

Chapter 4

Economic Freedom in the United Mexican States

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The effort to provide a measure of economic freedom including all three nations of North America has been hampered by the difficulty in obtaining data for the Mexican states. In the past year, however, much of the data needed to construct an index for the 31 Mexican states for the year 2003 has been collected. Although these data are not completely comparable, they are sufficient for the time being to analyze economic performance across the Mexican states.

No attempt has yet been made to make the values for Mexican states comparable to those of Canadian provinces or US states. There are two reasons for this: first, not all the data required are available or fully trustworthy at this point for the Mexican states; second, the incorporation of the Mexican states would require adding data categories for the Canadian provinces and US states. At present, the index of *Economic Freedom of North America* does not contain components on the rule of law and property rights, both of which are well-established and protected in Canada and the United States with little variation among states or provinces. This is not the case with Mexico, where both can vary broadly across states, and components would have to be added to the index constructed from Canadian and American data to capture this variation.

Because of these limitations, the results presented here should be considered preliminary and subject to revision. It is hoped that future editions of *Economic Freedom of North America* will include estimates of economic freedom for Mexico comparable to those of the Canadian provinces and US states.

The Data

Figure 4.1 shows a summary of the components included in the economic freedom index for the Mexican states. Data have been gathered for seven of the 10 components currently included as part of the index published in *Economic Freedom*

Figure 4.1 Areas and Components Used in the Index of Economic Freedom in the United Mexican States

Area 1 Size of Government

- 1A *Government consumption at all levels of government as a percentage of Gross State Product (INEGI, 2006b)*
- 1B *Government transfers and subsidies at all levels of government as a percentage of Gross State Product (INEGI, 2006b)*
- ...

Area 2 Takings and Discriminatory Taxation

- 2A *Total Tax revenues at all levels of government as a percentage of Gross State Product (INEGI, 2006b; CEFP, 2005)*
- 2B *Top marginal tax rate and the threshold at which it applies (Gwartney and Lawson, 2007)*
- 2C *Total indirect taxes at all levels of government as a percentage of Gross State Product (INEGI, 2006b; CEFP, 2005)*
- 2D *Total value-added taxes as a percentage of Gross State Product (CEFP, 2005)*

Area 3 Labor Market Freedom

- 3A *Population-weighted daily minimum wage salary as a percentage of daily average wage in a given state (Conasami, 2007)*
- ...
- 3D *The percentage of workers employed in the formal market as a percentage of total employment (Instituto Mexicano para la Competividad, 2006)*

Area 4 Legal System and Property Rights

- 4A *Impartiality of Judges (Instituto Mexicano para la Competividad, 2006)*
- 4B *Institutional quality of judicial system (Instituto Mexicano para la Competividad, 2006)*
- 4C *Trustworthiness and agility of public property registry (Instituto Mexicano para la Competividad, 2006)*
- 4D *Control against piracy of software (Instituto Mexicano para la Competividad, 2006)*

Notes: Component 3D and Area 4 and its components are included in the Mexican measurement of economic freedom but are not included in the index of economic freedom in the United States and Canada. Components 1C, 3B, and 3C of the American and Canadian index are not included in the Mexican estimate because of a lack of data.

Component 3A is population-weighted because there are three minimum wages that apply to three geographical regions in Mexico. Many Mexican states belong to all three regions whereas some belong to just one. To compute an effective minimum wage in those states where more than one minimum wage is applicable, different minimum wages are weighted by the percentage of population they cover in a given state. For example, if $\frac{1}{4}$ of State 1 belongs to Region A, $\frac{1}{4}$ belongs to Region B, and $\frac{1}{2}$ belongs to Region C, the minimum wage for State 1 would be computed as the minimum wage for Region A $\times \frac{1}{4}$ + minimum wage for Region B $\times \frac{1}{4}$ + minimum wage for Region C $\times \frac{1}{2}$.

of North America. The exceptions are measurements of social security expenditures (1C), government employment as a percentage of total employment (3B), and union density (3C). Statistics have been gathered for these components but the accuracy of these measurements remain questionable. For example, data on “union density,” the percentage of workers unionized, should control for the percentage of workers in the government and manufacturing sectors. [1] Since government employment is one of the other missing components, it is not possible to make this adjustment to union density.

Given the lower level of institutional development in Mexico, it is necessary to consider additional factors when estimating differences in economic freedom among Mexican states. One factor is the quality of property rights and the legal structure (Area 4 in figure 4.1). This component is measured in the *Economic Freedom of the World* (Gwartney and Lawson, 2007) at national levels but is not considered in *Economic Freedom of North America*. When only Canada and the United States are considered, this is probably not a problem since property rights are much more secure than in Mexico. Both Canada and the United States rate highly in these areas in *Economic Freedom of the World* while Mexico ranks slightly below the median.

Area 4 measures Legal Structure and Property Rights in Mexico. The Instituto Mexicano para la Competividad (Mexican Institute for Competitiveness), associated with the Graduate School of Public Administration and Public Policy at Instituto Tecnológico y de Estudios Superiores de Monterrey (Monterrey Institute of Technology and Higher Education), has collected (2006) data for many indicators of competitiveness at the state level in Mexico. Among these are four measurements similar to those used in *Economic Freedom of the World* called Impartiality of Judges (4A), Institutional Quality of the Judicial System (4B), Trustworthiness and Agility of Public Registry of Property (4C), and Control against Piracy of Software (4D).

In addition, although some measurements of labor freedom cannot accurately be measured at this time, another measurement is being included that is arguably a strong proxy for the labor-market conditions in Mexico. This component (3D) is the percentage of individuals who are working in the formal sector as a percentage of total employment. Most individuals do not use informal employment as a first resort as it is the solution to a regulatory environment that stifles mutually beneficial cooperation between employers and employees to create jobs that the market dictates. A state with very little formal employment is a state with serious labor-market restrictions.

All four areas are equally weighted to construct the overall index. The Distrito Federal (Federal District) is currently excluded from the Mexican index since it has only one level of government.

[1] In the index for Canada and the United States, data for the states and provinces were adjusted for the level of government employment through regression analysis; the manufacturing variable did not prove to be significant and no adjustments were made for this variable.

The Results

Figure 4.2 displays the scores for economic freedom of Mexican states, ranked from highest to lowest. Economic freedom is measured on a scale from zero to 10 where a higher value indicates a higher level of economic freedom. The maximum and minimum values are determined using the same mini-max calculation used for the United States and Canada (see Appendix A). Observe that Nuevo León, generally considered the most advanced state in the country, has the highest level of economic freedom followed by Coahuila de Zaragoza and Campeche. Chiapas, Nayarit, and Oaxaca, some of the poorest states, are at the bottom. Table 4.1 shows the overall score and scores for the components of the All-Government index for each Mexican state. (see figure 4.3 for a map of the Mexican States).

Figure 4.2: Summary of 2003 Ratings for Mexico at the All-Government Level

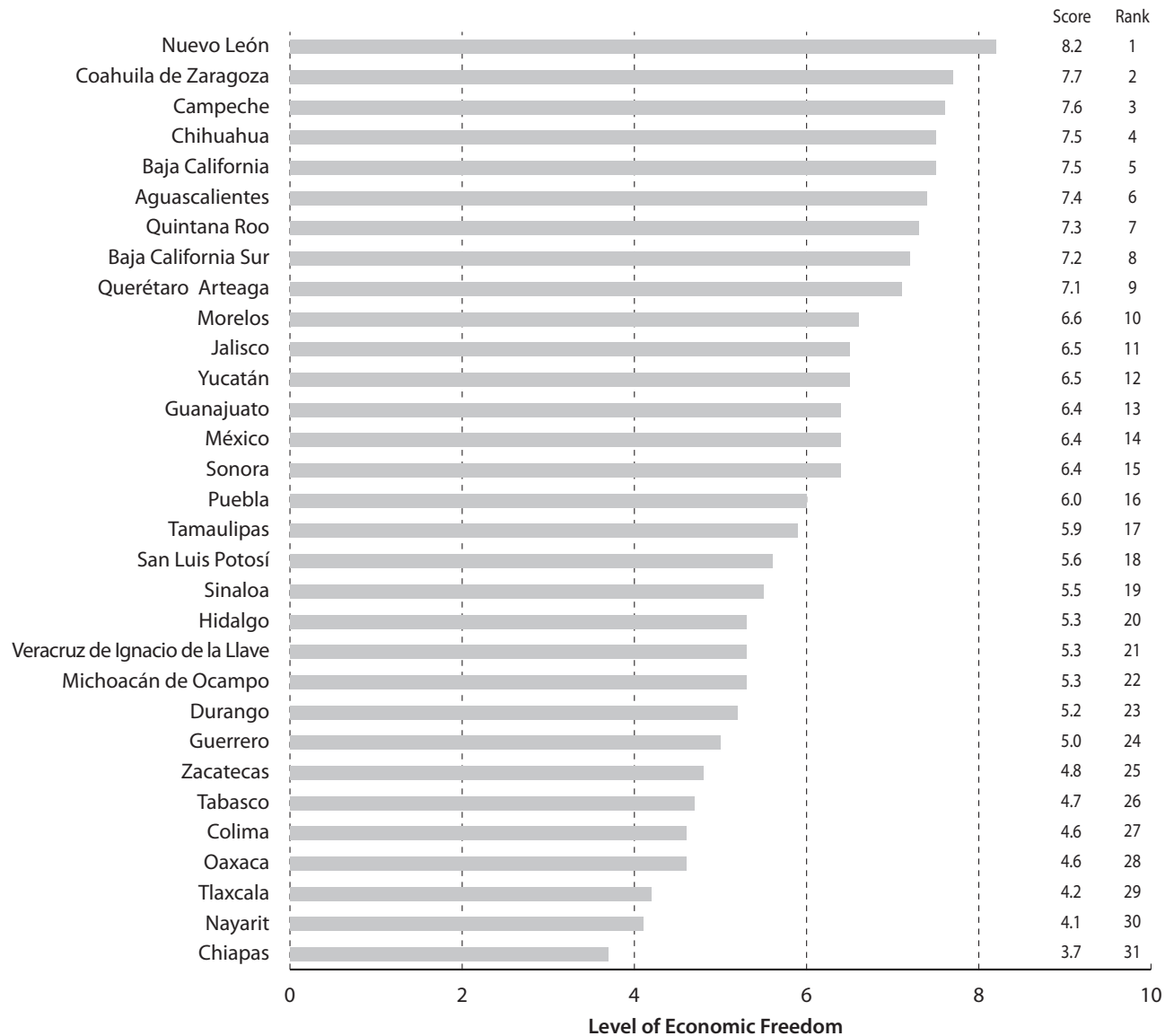


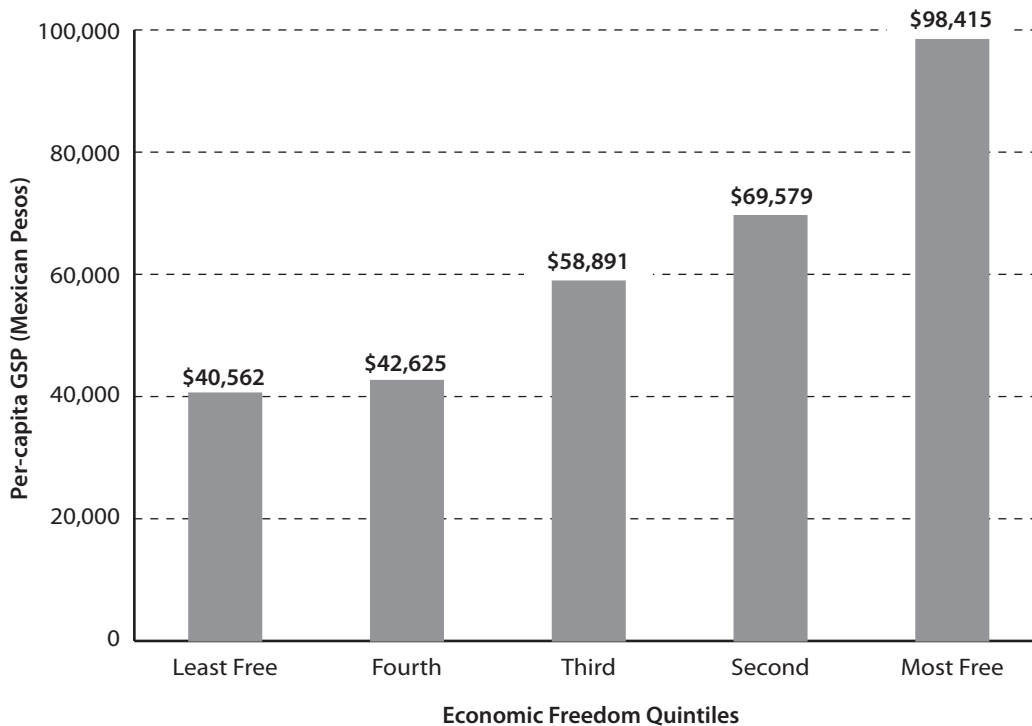
Table 4.1: Detailed Scores at the All-Government Level, 2003

	Overall Index	Rank	Area 1	Area 2	Area 3	Area 4	1A	1B	2A	2B	2C	2D	3A	3D	4A	4B	4C	4D
Aguaascalientes	7.4	6	8.5	8.6	6.9	5.5	10.0	7.0	9.1	7.0	9.2	9.1	6.5	7.4	7.2	8.3	6.1	0.2
Baja California	7.5	5	8.8	7.7	7.7	5.7	9.4	8.2	8.1	7.0	7.3	8.5	7.2	8.2	7.2	8.3	6.5	0.7
Baja California Sur	7.2	8	9.4	8.6	7.7	3.4	8.7	10.0	9.3	7.0	8.2	9.8	6.3	9.1	2.8	4.2	6.5	0.0
Campeche	7.6	3	8.3	9.1	8.1	4.7	7.9	8.8	9.7	7.0	9.9	9.6	9.1	7.1	8.3	6.7	3.9	0.0
Coahuila	7.7	2	9.5	8.8	7.8	4.7	9.1	9.9	8.9	7.0	10.0	9.2	6.9	8.7	6.7	5.0	7.0	0.3
Colima	4.6	27	6.7	1.8	5.1	4.9	8.8	4.6	0.0	7.0	0.0	0.0	5.6	4.6	6.7	7.5	5.2	0.3
Chiapas	3.7	31	2.7	8.5	0.8	2.7	2.8	2.6	9.9	7.0	6.9	10.0	1.2	0.4	6.1	3.3	0.9	0.4
Chihuahua	7.5	4	9.0	7.8	7.7	5.6	9.4	8.5	9.0	7.0	5.7	9.5	6.5	8.9	6.1	5.8	10.0	0.6
Durango	5.2	23	6.9	8.9	2.3	2.9	8.3	5.6	10.0	7.0	9.6	10.0	1.1	3.5	6.1	5.0	0.4	0.0
Guanajuato	6.4	13	8.1	8.9	3.8	5.0	9.1	7.0	9.4	7.0	9.4	9.7	4.9	2.8	5.6	8.3	5.2	0.8
Guerrero	5.0	24	4.3	9.0	1.9	4.7	6.5	2.0	9.8	7.0	9.2	9.9	3.9	0.0	7.2	5.0	6.5	0.1
Hidalgo	5.3	20	5.8	8.8	2.9	3.8	8.8	2.9	9.5	7.0	9.1	9.7	4.9	0.9	6.7	5.8	2.2	0.6
Jalisco	6.5	11	8.7	8.0	5.5	4.0	8.2	9.2	8.5	7.0	7.0	9.4	6.7	4.2	3.9	5.0	4.3	2.8
México	6.4	14	8.0	8.2	4.5	4.8	7.6	8.4	8.6	7.0	8.1	9.1	8.7	0.3	7.8	3.3	5.2	2.8
Michoacán	5.3	22	6.1	8.8	2.6	3.5	3.8	8.4	9.6	7.0	8.9	9.8	4.9	0.3	6.7	4.2	3.0	0.3
Morelos	6.6	10	7.5	8.8	5.2	4.7	8.9	6.2	9.3	7.0	9.4	9.6	8.0	2.4	7.2	5.8	5.2	0.6
Nayarit	4.1	30	3.0	8.5	2.0	3.1	5.9	0.0	9.3	7.0	7.8	9.8	2.3	1.7	3.3	1.7	7.4	0.0
Nuevo León	8.2	1	9.8	6.8	9.9	6.4	9.6	10.0	7.3	7.0	4.4	8.3	9.8	10.0	6.1	6.7	4.8	8.1
Oaxaca	4.6	28	3.0	8.8	2.5	4.1	5.4	0.6	9.7	7.0	8.6	10.0	3.8	1.3	8.9	5.8	1.3	0.2
Puebla	6.0	16	7.6	8.8	3.9	3.5	6.4	8.8	9.3	7.0	9.4	9.7	7.2	0.7	1.7	2.5	5.2	4.8
Querétaro	7.1	9	8.2	8.6	8.2	3.5	9.1	7.4	8.6	7.0	9.1	9.5	10.0	6.3	2.8	5.8	5.2	0.3
Quintana Roo	7.3	7	8.9	8.6	7.1	4.4	9.8	8.0	9.1	7.0	8.8	9.4	4.6	9.7	8.3	7.5	1.7	0.0
San Luis Potosí	5.6	18	6.6	9.0	3.6	3.4	8.1	5.1	9.4	7.0	9.6	9.9	5.8	1.3	7.8	4.2	0.9	0.6
Sinaloa	5.5	19	6.9	8.8	2.4	3.9	8.6	5.3	9.4	7.0	8.9	9.8	2.5	2.4	5.0	5.8	4.8	0.1
Sonora	6.4	15	8.3	8.8	4.7	3.7	9.0	7.5	9.4	7.0	9.0	9.7	3.7	5.7	3.9	5.8	4.8	0.2
Tabasco	4.7	26	2.7	8.8	1.9	5.5	0.0	5.3	9.3	7.0	9.4	9.5	3.3	0.6	8.3	8.3	5.2	0.0
Tamaulipas	5.9	17	8.2	3.9	6.9	4.5	9.0	7.4	3.8	7.0	4.1	0.7	7.3	6.5	6.7	5.8	4.3	1.3
Tlaxcala	4.2	29	4.6	8.9	3.0	0.1	6.7	2.4	9.5	7.0	9.2	10.0	5.5	0.5	0.0	0.0	0.0	0.4
Veracruz	5.3	21	6.7	7.4	2.7	4.6	4.3	9.1	7.9	7.0	7.0	7.7	4.9	0.5	1.7	4.2	4.8	7.9
Yucatán	6.5	12	8.7	8.7	3.1	5.3	8.0	9.5	9.3	7.0	8.9	9.6	2.0	4.3	6.1	9.2	5.2	0.5
Zacatecas	4.8	25	3.7	8.1	0.4	7.0	6.5	1.0	9.1	7.0	6.6	9.6	0.0	0.8	10.0	10.0	7.8	0.1

Figure 4.3: Map of the United Mexican States

Figure 4.4 further illustrates the relationship between economic freedom and Gross State Product (GSP) per capita. Again, levels of economic freedom are only estimated at the all-government level for the year 2003. GSP per capita is estimated for 2004 by dividing GSP in 2004 by the population in each state in 2005 since data on the population is not available for 2003 and 2004. That there is a benefit to economic freedom can be seen from the comparison of the per-capita incomes by quintile of economic freedom. The results are consistent with the results shown in figure 1.3 (page 13).

Finally, a regression similar to the regressions run in chapter 1 (page 30 and table 1.3) was run to analyze the impact of economic freedom at the all-government level in 2003 on GSP per-capita in 2004, while controlling for the level of education in states in 2000. The data used to measure the level of education is the percentage of individuals over 24 as a percentage of individuals over 24 who completed technical schooling having finished “preparatoria” or high school. However, this is the measure that is most comparable to that used for the United States and Canada. The year 2000 is used because it is the most recent year of data available before 2003. The results (table 4.2) are significant for both components. Economic freedom has a significant impact on per-capita GSP in 2004, supporting the results found for

Figure 4.4: Economic Freedom at the All-Government Level, 2003, and GSP per Capita, 2004**Table 4.2: Level of Economic Freedom and GSP per Capita in Mexico****Regression at All-Government Level**

Dependent Variable: Real GSP per Capita (2004)

Method: Ordinary Least Squares

Sample: 2003

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Constant	-55722	10711.8	-5.2	0.00
High School Graduates	3867.67	1120.71	3.45	0.00
Economic Freedom (All-Government Level)	12551.9	2226.83	5.64	0.00

Adjusted R²: 0.80

Note: High School Graduates is the number of high school graduates 24 years and older as a percentage of the total population 25 years and older in the year 2000; GSP per capita is calculated using GSP in 2004 and Population in 2005 due to data limitations.

Canada and the United States. Again, these results appear to corroborate with the regression results in table 1.3, the only difference being that education seems to have a significant impact on per-capita GSP as well. This is not too surprising, given that the Mexican indicator measures a higher level of education than the Canadian and American indicator.

Conclusion

This chapter has briefly discussed the index of economic freedom for the Mexican states in 2003. These are preliminary results and therefore subject to revision. Nonetheless, the data gathered thus far allow the construction of components that demonstrate that variance in the well-being of Mexicans is strongly connected to differences in economic freedom. The principal remaining hurdles to constructing an index of economic freedom for Mexico are finding or imputing reliable data for government employment at the state level, finding trustworthy data on total social-security payments, and constructing comparable data for the Legal Structure and Property Rights in Canada and the United States.

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