit higher score on the economic freedom index has \$32.13 higher venture capital investments per capita.

[8] For additional evidence on the relationship between economic freedom and entrepreneurial activity, see Kreft and Sobel (2005) and Sobel (forthcoming).

Institutions and the Productivity of Entrepreneurial Activity

Baumol's (1990) theory of productive and unproductive entrepreneurship explains why good institutions promote growth while bad institutions do not. In stressing the role of entrepreneurship in an economy, Baumol notes that entrepreneurial individuals have a choice to devote their labor efforts toward either private-sector wealth creation or toward securing wealth redistribution through the political and legal processes (e.g., lobbying and lawsuits). [9] This decision is influenced by the corresponding rates of return—or profit rates—of these alternative activities. Institutions consistent with economic freedom—those providing for secure property rights, a fair and balanced judicial system, contract enforcement, and effective limits on government's ability to transfer wealth through taxation and regulation—reduce the profitability of unproductive political and legal entrepreneurship. Under this incentive structure, creative individuals are more likely to engage in the creation of new wealth through productive market entrepreneurship.

In areas with weak institutions, these same individuals are instead more likely to engage in attempts to manipulate the political or legal process to capture transfers of existing wealth through unproductive political and legal entrepreneurship—activities that destroy overall wealth. [10] This reallocation of effort occurs because the institutional structure largely determines the relative personal and financial rewards to investing entrepreneurial energies into productive market activities rather than investing those same energies into unproductive political and legal activities. For example, a steel entrepreneur might react to competition by trying either to find a better way of producing steel (productive entrepreneurship) or by lobbying for subsidies, tariff protection, or filing legal anti-trust actions (unproductive entrepreneurship).

To understand this distinction better, consider the difference between positive-sum, zero-sum, and negative-sum economic activities. Activities are positive sum when net gains are created to society. Activities in the private market are positive sum because both parties gain in voluntary transactions. When you purchase a car, you value the car more than the money you pay for it and the car dealer values the money he receives more than the car he sells you. Government actions that simply transfer wealth from one person to another are instead zero-sum activities. One party's gain (e.g., the subsidy) is offset exactly by another party's loss (e.g., the taxes). However, because the zero-sum transfer requires an investment of resources in lobbying to secure, their overall impact on the economy is negative. Magnifying this is the fact that others will devote resources to political lobbying on the “defensive side” of transfers to protect their wealth from being seized. The resources

-
- [9] Spending effort and resources to secure wealth through political redistribution is what economists call “rent-seeking.” See, for instance, Tullock, 1967 and Tollison, 1982.
- [10] In poor institutional environments, entrepreneurial activities are also devoted toward what Coyne and Leeson (2004) term “evasive entrepreneurship” whereby resources are devoted to evading taxes and regulations.

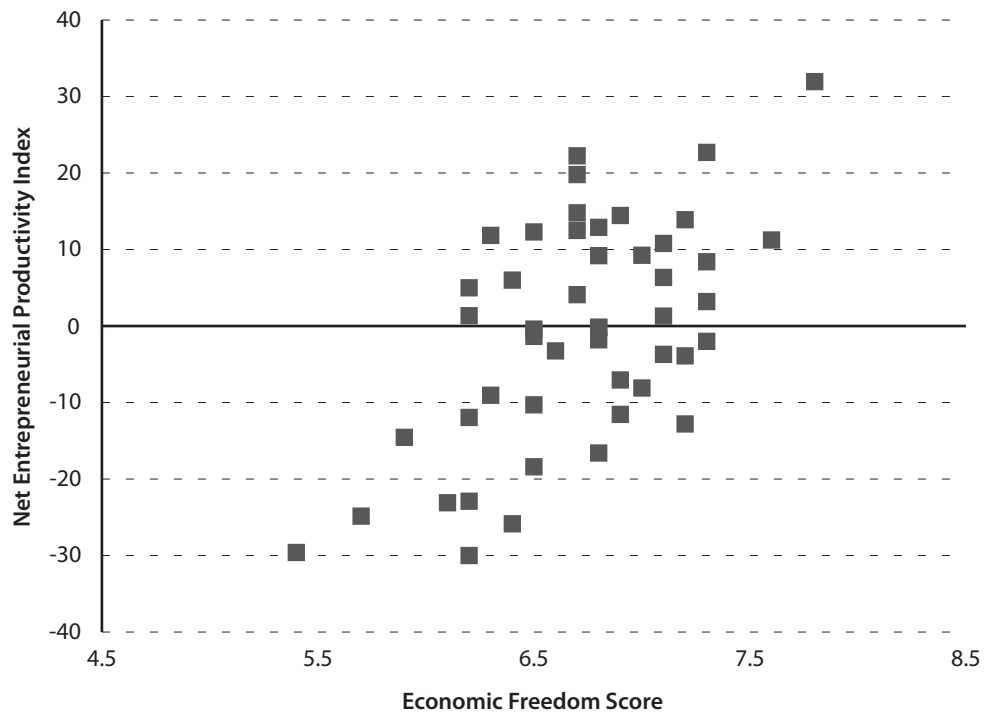
devoted toward securing (and fighting against) zero-sum political transfers have a cost; we have more lobbying firms and fewer DVD manufacturers.

Unproductive entrepreneurship is unproductive precisely because it uses up resources in the process of capturing zero-sum transfers and these resources have other, productive uses. Baumol's theory is founded in the idea that entrepreneurs exploit profit opportunities not only within private markets but also within the political and legal arenas. Thus, differences in measured rates of *private-sector* entrepreneurship, like those shown in tables 2.2 and 2.3, are partially the result of the different directions entrepreneurial energies are channeled by prevailing economic and political institutions through the rewards and incentive structures they create for entrepreneurial individuals.

In places like West Virginia with weak institutions, where lawsuits are unusually profitable for lawyers and their clients and state government's large influence over spending encourages individuals to fight over obtaining state government funds, there is a high level of unproductive entrepreneurship. As a result, there is less productive private-sector entrepreneurship and lower economic growth. In contrast, in states such as Delaware, with good institutions, productive entrepreneurship flourishes at the expense of unproductive entrepreneurship. Thus, while policies consistent with economic freedom clearly promote higher levels of productive entrepreneurial activity, they also tend to discourage unproductive entrepreneurial endeavors, such as lobbying and abuse of lawsuits.

Sobel (forthcoming) provides a ranking of the "net entrepreneurial productivity" of each US state, in which productive entrepreneurship is measured relative to unproductive political and legal entrepreneurship. This index was constructed by ranking each state on each of the five measures of productive entrepreneurship shown earlier. These rankings are then averaged to get each state's average ranking for productive entrepreneurship. By using the rankings, it avoids problems associated with trying to average the underlying measures that have different scales. Then, four measures of lobbying and abuse of lawsuits are similarly ranked and averaged. The average rankings are then subtracted to get a measure of the net entrepreneurial activity in each state. As an example, if a state had an average ranking of 3rd highest on the productive entrepreneurship measures, and ranked 40th on the measures of unproductive entrepreneurship, they would receive a +37 score in the index. The relationship between this index of net entrepreneurial productivity and economic freedom, shown in figure 2.3, is striking.

The data suggest that good institutions promote prosperity not only because they promote productive activities but also because they discourage unproductive, wealth-destroying activities. Despite the good intentions behind government policies that attempt to increase prosperity through increased government spending, the bottom line is that these policies tend to encourage entrepreneurial individuals to spend their time seeking government funding or favors rather than producing wealth. In a nutshell, states with poor institutions end up having too many lawyers and lobbyists and too few scientists and engineers.

Figure 2.3: Institutional Quality and Entrepreneurial Productivity

Source: Sobel, forthcoming.

This helps to highlight the difference between what economists consider good institutions and what some might consider “business-friendly policies.” When government gives subsidies or tax breaks to specific firms or industry groups but not to others, this is at odds with the policy structure, or rules of the game, consistent with prosperity. When it becomes more profitable for companies and industries to invest time and resources into lobbying the political process for favors, or into initiating lawsuits against others, we end up with more of these types of destructive activities and less productive activity. Firms begin competing over obtaining government tax breaks rather than with each other in the marketplace. They spend time lobbying rather than producing.

Conclusion

As the evidence presented here makes clear, states with policies consistent with economic freedom encourage higher levels of productive entrepreneurial activity. By unleashing their entrepreneurial energies, these states grow faster and secure a higher level of prosperity. Thereby, entrepreneurship serves as the conduit between economic freedom and economic prosperity. That is, economic freedom is correlated with income and growth *because* economic freedom promotes productive entrepreneurship, which is the underlying source of economic growth.

Equally important is how policies consistent with economic freedom divert resources away from unproductive uses—those that serve only to plunder wealth through political and legal channels. By lowering the rewards to plunder and increasing the returns to wealth creation, economic freedom promotes prosperity.

Unfortunately, despite the recent growing emphasis on institutions in the international literature about economic development, this idea has not equally infiltrated modern thinking about policies for state and local economic development. To grow and prosper, most well-intended state and local policies are now currently aimed at providing selective taxes and subsidies and introducing new government programs and regulations. But, because these policies actually lower economic freedom, they are destined to produce unintended consequences and result in lower economic prosperity.

While the policies consistent with economic freedom are fairly clear conceptually, there is a challenge in that, in practice, *specific* recommendations are needed for policy makers. For example, states wishing to promote lending to small businesses often first think of solving this problem by establishing new government loan funds. In this case, rather than looking toward government to solve these problems, we need to ask how we could remove current government banking regulations that stand as barriers to private lenders making these loans. Using the principles embodied in *Economic Freedom of North America* and its index, the challenge for academics is now to provide useful, and readable, guides to specific policy reforms that increase economic freedom at the state and local level.

In West Virginia, for example, the Public Policy Foundation of West Virginia released in March 2007 our book, *Unleashing Capitalism: Why Prosperity Stops at the West Virginia Border and How to Fix It*, a 250-page guide to the specific laws, policies, regulations, and taxes that should be changed to increase economic freedom in West Virginia, the US state with the lowest level of economic freedom. A similar study is now being undertaken in Kentucky. With more than 4,000 copies sold, and over 75 public presentations, including to the state's governor and legislature, we have found a clear hunger for analysis specific to a state and its policies—even in a state that has traditionally rejected these ideas. Citizens and policy-makers alike share a common goal of promoting prosperity and now more than ever need to hear the evidence and theories from the development literature that point them in the right direction. With the concept of economic freedom now making headlines and being debated on the floor of the legislature in West Virginia, we have shown it is possible to bring the ideals of economic freedom and the logic of institutional development economics to the state policy level. An example of reforms like those of Ireland that promote economic freedom and create prosperity is desperately needed at the state or provincial level, to serve as an example for others to follow.

References

- Acemoglu, Daron, and Simon Johnson (2005). Unbundling Institutions. *Journal of Political Economy* 115: 949–95.
- Acemoglu, Daron, Simon Johnson, and James Robinson (2001). The Colonial Origins of Comparative Development: An Empirical Investigation. *American Economic Review* 91: 1369–1401.
- Acemoglu, Daron, Simon Johnson, and James Robinson (2002). Reversal of Fortunes: Geography and Institutions in the Making of the Modern World Income Distribution. *Quarterly Journal of Economics* 117: 1231–94.
- Bauer, Peter T. (2000). *From Subsistence to Exchange and Other Essays*. Princeton University Press.
- Baumol, William J. (1990). Entrepreneurship: Productive, Unproductive and Destructive. *Journal of Political Economy* 98(5): 893–921.
- Bureau of Economic Analysis, US Department of Commerce (2007). *Annual State Personal Income*. US Department of Commerce.
- Cole, Julio H. (2003). The Contribution of Economic Freedom to World Economic Growth, 1980–99. *Cato Journal* 23 (Fall): 189–98.
- Coyne, Christopher J., and Peter T. Leeson. (2004). The Plight of Underdeveloped Countries. *Cato Journal* 24, 3: 235–49.
- Farr, W. K., R.A. Lord, and J. L. Wolfenbarger (1998). Economic Freedom, Political Freedom, and Economic Well-Being: A Causality Analysis. *Cato Journal* 18 (Fall): 247–62.
- Glaeser, Edward, Rafael La Porta, Florencio Lopez-de-Silanes, and Andrei Shleifer (2004). Do Institutions Cause Growth? *Journal of Economic Growth* 9, 3: 271–303.
- Gallup, John, Jeffrey Sachs, and Andrew Mellinger (1999). Geography and Economic Development. *International Regional Science Review* 22: 179–232.
- Gwartney, J. D., Robert A. Lawson, and Randall G. Holcombe (1999). Economic Freedom and the Environment for Economic Growth. *Journal of Institutional and Theoretical Economics* 155 (December): 1–21.
- Hall, Joshua C., and Russell S. Sobel (forthcoming). Institutions, Entrepreneurship, and Regional Differences in Economic Growth. *Southern Journal of Entrepreneurship*.

Karabegović, Amela, and Fred McMahon (2006). *Economic Freedom of North America: 2006 Annual Report*. Fraser Institute.

Kirzner, Israel M. (1973). *Competition and Entrepreneurship*. University of Chicago Press.

Kirzner, Israel M. (1997). Entrepreneurial Discovery and the Competitive Market Process: An Austrian Approach. *Journal of Economic Literature* 35, 1: 60–85.

Kreft, Steven F., and Russell S. Sobel (2005). Public Policy, Entrepreneurship, and Economic Freedom. *Cato Journal* 25 (Fall): 595–616.

North, Douglass (1990). *Institutions, Institutional Change and Economic Performance*. Cambridge University Press.

North, Douglass (1991). Institutions. *Journal of Economic Perspectives*, 5, 1: 97–112.

Ovaska, Tomi, and Russell S. Sobel (2005). Entrepreneurship in Post-Socialist Economies. *Journal of Private Enterprise* 21 (Fall): 8–28.

Powell, Benjamin (2003). Economic Freedom and Growth: The Case of the Celtic Tiger. *Cato Journal* 22 (Winter): 431–48.

Rodrik, Dani (2004). Institutions Rule: The Primacy of Institutions over Geography and Integration in Economic Development. *Journal of Economic Growth* 9: 131–65.

Sachs, Jeffrey (2003). Institutions Don't Rule: Direct Effects of Geography on per Capita Income. NBER Working Paper 9490. National Bureau of Economic Research.

Sachs, Jeffrey, and Andrew Warner (2001). The Curse of Natural Resources. *European Economic Review* 45: 827–38.

Schumpeter, Joseph A. [1911] 1934. *The Theory of Economic Development*. Harvard University Press.

Smith, Adam [1776] (1904). *An Inquiry into the Nature and Causes of the Wealth of Nations*. 5th edition (Edwin Cannan, ed.). Methuen.

Sobel, Russell S. (2007). *Unleashing Capitalism: Why Prosperity Stops at the West Virginia Border and How to Fix It*. Center for Economic Growth, The Public Policy Foundation of West Virginia. <<http://www.be.wvu.edu/divecon/econ/sobel/UnleashingCapitalism/>>

Sobel, Russell S. (forthcoming). Testing Baumol: Institutional Quality and the Productivity of Entrepreneurship. *Journal of Business Venturing*.

Sobel, Russell S., J.R. Clark, and Dwight R. Lee (2007). Freedom, Barriers to Entry, Entrepreneurship, and Economic Progress. *Review of Austrian Economics* 20: 221–36.

Stewart, Dugald (1793). *Account of the Life and Writings of Adam Smith, L.L.D.* Royal Society of Edinburgh.

Tollison, Robert D. (1982). Rent Seeking: A Survey. *Kyklos* 35, 4: 575–602.

Tullock, Gordon (1967). The Welfare Cost of Tariffs, Monopolies, and Theft. *Western Economic Journal* 5, 3: 224–32.

US Census Bureau (2007). *Small Area Income & Poverty Estimates*. United States Census Bureau.