State Medicaid Expansion and Citizens’ Quality of Life*

Patrick Flavin
Associate Professor
Department of Political Science
Baylor University
One Bear Place #97276
Waco, TX 76798
(254) 710-7418
Patrick_J_Flavin@baylor.edu

* All data and coding are available upon request for anyone wishing to replicate this study. A previous version of this paper was presented at the 2016 meeting of the American Political Science Association in Philadelphia, PA. Online Appendix available at: http://blogs.baylor.edu/patrick_j_flavin/publications/.
Abstract

Objectives. The U.S. Supreme Court’s 2012 ruling on the Affordable Care Act was a federal exogenous shock that presented all states with the decision to continue their Medicaid program in its current form or expand it to include thousands of newly eligible recipients. This paper takes advantage of this exogenous shock to evaluate the impact of Medicaid expansion on citizens’ quality of life.


Results. Average levels of subjective well-being increased among low income citizens in states that expanded Medicaid eligibility compared to states that did not. In a series of placebo tests, I also demonstrate that the expansion had no effect on the subjective well-being of middle or high income citizens who are unlikely to directly benefit from more generous Medicaid eligibility requirements.

Conclusions. The empirical findings suggest that the expansion of Medicaid has important implications for the well-being of low income Americans and, more broadly, contribute to the growing literature on how government policy choices can concretely impact the quality of life that citizens experience.

Keywords: Medicaid, Affordable Care Act, subjective well-being, life satisfaction, U.S. states
More than five years after being signed into law, the 2010 Patient Protection and Affordable Care Act (commonly referred to as the ACA or “Obamacare”) remains a source of considerable political debate. In a January 2016 Kaiser Foundation poll, the public was nearly evenly split in its evaluation of the law, with 44% reporting they have an unfavorable opinion of it and 41% reporting they have a favorable opinion.\textsuperscript{1} Although the law has been and continues to be the subject of federal litigation, perhaps the most important legal decision to date is the Supreme Court’s 2012 ruling that upheld most of the ACA but invalidated the law’s requirement that states expand their Medicaid program to cover all people earning up to 138% of the federal poverty level.\textsuperscript{2} This ruling took many by surprise (especially since the bulk of attention was on the Court’s decision to uphold the “individual mandate” requirement that all citizens purchase health insurance or face a financial penalty) and provided state governors and legislators a great deal of unanticipated power in shaping the future trajectory of their state’s Medicaid program (Rosenbaum and Westmoreland 2012; Barrilleaux and Rainey 2014; Lanford and Quadagno 2015). In short, the Supreme Court’s 2012 ruling was a federal exogenous shock that presented states with the decision to continue their Medicaid program in its current form or expand it to include thousands of newly eligible recipients.

This short paper takes advantage of this exogenous shock to evaluate the effect of the Medicaid expansion on citizens’ quality of life. Instead of focusing on medical service usage or

\textsuperscript{1} Respondents were asked: “As you may know, a health reform bill was signed into law in 2010. Given what you know about the health reform law, do you have a generally favorable or generally unfavorable opinion of it?” Polling results available at: \url{http://kff.org/interactive/kaiser-health-tracking-poll-the-publics-views-on-the-aca/#?response=Favorable--Unfavorable&aRange=twoYear}.

health outcomes commonly thought to contribute to human well-being, I assess the effect of policy choices on well-being directly using citizens’ evaluations of how satisfied they are with their own lives. Specifically, using a difference-in-differences estimation strategy, I compare changes in subjective well-being among low income citizens in states that did and did not expand Medicaid in 2014 (the first year federal money funded the expansion). After accounting for changes in state economic conditions, I find consistent evidence that subjective well-being increased among low income citizens in states that expanded Medicaid eligibility compared to states that did not. To address concerns about spuriousness, I also conduct a series of placebo tests and demonstrate that the expansion had no effect on the subjective well-being of middle or high income citizens who are unlikely to directly benefit from more generous Medicaid eligibility requirements. Together, these findings suggest that the expansion of Medicaid can have important effects on the well-being of low income Americans and, more broadly, contribute to the growing literature on how government policy choices concretely impact citizens’ quality of life.

**Background and Theoretical Expectations**

Medicaid is a program jointly funded by the federal and state governments that provides health care coverage to over 60 million Americans. Historically, Medicaid has covered low income children, pregnant women, elderly and disabled individuals, and some parents, but excluded most other low income adults (Wachino, Artiga, and Rudowitz 2014). In other words, simply being poor was not enough to warrant government assistance in obtaining access to medical coverage. The ACA was, in part, an attempt to significantly expand participation in the Medicaid program by requiring states to extend eligibility to all citizens earning up to 138% of
the federal poverty level or risk losing all of their Medicaid funding from the federal government. However, because of the Supreme Court’s ruling that states have the power to choose to expand or not without risking their existing federal funding, there is now significant variation in Medicaid eligibility across states. This variation allows, from a policy analysis standpoint, the chance to evaluate the real world effects of state government policy choices.

The vast majority of studies to date that examine Medicaid eligibility focus on the effects for (1) health insurance coverage rates, (2) medical service usage, and (3) health outcomes. Not surprisingly, expanding Medicaid eligibility increases the number of citizens who enroll and are covered by the program. For example, in the first few months of 2014 after the expansion under the ACA took place, over 4.8 million newly eligible Americans enrolled in Medicaid (Sommers, Kenney, and Epstein 2014; Wachino, Artiga, and Rudowitz 2014). Even before the ACA expansion, empirical studies uncovered evidence that expanding eligibility for public health programs can significantly boost program participation. For instance, Levine, McKnight, and Heep (2011) find that the introduction of the State Children's Health Insurance Program (SCHIP) in 1997 boosted the proportion of low income teenagers enrolled in the program. More broadly, a study that assesses the effectiveness of tax incentives and direct-coverage public insurance programs finds that public programs (like Medicaid) are more effective at boosting coverage

---

3 For 2013 (the year before the Medicaid expansion took effect for states that opted in), the federal government paid for, on average, 57% of the costs of the Medicaid program and states paid the remaining amount. This federal share ranged from a low of 50% in several states to a high of 73% in Mississippi (U.S. Department of Health and Human Services 2014). Under the ACA, the federal government pays 100% of costs for newly eligible Medicaid enrollees through 2016 and no less than 90% of costs after 2020.
rates compared to policies that provide a tax incentive to citizens to purchase private insurance (Bernick and Myers 2008). In short, there is considerable empirical evidence that expanding the eligibility for public health programs has the intended effect of increasing the number of Americans who enroll and obtain health insurance coverage.

There is also evidence that enrolling in Medicaid increases rates of medical service usage among program participants. For example, in a lottery experiment that randomly extended Medicaid eligibility to some citizens in Oregon, enrollees are significantly more likely to utilize preventative care, office visits, and prescription drugs compared to those not enrolled in Medicaid (Finkelstein et al. 2012; Baicker et al. 2013). In addition, enrollment in Medicaid appears to increase the likelihood of visiting the emergency room (Taubman et al. 2014) while, at the same time, lowering instances of preventable hospitalizations (Bindman, Chattopadhyay and Auerback 2008; DeLeire et al. 2013). On balance, the evidence suggests that expanding Medicaid increases overall medical service usage and somewhat alters the composition of services that make up that usage.

Perhaps most importantly, Medicaid enrollment has important effects on health outcomes. For example, Sommers, Baicker, and Epstein (2012) compare states that unilaterally expanded Medicaid eligibility to various disadvantaged groups in the 2000s to a set of control cases and find that expansions to cover low income adults are significantly associated with reduced mortality rates as well as improved self-reported health. Moreover, while program enrollees in the Oregon Medicaid experiment do not have discernibly lower blood pressure or cholesterol levels, they do have lower levels of depression and higher levels of self-reported physical and mental health compared to those not enrolled in the program (Finkelstein et al. 2012; Baicker et al. 2013). Similarly, early analysis of the direct effects of Medicaid expansion
under the ACA also finds that citizens express higher levels of self-reported health and are less likely to have their activities limited by poor health in states that expanded Medicaid compared to people living in states that did not expand the program (Sommers et al. 2015). In sum, across a wide array of health indicators, there is evidence that Medicaid expansion has positive effects for health outcomes among citizens.

Despite increased interest about the potential effects of expanding Medicaid eligibility under the ACA, to date there has been little focus on how the expansion broadly impacts citizens’ self-assessments of their own quality of life. Instead of examining medical service usage or health outcomes commonly thought to contribute to quality of life, advances in the scientific study of subjective well-being allow researchers to directly evaluate the effects of government policy decisions on citizens’ quality of life (e.g., Frey and Stutzer 2002; Frey 2008; Bok 2010; Radcliff 2013; Flavin, Pacek, and Radcliff 2014). This growing literature is built on the foundational assumption that one of the most accurate ways to evaluate human well-being is to simply ask people if they are living a life they deem satisfying. Perhaps for this reason, Helliwell and Putnam (2004, 1435) argue that, “a prima facie case can be made that the ultimate ‘dependent variable’ in social science should be human well-being, and in particular, well-being as defined by the individual herself.” Similarly, from a public policy standpoint, a normative argument can be made that promoting greater human well-being should be one of the primary aims of government policymaking. Therefore, it is eminently important to investigate and better understand the implications, if any, that the expansion of the Medicaid program may have for citizens’ quality of life in the United States.

From a theoretical perspective, I expect states that expanded Medicaid eligibility will report an increase in life satisfaction among low income residents (relative to those living in
states that did not expand) for three primary reasons. First, previous research has found that Medicaid enrollment can boost self-reported health among recipients (Sommers et al. 2015), and self-reported health has a particularly strong association with overall levels of self-reported well-being (Chida and Steptoe 2008; Diener and Chan 2011). Second, enrollment in Medicaid can provide greater economic stability and keep recipients from falling into poverty (Sommers and Oellerich 2013). Given research that documents a multitude of destructive and injurious effects of poverty including lower self-esteem, lower efficacy, higher rates of depression, and other deleterious psychological states (e.g., Simmons et al. 2010), preventing people from falling into poverty likely has positive implications for life satisfaction. Third, being enrolled in Medicaid can reduce feelings of anxiety and worry about what one will do if they or a loved one becomes sick or injured (Baicker et al. 2013) which, in turn, can lead to higher levels of satisfaction. In sum, there are strong theoretical reasons to expect that low income citizens in Medicaid expansion states will report an increase in self-reported well-being relative to those living in states that did not expand.

---

4 Additionally, compared to low income residents in states that expanded Medicaid, citizens living in states that did not expand are put at a particular disadvantage because of the way the ACA Medicaid expansion was interpreted by the Supreme Court. Specifically, the ACA was designed such that low income recipients would be eligible for enrollment in Medicaid and, therefore, were not designated as eligible to receive federal subsidies for purchasing private health insurance from government-run insurance exchanges. After the Supreme Court ruled that state Medicaid expansion is optional, many low income residents in states that did not expand are caught in a “Medicaid gap” whereby they are not eligible for any government support in obtaining health insurance and are subject to the difficulties that arise from living in that situation.
Data and Empirical Strategy

To investigate the linkage between state Medicaid expansion and citizens’ quality of life, this paper uses citizens’ self-assessments of their own life satisfaction commonly referred to as subjective well-being (SWB). As the scientific study of life satisfaction has grown across the social and medical sciences, a well-developed literature has responded to an array of potential theoretical and methodological concerns about its usage. For example, standard or conventional survey items used to measure SWB have been rigorously tested and found reliable and valid (Myers and Diener 1997). Moreover, scholars have grown increasingly confident that the scientific study of well-being is not particularly marred by social desirability bias or the desire to report one is satisfied when that is not the case (Myers and Diener 1995). Individuals who self-report higher levels of satisfaction on surveys also tend to demonstrate other attitudinal and behavioral characteristics that communicate happiness. For example, they are more likely to laugh, smile, and report higher levels for other (self-reported) measures of satisfaction (Watson and Clark 1991; Myers 1993; Myers and Diener 1997). Self-reported levels of well-being also correlate highly with evaluations that come from external sources, such as family, friends, or professional/clinical assessments (Myers and Diener 1997).

Recent research on SWB typically relies on a single, direct question that asks respondents to report on how satisfied they feel with their lives “in general.” Asking this question in a simple and direct way has been documented to perform as well or better than more complex multi-item approaches (Veenhoven 1993). For example, after examining in detail a large number of concerns over the scientific utility of self-reported satisfaction, Veenhoven (1996, 4) concludes that most doubts “can be discarded.” As he puts it, the “literature on this point can be summarized as saying that simple questions on happiness and life satisfaction measure subjective
appreciation of life quite validly” (1997, 157). In short, the available evidence clearly suggests that we can measure citizens’ self-assessments of their quality of life with reasonable accuracy.

To measure citizens’ SWB, I use data from the Gallup-Healthways Well-Being Index poll that surveys more than 500 Americans each day. The particular survey item used is, keeping with the suggestion of the literature discussed above, the most basic and straightforward life evaluation question. Specifically, it asks respondents: “Please imagine a ladder with steps numbered from 0 at the bottom to 10 at the top. Suppose we say that the top of the ladder represents the best possible life for you, and the bottom of the ladder represents the worst possible life for you. On which step of the ladder would you say you personally feel you stand at this time, assuming that the higher the step the better you feel about your life, and the lower the step the worse you feel about it? Which step comes closest to the way you feel?” Individual responses to this question were then aggregated to create state-level averages for comparison.

Because Medicaid is a program designed to aid low income Americans in obtaining health insurance coverage, any analysis of the effects of Medicaid expansion should naturally focus on this subgroup. The Gallup survey categorizes respondents into three groups based on their self-reported monthly household income: less than $3,000 (low income), $3,000 to less than $7,500 (middle income), and $7,500 or greater (high income). I use the average life evaluation measure by state for only respondents in the low income group (i.e. those with a monthly income of less than $3,000). For comparison to eligibility requirements under Medicaid expansion in 2014, 138% of the federal poverty level for a family of four equates to an income of $2,743 per month ($32,913 for the year). Because Gallup only reports aggregated data if an income group
has at least 300 responses for a particular state in a given year, I have an average measure of quality of life for low income respondents in 41 of the 50 states.\(^5\)

Drawing on data provided by the Kaiser Foundation, in 2014 there were 22 states that made the decision to expand their Medicaid program to all citizens making up to 138% of the federal poverty level. In the 41 states I have well-being data for low income respondents, 17 states expanded Medicaid eligibility while the other 24 did not. My empirical strategy is to compare the well-being of low income citizens in states that expanded Medicaid to those living in states that did not. However, simply modeling well-being in 2014 as a function of Medicaid expansion would create serious concerns about omitted variable bias because states that expanded Medicaid could be different from states that did not in a variety of ways, some of which are difficult or impossible to measure. Moreover, it is possible that states that expanded eligibility could have already had higher average levels of life satisfaction among citizens with lower incomes to begin with.

To address this methodological challenge, I use a difference-in-differences estimation strategy where change in SWB among low income citizens within states from 2010 to 2014 is the dependent variable, such that a positive value indicates an increase in SWB over that time period and a negative value indicates a decrease. 2010 is selected as the baseline year because it is the last year before some provisions of the ACA (though not the federally funded Medicaid expansion) started to take effect. Using a difference-in-differences estimation strategy accounts for all time invariant factors that differ between the states (culture, history, some states having

\(^5\) There were fewer than 300 low income respondents and, therefore, no life evaluation measure reported by Gallup for: Alaska, Delaware, Hawaii, New Hampshire, North Dakota, Rhode Island, South Dakota, Vermont, and Wyoming.
higher baseline levels of SWB than others, etc.) and allows a researcher to isolate only changes over time in expansion vs. non-expansion states. To account for other theoretically relevant and time variant factors that might affect citizens’ well-being, I also include a measure of change in a state’s unemployment rate and change in a state’s economic growth for 2010 to 2013. Using these variables, I estimate the following equation with the 41 states as the units of analysis:

\[ LE_{2014-2010} = \alpha + \beta_1(ME_{2014}) + \beta_2(UR_{2013-2010}) + \beta_3(EG_{2013-2010}) + \epsilon \]

In the equation, LE is average life evaluation among low income respondents, ME is a dummy variable (0=did not expand, 1=expand) for whether a state expanded Medicaid eligibility in 2014 or not, UR is a state’s unemployment rate, and EG is a state’s level of economic growth. Change in life satisfaction between 2010 and 2014 is a continuous variable, so I use ordinary least squares regression to estimate the coefficients.

---

6 Data from 2013 are used to calculate change in state unemployment rate and economic growth because data for 2014 are still preliminary and subject to major revision. Data on state unemployment rates are from the U.S. Department of Labor’s Bureau of Labor Statistics (published on March 4, 2015) and data on state economic growth is from the U.S. Department of Commerce’s Bureau of Economic Analysis (published on June 10, 2015).

7 Because the value for 2010 is subtracted from the value for 2013, a positive value for change in the unemployment rate indicates that the unemployment rate increased (i.e. got worse) while a positive value for change in level of economic growth indicates the state’s economy got better. Descriptive statistics for all variables included in the analysis are reported in Table A-1 of the Online Appendix.

8 Because there are two time periods in the analysis and the policy intervention is dichotomous, the results yielded by this estimation strategy are identical to the commonly employed difference-in-differences strategy whereby observations are pooled over time and the impact of the policy intervention is the
Before proceeding to the analysis, it is important to highlight that this study examines changes in quality of life among low income citizens within a state as a whole, regardless of whether respondents personally/directly benefitted from the Medicaid expansion (and are now enrolled in the program) or not. One advantage of this type of research design is that it minimizes concerns about social desirability bias (such that respondents feel they should report higher levels of SWB because they are now enrolled in the program) because the policy “treatment” is simply whether one lives in an expansion state or not. However, it also means that any effect of the policy intervention will likely be underestimated. Therefore, the research design employed in this study arguably applies a very conservative test that biases against finding any statistical relationship between Medicaid expansion and citizens’ quality of life.

**Analysis**

Table 1 reports the results from regression models with change in average SWB among low income citizens within a state between 2010 and 2014 as the dependent variable. In Column 1, the coefficient for the Medicaid expansion dummy variable is positive and statistically different from zero at conventional levels of statistical significance (p<.05). This indicates that low income citizens in states that decided to expand Medicaid report a greater boost in their level of SWB compared to citizens living in states that did not expand. From a substantive standpoint, moving from a non-expansion state to an expansion state predicts more than half a standard deviation increase for the change in SWB dependent variable. As a basis for comparison, that substantive effect is larger than the predicted effect of moving from one standard deviation coefficient for an interaction term of a state’s status in the treatment category and post-treatment time status (Wooldridge 2013).
below the mean to one standard deviation above for the change in state economic growth variable (which also has a coefficient that is statistically different from zero in the model). To test the robustness of the finding, Column 2 uses the same model specification but uses a ratio measure (the value for 2014 divided by the value for 2010) for change in SWB among low income citizens as the dependent variable. This additional estimation reveals a similar result: low income citizens’ self-reported quality of life increased more in states that expanded Medicaid compared to those living in states that did not expand.9

[Table 1 about here]

One potential concern with the interpretation of the analysis above is that some alternative factor beyond Medicaid expansion (and the change in a state’s unemployment rate and level of economic growth) is impacting quality of life among low income citizens. To subject this possibility to greater empirical scrutiny, I conduct a series of placebo tests on groups that, from a theoretical standpoint, do not stand to benefit (at least in any direct way) from the policy decision to expand Medicaid in their state. Specifically, I estimate regression models using the same specification as above but instead use as the dependent variable change in quality

9 With 41 cases in the analysis, it is possible that one or two data points may exert undue influence on the regression coefficients and obscure the actual relationship between state Medicaid expansion and SWB among low income citizens. To investigate this possibility and to test the robustness of the findings, I estimate the same two models reported in Table 1 but instead run bi-weight robust regressions that estimate slope coefficients by first dropping the data points with the greatest influence/leverage (any observation with a Cook's Distance greater than one) and then down-weighting data points with large absolute residuals. In both models, the coefficient for Medicaid expansion remains positive and statistically different from zero (full regression results reported in Table A-2 of the Online Appendix).
of life in a state between 2010 and 2014 among only citizens in the middle income category ($3,000 to less than $7,500 per month) and only citizens in the high income category ($7,500 or greater per month). If Medicaid expansion boosts SWB among middle and high income respondents in the same way it does for those with low incomes (as reported in Table 1), then it is likely that the boost in SWB among citizens with low incomes is attributable to some other factor I have not accounted for. However, if Medicaid expansion has no effect on the SWB of other income groups, that finding would provide suggestive evidence that the results reported in Table 1 are not spurious.

[Table 2 about here]

The results from these placebo test estimations are reported in Table 2. For citizens in the middle income category (Columns 1 and 2), there are enough respondents (i.e. more than 300) in the same 41 states as the analysis for citizens with low incomes reported above. For citizens in the high income category (Columns 3 and 4), there are enough respondents in only 32 states. Looking across the four columns in Table 2 reveals that the Medicaid expansion variable is not statistically different from zero in any of the four regression models. These results indicate that the decision to expand Medicaid did not have an effect on SWB among middle and high income citizens who, compared to citizens with low incomes, are unlikely to directly benefit from the policy. In other words, the finding that Medicaid expansion boosts SWB among citizens with low incomes does not extend to more affluent citizens. Taken together, these placebo tests suggest that the findings reported in Table 1 are not spurious.
Conclusion

Even in an era of “New Federalism” with considerable devolution of federal power to the states, it is rare that all states are simultaneously faced with a decision about the future trajectory of a major social program. The Supreme Court’s 2012 ruling that states have the power to choose whether or not to expand eligibility for their Medicaid program provided an exogenous shock and a useful opportunity to evaluate the program’s potential effects on citizens’ lives. While previous studies have investigated the impact of Medicaid expansion on health care service usage and health outcomes, this study goes a step further and assesses the potential implications for citizens’ general quality of life. As the analysis above documents, citizens with low incomes reported a greater boost in SWB in states that decided to expand Medicaid eligibility when compared to low income citizens living in states that chose not to expand. This finding suggests that the expansion of Medicaid can have important implications for the quality of life that citizens experience and is deserving of further study.

Future inquiries on this topic should utilize individual-level survey responses to more fully illuminate the precise mechanism(s) that link Medicaid expansion and self-assessments of quality of life among low income citizens. Previous research (discussed above) that links Medicaid enrollment with a variety of positive physical health outcomes likely explains a portion of the story, but it is also likely that enrollment in Medicaid has psychological benefits that reduce anxiety about what one will do when they or a loved one is in need of medical aid. Moreover, future research should examine if quality of life similarly increases in states that initially decided not to expand eligibility but then reconsidered and are now moving forward with a later expansion. Because state officials can change their decision with the aid of new
information, researchers should continue to investigate the impact that the expansion of Medicaid eligibility can have on citizens’ quality of life.
References


Table 1: State Medicaid Expansion and Change in Subjective Well-Being Among Low Income Citizens, 2010-2014

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>State Medicaid Expansion</td>
<td>0.095*</td>
<td>0.015*</td>
</tr>
<tr>
<td></td>
<td>[0.039]</td>
<td>[0.006]</td>
</tr>
<tr>
<td>Δ Unemployment Rate</td>
<td>-0.014</td>
<td>-0.002</td>
</tr>
<tr>
<td></td>
<td>[0.022]</td>
<td>[0.004]</td>
</tr>
<tr>
<td>Δ Economic Growth</td>
<td>0.026*</td>
<td>0.004*</td>
</tr>
<tr>
<td></td>
<td>[0.009]</td>
<td>[0.001]</td>
</tr>
<tr>
<td>Constant</td>
<td>-0.053</td>
<td>0.992*</td>
</tr>
<tr>
<td></td>
<td>[0.057]</td>
<td>[0.009]</td>
</tr>
<tr>
<td>R²</td>
<td>.29</td>
<td>.28</td>
</tr>
<tr>
<td>N</td>
<td>41</td>
<td>41</td>
</tr>
</tbody>
</table>

Unit of analysis is the state. Dependent variable listed above each column. Cell entries are ordinary least squares regression coefficients with standard errors reported beneath in brackets. * denotes p<.05 using a two-tailed test.
Table 2: State Medicaid Expansion and Change in Subjective Well-Being Among Middle and High Income Citizens, 2010-2014

<table>
<thead>
<tr>
<th>Sample:</th>
<th>Middle Income Citizens</th>
<th>Middle Income Citizens</th>
<th>High Income Citizens</th>
<th>High Income Citizens</th>
</tr>
</thead>
<tbody>
<tr>
<td>State Medicaid Expansion</td>
<td>0.041 [0.034]</td>
<td>0.006 [0.005]</td>
<td>0.003 [0.032]</td>
<td>0.000 [0.004]</td>
</tr>
<tr>
<td>Δ Unemployment Rate</td>
<td>0.000 [0.019]</td>
<td>-0.000 [0.003]</td>
<td>-0.062* [0.019]</td>
<td>-0.008* [0.002]</td>
</tr>
<tr>
<td>Δ Economic Growth</td>
<td>0.012 [0.008]</td>
<td>0.002 [0.001]</td>
<td>-0.012 [0.007]</td>
<td>-0.002 [0.001]</td>
</tr>
<tr>
<td>Constant</td>
<td>0.017 [0.049]</td>
<td>1.002* [0.007]</td>
<td>-0.074 [0.049]</td>
<td>0.990* [0.007]</td>
</tr>
<tr>
<td>R²</td>
<td>.08</td>
<td>.09</td>
<td>.30</td>
<td>.29</td>
</tr>
<tr>
<td>N</td>
<td>41</td>
<td>41</td>
<td>32</td>
<td>32</td>
</tr>
</tbody>
</table>

Unit of analysis is the state. Dependent variable listed above each column. Cell entries are ordinary least squares regression coefficients with standard errors reported beneath in brackets. * denotes p<.05 using a two-tailed test.