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Measuring Governors' Effectiveness: A Control Group Study

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Abstract: This research sought empirical evidence that the policies of celebrated governors of Pennsylvania, Massachusetts, and Arkansas led to increases in employment in their state. The counties of those states were matched with counties from other states based on variables thought to affect economic growth. Differences between the matched pairs were then examined in seventeen major sectors. Little regional support was found for the conclusion that the policies stimulated the counties' economies. The Pennsylvania counties lagged behind the match counties before the policies went into effect and continued to do so afterward. Massachusetts counties experienced relative growth in transportation and public utilities for a decade and manufacturing for three years. Finally, Arkansas demonstrated relative employment growth for a few years in farming and services, but it had done so previously for farming.

Introduction

“It’s the Economy Stupid” was the over-quoted theme of Bill Clinton’s successful presidential candidacy. His strategy was to emphasize the poor economic conditions of the nation, blame President Bush for those conditions, and offer himself as the agent of change. This strategy was not new, however. Candidates running for office have for years found that using the state of the economy as a campaign issue is a successful way to win elections. But the President is not the only one who can influence the economy; other federal, state, and even local officials can have profound impacts upon economic growth. This study focuses on the role that certain state governors had on their states’ economies.

In the late 1970’s and early 1980’s, a group of young, energetic, and intelligent men took the top office in several states. These new chief executives were then obscure, but many have now become household names, including: Bill Clinton, Bruce Babbitt, Michael Dukakis, Dick Thornburgh, Jim Blanchard, and Mario Cuomo. Each of these governors saw his state as a “Laboratory of Democracy;” a place where new and innovative policies could be tried out. Each of those states had specific problems that its governor promised to solve. Each of those governors tried to solve those problems with policies unlike any other in the country. And each of those governors is now remembered as one who successfully pulled his state out of a slump, be it economic, educational, environmental, or social.

Although these governors stressed a myriad of problems, the effects of each one could be felt in the state economy. This study is an attempt to isolate, through the control group method, the economic effects of each of those policies to see if they really accomplished what they claimed to do. The research studies Dick Thornburgh’s economic

development policies in Pennsylvania, Michael Dukakis' economic development and social programs in Massachusetts, and Bill Clinton's education initiatives in Arkansas. Not only will this research help to support or debunk these governors' claims of success, it may help to add the control group method to the growing number of empirical methods of policy analysis.

Background

In the 1970's, states began to take a proactive role in regional economic development that went beyond the traditional "smokestack chasing" (luring manufactures into the area at any cost) of days past. Since then, states have known that to improve their economies, they must improve education and transportation, provide new sources of capital, expand markets, support small businesses and entrepreneurs, and promote new technology (Fosler 1988, p. 3-4). Before this strategy was adopted, states attempted to attract new businesses to replace lost jobs and to combat slow unemployment growth. They did this through traditional methods such as "financial and tax incentives, advertisement, solicitation, grants for job training, infrastructure improvements, and assistance with site selection" (Fosler 1988, p. 312). Similarly, Bartik argues that traditional economic development policies, primarily targeted at branch plant recruitment, included marketing the area as a branch plant location and providing financial and nonfinancial incentives for relocation (Bartik 1991, p. 4). After attracting firms, state used "measures to keep firms [that] have included cost reduction (unemployment insurance, workers' compensation, and taxes), direct subsidies, plant closing legislation, and protectionist legislation (principally lobbied at the federal level)" (Fosler 1988, p. 312).

As economies become more complex with expanding markets, foreign competition, and increased technology, states can no longer just focus on recruitment and retention. Now they must attempt to create and expand businesses, products, services, and technology. These four bases of a diversified and strong economy are developed by "investing in basic support services (education and transportation) . . . [and undertaking] more focused action (removal of regulation barriers promotion of specific technologies, and providing seed and risk capital)" (Fosler 1988, p. 312). This economic development model is "a process that occurs predominately in the market driven private sector, but is affected in all its phases -- creation, expansion, relocation, contraction, and regeneration -- by a wide range of state actions, which cut across traditional functional lines" (Fosler 1988, p. 4). States cannot continue to accept prevailing economic forces as functions of the Federal government. "In the new role, the state employs an active strategy to improve its competitiveness by confronting and taking advantage of prevailing economic forces" (Fosler 1988, p. 4). Also, in the past, states have used one agency to recruit new industry. Now, states use a combination of public and private sector organizations to provide the flexibility they need "to anticipate, specialize, experiment, integrate, evaluate, and adjust in dealing with new and changing economic forces" (Fosler 1988, p. 4). Again, Bartik echoes by defining new wave economic development policies to be primarily targeted at small or existing businesses and to include capital market programs, information and education for small businesses, research and high technology, and export assistance (Bartik 1991, p. 4). Under each of the following governor's these imperatives were met by various means.

In Pennsylvania, Governor Dick Thornburgh (1979-1986) tackled the state's economic problems arising from the transition from an industrial to a post-industrial economy. Between 1979 and 1985, over 21% of all manufacturing jobs in the state disappeared, peaking Pennsylvania's unemployment at almost 15%, the ninth-highest in the nation. The state's 40 largest corporations lost 600,000 jobs in the seven years leading up to 1986. To investigate the problem, Thornburgh commissioned an economic study entitled "Choices for Pennsylvanians" (Osbourne 1988, p.45).

The study rejected smokestack chasing as a solution and emphasized the importance of new and small businesses, which are more maneuverable, more able to feel the changes in today's rapid-paced economy and make adjustments to account for these changes. The study encouraged Pennsylvania to modernize its existing manufacturing base and to diversify its economy by cultivating companies with innovative and advanced technology. The study also stressed the importance of forming partnerships between the private and public sectors and between state and local governments. One strength that should be utilized, the report suggested, was the technical expertise of Pennsylvania's colleges and universities. "Choices for Pennsylvanians' set the goals of increasing the number of small businesses and creating an environment in which academia and the business community would work together to expand research and growth" (Osbourne 1988, p.46).

Thornburgh took the recommendations of the study to heart in three ways. First, he created an Economic Development Commission in his cabinet. He gave it a staff with the charge of forcing the bureaucracy to buy into these new priorities (Osbourne 1988, p.48). Second, he created a program called the Ben Franklin Partnership. The program

divided the state into four advanced technology centers, each affiliated with a major university, in order to stimulate innovation that could create Pennsylvania jobs. The partnership also provided challenge grants and seed and venture capital. Finally, it set up small business incubators that kept new small businesses from having to invest in overhead before they could afford to (Osbourne 1988, pp.48-50). Third, Thornburgh created the Regional Enterprise Development Program to help develop outlying areas through a capital loan fund (Osbourne 1988, p.60). Included in this were programs to help businesses tap into federal contracts, and to give assistance in exporting (Osbourne 1988, p.61). This program assisted small businesses in becoming major players in markets to which they otherwise would have had no access.

At the same time that Thornburgh began his administration, Bill Clinton (1979-1981, 1983-1992) first became governor of the poor, rural state of Arkansas. The state's per-capita income competed with that of Mississippi and West Virginia for forty-seventh through forty-ninth in the nation. Almost fifty percent of its population lived in town of under 2,500 and over forty percent of the adult population had never graduated from high school (Osbourne 1988, p.85). Arkansas was last in the nation in per-child spending on education, last in teach salaries, has the lowest percentage of college graduates, and has the lowest tax burden in the nation (Osbourne 1988, p.88).

Clinton knew that in the past, when the state depended upon agriculture and timber, as well as manufacturing plants brought in from the north through smokestack chasing, education was not that important. An insightful leader, he knew that in the information age, innovation would be the key to economic growth, and that quality education and educational institutions were the way to prepare Arkansans to be leaders in

innovation. He told his constituents that “the future of this state depends on what we know . . . tomorrow is waiting for us, if we will seize it” (Osbourne 1988, p.110). To improve the state’s education system, Clinton increased the state budget by 40% in two years and put all of that new revenue towards elementary and secondary education. He raised teacher salaries by almost \$2,000. He required prospective teachers to pass the National Teacher Examination, something that was not required in Arkansas. He introduced standardized tests that measured the performance of public school students and created a summer residence school for gifted students at which he and his wife taught (Osbourne 1988, p.88). Clinton’s efforts to better educate the people of Arkansas is an important step in making them more marketable for the new, information-driven jobs of today. Effects of Clinton’s policies will be seen in, among other areas, long-term employment growth and diversification.

Massachusetts Governor Michael Dukakis (1975-1979, 1983-1987) found his second term blessed with the lowest unemployment rate of any industrial state – between 3% and 4%. With this favorable economic climate as a backdrop, the governor successfully sold his plan to reshape patterns of growth by focusing on declining regions within Massachusetts that he called “targets of opportunity” (Osbourne 1988, p.176-177).

To accomplish this goal, he first focused on infrastructure development in these areas. He then organized tours to state CEO’s to encourage them to relocate there. To help make their decision easier, he offered them, among other things, tax-exempt financing, investment by the state capital funds, and worker training (Osbourne 1988, p.178).

To deal with one of the poorest regions of the state he formed, with business, academic, and political leaders, the Governor's Task Force on Northern Berkshire County. Among other things, the task force encouraged the Governor to turn the state's highest peak into a ski resort, helped keep Sprague Electric in the area in 1985, and led to the creation of a Northern Berkshire Regional Industrial Development Authority, an office funded with over \$150,000 a year (Osbourne 1988, p.178-179).

Dukakis also led the charge to revitalize mature industries after he was criticized for helping regions and not people. He did this through the creation of an Economic Stabilization Trust that provided loans to declining firms to turn them around. Also, he began a Massachusetts Product Development Corporation that made venture capital available to mature firms developing new products or processes. An Industrial Services Program helped dislocated workers and helped lagging firms upgrade their technology and management. A monitoring group analyzed economic trends within industries and regions and intervened when necessary. Finally, an Industrial Advisory Board, made up of members of the business, labor, and government communities, oversaw the programs and made recommendations to the governors and legislature (Osbourne 1988, p.188-193).

Besides helping lagging regions and firms, Dukakis also focused on increasing the state's human capital by reforming the welfare system. His system, Employment and Training Choices (ET), is considered to be such a success because it was voluntary and gave a wide range of options to volunteers. The program helped welfare recipients obtain valuable jobs by providing day care and subsidizing transportation expenses, even through the first year on the job (Osbourne 1988, p.201). After three years, ET led to higher wages and greater retention rates than under a simple system of job placement (Osbourne

1988, p.203). Outcomes of these policies can be measured by studying employment in targeted regions, the growth of new businesses and survival of declining ones, and the number of people who went from welfare to jobs.

Method

This research will utilize the geographical control group method developed at the Regional Research Institute (for further detail, see Rephann and Isserman 1994 (highways); Isserman and Rephann 1995 (families)). This method is a tool in which the area to be studied is broken down into counties and those counties are matched with similar ones around the country. The matches are done on the basis of input variables defined by the researcher. In the first program, RANKER, the researcher defines the dates to be considered and the input variables – the variables to be used in finding a match for each of the counties. RANKER assesses the similarity between the study counties and all other U.S. counties in terms of selected variables. The next program, MATCHER, selects one county for each study county so that the control group is as identical as possible to the study group. The final program, TESTER, takes the county pairs and calculates growth rate difference for seventeen variables. Then it performs a t- test to determine whether the mean growth rate differences for a state's counties are significantly different than zero.

The Experiment

The first step in performing research with this control group research was to select the governors. A group of innovative leaders was profiled in David Osbourne's Laboratories of Democracy, they included Clinton, Babbitt, Dukakis, Thornburgh, Cuomo, and Blanchard. Clinton, Dukakis, and Thornburgh were chosen for two reasons. First, they experienced problems that were mirrored in other states. Babbitt had an

extraordinary experience with water conservation, but the number of states that experience that same problem are few. Second, their policies were intended to affect employment. This fact is important because the Regional Research Institute data base permitted employment statistics.

After the governors were chosen, the selection variables for MATCHER needed to be defined. These variables, as outlined above, define what the program will use to match the control counties with prospective match counties. RANKER offers many possible input variables, all of which are listed in Appendix A. Besides defining the input variables, several other variables must be provided to the program. These variables will differ from state to state, because they depend upon when the governor took office. The first year is the Match Year, this is the year at which the output data will begin. The second time variable, the Base Year, defines when the program will begin looking at data to match potential counties. The final year to be entered in rank is the Census year nearest the match year. This obviously is the closest year ending in zero that comes before the Match year. In the test program, two other time variables must be entered. The treatment year is the year that is going to be the first year for which outputs from the matches will be compared. The last pre-treatment year, obviously, is the year before that. In this study, the treatment year was three years before each governor took office. This way, statistics could be followed before and after their policies took effect.

Four different sets of selection variables were run. The outcomes did not differ in any major way. All of the variable combinations are noted in Appendix A.

Results

The results proved to be less conclusive than hoped, yet they still tell a story. The first test was on Pennsylvania and matched that state's counties with some from Connecticut (4), Iowa (1), Illinois (8), Indiana (4), Kentucky (1), Massachusetts (3), Maine (2), Michigan (4), Missouri (1), North Carolina (1), New York (8), Ohio (16), Rhode Island (1), South Carolina (2), Vermont (4), Wisconsin (2), and West Virginia (5). A complete list of the matches from all of the states is in Appendix B.

Examination of the treated years before Governor Dick Thornburgh took office (1976-1978) indicates that, before 1979, the Pennsylvania counties lagged behind their counterparts in total full- & part-time employment, farm employment, and private non-farm employment; they had higher employment levels than their matches in federal civilian employment (and continued to do so for years after Thornburgh took office).

Total full- & part-time, farm, and private nonfarm employment all continued to lag behind the match counties throughout Thornburgh's administration. In almost all other sectors (wage and salary, mining, construction, transportation and public utilities, retail trade, government and government enterprises, military, and state and local government employment) the Pennsylvania counties were equal to the match counties before Thornburgh's tenure as Governor, but lagged after 1979. Graphs of the results from selected sectors for all three states can be found in Appendix C.

Massachusetts counties were matches with counties from California (1), Illinois (1), New Hampshire (1), New Jersey (1), New York (3), Pennsylvania (5), Wisconsin (1), and Wyoming (1).

Ag. serv., for., fish., and other employment and federal civilian employment both had employment rates lower in the Massachusetts counties than in the match counties before Dukakis came to office. Both, however, grew to a level even with the match counties after the beginning of his first term. On the other hand, before Dukakis, state and local government employment enjoyed higher employment rates in Massachusetts counties than in the match counties. This trend continued throughout the late 1970s.

Farm employment grew significantly after 1979, as did mining, manufacturing, and transportation and public utilities. Construction and military employment both lagged behind the match counties after Dukakis' administration began.

Finally, Arkansas counties were matched with others from Alabama (5), Arizona (1), California (1), Florida (1), Georgia (3), Kentucky (10), Louisiana (4), Michigan (1), Minnesota (1), Missouri (5), Mississippi (9), North Carolina (9), Oklahoma (7), Pennsylvania (1), South Carolina (2), Tennessee (7), Texas (1), Virginia (1), and Wisconsin(4).

Before Governor Clinton took office in 1979, Arkansas counties were lagging behind their match counties in construction, and FIRE. They were succeeding their match counties in farm and state and local government employment. After Clinton took office, farm employment continued to grow, and construction, FIRE, and state and local government employment came out of their slumps to arrive at a level even with the match counties. Clinton's tenure also saw the growth of total full- & part-time employment, services, and federal civilian employment.

Conclusions

Pennsylvania's story is, partly, a tragedy of the rust belt. Thornburgh could not save the already lagging sectors, nor could he keep others from beginning their descent. Most of Thornburgh's noted policies dealt with helping new and innovative businesses start. Most of these entities, closely tied to major research universities, were, by definition, small businesses. Naturally, their growth may not have been reflected in state totals for employment. Creating 100 new jobs in each county may not be enough to be reflected in this study, yet if they were the jobs that Thornburgh proposed to create, then his policies were a success. Unfortunately, the ultimate goal of bringing Pennsylvania out of an economic slump, according to this study, was not realized.

Dukakis' much celebrated, and later decried, Massachusetts Miracle is supported by this research. All of the sectors that were lagging before he took office were brought up to speed with their matches. The only sectors that depressed during Dukakis' administration were construction and military employment. The Massachusetts Miracle described how Dukakis brought his state out of the economic ruin of the late 1970s into prosperity in the early 1980s. During his 1988 Presidential campaign, critics claimed that his Miracle was short-lived. They noted that economic conditions in Massachusetts were poor once again. This research indicates that since, for the most part, Massachusetts' employment rates were equal to their match counties, the downturn before 1988 was felt throughout the nation in areas similar to Massachusetts. The downturn in military employment is a function of federal base closings, and has little to do with Dukakis' policies.

Governor Clinton was extremely successful in improving his state's poor economic conditions. His policies were aimed at creating an educated workforce that would be capable and willing to stay and work in Arkansas, and he was successful. Arkansas has been known as a state that exports large numbers of educated young people. Clinton tried to keep those people in Arkansas and prepare them for new industry. Also, he wanted to take the older, less-educated workforce and bring it up to speed. Again, the results of this study show that economic growth, attributable to investment in the workforce, occurred.

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REAL PA03

Years	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Sector																			
Total full- & part-time employment	-0.007	-0.011	-0.023	-0.028	-0.022	-0.02	-0.022	-0.036	-0.044	-0.045	-0.047	-0.043	-0.042	-0.038	-0.038	-0.032	-0.038	-0.041	-0.053
Prob>t	0.07	0.09	0.02	0.01	0.07	0.13	0.14	0.05	0.03	0.05	0.06	0.13	0.19	0.27	0.25	0.31	0.23	0.21	0.12
Wage and salary employment	-0.005	-0.006	-0.015	-0.023	-0.015	-0.014	-0.016	-0.032	-0.045	-0.049	-0.052	-0.052	-0.05	-0.047	-0.052	-0.048	-0.051	-0.055	-0.07
Prob>t	0.32	0.48	0.19	0.09	0.3	0.38	0.36	0.12	0.05	0.05	0.05	0.09	0.15	0.21	0.14	0.15	0.14	0.13	0.06
Farm employment	0.003	-0.043	-0.112	-0.139	-0.086	-0.104	-0.107	-0.122	-0.104	-0.046	-0.054	-0.025	-0.02	-0.042	-0.044	-0.013	-0.018	-0.055	-0.042
Prob>t	0.82	0.04	0	0	0	0	0	0	0	0.13	0.08	0.44	0.55	0.19	0.16	0.65	0.54	0.06	0.16
Private employment	-0.01	-0.014	-0.024	-0.029	-0.025	-0.023	-0.025	-0.037	-0.047	-0.049	-0.048	-0.043	-0.04	-0.035	-0.032	-0.028	-0.036	-0.039	-0.054
Prob>t	0.05	0.11	0.04	0.03	0.09	0.15	0.16	0.1	0.06	0.08	0.11	0.22	0.3	0.42	0.42	0.46	0.34	0.32	0.2
Ag.serv.,for.,fish., and other	0.015	0.032	-0.028	-0.094	-0.111	-0.13	-0.178	-0.178	-0.127	-0.119	-0.101	-0.198	-0.178	-0.073	-0.078	0.052	-0.068	-0.209	0.026
Prob>t	0.65	0.5	0.61	0.26	0.26	0.26	0.16	0.15	0.37	0.44	0.6	0.41	0.45	0.76	0.79	0.89	0.86	0.63	0.94
Mining	-0.035	-0.099	-0.116	-0.128	-0.186	-0.225	-0.285	-0.335	-0.48	-0.33	-0.348	-0.676	-0.642	-0.534	-0.489	-0.46	-0.329	-0.542	-0.513
Prob>t	0.44	0.19	0.27	0.19	0.15	0.22	0.2	0.18	0.09	0.24	0.16	0.04	0.03	0.06	0.09	0.12	0.2	0.04	0.05
Construction	-0.044	-0.049	-0.123	-0.184	-0.205	-0.129	-0.087	-0.064	-0.114	-0.126	-0.118	-0.116	-0.113	-0.067	-0.057	-0.023	-0.011	-0.09	-0.136
Prob>t	0.13	0.38	0.15	0.06	0.05	0.08	0.14	0.22	0.08	0.04	0.09	0.14	0.17	0.44	0.5	0.74	0.89	0.23	0.07
Manufacturing	-0.005	-0.014	-0.024	-0.018	0.005	-0.025	-0.031	-0.066	-0.088	-0.082	-0.079	-0.062	-0.054	-0.063	-0.069	-0.08	-0.069	-0.058	-0.062
Prob>t	0.72	0.51	0.41	0.61	0.9	0.55	0.38	0.11	0.05	0.1	0.13	0.27	0.37	0.37	0.3	0.19	0.2	0.34	0.37
Transportation and public utilities	0.004	-0.003	-0.029	-0.038	-0.035	-0.052	-0.065	-0.073	-0.085	-0.132	-0.143	-0.161	-0.137	-0.153	-0.178	-0.252	-0.25	-0.271	-0.313
Prob>t	0.78	0.89	0.4	0.33	0.41	0.31	0.21	0.17	0.12	0.02	0.03	0.04	0.12	0.1	0.13	0.07	0.1	0.1	0.09
Wholesale trade	-0.031	-0.019	-0.026	-0.027	0.014	-0.042	-0.117	-0.075	-0.059	-0.031	-0.025	-0.024	-0.102	-0.002	0.06	0.083	0.119	0.005	0.061
Prob>t	0.06	0.51	0.57	0.63	0.78	0.34	0.02	0.12	0.28	0.57	0.67	0.7	0.17	0.98	0.55	0.39	0.22	0.97	0.55
Retail trade	-0.003	-0.011	-0.008	-0.018	-0.019	-0.01	-0.011	-0.017	-0.029	-0.044	-0.061	-0.073	-0.072	-0.059	-0.035	-0.005	-0.016	-0.021	-0.03
Prob>t	0.61	0.26	0.47	0.17	0.15	0.54	0.54	0.39	0.21	0.09	0.04	0.02	0.04	0.12	0.37	0.9	0.67	0.61	0.54
Finance, insurance, and real estate	0.004	-0.013	-0.058	-0.025	-0.004	0.023	-0.028	-0.033	-0.001	-0.003	-0.019	-0.015	-0.006	0.02	0.04	0.088	0.09	0.088	0.098
Prob>t	0.74	0.49	0.03	0.35	0.9	0.46	0.5	0.43	0.99	0.96	0.73	0.8	0.92	0.77	0.55	0.19	0.16	0.17	0.12
Services	0.005	0	0.014	-0.001	0.004	0.001	0.02	0.026	0.019	0.026	0.039	0.051	0.067	0.066	0.08	0.047	0.025	0.016	0.033
Prob>t	0.38	0.99	0.44	0.97	0.84	0.98	0.34	0.3	0.49	0.44	0.27	0.23	0.17	0.21	0.15	0.32	0.62	0.76	0.56
Government and govt. enterprises	-0.003	-0.007	-0.009	-0.019	-0.018	-0.014	-0.016	-0.036	-0.044	-0.056	-0.072	-0.09	-0.099	-0.096	-0.108	-0.106	-0.107	-0.1	-0.109
Prob>t	0.37	0.29	0.33	0.14	0.24	0.4	0.38	0.04	0.02	0	0	0	0	0	0	0	0	0	0
Federal, civilian	0.015	0.033	0.036	0.036	0.041	0.05	0.069	0.072	0.055	0.045	0.038	0.027	0.037	0.039	0.01	0.035	0.043	0.068	0.046
Prob>t	0.09	0.01	0.03	0.03	0.04	0.03	0.01	0.01	0.07	0.18	0.29	0.45	0.33	0.33	0.83	0.45	0.39	0.18	0.42
Military	0.005	0.005	0.007	-0.003	-0.003	-0.013	-0.014	-0.031	-0.035	-0.026	-0.012	-0.062	-0.069	-0.059	-0.039	0	0.014	0.03	0.055
Prob>t	0.23	0.4	0.3	0.71	0.81	0.37	0.4	0.08	0.06	0.18	0.57	0.01	0.01	0.04	0.15	0.99	0.64	0.28	0.05
State and local	-0.006	-0.01	-0.014	-0.026	-0.027	-0.023	-0.028	-0.051	-0.06	-0.075	-0.094	-0.11	-0.12	-0.117	-0.128	-0.131	-0.131	-0.123	-0.13
Prob>t	0.18	0.18	0.19	0.07	0.13	0.21	0.15	0.01	0	0	0	0	0	0	0	0	0	0	0