

## *Does a State's Legal Framework Affect Its Economy?*

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Why do some places enjoy faster economic growth than others? Economic historians have struggled with this question ever since Adam Smith first visited a pin factory. We know that it is hard to have economic growth without a stable monetary system, as Milton Friedman skillfully demonstrated, or without a good education system. Douglass North, the 1993 Nobel Laureate in economics, has shown that a dependable legal and property rights framework also plays a vital role.<sup>1</sup>

When businesses decide where to locate new offices and where to market new goods and services, they must weigh the comparative costs and benefits of different locales. A century ago businesses highly prized proximity to waterways. As a result American cities such as New York, Philadelphia and St. Louis attracted businesses. But geography is not everything. In fact, geography may even be overrated when compared with a dependable legal system that encourages entrepreneurs and competition. A highly educated, motivated populace is among the most appealing resources a state or country can offer. Consider Hong Kong: An island of rocks with few natural resources, Hong Kong developed into a commercial powerhouse in the twentieth century because a savvy, entrepreneurial population was free to operate within a lean, mostly unregulated

economic system. Though Hong Kong was free-wheeling, it was not anarchic; its British colonial history assured that the rule of law would prevail in commercial disputes. When the Communist Party took over China in 1949, entrepreneurs from Shanghai rushed to Hong Kong to continue their trades, enhancing Hong Kong's prosperity. Meanwhile, mainland China stagnated until Deng Xiao Ping tossed aside Communist mantras in the 1980s. In Europe, the Dutch economy leapfrogged its neighbors in the seventeenth century even though the Netherlands had few natural resources and faced a constant struggle to stop the seas from flooding its towns. A secure legal system that fostered competition and invited a free flow of capital and of people brought riches to the Netherlands despite its precarious landscape.

When a company today decides where to open up a shop or where to locate a plant, many factors come into play. The technological know-how of research universities may help lure and incubate start-up businesses. The tax structure, transportation infrastructure, and education level of local workers all enter into the calculus.

This paper examines whether economic growth among the 50 United States is correlated with the legal framework of those respective states. Is it possible that a more fair and dependable legal environment influences state economies? Using econometric analysis, we conclude that the impact of a state's legal system on economic growth is statistically significant. A state that imposes a capricious or arduous court system on businesses is likely stunting its growth compared with a state that offers a more reasonable structure.

## Data Sets

1) On January 11, 2002 Harris Interactive released a report entitled “The State Liability Ranking Study.” Harris pollsters asked 824 senior litigators and in-house general counsel to rank the states by the reasonableness and fairness of their tort liability systems.<sup>2</sup> Key elements of the survey included:

- Overall treatment of tort and contract litigation
- Treatment of class action suits
- Punitive damages
- Timeliness of Summary Judgment/Dismissal
- Discovery
- Scientific and Technical Evidence
- Judges’ Impartiality and Competence
- Juries’ Predictability and Fairness

The interviews took place between November 7 and December 11, 2001. The respondents came from companies with annual revenues of at least \$100 million. States were given an overall score and ranked 1 through 50, where 1 is a legal environment perceived to be more reasonable and fair, and 50 represents a state with the least reasonable and fair legal system.

The Harris data provides the independent “X” variable for the analysis.

- 2) The dependent variable for this study is the growth rate of real gross state product (GSP) per capita from 1995 to 1999.<sup>3</sup> This period is appropriate for it was a time of general prosperity across the United States without pronounced pockets of recession that may have injured certain states. Except for the state of Alaska, all states enjoyed positive economic growth over this timeframe.

### Analysis and Results\*

Using ordinary least squares regression techniques, we can assess whether the legal framework is statistically related to the pace of economic growth in the states. The results demonstrate a significant relationship. While other factors are probably important (including, for example, education, infrastructure, taxes), a negative legal structure likely impedes growth.

The analysis shows that for every increase in rank (the state's legal framework improving) the state's average growth in per capita GSP increased by 0.15% (plus or minus 0.11%) with a confidence level of 95%. This yielded a positive "t-test" for statistical significance.

The overall results are not dependent on any particularly strong or weak state. If we throw out from the data sets the two outliers—Delaware and Alaska—it would not substantially affect the estimate of the coefficient for the state legal framework, nor would it significantly change the explanatory power—R-squared—of the model.<sup>4</sup>

The residuals for the regression do not show apparent structure or pattern, giving some confirmation to the standard assumptions of normality and constant variance of errors.

While the regression test indicates a significant statistical relationship, the results are not so robust that one could accurately predict state economic growth rates by simply knowing the rank of the legal framework.

In addition to the regression analysis, we may also compare the top and bottom quintiles of the legal ranking. While the average per capita state growth (unweighted) was 14.2%, the ten states that ranked highest on the Harris survey averaged 15.72% growth. The ten states that ranked lowest averaged 11.63%. These results were not biased by any particularly strong or weak state within the data subsets.

As with any statistical modeling, there are caveats. The Harris Survey is a snapshot view of legal perceptions taken in 2001. Is it possible that perceptions changed over the course of the tested period, 1995-1999? Nor does this study tell us with certainty which way the causation goes between an unfair legal framework and a slow-

growing economy. Is it possible that poorer states do not invest in better legal systems and that slow economic growth causes inferior legal structures?

While we could add more caveats, the results of this study do comport with common sense. Namely, states that have less fair legal regimes would attract less business and therefore generate less income. More research must be done, but this preliminary study yields results that can contribute to public policy debate.

The impact of legal regimes may become even more pronounced over time. U.S. companies are operating in an extremely competitive environment. Shareholders expect high productivity rates, and managers are forced to grapple with narrow profit margins. The increasing scrutiny of investors pressures companies to pursue only the most productive activities. States that hang a sign on their borders saying, "You're Not Welcome Here," will find that they will get their wish.

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<sup>1</sup> England's more dependable property rights regime aided economic development after the Middle Ages, compared with Spain's. See Douglass North, Institutions, Institutional Change and Economic Performance (Cambridge, Cambridge University Press, 1990). A more contemporary examination is found in Rafael LaPorta, Florencio Lopez-de-Silanes, and Andrei Schliefer, "Law and Finance," Journal of Political Economy, vol. 106 (1998), pp. 1113-55.

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<sup>2</sup> Harris Interactive, Study No. 14966, “U.S. Chamber of Commerce State Liability Systems Ranking Study,” (January 11, 2002).

<sup>3</sup> Data can be found on [http://minneapolisfed.org/economy/specmap/state\\_Gps.xls](http://minneapolisfed.org/economy/specmap/state_Gps.xls)

\* I would like to thank David Rubashkin Consulting, LLC for assistance in the data analysis.

<sup>4</sup> The  $R^2$  statistic tells us the rank order of a state’s legal framework explains approximately 12% of the variation among the 50 states’ five-year growth rates.

APPENDIX

Response: State Economic Growth  
Summary of Fit

RSquare	0.136102
RSquare Adj	0.118104
Root Mean Square Error	5.448967
Mean of Response	14.2056
Observations (or Sum Wgts)	50

Parameter Estimates

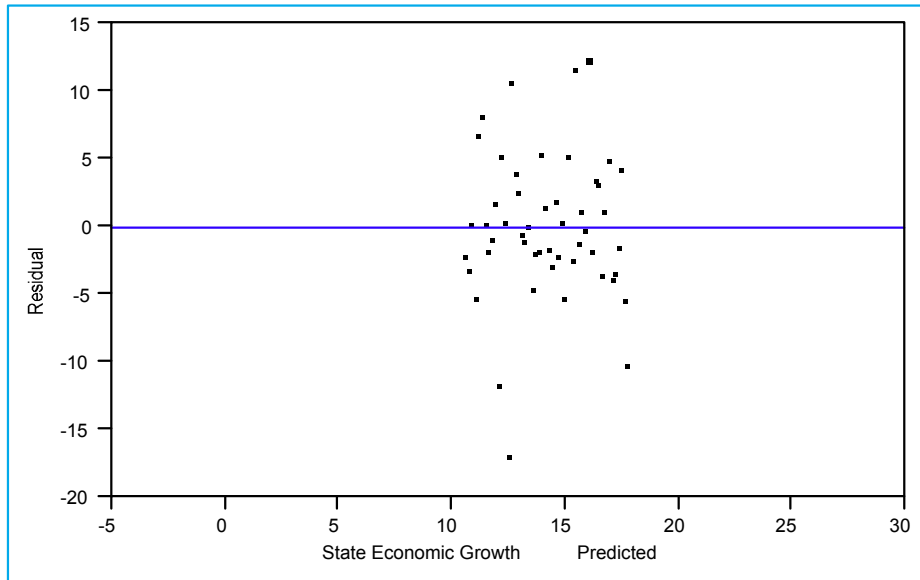
Term	Estimate	Std Error	t Ratio	Prob> t
Intercept	17.950139	1.564613	11.47	<.0001
State Legal Fra	-0.146845	0.053399	-2.75	0.0084

Effect Test

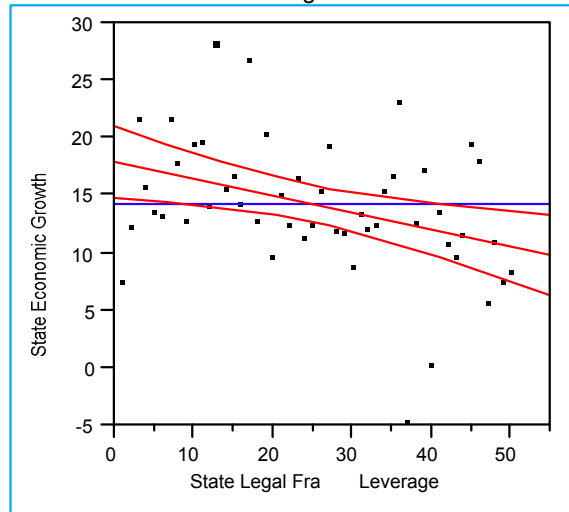
Source	Nparm	DF	Sum of Squares	F Ratio	Prob>F
State Legal Fra	1	1	224.52842	7.5621	0.0084

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	224.5284	224.528	7.5621
Error	48	1425.1798	29.691	Prob>F
C Total	49	1649.7082		0.0084



State Legal Fra



Effect Test

Sum of Squares	F Ratio	DF	Prob>F
224.52842	7.5621	1	0.0084