

**PA 819**  
**Spring 2020**  
**Final Project**  
**State Business-Oriented Policies and Economic Growth**  
**Due: Wednesday April 22, 3:30 pm**

The impact of the state level policies aimed at encouraging business activity and entrepreneurship is a topic of current debate.

***Your Assignment***

You are the chief economic adviser for the governor's Council of Economic Advisers, and your task is to assess econometrically the impact of what are perceived to be business-friendly policy regimes on economic growth. In particular,

1. Is there a statistically significant impact of regulatory burden, firm tax rates, and fiscal situation on economic growth?
2. Is the impact of any set of these measures economically meaningful? How do they compare to other aspects of performance?

You are provided a proprietary data set. Do not circulate your results to any other individuals outside of the course until after submission of the projects (at which time you will be able to circulate the results, with acknowledgment of data source). You should note where your ability to answer these two questions is limited by shortcomings of the data.

***Ground Rules***

The memorandum may not exceed 3 double-spaced typed pages, plus tables and/or figures that do not count against the page limit. The memo should start with a clear, one-paragraph summary of your findings. Present empirical results in a table or tables. Assume that your reader is familiar the statistical techniques and terminology. Attach Stata output and code for grading purposes, but since a real-world memo would *not* include this output, your memo ought not rely on or refer to specific entries in the Stata output (referring to entries in included tables is appropriate).

Be sure to use the concepts from class, where relevant, including concerns about omitted variable bias, accounting for nonlinearities, endogeneity issues, sample selection issues, and panel techniques (fixed effects, time differences, time trends). While there are some published studies of the impact of business policy regimes on employment and growth, your memo should focus on the empirical results *you* obtain.

You are not restricted to examining these variables. You can add variables to the data set and analysis if this would help you address these questions.

The memo might be organized to include sections that (i) describe the data, (ii) baseline specification results, attached with some economic motivation, (iii) robustness tests, and (iv) brief policy implications.

## Data Description

The data set is built on data obtained from Bureau of Economic Analysis (BEA) and Bureau of Labor Statistics (BLS), as well as from independent think tanks that have compiled indices of business conditions. The employment and wage data are from the Quarterly Census of Employment and Wages (QCEW).

Variable	Description
fips2	State (FIPS code)
year	Year
empl	Employment (levels)
totw	Wages (thousands \$, levels)
totw_priv	Wages private sector (thousands \$, levels)
totw_priv_manuf	Wages manufacturing (thousands \$, levels)
ngdp	Nominal Gross Domestic Product, by state (mn \$, levels)
rgdp	Real Gross Domestic Product, by state (mn 2012\$, levels)
empl_priv	Employment in private sector
empl_priv_manuf	Employment in manufacturing
wage_priv	Wages in private sector
wage_priv_manuf	Wages in manufacturing
ldensity	Log population density
wet	Precipitation (less precipitation = higher values)
mild	Temperature extremes (less extreme = higher values)
distance	Proximity to water (closer = higher values)
bhi_norm	State Competitiveness Index: Beacon Hill Institute index, normalized (by demeaning, dividing by standard deviation)
CDBI_n	Cost of Doing Business Index: Milken Institute
fprc_norm	Fiscal Policy Report Card on the Nation's Governors: Cato Institute (by demeaning, dividing by standard deviation)
rsps	Rich States, Poor States Economic Outlook ranking: American Legislative Exchange Committee
cpi	CPI all urban (1982-84=100)

### Additional Information on indices

Description: State Competitiveness Index: Beacon Hill Institute. Higher values interpreted as better business environment. Stated Focus of Index: Long-term competitiveness for attracting and incubating new businesses and growth of existing firms. Policy Categories: Cost of doing business; size of government; tax rates and burden; quality of life; welfare and transfer payments; employment,

earnings, and job quality; business incubation; human capital; infrastructure; technology, knowledge jobs, and digital economy; resource efficiency/environment; and external sector.

Description: Cost of Doing Business Index: Milken Institute. Higher values interpreted as better business environment. Stated Focus of Index: Fundamental business costs, including labor, taxes, real estate, and electricity. Policy Categories: Cost of doing business (excl. taxes); tax rates and tax burden.

Description: Fiscal Policy Report Card on the Nation's Governors, Cato Institute. Stated Focus of Index: Fiscal performance of governors in terms of restraining the growth of taxes and spending. Policy Categories: Cost of doing business (excl. taxes); size of government; tax rates and tax burden.

Description: *Rich States, Poor States* (Arthur Laffer, Stephen Moore & Jonathon Williams) Economic Outlook Ranking: American Legislative Exchange Committee (ALEC). *Lower* values interpreted as better business environment. Stated Focus of Ranking: A forecast based on a state's current standing in 15 state policy variables: Top Marginal Personal Income Tax Rate, Top Marginal Corporate Income Tax Rate, Personal Income Tax Progressivity, Property Tax Burden, Sales Tax Burden, Remaining Tax Burden, Estate/Inheritance Tax Levied, Recently Legislated Tax Changes, Debt Service as a Share of Tax Revenue, Public Employees Per 10,000 of Population, State Liability System Survey (tort litigation treatment, judicial impartiality, etc.), State Minimum Wage, Average Workers' Compensation Costs (per \$100 of payroll), Right-to-Work State, Number of Tax Expenditure Limits.