



AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search

<http://ageconsearch.umn.edu>

aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

An Economic Freedom Index for U.S. Metropolitan Areas

Dean B. Stansel

Florida Gulf Coast University – USA

Abstract. This paper is the first attempt to produce an economic freedom index for local economies in the U.S. It provides a more comprehensive measure of the restrictions government places upon economic freedom compared to simple fiscal measures like total government spending or revenue. That makes it a valuable tool for a wide variety of researchers seeking to investigate the impact of government upon society, including regional economists and researchers in state and local public finance. The two economic freedom indices of nations have stimulated a large body of such research. There are several similar indices that provide the same tool for those examining state governments. Like the other two sets of indices, higher levels of local economic freedom are found to be correlated with positive economic outcomes such as higher per capita income and lower unemployment.

1. Introduction

The question of why some areas are rich while others are poor has captured the attention of economists for centuries. In his seminal 1776 work, *The Wealth of Nations*, Adam Smith suggested that the “simple system of natural liberty” was the best way for societies to maximize their prosperity (Book IV, Chapter IX). In theory, keeping infringements on economic freedom to a minimum creates an environment that should prove to be more conducive to entrepreneurial activity and economic growth. In order to test that theory (and other theories), nearly 30 years ago scholars began an initiative to measure the level of economic freedom in nations across the globe. Those scholars have included Nobel Laureates Milton Friedman, Gary Becker, and Douglass North (Gwartney et al., 1996). While there are at least two national and two sub-national indices of economic freedom currently being updated regularly, there are no local indices. This paper provides the first local economic freedom index, measuring the level of economic freedom in U.S. metropolitan areas.

The first international report on this important topic – *Economic Freedom of the World, 1975-1995* (Gwartney et al., 1996) – defined economic freedom as follows:

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 (p. 12).

The formula has been gradually revised over the years, but the same basic definition remains.

Other similar indices have been developed as well (e.g., Miller et al., 2012), but since Gwartney et al. (2012) provide data going back to 1970, along with annual updates, it provides the most voluminous set of data available. There are literally hundreds of articles in academic journals that utilize the *Economic Freedom of the World* data to examine the relationship between economic freedom and a host

of economic conditions.¹ Their findings have illustrated a positive relationship between economic freedom and a wide variety of variables (e.g., GDP, GDP growth, literacy, and life expectancy).

The wide differences in economic freedom that we observe at the country level can exist at the sub-national level as well; e.g., residents in Texas and Florida have greater economic freedom than those in California and New York. *Economic Freedom of North America* (Karabegović et al., 2002), was the first effort to measure economic freedom in the U.S. states (and Canadian provinces). It provided data for 1981, 1985, 1989, and 1993-2000. Since then, data has been provided for every year. Ruger and Sorens (2009 and 2011) recently provided a more comprehensive index of both personal and economic freedom in the U.S. states. While these sub-national indices are newer, they have been cited by dozens of academic journal articles. The findings of that research are similar to those for the national indices.² Higher economic freedom is typically found to be associated with positive economic outcomes.

Just as the level of economic freedom can vary *across* sub-national jurisdictions, it can vary *within* them as well. For example, the Miami metropolitan area has substantially *less* economic freedom than Tampa, and the San Diego metropolitan area has substantially *more* economic freedom than Los Angeles. These differences in economic freedom may matter even more at the local level, since the cost of “voting with your feet” (Tiebout, 1960) by moving to a different metropolitan area is substantially lower than the cost of moving to a different state or country. Furthermore, national and state boundaries can be somewhat arbitrary, and local economies can cross those borders. For example, the Washington, D.C., metropolitan area includes parts of three states (in addition to the District of Columbia itself). There are 42 others that include counties in more than one state. Areas like San Diego, Tucson, El Paso, and Buffalo lie on national borders. Metropolitan areas are defined (and those definitions are regularly updated) by commuter patterns in an effort to capture the boundaries of local labor markets.³ Therefore, they may more accurately reflect actual “economies” than do states or nations.

¹ Hall and Lawson (forthcoming). See also the comprehensive list maintained at the report’s website at www.freetheworld.com/papers.html.

² Hall, Pulito, and VanMetre (2012) provide a good example of that research as well as a nice summary of previous research in this area.

³ For a brief discussion of the metropolitan area concept, see: www.census.gov/population/metro/about/.

The next section details the methodology and the data used in producing the index. Section 3 provides the index itself as well as some analysis of those results. Section 4 provides brief concluding remarks.

2. Methodology and Data

Since the *Economic Freedom of North America* (EFNA) index is the oldest of the state-level indices, the most recent version (Ashby et al., 2011) will be used as a model for this metropolitan area economic freedom index. The EFNA contains a total of ten variables, divided into three components. Those components are: Area 1: Size of Government; Area 2: Takings and Discriminatory Taxation; and Area 3: Labor Market Freedom. The first column of Tables 1-3 below provide descriptions of the components for states and provinces that were used in the EFNA. The second column provides a description of the analogous components used for metro areas. Table A1 in the appendix provides a more detailed description of the variables used herein and their sources.

The local fiscal data used in Areas 1 and 2 comes from the U.S. Census Bureau’s Census of Governments, performed every five years in the years ending in “2” and “7.” The local government data I use includes *all* local governments within each county (county, municipality, town and township, school district, and special district). There are over 3,000 counties in the U.S. containing more than 87,000 such local governments. The Census Bureau provides county totals, which I then aggregated to the metro area level by adding the county totals for each metro area. The latest data are from 2002.⁴ For Areas 1 and 2, the local components are described using the Census Bureau’s terminology. The fiscal measures are calculated as a percentage of 2002 personal income, the closest proxy to what the EFNA uses (gross state product, or state GDP). That personal income data comes from the Bureau of Economic Analysis.

There is wide variation across states in the way that government services are divided amongst local and state governments. As a result, using only the local government data would not allow for meaningful comparisons across metro areas in different

⁴ According to my private correspondence with the Census Bureau, the database file that provides 2007 county totals of fiscal activity by all local governments within each county would not be available until sometime after January 2013, well after submission of this article.

states. To facilitate such comparisons, the 2002 state government average for the same components was added to the local data,⁵ with state fiscal data coming from the U.S. Census Bureau's State Government Finance series and the state personal income data from the Bureau of Economic Analysis. So the index is based upon the combined burden of state and local government in each of the 384 U.S. metro areas.⁶ Since this is an index of economic freedom for metropolitan areas in the same country, no data for federal government spending or revenue is included.

As Table 1 indicates, the local measures for size of government match closely with those used in the state index. To provide a richer measure of the size of government, spending is measured three ways: consumption spending, transfers and subsidies, and spending on public pensions and unemployment compensation. A higher level of government spending means that a greater percentage of resources will be allocated through the political process rather than the market process. This will tend to reduce the gain produced by that spending. As a result, higher values on all three of these variables are interpreted as reducing economic freedom.

With one exception the match for takings and discriminatory taxation measures in Table 2 is also quite close. As with spending, taxation is measured in a variety of ways in order to provide a richer measure of the burden of government. The first variable is included to capture the impact of taxes not included in the other three measures. Since very few jurisdictions levy a local income tax, the top marginal income tax rate variable (2B) was replaced with a variable for the individual income tax reve-

nue share of personal income.⁷ Since higher levels of taxation remove greater amounts of money from the hands of private decision makers and places it into the hands of politicians and government employees with no profit motive, higher values of all three of these variables are interpreted as lowering economic freedom.

Table 3 details the Area 3 data for labor market freedom, which also matches fairly closely with that used in the EFNA. The minimum wage restricts the ability of workers and employers to engage in voluntary exchange. The minimum wage variable was calculated by multiplying the minimum wage in force in each area by 2,080 hours (40 hours per week times 52 weeks per year), then dividing that annual income level by the per capita personal income in that area. The variation in minimum wages is primarily *across* states; however, since per capita income varies across metro areas within the same state, this minimum wage variable also varies *within* states. The only local minimum wage in 2002 was in Washington, D.C., which was \$6.15, a dollar higher than the federal minimum wage of \$5.15.⁸ However, according to the Department of Labor, eleven states had minimum wages in 2002 that exceeded that federal level.⁹

Government employment as a percentage of total employment is based on government employment data from the U.S. Census Bureau¹⁰ and total employment data from the Bureau of Economic Analysis. Union density data come from Hirsch and Macpherson (2012), which is based on state-level data from the Current Population Survey. It refers to the percentage of total employed workers who

⁵ There are 43 metro areas (out of 384) that cross state boundaries. These areas contain counties in more than one state. The fiscal data for the state with the largest principal city in each area was used. For example, the Louisville-Jefferson County, Kentucky, metro area includes portions of Indiana. Since Louisville-Jefferson County is the largest principal city in the area, the state data for Kentucky was used. State taxes and spending are somewhat higher in Kentucky, so this would mean that a resident in the Indiana suburbs would have slightly higher economic freedom than the rankings herein imply.

⁶ The 384 metropolitan areas consist of 355 metropolitan statistical areas (MSA) and 29 metropolitan divisions (MD), as defined for 2009. MDs are the component areas within large MSAs. For example, San Francisco-San Mateo-Redwood City and Oakland-Fremont-Hayward are the two MDs within the San Francisco-Oakland-Fremont MSA. Since such large MSAs (previously called CMSAs, for consolidated metropolitan statistical areas) are fundamentally different from the other MSAs, the eleven such MSAs are not considered separately herein. Instead each of their 29, more comparable, component MDs are included.

⁷ An anonymous referee suggested that this variable (2B) might not be capturing much more than the overall tax variable (2A). The correlation between 2A and 2B is only 0.48. The correlation between the Area 2 average and the Area 2 average without the income tax revenue variable (2B) is 0.76, so it does seem to be capturing at least some differences across areas.

⁸ According to Sonn (2006), more recently three other local minimum wages have been established (Santa Fe, NM, and San Francisco, CA, in 2004, and Albuquerque, NM, in 2007). Note that there are other labor market interventions such as the federal Davis-Bacon Act requiring federal contractors to pay their workers at least the "prevailing wage" (or average pay) in the area. There are also "living wage" ordinances in some areas that require government contractors to be paid a wage above the legal minimum. Since both of these apply only to government contractors, and the former applies to all employers, their effect is likely small, so they are not incorporated herein.

⁹ www.dol.gov/twhd/state/stateMinWageHis.htm.

¹⁰ The local data is from the unpublished "County Area Employment" data series, based on Census of Governments data. The state data is from the unpublished "Public Employment" data series. Both are available from the Census Bureau upon request.

were union members. State data was used for three reasons.¹¹ (In the case of multi-state metro areas, data for the state with the largest principal city was used.) First, there was no local data for a substantial number of the metropolitan areas (143 of 384). Second, the data source includes a warning that the

small sample size in some areas creates problems.¹² Third, many of the restrictions on labor market freedom related to unions are determined at the state level. For all three of these Area 3 variables, higher values represent greater restrictions on labor markets, thus lowering economic freedom.

Table 1. Area 1: size of government.

<u>Economic Freedom of North America</u>	<u>Metro Area Economic Freedom Index</u>
<u>1A: General Consumption Expenditures by Government as a Percentage of GDP</u>	<u>1A: General Consumption Expenditures by Government as a Percentage of Personal Income</u>
Total Expenditures MINUS:	Total Expenditures MINUS:
Transfers to Persons	Total Assistance and Subsidies
Transfers to Businesses	<i>Total Intergovernmental Expenditure to State Government</i>
Transfers to Other Governments	<i>Total Intergovernmental Expenditure to Federal Govt.</i>
Interest on Public Debt	Total Interest on Debt
 <u>1B: Transfers and Subsidies as a Percentage of GDP</u>	 <u>1B: Transfers and Subsidies as a Percentage of Personal Income</u>
Includes transfers to persons and businesses such as :	<i>Total Assistance and Subsidies</i>
Welfare Payments	
Grants	
Agricultural Assistance	
Food-stamp Payments	
Housing Assistance	
 <u>1C: Social Security Payments as a Percentage of GDP</u>	 <u>1C: Social Security Payments as a Percentage of Personal Income</u>
Includes payments by:	<i>The sum of:</i>
Employment Insurance	<i>Total Expenditures on Unemployment Compensation</i>
Workers Compensation	<i>Total Expenditures on Employee Retirement</i>
various pension plans	

¹¹ I am grateful to Bob Lawson for suggesting this solution.

¹² For example, Athens, GA, had a union density of 0% in 2005 and 11% in 2007. McAllen, TX had 0.5% in 2005 and 12.3% in 2007.

Table 2. Area 2: takings and discriminatory taxation.

<u>Economic Freedom of North America</u>	<u>Metro Area Economic Freedom Index</u>
<u>2A: Total Tax Revenue as a Percentage of GDP</u> Total Tax Revenue	<u>2A: Total Tax Revenue as a Percentage of Personal Income</u> Total Tax Revenue
<u>2B: Top Marginal Income Tax Rate and the Income Threshold at Which It Applies</u>	<u>2B: Total Individual Income Tax Revenue as a Percentage of Personal Income</u> Total Individual Income Tax Revenue
<u>2C: Indirect Tax Revenue as a Percentage of GDP</u> Includes: Property Taxes Contributions to social security insurance (i.e., employment insurance, Workers Compensation, and various pension plans) other various taxes Does NOT include: Income Tax Revenue Sales Tax Revenue Natural Resource Royalties	<u>2C: Indirect Tax Revenue as a Percentage of Personal Income</u> Total Tax Revenue MINUS Total Income Tax Revenue and Total Sales Tax Revenue
<u>2D: Sales Taxes Collected as a Percentage of GDP</u> Total Sales Tax Revenue	<u>2D: Sales Taxes Collected as a Percentage of Personal Income</u> Total Sales Tax Revenue

Table 3. Area 3: labor market freedom.

<u>Economic Freedom of North America</u>	<u>Metro Area Economic Freedom Index</u>
3A: Minimum Wage Annual Income as a Percentage of Per Capita GDP	3A: Minimum Wage Annual Income as a Percentage of Metro Area Per Capita <i>Personal Income</i>
3B: Government Employment as a Percentage of Total State/Provincial Employment	3B: State and Local Government Employment as a Percentage of Total Employment
3C: State Union Density	3C: <i>State</i> Union Density

Following the approach of the EFNA, for each variable individual observations are given a value between zero and ten. The formula is detailed in Equation (1).

$$Value_i = \frac{Maximum\ Observed\ Value - Observation_i}{Maximum - Minimum} * 10 \quad (1)$$

For each metropolitan area, the values are averaged in each of the three component areas (Areas 1-3). Those three component averages are then averaged to get an overall economic freedom index score. Each of the three areas is equally weighted, as is each of the variables within those areas.

Similar to the annual indices of economic freedom in nations and states, this should be thought of as a work in progress. Area 3 in particular created the most difficulty, and it required several difficult trade-offs that may be revisited in future efforts. Furthermore, there are a variety of additional measures of restrictions on economic freedom at the state level that could have been incorporated. For example, the Institute for Justice recently produced a state ranking of occupational licensing restrictions (Carpenter et al., 2012). Those restrictions can also vary at the local level. However, whether this measure of local economic freedom would be improved by including such state-level data is unclear. Such issues will be taken up in future research efforts. The next section will present and discuss the scores for the 384 U.S. metropolitan areas.

3. Economic Freedom in U.S. Metropolitan Areas

The economic freedom index scores for the top 20 and bottom 20 metropolitan areas are presented in Tables 4 and 5. The complete list of 384 areas can be found in Table A2 of the appendix.¹³ The index scores vary quite widely from a high of 8.52 in Naples, Florida, to a low of 3.32 in El Centro, California. As Table 4 indicates, 17 of the 20 most-free metropolitan areas are in states with no tax on labor income (FL, NH, SD, TN, TX). Table 5 shows that 15 of the 20 least-free areas are in California or New York (areas with very high income taxes).

There are wide variations within states as well. Table 6 lists the most-free and least-free metropolitan area in the ten most populous states. (A more complete picture of this variation can be found in

Table A2 in the appendix, which is sorted alphabetically by state for ease of finding particular areas. Santa Ana-Anaheim-Irvine, the most-free area (at 6.77) in California, the state with the overall least-free area, has less economic freedom than the least-free area in Florida (Palm Coast at 7.45), the state with the overall most-free area. However, Santa Ana's economic freedom score is more than two times higher than the score for California's least-free area (El Centro, the overall least-free area).

The metro area economic freedom index is found to be correlated with positive economic outcomes, as is the case with the national and state freedom indices. Figure 1 shows that per capita personal income is highest in the most free quintile, about 7 percent higher than in the least free quintile. Income drops gradually over the next three quintiles before falling more substantially (by over \$1000) from the fourth to fifth quintile. As the scatter plot in Figure 2 indicates, there is a positive correlation between economic freedom and per capita personal income.

That same basic relationship is illustrated for the unemployment rate in Figure 3. The unemployment rate is highest in the least free quintile, about 22 percent higher than in the most free quintile. It declines substantially from the least free quintile to the fourth quintile, then more gradually over the next two before rising slightly in the most free quintile. There is a stronger (and negative) correlation between economic freedom and unemployment rate than there is with income. The outlier at the upper right of the scatter plot in Figure 4 is Yuma, AZ, with an economic freedom score of 6.94 and an unemployment rate of 16.8%. Yuma, located on the state's southern border with Mexico, has a largely agricultural economy, which Arizona's Department of Commerce cites as the reason for their abnormally high unemployment rate (Kline, 2009).

These results represent the first attempt to formulate an economic freedom index for local economies. There is much more work to be done to refine this measure. I hope that this paper will stimulate others to contribute to that effort. A local economic freedom index can provide a valuable tool to build upon the existing research using such indices for nations and states. For example, interested readers of this journal could use this data to study city-to-city migration as Ashby (2007) did for states, housing prices as Campbell et al. (2008) did for states, entrepreneurship and growth as Hall and Sobel (2007) did for states, and city growth as done by Stansel (2011).

¹³ For brevity, only the overall score and ranking is listed there. A dataset with full results, including the scores and rankings for each of the three subcomponent areas of the index, is available from the author upon request.

Table 4. The 20 most-free metro areas.

Area	Overall EFI	Rank	Area 1: Size of Government	Rank	Area 2: Takings and Discriminatory Taxation	Rank	Area 3: Labor Market Freedom	Rank
Naples-Marco Island, FL	8.52	1	9.48	1	6.94	47	9.13	1
Fort Walton Beach- Crestview-Destin, FL	8.39	2	9.25	10	7.60	8	8.32	14
Manchester-Nashua, NH	8.37	3	9.40	3	7.73	7	7.98	27
West Palm Beach-Boca Raton-Boynton Beach, FL *	8.34	4	9.29	8	6.70	86	9.04	2
Bradenton-Sarasota- Venice, FL	8.33	5	9.16	14	7.27	27	8.56	10
Sebastian-Vero Beach, FL	8.33	6	9.40	4	6.88	53	8.71	4
Rockingham County- Strafford County, NH *	8.23	7	9.48	2	7.45	18	7.77	45
Palm Bay-Melbourne- Titusville, FL	8.17	8	9.22	11	7.46	14	7.83	36
Sioux Falls, SD	8.11	9	8.82	37	6.89	52	8.63	8
Tampa-St. Petersburg- Clearwater, FL	8.07	10	9.02	23	6.92	50	8.25	17
Charlottesville, VA	8.06	11	9.26	9	6.75	78	8.15	19
Jacksonville, FL	8.05	12	8.59	66	7.06	39	8.52	11
Tyler, TX	8.05	13	8.80	40	7.47	13	7.88	31
Nashville-Davidson- Murfreesboro-Franklin, TN	8.01	14	8.41	91	7.55	11	8.08	22
Pensacola-Ferry Pass- Brent, FL	8.01	15	9.03	21	7.46	15	7.54	66
Ocala, FL	7.98	16	9.07	18	7.59	10	7.28	101
Boulder, CO	7.96	17	8.63	57	6.57	105	8.67	7
San Angelo, TX	7.95	18	8.83	36	7.32	26	7.71	50
Lakeland-Winter Haven, FL	7.92	19	8.96	27	7.49	12	7.30	96
Richmond, VA	7.90	20	8.94	28	6.67	92	8.08	21

Note: * indicates "metropolitan division," which is a separate part of one of the 11 larger consolidated metropolitan areas.

Table 5. The 20 least-free metro areas.

Area	Overall		Area 1: Size of Government		Area 2: Takings and Discriminatory Taxation		Area 3: Labor Market Freedom	
	EFI	Rank		Rank		Rank		Rank
El Centro, CA	3.32	384	2.65	384	5.71	270	1.58	384
Visalia-Porterville, CA	4.19	383	3.51	382	6.22	165	2.85	382
Merced, CA	4.31	382	4.25	379	6.06	197	2.62	383
Kingston, NY	4.48	381	6.75	306	2.82	384	3.86	374
Glens Falls, NY	4.50	380	6.87	288	3.32	382	3.32	380
Bakersfield, CA	4.57	379	4.54	377	5.55	298	3.62	379
New York-White Plains- Wayne, NY-NJ *	4.60	378	5.21	368	3.56	380	5.04	334
Modesto, CA	4.66	377	4.24	380	5.66	277	4.09	366
Fresno, CA	4.79	376	4.50	378	5.90	238	3.98	372
Wenatchee-East Wenatchee, WA	4.88	375	4.62	373	5.98	222	4.06	369
Hanford-Corcoran, CA	4.91	374	5.51	362	6.30	148	2.92	381
Weirton-Steubenville, WV-OH	4.94	373	4.55	376	4.79	361	5.49	312
Fairbanks, AK	4.98	372	3.62	381	7.16	33	4.15	363
Utica-Rome, NY	4.99	371	6.77	305	4.52	369	3.69	378
Binghamton, NY	5.00	370	6.78	302	4.42	374	3.80	376
Stockton, CA	5.01	369	5.26	367	5.72	267	4.03	370
Anchorage, AK	5.02	368	3.27	383	7.14	36	4.66	349
Madera-Chowchilla, CA	5.05	367	5.46	364	5.94	232	3.77	377
Yuba City, CA	5.11	366	5.35	366	6.16	176	3.84	375
Longview, WA	5.12	365	5.40	365	5.97	224	3.99	371

Note: * indicates "metropolitan division," which is a separate part of one of the 11 larger consolidated metropolitan areas.

Table 6. Most- and least-free metro area in the ten most populous states.

Area	Overall EFI	Rank	Area 1: Size of Government, Rank	Area 2: Takings and Discriminatory Taxation, Rank	Area 3: Labor Market Freedom, Rank
Santa Ana-Anaheim-Irvine, CA *	6.77	197	132	252	217
El Centro, CA	3.32	384	384	270	384
Tyler, TX	8.05	13	40	13	31
Laredo, TX	6.05	299	229	247	347
Albany-Schenectady-Troy, NY	5.54	341	260	372	337
Kingston, NY	4.48	381	306	384	374
Naples-Marco Island, FL	8.52	1	1	47	1
Palm Coast, FL	7.45	78	5	112	208
Lake County-Kenosha County, IL-WI *	7.03	143	98	190	186
Champaign-Urbana, IL	6.29	276	275	150	307
Lancaster, PA	7.05	138	179	142	141
Johnstown, PA	6.47	245	249	61	323
Cincinnati-Middletown, OH-KY-IN	5.98	307	354	282	193
Cleveland-Elyria-Mentor, OH	5.41	347	359	370	267
Warren-Troy-Farmington Hills, MI *	6.96	156	100	187	215
Detroit-Livonia-Dearborn, MI *	5.48	345	327	336	335
Newark-Union, NJ-PA *	6.83	181	114	243	222
Ocean City, NJ	5.40	349	220	381	332
Atlanta-Sandy Springs-Marietta, GA	7.54	60	102	208	16
Albany, GA	6.57	228	209	304	191

Note: * indicates "metropolitan division," which is a separate part of one of the 11 larger consolidated metropolitan areas.

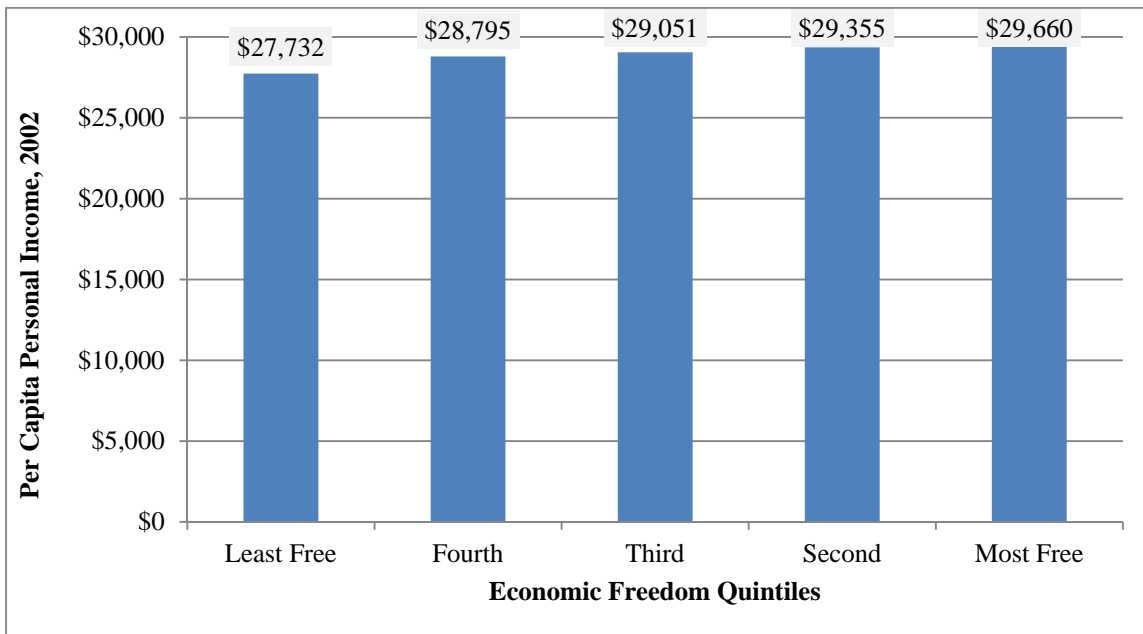


Figure 1. Economic freedom by quintile and per capita personal income, 2002.

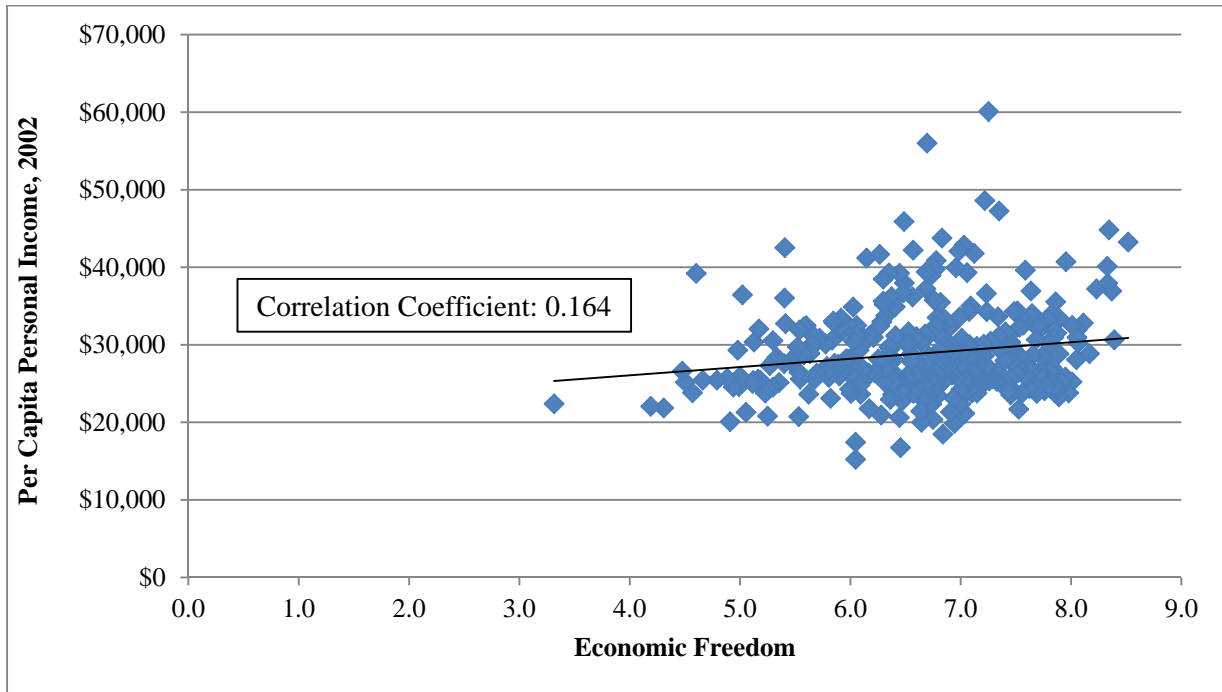


Figure 2. Economic freedom and per capita personal income, 2002.

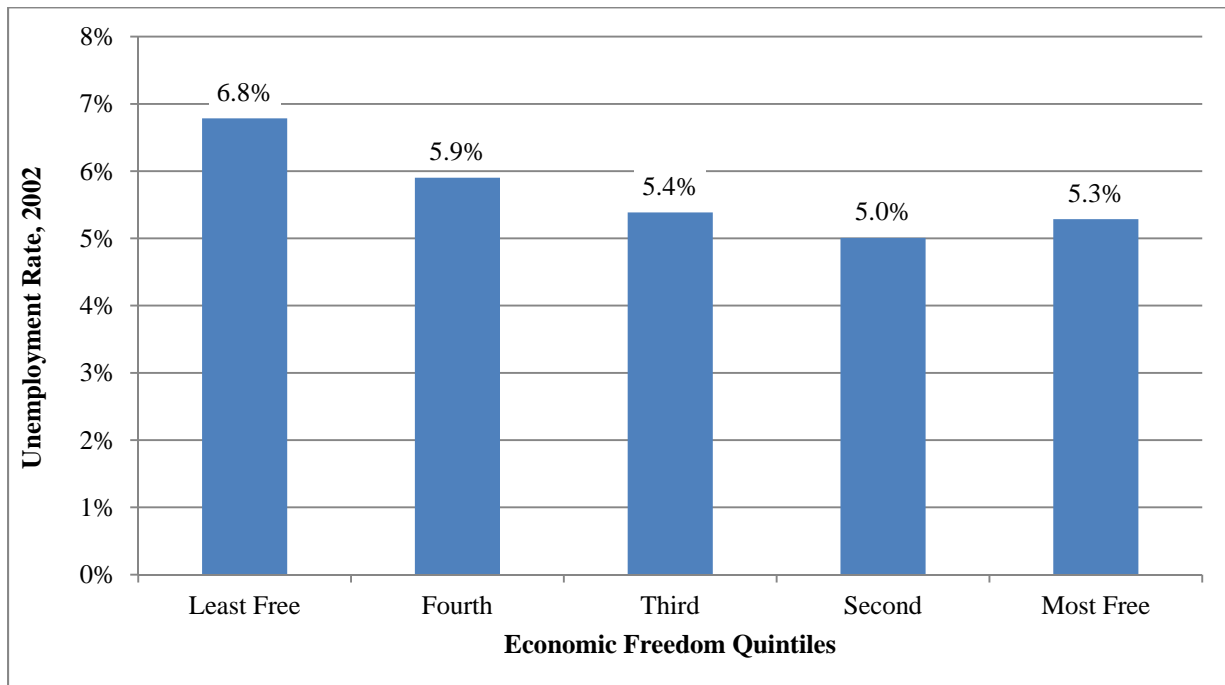


Figure 3: Economic freedom by quintile and unemployment rate, 2002.

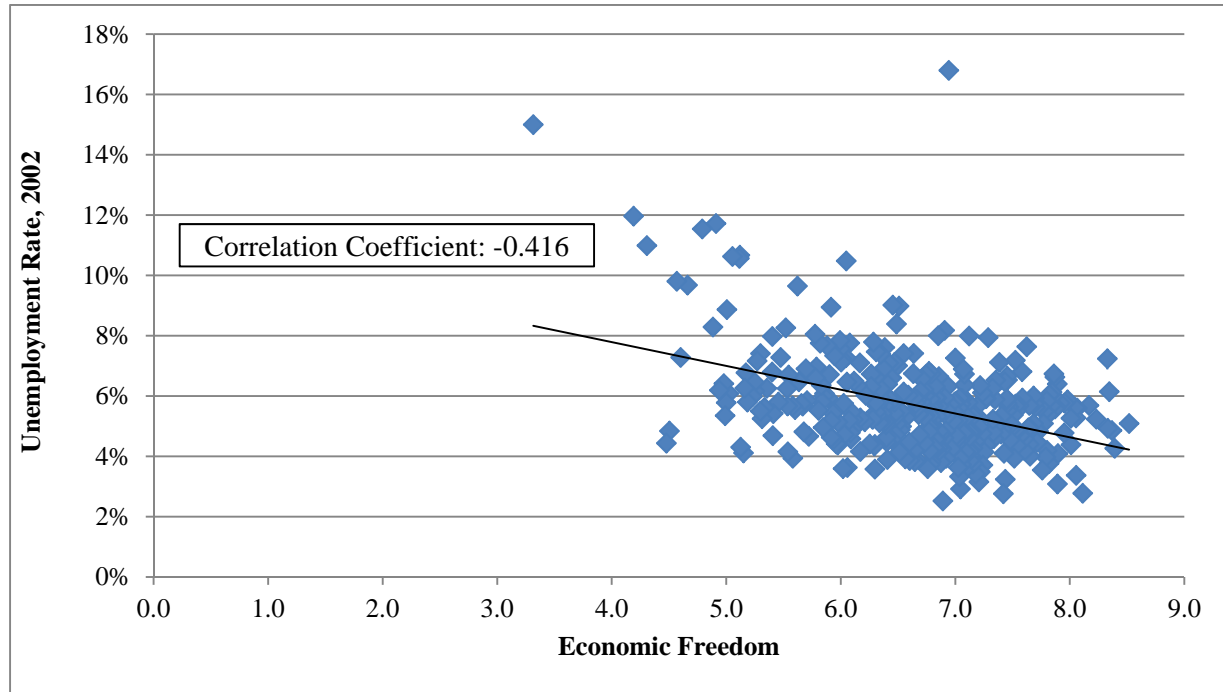


Figure 4: Economic freedom and unemployment rate, 2002.

4. Conclusion

Adam Smith claimed that the “system of natural liberty” was a crucial ingredient in the recipe for economic prosperity. In order to test that important hypothesis, we need credible measures of the extent to which that system exists in different jurisdictions. There are already several indices of economic freedom available for nations and for sub-national jurisdictions (like U.S. states and Canadian provinces). These indices provide more comprehensive measures than other alternatives such as total government spending or revenue. There is a large body of research examining the relationship between economic freedom and economic prosperity in nations. One of the problems such research faces is that there are numerous differences across highly disparate nations that are difficult to incorporate into an econometric test.

This paper provides the first attempt at a local economic freedom index that can be used to build on that national and state research by examining the same types of relationships in local economies, where those unquantifiable differences across areas are less pronounced. There is much work to be done in refining this measure, for example by incorporating regulatory costs. While rigorous hypothesis testing is beyond the scope of this paper, some simple

statistical analysis indicated that economic freedom is positively correlated with two measures of economic prosperity. These preliminary results are similar to the findings for nations and states.

Acknowledgements

I am grateful to Brad Hobbs and Steve Gohmann for their efforts on a previous version and to Wendell Cox, Peter Gordon, Josh Hall, Bob Lawson, Adrian Moore, and Sam Staley for helpful comments and suggestions. Brandon Wasicsko and Amy Weisgarber provided valuable research assistance.

References

- Ashby, N. 2007. Economic freedom and migration flows between U.S. states. *Southern Economic Journal* 73:677-697.
- Ashby, N., A. Bueno, and F. McMahon. 2011. *Economic Freedom of North America 2011*. Vancouver: Fraser Institute.
- Campbell, N., A. Jauregui, and K. Heriot. 2008. Housing prices and economic freedom. *Journal of Private Enterprise* 23:1-17.

- Carpenter, D., L. Knepper, A. Erickson, and J. Ross. 2012. *License to Work: A National Study of Burdens from Occupational Licensing*. Washington, D.C.: Institute for Justice.
- Gwartney, J., R. Lawson, and J. Hall. 2012. *Economic Freedom of the World: 2012 Annual Report*. Vancouver: Fraser Institute.
- Gwartney, J., R. Lawson, and W. Block. 1996. *Economic Freedom of the World, 1975–1995*. Vancouver: Fraser Institute.
- Hall, J., and R. Lawson. Forthcoming. Economic freedom of the world: An accounting of the literature. *Contemporary Economic Policy*.
- Hall, J., J. Pulito, and B. VanMetre. 2012. Freedom and entrepreneurship: New evidence from the 50 states. Working Paper, Mercatus Center at George Mason University.
- Hall, J., and R. Sobel. 2008. Institutions, entrepreneurship, and regional differences in economic growth. *Southern Journal of Entrepreneurship* 1: 69-96.
- Hirsch, B., and D. Macpherson. 2012. *Union Membership and Coverage Database*. www.unionstats.com/.
- Karabegović, A., F. McMahon, and D. Samida. 2002. *Economic Freedom of North America*. Vancouver: Fraser Institute, and Dallas: National Center for Policy Analysis.
- Kline, B. 2009. Yuma unemployment rate among nation's highest. azcentral.com/12news/news/articles/2009/02/09/20090209yumaunemploy020909-CR.html.
- Miller, T., K.R. Holmes, and E.J. Feulner. 2012. *2012 Index of Economic Freedom*. Washington, D.C.: The Heritage Foundation.
- Ruger, W., and J. Sorens. 2009. *Freedom in the 50 States: An Index of Personal and Economic Freedom*. Arlington, VA: Mercatus Center at George Mason University.
- Ruger, W., and J. Sorens. 2011. *Freedom in the 50 States 2011: An Index of Personal and Economic Freedom*. Arlington, VA: Mercatus Center at George Mason University.
- Sonn, P. 2006. Citywide minimum wage laws: A new policy tool for local governments. *Economic Policy Brief*, No. 1 (May), New York: Brennan Center for Justice.
- Stansel, D. 2011. Why some cities are growing while others are shrinking. *Cato Journal* 31: 285-303.
- Tiebout, C. 1956. A pure theory of local expenditures. *Journal of Political Economy* 64: 416-24.

Appendix

Table A1. Data sources.

Area 1: Size of Government

1A: General Consumption Expenditures by State and Local Government as a Percentage of Personal Income

Total Expenditures MINUS: Total Assistance and Subsidies, Total Intergovernmental Expenditure to State Government, Total Intergovernmental Expenditure to Federal Government, and Total Interest on Debt

1B: Transfers and Subsidies by State and Local Government as a Percentage of Personal Income

Total Assistance and Subsidies

1C: Social Security Payments by State and Local Government as a Percentage of Personal Income

The sum of: Total Expenditures on Unemployment Compensation and Total Expenditures on Employee Retirement

Sources: State Fiscal: U.S. Census Bureau, *State Government Finances*.

Local Fiscal: U.S. Census Bureau, *Census of Governments*, County Area Finances dataset.

State and Local Personal Income: U.S. Department of Commerce, Bureau of Economic Analysis.

Area 2: Takings and Discriminatory Taxation

2A: Total Tax Revenue as a Percentage of Personal Income

2B: Total Income Tax Revenue as a Percentage of Personal Income

2C: Indirect Tax Revenue as a Percentage of Personal Income

Total Tax Revenue MINUS: Total Income Tax Revenue and Total Sales Tax Revenue

2D: Sales Taxes Collected as a Percentage of Personal Income

Total Sales Tax Revenue

Sources: State Fiscal: U.S. Census Bureau, *State Government Finances*.

Local Fiscal: U.S. Census Bureau, *Census of Governments*, County Area Finances dataset.

State and Local Personal Income: U.S. Department of Commerce, Bureau of Economic Analysis.

Area 3: Labor Market Freedom

3A: Minimum Wage Annual Income as a Percentage of Metro Area Per Capita Personal Income

Sources: State Minimum Wage: U.S. Department of Labor, www.dol.gov/whd/state/stateMinWageHis.htm

Local Minimum Wage: Sonn, Paul. 2006. "Citywide Minimum Wage Laws: A New Policy Tool for Local Governments," Economic Policy Brief, No. 1 May 2006, (New York: Brennan Center for Justice).

U.S. Department of Labor, www.dol.gov/whd/state/stateMinWageHis.htm

Local Personal Income: U.S. Department of Commerce, Bureau of Economic Analysis.

Local Population: U.S. Department of Commerce, Bureau of Economic Analysis.

3B: State and Local Government Employment as a Percentage of Total Employment

Sources: State Government: U.S. Census Bureau, *Public Employment*.

Local Government: U.S. Census Bureau, *Census of Governments*, County Area Employment data set.

Total: U.S. Department of Commerce, Bureau of Economic Analysis.

3C: State Union Density

Source: Hirsch, Barry T., and David A. Macpherson. 2012. Union Membership and Coverage Database.

www.unionstats.com/ (This data is based on data from the Current Population Survey. It refers to the percentage of total employed workers in each *state* who were union members.)

Table A2. Economic Freedom Index of U.S. Metro Areas (sorted alphabetically by state).

Area	Overall		Area	Overall	
	EFI	Rank		EFI	Rank
Montgomery, AL	7.13	119	Chico, CA	5.30	354
Huntsville, AL	6.86	174	Redding, CA	5.27	356
Birmingham-Hoover, AL	6.83	183	Los Angeles-Long Beach, CA *	5.17	361
Gadsden, AL	6.71	210	Yuba City, CA	5.11	366
Decatur, AL	6.67	216	Madera-Chowchilla, CA	5.05	367
Anniston-Oxford, AL	6.47	243	Stockton, CA	5.01	369
Dothan, AL	6.40	254	Hanford-Corcoran, CA	4.91	374
Tuscaloosa, AL	6.40	255	Fresno, CA	4.79	376
Mobile, AL	6.36	263	Modesto, CA	4.66	377
Auburn-Opelika, AL	6.17	284	Bakersfield, CA	4.57	379
Florence-Muscle Shoals, AL	5.82	324	Merced, CA	4.31	382
-----	-----	-----	-----	-----	-----
Anchorage, AK	5.02	368	Visalia-Porterville, CA	4.19	383
Fairbanks, AK	4.98	372	El Centro, CA	3.32	384
-----	-----	-----	-----	-----	-----
Phoenix-Mesa-Scottsdale, AZ	7.47	72	Boulder, CO	7.96	17
Tucson, AZ	7.19	108	Colorado Springs, CO	7.85	28
Flagstaff, AZ	7.16	111	Grand Junction, CO	7.64	51
Yuma, AZ	6.94	157	Denver-Aurora-Broomfield, CO	7.59	56
Lake Havasu City-Kingman, AZ	6.75	201	Fort Collins-Loveland, CO	7.57	58
Prescott, AZ	6.74	203	Pueblo, CO	7.39	86
-----	-----	-----	-----	-----	-----
Little Rock-North Little Rock-Conway, AR	7.15	116	Greeley, CO	7.33	93
Hot Springs, AR	7.05	137	-----	-----	-----
Fayetteville-Springdale-Rogers, AR-MO	7.04	142	Bridgeport-Stamford-Norwalk, CT	7.25	99
Fort Smith, AR-OK	6.79	189	Hartford-West Hartford-East Hartford, CT	6.73	205
Jonesboro, AR	6.66	218	Norwich-New London, CT	6.56	230
Pine Bluff, AR	6.64	223	New Haven-Milford, CT	6.48	241
-----	-----	-----	-----	-----	-----
Santa Ana-Anaheim-Irvine, CA *	6.77	197	Wilmington, DE-MD-NJ *	6.82	186
San Francisco-San Mateo-Redwood City, CA *	6.70	211	Dover, DE	6.66	217
-----	-----	-----	-----	-----	-----
Santa Rosa-Petaluma, CA	6.49	239	Washington-Arlington-Alexandria, DC-VA-MD-WV *	7.12	122
San Jose-Sunnyvale-Santa Clara, CA	6.49	240	-----	-----	-----
Napa, CA	6.45	247	Naples-Marco Island, FL	8.52	1
San Diego-Carlsbad-San Marcos, CA	6.39	258	Fort Walton Beach-Crestview-Destin, FL	8.39	2
Santa Cruz-Watsonville, CA	6.35	266	West Palm Beach-Boca Raton-Boynton Beach, FL *	8.34	4
Oxnard-Thousand Oaks-Ventura, CA	6.31	272	Bradenton-Sarasota-Venice, FL	8.33	5
Oakland-Fremont-Hayward, CA *	6.27	280	Sebastian-Vero Beach, FL	8.33	6
-----	-----	-----	Palm Bay-Melbourne-Titusville, FL	8.17	8
Salinas, CA	5.92	314	Tampa-St. Petersburg-Clearwater, FL	8.07	10
Santa Barbara-Santa Maria-Goleta, CA	5.92	315	Jacksonville, FL	8.05	12
Vallejo-Fairfield, CA	5.84	322	Pensacola-Ferry Pass-Brent, FL	8.01	15
San Luis Obispo-Paso Robles, CA	5.72	329	Ocala, FL	7.98	16
Sacramento – Arden-Arcade – Roseville, CA	5.60	337	Lakeland-Winter Haven, FL	7.92	19
-----	-----	-----	Port St. Lucie, FL	7.87	25
Riverside-San Bernardino-Ontario, CA	5.35	351	Fort Lauderdale-Pompano Beach-Deerfield Beach, FL *	7.80	34

Table A2 (continued). Economic Freedom Index of U.S. metro areas (sorted alphabetically by state).

Area	Overall		Area	Overall	
	EFI	Rank		EFI	Rank
Gainesville, FL	7.79	35	Elkhart-Goshen, IN	7.40	85
Orlando-Kissimmee, FL	7.74	39	Indianapolis-Carmel, IN	7.34	91
Cape Coral-Fort Myers, FL	7.72	41	Lafayette, IN	7.27	97
Tallahassee, FL	7.71	42	Muncie, IN	7.26	98
Punta Gorda, FL	7.70	43	South Bend-Mishawaka, IN-MI	7.21	105
Panama City-Lynn Haven-Panama City Beach, FL	7.53	65	Bloomington, IN	7.15	115
Miami-Miami Beach-Kendall, FL *	7.46	73	Anderson, IN	7.11	125
Deltona-Daytona Beach-Ormond Beach, FL	7.45	74	Columbus, IN	7.08	130
Palm Coast, FL	7.45	78	Terre Haute, IN	7.04	141
Atlanta-Sandy Springs-Marietta, GA	7.54	60	Michigan City-La Porte, IN	6.77	198
Columbus, GA-AL	7.51	68	Gary, IN *	6.74	204
Augusta-Richmond County, GA-SC	7.50	69	Kokomo, IN	6.71	208
Warner Robins, GA	7.24	100	Iowa City, IA	7.42	82
Athens-Clarke County, GA	7.16	112	Dubuque, IA	7.14	117
Dalton, GA	7.15	113	Des Moines-West Des Moines, IA	7.08	132
Savannah, GA	7.13	118	Cedar Rapids, IA	7.01	146
Macon, GA	7.10	127	Ames, IA	6.89	166
Rome, GA	6.86	171	Waterloo-Cedar Falls, IA	6.88	169
Gainesville, GA	6.84	177	Davenport-Moline-Rock Island, IA-IL	6.80	188
Hinesville-Fort Stewart, GA	6.84	178	Sioux City, IA-NE-SD	6.60	225
Brunswick, GA	6.82	185	Wichita, KS	7.45	77
Valdosta, GA	6.65	220	Lawrence, KS	7.13	120
Albany, GA	6.57	228	Manhattan, KS	7.13	121
Honolulu, HI	5.58	338	Topeka, KS	7.01	148
Boise City-Nampa, ID	7.37	87	Louisville-Jefferson County, KY-IN	6.68	215
Idaho Falls, ID	7.06	136	Elizabethtown, KY	6.66	219
Lewiston, ID-WA	6.99	152	Lexington-Fayette, KY	6.60	226
Coeur d'Alene, ID	6.50	238	Bowling Green, KY	6.47	242
Pocatello, ID	6.47	244	Owensboro, KY	6.38	260
Lake County-Kenosha County, IL-WI *	7.03	143	Lafayette, LA	6.77	199
Springfield, IL	6.87	170	Alexandria, LA	6.41	251
Peoria, IL	6.86	172	New Orleans-Metairie-Kenner, LA	6.36	262
Decatur, IL	6.85	175	Baton Rouge, LA	6.32	269
Bloomington-Normal, IL	6.79	190	Shreveport-Bossier City, LA	6.12	288
Kankakee-Bradley, IL	6.63	224	Monroe, LA	6.11	289
Rockford, IL	6.55	232	Houma-Bayou Cane-Thibodaux, LA	6.09	292
Danville, IL	6.38	259	Lake Charles, LA	5.81	325
Chicago-Naperville-Joliet, IL *	6.37	261	Portland-South Portland-Biddeford, ME	6.06	296
Champaign-Urbana, IL	6.29	276	Lewiston-Auburn, ME	5.97	308
Evansville, IN-KY	7.48	71	Bangor, ME	5.92	313
Fort Wayne, IN	7.41	83	Hagerstown-Martinsburg, MD-WV	7.33	92

Table A2 (continued). Economic Freedom Index of U.S. metro areas (sorted alphabetically by state).

Area	Overall		Area	Overall	
	EFI	Rank		EFI	Rank
Baltimore-Towson, MD	7.23	102	Kansas City, MO-KS	6.99	153
Bethesda-Frederick-Rockville, MD *	7.22	103	Cape Girardeau-Jackson, MO-IL	6.88	168
Salisbury, MD	7.03	145	Billings, MT	7.03	144
Cumberland, MD-WV	6.94	158	Missoula, MT	6.92	160
Cambridge-Newton-Framingham, MA *	7.35	89	Great Falls, MT	6.85	176
Peabody, MA *	7.06	135	Omaha-Council Bluffs, NE-IA	7.52	67
Boston-Quincy, MA *	6.98	154	Lincoln, NE	7.44	79
Pittsfield, MA	6.84	180	Carson City, NV	7.69	45
Worcester, MA	6.79	192	Reno-Sparks, NV	7.64	52
Barnstable Town, MA	6.69	212	Las Vegas-Paradise, NV	7.27	96
Springfield, MA	6.53	233	Manchester-Nashua, NH	8.37	3
Warren-Troy-Farmington Hills, MI *	6.96	156	Rockingham Co.-Strafford Co., NH *	8.23	7
Ann Arbor, MI	6.76	200	Newark-Union, NJ-PA *	6.83	181
Holland-Grand Haven, MI	6.68	214	Edison-New Brunswick, NJ *	6.78	195
Grand Rapids-Wyoming, MI	6.55	231	Trenton-Ewing, NJ	6.57	229
Jackson, MI	6.45	248	Camden, NJ *	6.32	268
Saginaw-Saginaw Township North, MI	6.42	250	Vineland-Millville-Bridgeton, NJ	6.00	305
Kalamazoo-Portage, MI	6.40	256	Atlantic City-Hammonton, NJ	5.85	320
Monroe, MI	6.35	264	Ocean City, NJ	5.40	349
Niles-Benton Harbor, MI	6.35	265	Albuquerque, NM	6.34	267
Lansing-East Lansing, MI	6.25	281	Santa Fe, NM	5.53	342
Battle Creek, MI	6.22	282	Las Cruces, NM	5.53	343
Muskegon-Norton Shores, MI	5.99	306	Farmington, NM	5.25	357
Flint, MI	5.95	310	Albany-Schenectady-Troy, NY	5.54	341
Bay City, MI	5.78	327	Nassau-Suffolk, NY *	5.41	348
Detroit-Livonia-Dearborn, MI *	5.48	345	Buffalo-Niagara Falls, NY	5.33	352
Rochester, MN	6.41	253	Syracuse, NY	5.31	353
Minneapolis-St. Paul-Bloomington, MN-WI	6.30	274	Rochester, NY	5.30	355
Mankato-North Mankato, MN	6.02	302	Elmira, NY	5.25	358
St. Cloud, MN	5.94	311	Ithaca, NY	5.15	363
Duluth, MN-WI	5.46	346	Poughkeepsie-Newburgh-Middletown, NY	5.13	364
Jackson, MS	6.93	159	Binghamton, NY	5.00	370
Gulfport-Biloxi, MS	6.31	271	Utica-Rome, NY	4.99	371
Hattiesburg, MS	6.09	291	New York-White Plains-Wayne, NY-NJ *	4.60	378
Pascagoula, MS	6.01	303	Glens Falls, NY	4.50	380
Jefferson City, MO	7.61	54	Kingston, NY	4.48	381
St. Louis, MO-IL *	7.49	70	Raleigh-Cary, NC	7.65	49
Columbia, MO	7.18	109	Durham-Chapel Hill, NC	7.54	62
Springfield, MO	7.12	124	Burlington, NC	7.52	66
Joplin, MO	7.10	126	Winston-Salem, NC	7.45	76
St. Joseph, MO-KS	7.00	149	Jacksonville, NC	7.43	80

Table A2 (continued). Economic Freedom Index of U.S. metro areas (sorted alphabetically by state).

Area	Overall		Area	Overall	
	EFI	Rank		EFI	Rank
Greensboro-High Point, NC	7.35	88	Pittsburgh, PA	6.81	187
Charlotte-Gastonia-Concord, NC-SC	7.24	101	Erie, PA	6.74	202
Asheville, NC	7.15	114	Williamsport, PA	6.73	207
Hickory-Lenoir-Morganton, NC	7.12	123	Philadelphia, PA *	6.69	213
Goldsboro, NC	7.08	129	Reading, PA	6.64	222
Fayetteville, NC	7.07	133	Allentown-Bethlehem-Easton, PA-NJ	6.53	234
Greenville, NC	6.86	173	Johnstown, PA	6.47	245
Rocky Mount, NC	6.51	237	Providence-Warwick-Pawtucket, RI	5.93	312
Wilmington, NC	6.30	273	Anderson, SC	7.22	104
Bismarck, ND	7.21	107	Florence, SC	7.08	131
Fargo, ND-MN	7.05	139	Columbia, SC	7.07	134
Grand Forks, ND-MN	6.51	236	Charleston-North Charleston-Summerville, SC	7.01	147
Cincinnati-Middleton, OH-KY-IN	5.98	307	Greenville-Mauldin-Easley, SC	7.00	150
Youngstown-Warren-Boardman, OH-PA	5.90	316	Sumter, SC	7.00	151
Canton-Massillon, OH	5.89	317	Spartanburg, SC	6.79	191
Columbus, OH	5.85	321	Myrtle Beach-North Myrtle Beach-Conway, SC	6.39	257
Lima, OH	5.83	323	Sioux Falls, SD	8.11	9
Springfield, OH	5.79	326	Rapid City, SD	7.89	21
Akron, OH	5.71	330	Nashville—Davidson—Murfreesboro—Franklin, TN	8.01	14
Sandusky, OH	5.67	333	Morristown, TN	7.89	22
Dayton, OH	5.66	334	Clarksville, TN-KY	7.87	24
Toledo, OH	5.63	335	Kingsport-Bristol-Bristol, TN-VA	7.78	36
Mansfield, OH	5.55	340	Cleveland, TN	7.77	37
Cleveland-Elyria-Mentor, OH	5.41	347	Johnson City, TN	7.69	44
Tulsa, OK	7.21	106	Knoxville, TN	7.65	48
Oklahoma City, OK	7.17	110	Chattanooga, TN-GA	7.54	61
Lawton, OK	6.78	196	Memphis, TN-MS-AR	7.41	84
Corvallis, OR	6.73	206	Jackson, TN	6.59	227
Medford-Ashland, OR	6.31	270	Tyler, TX	8.05	13
Portland-Vancouver-Beaverton, OR-WA	6.29	277	San Angelo, TX	7.95	18
Salem, OR	6.17	286	Texarkana, TX-Texarkana, AR	7.88	23
Bend, OR	6.08	294	Dallas-Plano-Irving, TX *	7.86	26
Eugene-Springfield, OR	6.00	304	Killeen-Temple-Fort Hood, TX	7.85	27
Lancaster, PA	7.05	138	Wichita Falls, TX	7.84	29
State College, PA	6.97	155	Houston-Sugar Land-Baytown, TX	7.82	30
York-Hanover, PA	6.92	162	Midland, TX	7.73	40
Harrisburg-Carlisle, PA	6.90	165	Fort Worth-Arlington, TX *	7.68	46
Altoona, PA	6.84	179	Abilene, TX	7.68	47
Scranton—Wilkes-Barre, PA	6.83	182	Lubbock, TX	7.65	50
Lebanon, PA	6.82	184	Amarillo, TX	7.60	55

Table A2 (continued). Economic Freedom Index of U.S. metro areas (sorted alphabetically by state).

Area	Overall		Area	Overall	
	EFI	Rank		EFI	Rank
Longview, TX	7.58	57	Seattle-Bellevue-Everett, WA *	6.15	287
Waco, TX	7.56	59	Olympia, WA	6.05	297
San Antonio, TX	7.53	64	Spokane, WA	5.88	318
Sherman-Denison, TX	7.45	75	Tacoma, WA *	5.78	328
Austin-Round Rock, TX	7.35	90	Bellingham, WA	5.70	331
Corpus Christi, TX	7.32	94	Yakima, WA	5.62	336
Beaumont-Port Arthur, TX	7.29	95	Mount Vernon-Anacortes, WA	5.52	344
College Station-Bryan, TX	7.04	140	Kennewick-Pasco-Richland, WA	5.40	350
El Paso, TX	6.91	164	Longview, WA	5.12	365
Victoria, TX	6.78	193	Wenatchee-East Wenatchee, WA	4.88	375
Odessa, TX	6.71	209	Morgantown, WV	5.68	332
Brownsville-Harlingen, TX	6.46	246	Charleston, WV	5.58	339
McAllen-Edinburg-Mission, TX	6.05	298	Huntington-Ashland, WV-KY-OH	5.23	359
Laredo, TX	6.05	299	Parkersburg-Marietta-Vienna, WV-OH	5.18	360
Ogden-Clearfield, UT	6.92	161	Wheeling, WV-OH	5.16	362
Salt Lake City, UT	6.91	163	Weirton-Steubenville, WV-OH	4.94	373
Logan, UT-ID	6.65	221	Oshkosh-Neenah, WI	6.52	235
Provo-Orem, UT	6.45	249	Racine, WI	6.41	252
St. George, UT	6.28	278	Madison, WI	6.30	275
Burlington-South Burlington, VT	6.78	194	Green Bay, WI	6.21	283
Charlottesville, VA	8.06	11	Appleton, WI	6.17	285
Richmond, VA	7.90	20	Fond du Lac, WI	6.10	290
Winchester, VA-WV	7.82	31	Sheboygan, WI	6.09	293
Lynchburg, VA	7.81	32	Eau Claire, WI	6.07	295
Roanoke, VA	7.80	33	Wausau, WI	6.03	300
Harrisonburg, VA	7.76	38	Milwaukee-Waukesha-West Allis, WI	6.03	301
Danville, VA	7.62	53	La Crosse, WI-MN	5.96	309
Blacksburg-Christiansburg-Radford, VA	7.53	63	Janesville, WI	5.86	319
Virginia Beach-Norfolk-Newport News, VA-NC	7.43	81	Casper, WY	7.09	128
Bremerton-Silverdale, WA	6.27	279	Cheyenne, WY	6.88	167

Note: For brevity, only the overall score and ranking is listed there. Full results, including the scores and rankings for each of the three sub-component areas of the index, are available from the author upon request. * indicates "metropolitan division," which is a separate part of one of the 11 larger consolidated metropolitan areas.