"State involvement in limiting textbook choice by school districts"

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Who gets to decide what textbooks are used in America's classrooms varies by state. States can let each school district decide, provide standards that must be followed and make available an incomplete listing of books meeting those standards, or allow schools to only choose books from a list provided by the state. I present a model that provides an explanation for state limits on textbook selection by school districts. I examine the roles played by decision making costs, effectiveness of voters, religious composition, power of teachers, and propensity of state governments to interfere with or to help districts in textbook selection policies at the state level. There has been virtually no research on this topic. My findings corroborate the extant literature in regards to interference by state governments in local affairs and extend the morality politics literature by finding a strong link between fundamentalism and state level policies. I also find that state book lists are less likely 1) in more educated states, where voters are better able to select the most appropriate textbook, 2) in states with smaller school districts, where voters are more involved in the schools, and 3) in states with stronger teacher unions, giving teachers more power in textbook selection.

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1. Introduction

During recent years, several states that require textbook selection at the state level have been in the spotlight for controversies regarding what they choose to include and exclude from their book lists. Most recently, attention was drawn to Texas where they changed the state's curriculum so that it questions the separation of state and church doctrine and downplays the influence of figures such as Thomas Jefferson (Strauss, 2010). Some conservatives dislike Jefferson because he advocated separation between church and state, while some liberals dislike him because he held slaves.

The teachings of evolution in America's biology classes top the list among controversial topics[2]. For scientists, evolution constitutes an important building block necessary for the understanding of modern biology, while for some Christians it constitutes a direct attack on their beliefs. Politicians and school board members often make headlines over their stances, comments and actions regarding evolution and creationism. In Florida, for instance, an intense debate over teachings of evolution versus intelligent design and other theories culminated in the adoption of new state standards in 2008 explicitly requiring for evolution to be taught in schools. This requirement turned out to be highly controversial and was followed by actions from state legislators attempting to undermine it (Postal, 2011). In March 2011, Florida Senator Steve Wise filed the most recent attempt, a bill demanding "critical analysis of the scientific theory of evolution" (SB 1854, 2011). The bill immediately sparked the interest of media outlets and another round of fights between both sides erupted. Specifically, scientific groups saw it as an attack on the teachings of evolution in schools. The bill died 3 months after it was filed, but

[2] This statement is based on the number of court cases filed against schools regarding controversial topics.

based on legislative actions from the past four years, a similar form of it should be expected to resurface soon. Similarly, in 2006, the Utah Origins of Life bill sought to require teachers to issue a disclaimer to their students stating that not all scientists agree about evolution. Stephen Urquhart, the Mormon majority whip, amended the bill affirming that "he thought God did not have an argument with science" (Johnson, 2006). The bill was soon voted down.

Who gets to decide what books are used in America's classrooms varies by state. States can: (1) let each school district decide, (2) provide standards that must be followed and make available an incomplete listing of books meeting those standards (allowing petitioning of waivers for the use of other textbooks), or (3) allow schools to only choose books from a list provided by the state. Selecting good textbooks is important for student success. In a study relating to Brazilian and Indian educational production functions, Pritchett and Filmer (1999) found that increases in test scores per dollar spent on learning materials including textbooks were about 19 times greater than those from increases in teacher salaries (Pritchett and Filmer 1999, quoted in Boissiere 2004). According to Stream (2006) 80-90% of classroom and homework assignments in American schools are textbook driven. Furthermore, a large amount of taxpayer dollars – roughly 4.3 billion –are involved in the textbook market each year (Finn and Ravitch, 2004). This paper provides an explanation for state limits on textbook selection and for district decisions regarding the use of textbook list waivers. Follow-up research should focus on the impact of textbook choice policies on student outcomes.

Would a commission at the state level be more effective in knowing what textbooks the children of a remote rural district should use or would teachers and people familiar with the background of the students do a better job at choosing school materials? It is important to

understand what characterizes states that decide between these options. Specifically, why is it that certain states have decided to impose limits on the materials that can be used by its teachers while others have not? Understanding what influences these policies should provide insight into what makes states more or less flexible regarding their delegation of authority to choose textbooks. Given the importance of textbook use, who gets to make these types of choices could have important consequences for the performance of the educational sector.

In order to examine this question, the costs of decision making, effectiveness of voters, religious composition, power of teachers, and propensity of state governments to intervene (or to help inept districts) in textbook selection are analyzed at the state level. To my knowledge this is the first study to empirically examine textbook selection policies[3]. This study extends the existent literature in public choice, economics and political science. For instance, numerous studies have linked greater educational attainment to more involved electorates. This article provides some evidence for the idea that more educated people tend to demand more choice, are more involved in decision processes, and are more confident in their decisions. The study also examines the costs of decision making. The second section of this paper provides support for the hypothesis that the presence of heterogeneity in income makes it harder to reach agreements. This study also provides evidence consistent with there being less parental involvement in larger school districts. Furthermore, this paper corroborates the extant literature in regards to intervention by state governments in local affairs and extends the morality politics literature by

[3] Fuchs and Wöβmann (2007) examine an international education production function to assess whether having textbook autonomy leads to higher test scores by looking at 15 year olds in thirty countries and find that the use of autonomy when choosing textbooks only matters if there is a state exit exam. However, the authors do not examine the policies themselves.

finding a strong link between fundamentalism[4] and both state level and district level textbook selection policies. This is a relevant policy to examine because the benefits obtained by special interest groups are concentrated while the impacts (or costs) to the rest of society, are dispersed.

As mentioned earlier, some states provide textbook lists that are highly recommended but allow for districts to deviate from those lists through the use of waivers. The second section of this paper analyzes factors that are expected to influence petitions for the use of other textbooks at the school district level for the state of Indiana. Specifically, the second section of this paper provides some insight into what characterizes districts in Indiana that went through the extra work required to deviate from their state's recommended biology list during the year 2004. The results provide evidence supporting the costs of decision making as measured by gini coefficients for the state of Indiana, suggesting that counties that are more unequal in income distribution have a harder time reaching agreements. In addition to this, the results suggest that citizens who are more fundamentalist than average are more likely to request a waiver to opt out from Indiana's state list.

This paper is broken into four sections. Part 2 examines State Textbook Selection Policies. The Empirical Model and Results are presented in subsections A and B, respectively. Part 3 evaluates the use of waivers at the district level for the state of Indiana. Subsections A, B, and C present the Background, Empirical Model and Results. Part 4 concludes.

[4] In morality politics the term traditionalist is used to describe those who "take the Bible literally". I use the term fundamentalist instead, to avoid confusion with the more common usage of the word traditionalist. The term traditionalist is commonly associated with churches, such as the Catholic Church, which are not part of the group encompassing religious traditionalism as defined by the morality politics literature. Please refer to the Appendix for a complete description of what the term fundamentalist entails.

2. What characterizes states that give districts more choice in education?

2. A. Empirical model

This study examines several factors influencing state textbook selection policies utilizing two different specifications: a cross-sectional ordered logit model and a panel data logit model (PLM). Data availability dictated the use of these two different approaches because there is a trade-off between keeping a larger sample with fewer variables and using a specification with fewer observations, but a greater number of relevant variables. The state of Hawaii was dropped from all specifications because it only has one school district[5]. Policies determining who can select textbooks vary by state; they can be classified into three major groups:

1. *Complete Choice States ("Local Choice States"):* These are states that let each school district choose the textbooks it wants to use. In this case it is usually the duty of teachers, parents, and principals to choose the textbooks. 29 states correspond to this category[6].

2. *Recommended List States ("Recommended List States"):* These are states that have a list that is recommended, but not mandatory. These states usually have "correlation standards" that must be met and provide a list of books that have been shown to meet those standards (the students are then tested on the standards). Basically, these states have recommendations from a state agency, but their districts are allowed to choose books from outside that list. Currently, 12 states correspond to this category.

[5] For the state of Hawaii, there is no disparity between what the state and districts want since there is only one district in the state.

[6] California has a mandatory state list for grades 1-8, but is a choice state for high school. Since this paper focuses on high school texts, California is classified as a local choice state.

3. *Restricted Choice List ("Mandatory States"):* These are states in which the list of books that a district can use is chosen at the state level. Presently, 8 states fit into this category.

Table 1 provides a list of states and their corresponding classification. I classified each state by examining its specific laws. A spreadsheet with this information is available upon request. Table 2 defines the variables used and their sources. In order to provide an explanation of state policies regarding textbook selection, I estimated the following cross-sectional ordered logit models[7]:

(a) $State\ List\ 1 = \beta_o + \beta_1\ State\ Revenue + \beta_2\ Homeownership + \beta_3\ District\ Size + \beta_4\ Education + \beta_5\ Fundamentalist + \beta_6\ Gini + e_i$

(b) $State\ List\ 1 = \beta_o + \beta_1\ State\ Revenue + \beta_2\ Homeownership + \beta_3\ District\ Size + \beta_4\ Education + \beta_5\ Fundamentalist + \beta_6\ Gini + \beta_7 Teachers'\ Union + e_i$

The only difference between models (a) and (b) is the inclusion of the teachers' union variable for model (b). The two models were tested because using the teachers' union variable decreases the sample size by one: the state of South Carolina does not have a teachers' union. The dependent variable ("STATE LIST 1") is defined in the following way:

- 0 if a state has complete choice (local choice states)
- 1 if a state is in between (recommended list states)
- 2 if a state has a mandatory state list (mandatory states)

In order to account for differences that might arise from some states having long lists while others have short lists, the following models were also estimated:

(c) $State\ List\ 2 = \beta_o + \beta_1\ State\ Revenue + \beta_2\ Homeownership + \beta_3\ District\ Size + \beta_4\ Education + \beta_5\ Fundamentalist + \beta_6\ Gini + e_i$

(d) $State\ List\ 2 = \beta_o + \beta_1\ State\ Revenue + \beta_2\ Homeownership + \beta_3\ District\ Size + \beta_4\ Education + \beta_5\ Fundamentalist + \beta_6\ Gini + \beta_7\ Teachers'\ Union + e_i$

[7] The estimates presented correspond to high school.

Models (c) and (d) differ from models (a) and (b) in the definition of the dependent variable. The dependent variable ("STATE LIST 2") is defined as follows:

- 0 if a state has complete choice (local choice states)
- 1 if a state is in between (recommended list states)
- 2 if a state has a long mandatory state list for 9th grade. A long list is defined as a list that has a higher amount of books than the average of 24 books[8]
- 3 if a state has a short mandatory state list for 9th grade (i.e. lower than average when counting books from all lists)

Once again, models (c) and (d) differ in the inclusion of the teachers' union variable. As mentioned earlier, I also estimate the following PLM for the years 1970, 1980, 1990, and 2000:

(e) $State\ List\ 3_{it} = \beta_o + \beta_1 State\ Revenue_{it} + \beta_2 Homeownership_{it} + \beta_3 District\ Size_{it} + \beta_4 Education_{it} + \beta_5 Fundamentalist_{it} + \beta_6 Gini_{it} + \lambda_t + e_{it}$

The PLM model is very similar to the cross-sectional models except for two important differences: (1) the dependent variable is coded as "choice" and "non choice" because the authors who collected the data[9] did not distinguish between mandatory and recommended list states, and (2) the teachers' union variable is excluded because teachers' union data are not available for these years.

The advantage of using a panel is that it increases sample size and should provide more powerful test statistics. The disadvantage for this specific case is the lack of data for the variables mentioned above. Throughout the years, Watts (2002), Tulley (1985), and Zinth (2005) kept track of the number of states deciding whether or not to give their districts a choice in

[8] This was also tested by setting the cut off at the median of 20 books. The empirical results using the median as a cut off rather than the mean are very similar and are available upon request.

[9] Watts (2002), Tulley (1985) and Zinth (2005) kept track of the states' status throughout the years. The data come from their articles.

regards to textbook selection. The authors made a distinction between choice and non choice states, but they did not distinguish between mandatory and recommended list states. For this reason, the dependent variable in the panel ("STATE LIST 3") is defined in the following way:

- 0 if a state has complete choice (local choice states)
- 1 if a state does not have complete choice (mandatory and recommended list states)

The panel model uses time fixed effects[10] and the robust standard errors are clustered at the state level. Once again, the state of Hawaii was excluded because it only has one district. For this reason, the panel has 196 observations. Descriptions and sources for the variables used can be found in Table 2. Table 3 presents summary statistics.

One hypothesis for having a mandatory state list has to do with bureaucratic influences present in a state and ensuring that funds are used in appropriate ways (accountability). Withholding state funding unless a policy is adopted can often be used to dictate policies. States in which the state supplies a large share of school funding are expected to be more likely to dictate educational policies and, thus, textbook policies. A common reason given in favor of mandatory state lists is that state oversight of school books is cost and time efficient, saving the districts time by narrowing the lists they can choose from, and helping to ensure alignment with standards set by the state[11]. Textbook list restrictions also provide a way for states to help local districts that they deem unfit to make wise choices for themselves (due, perhaps to a lack of expertise or resources). It is expected that states that are more bureaucratic are more likely to

[10] Initially state fixed effects were added as well, but given the shortness of the panel the model was over-parameterized.

[11] For a thorough discussion of arguments for and against textbook adoption see Farr and Tulley (1988) and Finn and Ravitch (2004).

"help" districts by having mandatory state lists[12]. The bureaucratic aspect can be captured by the state revenue variable ("STATE REVENUE"), which equals the percentage of school revenue coming from the state and represents expected state involvement in local affairs, following Husted and Kenny (2000). School system revenues are obtained from a combination of federal, state, and local sources. The variable state revenue measures the importance of school system revenues coming from the state, and is defined as: State Revenue = (State Revenue * 100) / total revenue.

Some religious groups, known in the literature as fundamentalists, have been in the spotlight for championing issues related to textbook selection and adoption policies. Groups with these beliefs are measured by the number of adherents to fundamentalist churches as a percent of a state's total population ("FUNDAMENTALIST"). Fundamentalist churches are churches that are classified as "taking the Bible literally". This classification of fundamentalist churches has been used before in the morality politics literature and follows Johnson (1976). The morality politics literature is a body of literature that looks at how the political culture of an area can explain political outcomes and characteristics. The Southern Baptist Convention and the American Baptist Association are examples of congregations classified as fundamentalist. The Appendix contains a complete listing of congregations that are classified as being fundamentalist. The hypothesis regarding fundamentalism is that a state with a higher percentage of adherents to fundamentalist churches would be more likely to have a state

[12] State level funding may also reflect a desire to ensure basic levels of educational support where some districts are very poor.

mandated list[13]. Citizens belonging to fundamentalist congregations are strongly vocal against topics such as the teaching of evolution in schools and gay marriage. Fundamentalist believers in creationism consequently tend to oppose having their children exposed to evolutionary theories; thus they are expected to want to influence book lists in support of their ideologies.

These types of interest groups are powerful, concerned about this issue, well organized, and well known for their ongoing lobbying and strong political influence[14] (Delfattore, 1992; Batista Oliveira 1995). Answers in Genesis and other strong anti-evolution organizations have been known to use their hefty budgets to undermine the teaching of evolution (Cole, 2000 as cited in Moore, 2004). Furthermore, this does not seem to be a large enough issue for other parties to get together and exert their influence. It is also easier for fundamentalists to focus their efforts at the state level rather than at the district level for the simple reason that it is easier to lobby for an entire state than numerous districts. For example, if an advocacy group were to tackle the districts in Florida, it would be waging 67 separate "battles", one with each school district, as opposed to one large "battle" at the state level.

Even though the relationship between fundamentalists and public policies has been extensively studied, this paper is unique in that it examines textbook selection policies in this framework for the first time. Hutcheson and Taylor (1973) found fundamentalism to be strongly correlated with various political system and policy outcome variables relating to education and tax policies. Hutcheson and Taylor (1973, p. 418-19) analyzed fundamentalist groups and

[13] I also tried using a variable measuring percentage of votes for Bush in 2000 and average senator ADA scores. The results are very similar to using fundamentalism, but fundamentalism was chosen because the changes for several states preceded the 2000 elections.

[14] See Delfattore (1992) for a documented account of the disproportionate influence these groups have had over the years.

suggested both that "identification with fundamentalist religious groups represents an important factor in state political systems" and that "one may conclude that the values espoused by fundamentalist denominations represent a subculture influential in state policies". Morgan and Meier (1980, p. 148) studied the relationship between religion and referenda on moral issues using statewide referenda in Oklahoma, relating to issues such as repealing prohibition and authorizing betting on horse races and found that "religion does matter and, in fact, is clearly as important in its effect on moral votes as socioeconomic characteristics". Heath, Waters and Watson (1995, p. 139) examined state per capita income and found that religion significantly influences per capita income noting that "Christian fundamentalism influences the institutional environment in a manner detrimental to the generation of income, while Judaism exerts an impact contributing to wealth generation", where Christian fundamentalism was determined following the morality politics classification.

Using the fundamentalist classification, the states with the most fundamentalist groups as a percent of their population were Arkansas (37%), Mississippi (36.6%), and Alabama (35.6%). The states with the lowest percentage were Rhode Island (0.9%), Connecticut (1.1%) and New York (1.1%). It is expected that the more fundamentalist the state, the more likely it is to prefer mandatory state lists. Nevertheless, it is not clear that, all other things equal, adding more fundamentalists to states that are already highly fundamentalist would make them more influential. It is possible that having a state with 35% fundamentalists does not translate into more influence than having a state with 25% fundamentalists, given that the value of 25% is already very high. Perhaps what matters is whether or not a state is more fundamentalist than the rest. In order to account for this possibility, the fundamentalist variable is also measured as a dummy taking a value of 1 if a state has more fundamentalist church members than the average

state or a value of 0 otherwise ("FUNDAMENTALIST DUMMY"). The regressions that provided the best fits for each specification were reported in the tables.

The data regarding fundamentalism were obtained from the Glenmary Research Center's database. The Glenmary Research Center's database in Jones et al. (2002, p. xv) defines total adherents as "all members, including full members, their children and the estimated number of other participants who are not considered members; for example, the "baptized", "those not confirmed", "those not eligible for communion", "those regularly attending services", and the like". There is a striking relationship between types of state lists and the percentage of fundamentalist adherents for each state, which can be appreciated in Table 5.

Several studies have linked greater educational attainment to more confident, better informed and more involved electorates. Husted and Kenny (2007), for example, found that more educated voters are less likely to set limits on educational spending, given that more educated voters are generally more confident in their abilities. Similarly, Adams and Kenny (1986) found that more educated voters are less likely to impose term limits on their governors. Schmidt, Kenny and Morton (1996) used an objective measure of deviation from voter wishes and found that reactions to bad voting records were greater in more educated states. In addition to these studies, Denslow, Dewey and Kenny (2009) found that more educated cities were better represented than those with less education when examining the impact of the surge in property values on municipal expenditures for the 2000-2006 period. It is anticipated that states with more educated people would demand – or be given – more choice, because they would be expected to be more involved in the decision process and to be more confident in their decisions. Furthermore, textbook list restrictions can provide a way for states to help local districts that they deem unfit to make choices for themselves due, perhaps, to a lack of expertise or resources. The

population's adult educational attainment for each state is captured by two variables: bachelor's degree ("BACHELORS"), which represents the percent of the state's population holding a bachelor's degree, and advanced degree ("ADVANCED DEGREE"), which represents the percent of the state's population holding a graduate or professional degree.

A state's policy is also likely to be influenced by the size of its school districts. More choice would be expected in smaller districts since it is easier to reach agreements and more parental involvement is expected than in larger districts. On the other hand, if a district is large enough there might be less of a need to rely on the state government for textbook choice if economies of scale can be reached at the district level. One would also expect less parental involvement in larger districts, since there is a larger incentive to free ride, making a large local district less effective than a small one. Thus, for very large school districts, there would be less of a loss in going to a state decision. District size is defined as the number of students enrolled in the state divided by the number of districts in the state ("DISTRICT SIZE"), and as a dummy taking a value of 1 if a district is large, or a value of 0 if a district is small ("DISTRICT SIZE DUMMY"). Large districts are defined as districts that belong to the 8^{th}-10^{th} largest district deciles[15] when looking at the distribution of students/districts across states. This range was chosen because it captured the factor under consideration[16].

More heterogeneous districts might have a harder time reaching agreements and, for that reason, prefer to delegate to a state decision. A gini coefficient variable is used to control for heterogeneity between households within each state, providing a measure of household income

[15] Similar results were obtained when using the average and the median district as cut off points between large and small districts. The dummy was created following the same logic that was explained for the fundamentalist dummy.

[16] It provided the best fit.

inequality at the state level. The gini variable ("GINI") can range from 0 to 1. A low gini represents a state with more equal distribution (value of 0 if districts look the same, meaning that everyone has the same income), while a high gini represents a state with high inequality of income (value of 1 if districts have perfect inequality). Utah and New Hampshire have the lowest gini coefficients (0.4104 and 0.4151 respectively) indicating that the income distribution is more equal than in other states, while New York and Connecticut have the highest (0.4985 and 0.4809 respectively), indicating that income is distributed more unequally than in other states.

A state's policy regarding textbook selection is also expected to be influenced by teachers. Teachers' union expenditures at the state level provide a measure of the power teachers can have on their specific states. Powerful groups of teachers would likely exert their influence and require more of a say on what happens in the classroom. States where teachers' unions are stronger would be expected to favor more choice in textbooks since teachers would prefer selecting their own texts over having someone else make that decision for them. The teachers' union variable ("TEACHERS' UNION") is defined as total union expenditures per student at the state level for each state's largest union, giving a measure of the influence and strength of teachers.

Finally, following Fischel (2005), a measure of homeownership is included in the model. Home values are higher when schools are doing a good job, so one would expect states with more homeowners to be better monitors and to have less of a need to restrict choice. The homeownership variable ("HOMEOWNERSHIP") is defined as the percentage of homeowners in the state, relative to renters.

2. B. Results

The first set of results is reported in Tables 6 - 8. Results with the additional teachers' union variable are shown in Table 7, while results using the panel logit model in Table 8. These different specifications were tested, since there is a trade-off between keeping the larger sample and between using specifications with fewer observations, but a better fit. It is important to note that the coefficients presented in Tables 6-8 only give us the direction of the effects. Due to the nonlinear nature of logit models, the partial effects (i.e. the marginal effects) for a given explanatory variable are not given by its coefficient and are different for each observation[17]. For this reason, two routinely followed approaches are used to compute marginal effects. The first method, known as Partial Effects at the Average (PEAs) consists on computing the marginal effects at the average values of each continuous explanatory variable. In the case of discrete variables, dy/dx is calculated for a discrete change of the dummy variable from 0 to 1. The idea here is to obtain the partial effect for the "average" state in the sample. The second method, known as Average Partial Effects (APEs) consists on computing marginal effects for each state and then averaging these over the sample. Results with the marginal effects calculated as Average Partial Effects and Partial Effects at the Average for each outcome can be found in the Appendix.

Columns (1) and (2) in Tables 6 and 7 differ in the definition of the dependent variable. For column (1) the dependent variable is defined as local choice, recommended or mandatory state list, whereas for column (2) the mandatory state list group is further subdivided into two groups: short mandatory state list and long mandatory state list. Though different measures of

[17] For a more thorough explanation, please refer to Wooldridge (2005).

several variables were tested, only the results that provided the best fits were presented given that they all yielded very similar results.

The coefficients of different measures of the fundamentalist variables are highly significant and, as hypothesized, positive in every specification except for one of the panel specifications. These results indicate that the probability of having a more restricted state list increases as more people belong to fundamentalist groups. Specifically, the marginal effects from the ordered logit cross-section presented in Tables 10-14 indicate that the probability of being a local choice state decreases, for example[18], by 37% for states which have more fundamentalist adherents when compared to those that do not. The panel results suggest that the probability of having a mandatory state list increases as more people belong to fundamentalist groups. These results are to be expected, given that fundamentalists feel more strongly about evolution than others and are, thus, more active and effective in bringing about policies they prefer.

According to the estimates, the district size variable and the district size dummy variable are always highly significant and positive for the cross-sectional specifications, indicating that the probability of having a more restricted state list increases as school districts become larger. District size is significant in 2 out of the 3 panel specifications. The marginal effect in Table 10 indicates that the probability of being a local choice state decreases by 11% for states with a district size one standard deviation (i.e. 7,301) above the mean[19]. This result is consistent with there being less parental involvement in larger districts. This is because there is a large incentive

[18] This example corresponds to the Average Partial Effect calculation in Table 10 for Outcome 0 (local choice states)

[19] This is obtained by multiplying the Average Partial Effect coefficient from Outcome 0 (local choice states) by the standard deviation: -0.000015*standard deviation = -0.000015*7,301.346 = 0.1095

to free ride and a gain from the state government taking over in the sense that a state bureaucracy is seen as better than having decisions made by uninterested voters.

The coefficients on advanced and bachelor's degree are significantly negative in all cross-sectional specifications, as expected. However, these results are not corroborated by the panel, and as such should be viewed with caution. The cross-sectional results suggest that the probability of having a more restricted state list falls as the residents of a state become more educated. The marginal effect in Table 10 indicates that the probability of being a local choice state increases by 13% for a state that has a percentage of residents with advanced degrees one standard deviation above the mean. This is expected, since states with more educated people would be more confident in their choices and demand more choice.

The model provides some evidence for the state revenue hypothesis. The coefficient for the state revenue variable is significant and positive in most regressions (except for the model including the teachers' union variable), and indicates that the probability of being a more restricted state list increases as state revenue becomes a larger share of total school revenue (i.e. more intervention in local decisions). Specifically in Table 11, the marginal effect indicates that the probability of being a local choice state decreases by 12% for a state that has a state revenue share of total revenue one standard deviation above the mean. For the panel section, the marginal effects are always positive and significant, indicating that the probability of having a mandatory state list increases as state revenue becomes a larger share of total school revenue. This is consistent with the bureaucratic involvement hypothesis. As expected, states that are more bureaucratic are more likely to have mandatory state lists since states where the state level government intervenes more in local affairs are more likely to also interfere by restricting

textbook choice and "taking care" of their residents. It is important to emphasize that these results are not present in all the specifications.

The model does not provide support for the hypothesis predicting that homeowners have less of a need to restrict choice, suggesting that homeownership does not play a role in state level textbook selection policy restrictions.

The state income gini variable is slightly significant and positive in a few unreported regressions, available upon request, indicating that the probability of having a more restricted state list increases as states have a more heterogeneous population. Heterogeneous states are states in which there is a more unequal income distribution. A possible explanation for this is that it might be harder for districts to reach agreements in the presence of more heterogeneous populations. Note, however, that the marginal effects for the specifications with the best overall fits – presented in Tables 10-14 – are not statistically different from 0.

The results with the additional teachers' union variable are similar to the results excluding this variable and are shown in Table 7. Teachers' union is weakly significant in one specification, indicating that, as hypothesized, the probability of having a more restricted state list falls as teachers have more power (as reflected by their expenditures). This result is consistent with the idea that more powerful teachers would exert their influence, and require more of a say on what happens in the classroom. Specifically in Table 14 the marginal effect indicates that the probability of being a local choice state increases by about 9% for states that have state level union expenditures one standard deviation (i.e. 13.03) above the mean.

3. What characterizes school districts that choose to opt out of a state's recommended textbook list? Evidence from Indiana.

3. A. Background

The textbook selection policies studied examine biology textbooks specifically because evolution has always been the most controversial topic. Moore, Jensen and Hatch (2003) indicate that in the 1920s, Tennessee, Arkansas, and Mississippi passed laws that prohibited the teaching of human evolution. According to these authors, Mississippi was the last state to nullify its ban on the teaching of evolution in 1970. Nowadays, teachers encounter pressure from both sides. On the one hand, several authors have noted that teachers are pressured to avoid teaching evolution (Zimmerman, 1987; Kraemer 1995; and Randak 2001 as cited in Moore, 2004). On the other hand, both court decisions and a variety of professional scientific societies have consistently supported the teaching of evolution (Moore, 2004).

The state of Indiana, one of the thirteen recommended list states, provides an ideal setting to study the factors that characterized individual school districts that requested waivers to opt out from their state's recommended textbook list. The Indiana Department of Education has collected and published easily accessible data on their adoption process, laws, adoption outcomes, and other district level variables of interest which are described in subsection B. Indiana has 291[20] school districts. Figure 2 illustrates the distribution of school districts that received waivers for high school science classes[21] during the year 2004. As the figure shows,

[20] Technically, Indiana has 292 school districts, but one district was excluded because it didn't have a high school. All special education districts were excluded as well.

[21] 1st year Biology, 2nd year Biology, and Earth/Space Science

there are districts requesting waivers in all six regions. A brief excerpt of relevant sections from Indiana's textbook adoption code for the year 2004[22], the last year for which data on science textbook adoptions at the school district level was available, is provided below (Indiana legislative services agency website, 2004)

- The procedures for textbook adoption must include the involvement of both teachers and parents on an advisory committee for the preparation of recommendations. The majority of members must be teachers but no less than 40% of the committee must be comprised of parents.
- The local superintendents must forward to the state board of education a list of their selections for all subjects and grades. The board shall examine these lists, and, if the board finds a deviation from the state adopted list and that there has been no waiver granted under section 27 of the chapter, the board shall notify the local superintendent of the deviation. If the school corporation does not comply with this chapter within thirty days of receiving the notification, the board shall cancel the accreditation of the offending schools.
- After giving the advisory committee an opportunity to give its recommendation, the governing body of a school corporation may request a waiver from the adoption requirements if the governing body believes that the educational needs of the students attending that school corporation can best be served by adopting no textbook or adopting a textbook that has not been adopted by the commission.
- A request for a waiver must be submitted on a form approved by the Indiana State Board of Education before June 1 of the year preceding the first school year for which the waiver is to apply. The Indiana State Board of Education shall grant the waiver if it determines that the request is reasonable.

Thus, for the year 2004, Indiana had a system in place in which parents were permitted to influence the choice of textbooks used in the classroom, reflecting local choice. This local decision was, however, subject to approval from the state, which also added difficulty to the process by requiring extra steps for the waiver procedure to be completed. Each school district desiring to deviate from the state's recommended list had to agree on a textbook that both met

[22] Indiana's code was changed in the year 2009. The current code provides all school districts with "blanket waivers". This essentially means that school districts can determine the best materials to achieve proficiency of the academic standards by themselves. They still have to notify the state of their choice of textbook, but the decision is now mainly a local one.

the committee's requirements and allowed students to achieve proficiency in the state's academic standards. They also had to submit a waiver form and obtain approval from the Indiana State Department of Education. The state's evaluation was mostly concerned with authorizing textbooks that met the state standards.

It is important to note that the content of biology textbooks that are selected in this state plays a very important role. Recent studies found that even though Indiana has some of the best state standards regarding evolution, 43% of its biology teachers avoid or "briefly mention" evolution, and at least 20% reject or are undecided about its scientific validity (Rutledge and Warden, 2000; Rutledge and Mitchell, 2002, cited in Moore, 2004).

3. B. Empirical Model

What characterizes school districts that opt out of a recommended state list? In order to assess this question, the following cross-sectional logit model is estimated:

$$(f) \quad Textbook\ Waiver = \beta_o + \beta_1 Fundamentalist + \beta_2 Gini + \beta_3 DistrictSize + \beta_4\ Bachelor's + \beta_5 Rurality + \beta_6 Region + e_i$$

The dependent variable ("TEXTBOOK WAIVER") is defined in the following way:

- 0 if a school district uses a textbook from the state recommended list
- 1 if a school district opts out of the state recommended list by using a waiver

These data come from the Indiana Department of Education's 2004 textbook adoption report by category which is available in their website at the school district level. Summary statistics and sources for the explanatory variables used can be found in Table 4.

As mentioned earlier, the term fundamentalist refers to churches that are classified as "taking the bible literally". As seen in section 2, the results from the state level analysis suggest that the probability of being a local choice state decreases as states have more fundamentalist adherents when compared to those that do not. These results are to be expected given that

fundamentalists feel more strongly about evolution than others and are, thus, more active and effective in bringing about policies they prefer. These results do not, however, give us any insight in regards to what happens in states that do not have mandatory lists, perhaps because fundamentalists do not constitute a large enough group to demand one, as seems to be the case with the state of Indiana. In Indiana, the percent fundamentalist at the state level is 5.9%, which is much lower than the percent for the average state (10.20%)[23]. Furthermore, judging by its standards, Indiana could be classified as a "pro-evolution" state. Indiana has some of the best evolution education state standards in the nation (Rutledge and Warden 2000, Rutledge and Mitchell 2002, quoted in Moore 2004). Given these circumstances, you would expect fundamentalist districts to clearly be better off by requesting a waiver. It is important to note that what matters in this case is how fundamentalist each school district is relative to the state (given that the recommended list is chosen at the state level). For this reason, the fundamentalist variable ("FUNDAMENTALIST DUMMY") was calculated for each county[24] using the following steps:

Step 1: Calculate fundamentalist difference[25] where:

Fundamentalist Difference = % Fundamentalist in county - % Fundamentalist in the state of Indiana

Step 2: Create fundamentalist dummy where fundamentalist is:

- 0 if the county is either less fundamentalist than the state or just slightly more fundamentalist than the state (by less than 1 percentage point).

[23] The state with the lowest percent is Rhode Island (0.9%) and the highest Arkansas (37%).

[24] Religious fundamentalism data is only available at the county and state levels. The data for this section were collected preferably at the school district level, but when that was not possible, county level data were used instead. For a description of the variables used and their levels, refer to the summary statistics section.

[25] Fundamentalist difference is measured in percentage points (as opposed to percentage). A percentage point is the unit for the arithmetic difference of two percentages. For example, 15% is 5 percentage points higher than 10%, but 50% higher than 10%.

- 1 if the county is much more fundamentalist than the state (more fundamentalist by more than 1 percentage point).

The implicit assumption here is that being just slightly more fundamentalist than the state may not cause you to go through the extra effort required to change a textbook, but being much more fundamentalist than the state would. The cut off used, suggesting support for this assumption, provided the best fit. As was the case with the state level analysis, the classification of fundamentalist churches used was taken from the morality politics literature and follows Johnson (1976).

Educational attainment is also included. As mentioned in section 2, several studies have linked greater educational attainment to more confident, better informed and more involved electorates. It is anticipated that states with more educated people would demand (or be given) a waiver if the state list does not match their beliefs, because they would be expected to be more involved in the decision process and to be more confident in their decisions. It is also expected that states with more educated residents would be more likely to prefer relatively evolutionist content, given that they would be expected to have a better understanding of science. Several studies have found a link between education and evolution beliefs. As an example, a recent Gallup poll found that "there is a strong relationship between education and belief in Darwin's theory […] ranging from 21% of those with high school educations or less to 74% of those with postgraduate degrees"[26] (Newport, 2009). Furthermore, Indiana's science education standards have been evaluated as "pro-evolutionist", so you would expect school districts with more educated citizens to be less likely to request a waiver. The population's adult educational attainment for a school district is captured by the variable bachelor's degree ("BACHELORS"),

[26] See Figure 1

which represents the percent of the school district's population over 25 years old holding a bachelor's degree or higher.

Since several steps and agreements between school district parents and teachers are required to be able to decide to opt out from a state list, apply for and obtain a waiver, the size of a school district is expected to influence the use of waivers. As mentioned earlier, one would expect less parental involvement in larger districts, since there is a large incentive to free ride. Thus, you would expect large districts to have a harder time reaching agreements and applying for waivers. District size in this context is defined as the total number of students enrolled in the school district ("DISTRICT SIZE"). In a similar fashion, one would expect heterogeneity between households within a district to affect the use of waivers. For this reason, a gini coefficient variable ("GINI"), providing a measure of household income inequality, is used. School districts are expected to be less likely to get a waiver when they are more unequal (i.e. have a higher gini coefficient). This variable is a proxy for the costs of reaching a decision. The higher the inequality, the harder it is to reach a decision regarding a waiver. The gini coefficients were calculated from the US 2000 Census by Professor Mark Burkey from NCA&T State University (Burkey, 2000).

A variable measuring rurality is also included. This is because urban inhabitants "may possess a different stock of information than their rural counterparts that induces differential consumption choices" (Sass and Saurman, 1993). In order to control for the relative rurality of school districts, dummies using the 2004 Locale Census definitions were created. The categories used are listed in Table 4. In addition to this, regional dummies were constructed using the Indiana Department of Education's regional classification. These regions are listed in the

Appendix. Given that some variables were only available at the county level, errors were clustered at the county level.

3. C. Results

The logit model results for the use of waivers analysis for the state of Indiana are available in Table 9. Results with the marginal effects calculated as Average Partial Effects (APEs) and Partial Effects at the Average (PEAs) for each outcome can be found in the Appendix.

The fundamentalist variable is defined as a dummy taking a value of 1 if the county is more fundamentalist than the state of Indiana by more than 1 percentage point and 0 otherwise. The coefficient of this variable is significant and, as hypothesized, positive. These results indicate that the probability of having a waiver increases when a county is more fundamentalist than the state of Indiana by more than 1 percentage point when compared to those counties that are not (i.e those counties that are either less fundamentalist than the state or more fundamentalist but by less than 1 percentage point). The marginal effects from Table 15 indicate that the probability of having a waiver increases, for example, by 9% when a county is more fundamentalist than the state of Indiana by more than 1 percentage point than otherwise. These results are to be expected given that, as explained in the background section, Indiana is a mostly pro-evolution state that does not have a mandatory list. Under these circumstances, one would expect fundamentalists to be better off by requesting a waiver.

The income gini variable is slightly significant and negative indicating that the probability of having a waiver decreases when a county is more unequal (has a higher gini coefficient). This picks up the costs of reaching a decision. The more unequal a county is, the

harder it is to make a decision and reach agreements, so the less likely the school districts would be to get a waiver. There is lack of support for the predictions regarding educational attainment and district size implying that, unlike the state level predictions, education and district size do not seem to play a role in the use of waivers for the state of Indiana.

4. Conclusions

This paper presented several models examining textbook selection policies. The first two models examined the factors influencing state level textbook policies, and the third model examined factors associated with Indiana districts opting out of the state list of approved textbooks. Religious composition, effectiveness of voters, costs of decision making, power of teachers, and propensity of state governments to intervene or to help inept districts are all important factors.

This analysis extends the extant morality politics literature and provides strong evidence of the link between religious fundamentalism and government policies. As expected, the probability of being a local choice state falls with greater adherence to fundamentalist groups. This is expected because these groups tend to have more interested and focused constituents relative to other groups. Fundamentalism seemed to also play a very important role in the use of waivers for the state of Indiana, a state that has a smaller proportion of fundamentalists than other states, strong evolution educational standards and relatively pro-evolutionist content coverage in its state recommended textbooks. The evidence suggests that, as expected, it is the fundamentalist groups that can stand to benefit the most from the use of waivers in this type of environment.

The results of this study are consistent with those of Husted and Kenny (2007), Adams and Kenny (1986), Schmidt, Kenny and Morton (1996) and Denslow, Dewey and Kenny (2009) offering some evidence that states with a more educated populace demand – or are given – more local choice, because they are expected to be more involved in the decision processes and to be more confident in their decisions.

The evidence suggests that the probability of having more restricted textbook lists increases as school districts become larger, supporting the notion that less parental involvement is expected in larger districts, since there is a large incentive for parents to free ride, making a large local district less effective than a small one. Thus, as expected, for very large school districts, there seems to be less of a loss in going to a state decision. The study also finds support for decision making costs being greater in more heterogeneous districts. Specifically, the presence of higher income inequality within a county is found to lessen the probability that a district seeks a waiver from the Indiana state list of approved textbooks.

Furthermore, this paper corroborates the extant literature in regards to intervention by state governments in local affairs, by suggesting that there is a link between how much a state government contributes to school revenues and how much it intervenes in a school district's affairs.

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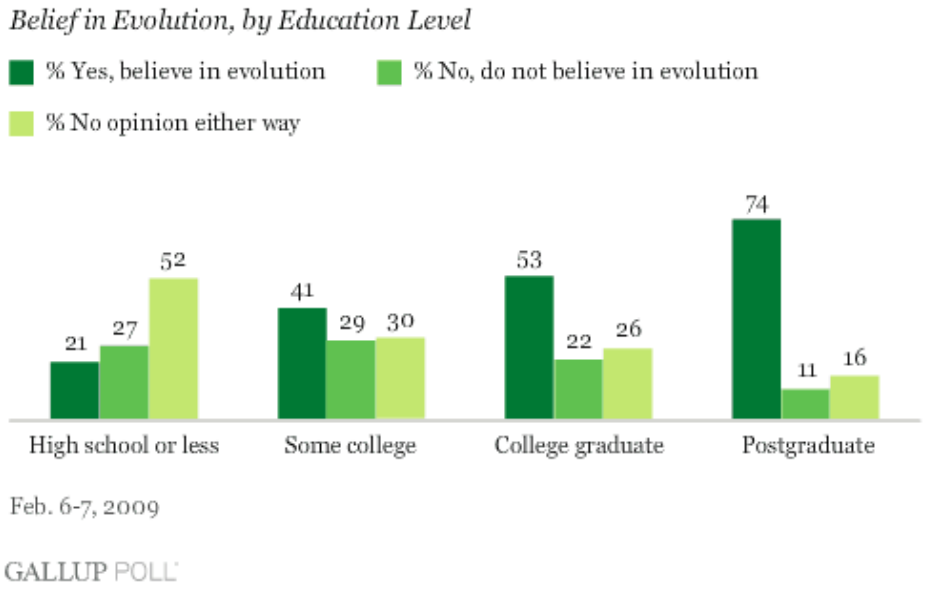
6. Figures and Tables

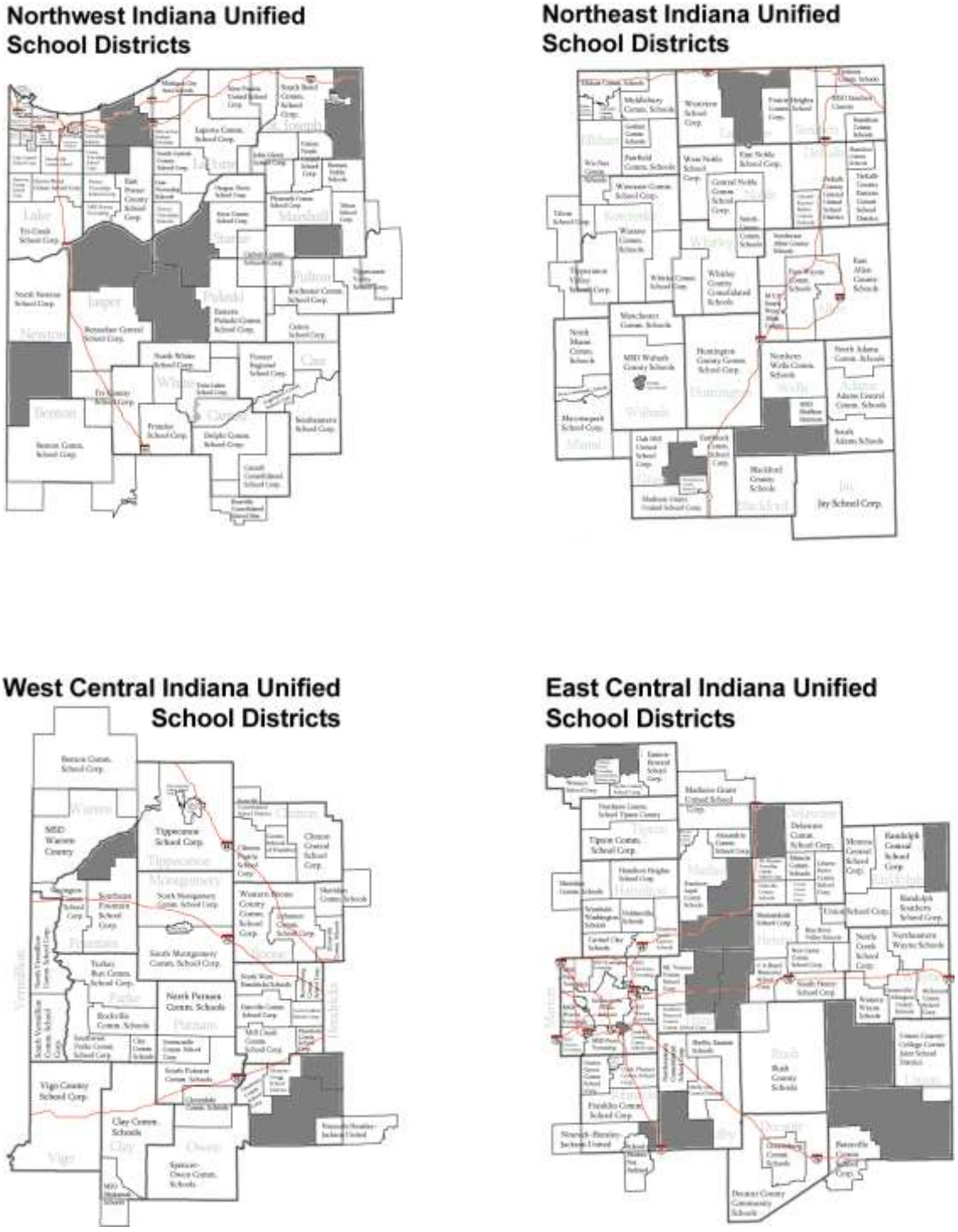
Figure 1: Belief in Evolution, by education level (Gallup poll)



Source: Newport (2009)

Figure 2: Geographical distribution of Indiana school district waivers.

The shading indicates school districts that used a waiver for Science textbooks during the year 2004.



Southwest Indiana Unified School Districts

Southeast Indiana Unified School Districts

Notes:

Map Source: Indiana Business Research Center using Tiger/Line 2006 Second Edition Files from the US Census Bureau, August 2007.

Last accessed on July 14, 2011, link: http://www.stats.indiana.edu/maptools/school_districts.asp

Table 1: Classification of states and number of biology textbooks

States that have a Mandatory State List (8 states)

STATE	9TH GRADE	10TH GRADE	11TH GRADE	12TH GRADE
ALABAMA	22 books	22 books	23 books	23 books
FLORIDA	17 books	17 books	17 books	17 books
LOUISIANA	14 books	14 books	14 books	14 books
MISSISSIPPI	53 books	56 books	60 books	60 books
NEW MEXICO	26 books	26 books	26 books	26 books
N. CAROLINA	18 books	18 books	18 books	18 books
OKLAHOMA	32 books	31 books	31 books	29 books
TENNESSEE	16 books	17 books	16 books	16 books

States that have a Recommended State List (12 states)

STATE	9TH GRADE	10TH GRADE	11TH GRADE	12TH GRADE
ARKANSAS	17 books	17 books	17 books	17 books
GEORGIA	22 books	21 books	18 books	18 books
IDAHO	28 books	28 books	30 books	30 books
INDIANA	40 books	40 books	40 books	40 books
KENTUCKY	34 books	34 books	35 books	35 books
NEVADA	39 books	36 books	39 books	39 books
OREGON	8 books	8 books	8 books	8 books
S. CAROLINA	20 books	13 books	14 books	14 books
TEXAS	7 books	7 books	11 books	11 books
UTAH	22 books	9 books	9 books	9 books
VIRGINIA	14 books	14 books	14 books	14 books
W. VIRGINIA	5 books	3 books	1 book	1 book

Table 1: Classification of states and number of biology textbooks (Continued)

States that do not have a state list (28 or 29 states depending on grade levels considered since California only has a list for elementary and middle school)

STATE	STATE	STATE	STATE
ALASKA	*ARIZONA*	*COLORADO*	*CONNECTICUT*
DELAWARE	*ILLINOIS*	*IOWA*	*KANSAS*
MAINE	*MARYLAND*	*MASSACHUSETTS*	*MICHIGAN*
MINNESOTA	*MISSOURI*	*MONTANA*	*NEBRASKA*
NEW HAMPSHIRE	*NEW JERSEY*	*NEW YORK*	*NORTH DAKOTA*
OHIO	*PENNSYLVANIA*	*RHODE ISLAND*	*SOUTH DAKOTA*
VERMONT	*WASHINGTON*	*WISCONSIN*	*WYOMING*

States that do not have a state list for high school (1 state)

STATE
CALIFORNIA

Notes: - California has a list only until 8th grade.

- The state lists and links to relevant state laws are available upon request.

- The results presented for the short and long list classification in this paper correspond to the 9th grade. The long and short list classification was established for each grade separately, with very similar results being obtained for each grade.

Table 2: Description and sources: State level textbook selection variables.

INDEPENDENT VARIABLE	DESCRIPTION	SOURCE
BACHELOR'S DEGREE	% Bachelor's Degree in state.	- Cross-section: US Census Bureau (Census of Population). Year: 2007 - Panel: US Census Bureau (Decennial Census of Population 1940-2000). Years: 1970, 1980, 1990, 2000.
ADVANCED DEGREE	% Advanced Degree (more than Bachelor's).	- Cross-section: US Census Bureau Census of Population. Year: 2007
DISTRICT SIZE	Total students in a state / number of districts in a state. Thus, a larger number (1/1 vs 500/1) means larger districts.	- Cross-section: Common Core. Year: 2007 - Panel: Common Core. Years: 1969-70, 1979-80, 1989-90, 1999-00
DISTRICT SIZE DUMMY	Dummy takes value of 1 if average district is large, value of 0 if district is small. A large district is defined as a district corresponding to the 8^{th}-10^{th} deciles when looking at the distribution of students/districts across states.	- Cross-section: Common Core. Year 2007
HOMEOWNERSHIP	% Homeowners	- Cross-section: US Census Bureau: Household vacancies and Homeownership. "Homeownership rates by state: 1984-2007". Year 2007 - Panel: US Census Bureau: Census of Housing, 1900-2000. Years: 1970, 1980, 1990, 2000.
FUNDAMENTALIST	Total adherents of fundamentalist churches as a percent of total population	- Cross-section: Glenmary Research Center. Year 2000. - Panel: Glenmary Research Center. Years: 1971, 1980, 1990, 2000.
FUNDAMENTALIST DUMMY	Dummy takes value of 1 if more fundamentalists than the average, value of 0 if otherwise.	- Cross-section: Glenmary Research Center. Year 2000.
STATE REVENUE	School system revenue from state *100 / total School system revenue.	- Cross-section: Census of Governments Survey of Local Government Finances – School Systems (US Census Bureau 2007). Year 2007. - Panel: US Dept. of Education, NCES, Statistics of State School Systems and Common Core. Digest of Education Statistics (2002). Years: 1969-70, 1979-80, 1989-90, 1999-00.
GINI	- Cross-section: State level household income inequality measure (Gini coefficient). - Panel: State level family[27] income inequality measure (Gini coefficient).	- Cross-section: US Census Bureau, Income Report 2007. Year 2007. - Panel: US Census Bureau, Historical Income Tables for States. Years: 1969-70, 1979-80, 1989-90, 1999-00.
TEACHERS' UNION	Total union expenditures by largest state level teachers' union / Student population by state.	- Cross-section: IRS990 forms and Common Core, following Johnathan Lott. Year: 2007.

[27] The State Income Gini is measured at the family level instead of the household level because data for 1970 is only available at the family level. The Census Bureau defines household as a group of persons occupying a housing unit, thereby including families and unrelated individuals. A family is defined as a group of two or more persons related by birth, marriage, or adoption and residing together.

Table 3: Summary statistics: State level textbook selection variables.

Variable	Cross-section Excluding South Carolina N=48		Cross-section Including South Carolina N=49		Panel N=196	
	Mean (S.D.)	*Max (Min)*	*Mean (S.D.)*	*Max (Min)*	*Mean (S.D.)*	*Max (Min)*
Bachelor's Degree	26.7563 (4.7488)	37.9 (17.3)	26.6898 (4.7221)	37.9 (17.3)	17.4767 (5.972)	33.19 (6.7)
Advanced Degree	9.65 (2.4515)	16 (6.4)	9.6204 (2.4346)	16 (6.4)	…	…
District Size	4,831.359 (7,363.557)	35,237.5 (337.643)	4,897.953 (7,301.346)	35,237.5 (337.43)	4,745.5220 (6,411.5430)	37,500 (235.211)
District Size Dummy	0.2917 (0.4593)	1 (0)	0.3061 (0.4657)	1 (0)	0.3061 (0.4621)	1 (0)
Homeownership	70.1917 (4.3169)	77.6 (55.9)	70.2714 (4.3080)	77.6 (55.9)	66.6827 (4.9488)	75.2 (47.3)
Fundamentalist	9.8667 (10.6749)	37 (0.9)	10.2061 (10.8271)	37 (0.9)	11.5788 (11.6312)	47.0900 (0.1537)
Fundamentalist Dummy	0.2708 (0.4491)	1 (0)	0.2857 (0.4564)	1 (0)	0.3010 (0.4599)	1 (0)
State Revenue	49.8532 (11.9998)	87.7584 (31.7056)	49.7302 (11.9053)	87.7584 (31.7056)	46.1500 (13.5360)	73.9902 (8.2357)
Gini	0.4483 (0.0194)	0.4985 (0.4104)	0.4458 (0.0192)	0.4985 (0.4104)	0.3820 (0.0325)	0.4720 (0.3170)
Teachers' Union	21.9264 (13.0259)	63.8157 (2.1544)	…	…	…	…

Table 4: Summary statistics and sources: Indiana district level study.

INDEPENDENT VARIABLE N=291	MEAN (S.D)	MAX (MIN)	DESCRIPTION	SOURCE
BACHELOR'S	18.8084 (11.1516)	78.7505 (4.3919)	% of population over 25 years old holding a bachelor's degree or higher. District level variable.	School District Demographic System (SDDS). Year: 2000
DISTRICT SIZE	3,449.014 (4,381.217)	39,989 (149)	Number of students enrolled in the district. District level variable.	National Center for Education Statistics Common Core of Data. Year: 2004
REGIONAL DUMMIES	…	…	Regions determined by the Indiana Department of Education. See Appendix for details.	Indiana Department of Education. Year: 2004
FUNDAMENTALIST DUMMY	0.5017 (0.5009)	1 (0)	Dummy takes value of 1 if the county is more fundamentalist than the state by more than 1 percentage point and 0 otherwise. County level variable.	Glenmary Research Center. Year: 2000
RURALITY DUMMIES	…	…	(omitted dummy) Rural outside CBSA/MSA (1) Rural inside CBSA/MSA (2) Small town, Large town and Urban fringe of midsize city (3) Urban fringe of large city, Midsize city, and Large city. District level variable.	NCES. Common Core. Year: 2004.
GINI	0.4031 (0.0258)	0.4719 (0.3447)	Gini coefficients calculated by M. Burkey using US Census 2000 data. County level variable.	Professor Mark Burkey's website. NCA&T State University, Greensboro, NC. Year: 2000

Table 5: Fundamentalism by state.

States that have a Mandatory State List
(8 states)

STATE	% FUNDAMENTALIST
ALABAMA	35.6
FLORIDA	10.8
LOUISIANA	19.4
MISSISSIPPI	36.6
NEW MEXICO	9.2
N. CAROLINA	22.5
OKLAHOMA	34.5
TENNESSEE	29.5
AVERAGE	**24.76**

States that have a Recommended State List
(12 states)

STATE	% FUNDAMENTALIST
ARKANSAS	37
GEORGIA	24.5
IDAHO	4.7
INDIANA	5.9
KENTUCKY	27.8
NEVADA	3.6
OREGON	6.3
S. CAROLINA	26.5
TEXAS	19.5
UTAH	1.3
VIRGINIA	13
W. VIRGINIA	7.3
AVERAGE	**14.78**

States that do not have a state list *for high school*
(1 state)

STATE	% FUNDAMENTALIST
CALIFORNIA	3.8

States that do not have a state list
(28 states or 29 states depending on grade level)

STATE	% FUNDAMENTALIST
ALASKA	7.6
ARIZONA	5.7
COLORADO	4.8
CONNECTICUT	1.1
DELAWARE	2.9
ILLINOIS	4.7
IOWA	3.3
KANSAS	7.1
MAINE	1.8
MARYLAND	4.4
MASSACHUSETTS	1.4
MICHIGAN	3.8
MINNESOTA	4.2
MISSOURI	17.4
MONTANA	6.1
NEBRASKA	3.7
NEW HAMPSHIRE	1.4
NEW JERSEY	1.4
NEW YORK	1.1
NORTH DAKOTA	4.1
OHIO	4.6
PENNSYLVANIA	2.3
RHODE ISLAND	0.9
SOUTH DAKOTA	4.9
VERMONT	1.6
WASHINGTON	5.6
WISCONSIN	6.2
WYOMING	6.7
AVERAGE	**4.31**

Table 6: Ordered logit cross-section regression explaining state textbook policies excluding teachers' union variable.
T-statistics in parenthesis.

VARIABLE	MEAN (S.D.)	COEF (T-STAT) (1)	COEF (T-STAT) (2)
STATE REVENUE	49.7302 (11.9053)	0.0774** (1.99)	0.0612* (1.68)
HOMEOWNERSHIP	70.2714 (4.3080)	0.1405 (1.33)	0.1023 (1.02)
DISTRICT SIZE	4,897.953 (7,301.346)	0.00016** (2.43)	…
DISTRICT SIZE DUMMY	0.3061 (0.4657)	...	2.3145*** (2.75)
ADVANCED DEGREE	9.6204 (2.4346)	-0.5851* (-2.55)	-0.5280** (-2.34)
FUNDAMENTALIST DUMMY	0.2857 (0.4564)	2.7096** (2.26)	2.5350** (2.14)
GINI	0.4458 (0.0192)	56.4161 (1.55)	42.9408 (1.30)
PSEUDO R^2	…	0.4951	0.4536

(1) Dependent variable is 0 if local choice state, 1 if recommended state, and 2 if mandatory state list. High school biology textbooks

(2) Dependent variable is 0 if local choice state, 1 if recommended state, 2 if long mandatory state list, and 3 if short mandatory state list (using average as cut off for long and short lists). 9^{th} grade biology textbooks (similar results were obtained for 10^{th}, 11^{th}, and 12^{th} grade biology textbooks).

Notes: Number of observations = 49. 2-tailed tests. * = significant at 10% level, ** = significant at 5% level, *** = significant at 1% level

Table 7: Ordered logit cross-section regression explaining state textbook policies including teachers' union variable.
T-statistics in parenthesis.

VARIABLE	MEAN (S.D.)	COEF (T-STAT) (1)	COEF (T-STAT) (2)
STATE REVENUE	49.8532 (11.9998)	0.0451 (1.23)	0.0587 (1.58)
HOMEOWNERSHIP	70.1917 (4.3169)	0.1090 (0.95)	0.0894 (0.83)
DISTRICT SIZE	4,831.359 (7,363.557)	0.0001** (2.36)	0.0001** (2.40)
BACHELORS	26.7563 (4.7488)	-0.1870* (-1.78)	-0.2148** (-2.14)
FUNDAMENTALIST	9.8667 (10.6749)	0.0971* (1.78)	…
FUNDAMENTALIST DUMMY	0.2708 (0.4491)	…	2.5790** (2.03)
GINI	0.4483 (0.0194)	41.8208 (1.23)	34.6331 (1.03)
TEACHERS' UNION	21.9264 (13.0259)	-0.0754* (-1.72)	-0.0440 (-1.02)
PSEUDO R^2	…	0.4887	0.4449

(1) Dependent variable is 0 if local choice state, 1 if recommended, and 2 if mandatory state list. High school biology textbooks

(2) Dependent variable is 0 if local choice state, 1 if recommended, 2 if short mandatory state list, and 3 if long mandatory state list (using average as cut off for long and short lists). 9^{th} grade biology textbooks (similar results were obtained for 10^{th}, 11^{th}, and 12^{th} grade biology textbooks).

Notes: Number of observations = 48. 2-tailed tests. * = significant at 10% level, ** = significant at 5% level, *** = significant at 1% level

Table 8: Choice / Non Choice logit panel explaining state textbook policies.
T-statistics in parenthesis. Note: Teachers' Union data not available.

VARIABLE	MEAN (S.D)	COEF (T-STAT) (1)	COEF (T-STAT) (2)	COEF (T-STAT) (3)
STATE REVENUE	46.1500 (13.5360)	0.0467*** (2.70)	0.0502** (1.97)	0.0467* (1.79)
HOMEOWNERSHIP	66.6827 (4.9488)	0.0065 (0.13)	0.0170 (0.27)	0.0065 (0.10)
DISTRICT SIZE	4745.5220 (6411.543)	0.00005 (1.57)	0.00007* (1.71)	0.00005 (0.94)
BACHELOR'S DEGREE	17.4767 (5.9272)	-0.1469* (-1.83)	-0.1354 (-1.07)	-0.1469 (-1.17)
FUNDAMENTALIST	11.5788 (11.6312)	0.0855** (2.45)	0.1109** (2.21)	0.0855 (1.48)
GINI	0.3820 (0.0325)	7.2462 (0.66)	9.3478 (0.68)	7.2462 (0.53)
PSEUDO R^2	…	0.3999	0.3952	0.3999

N = 196. 2-tailed tests. * = significant at 10% level, ** = significant at 5% level, *** = significant at 1% level. Dependent variable is 0 if local choice and 1 if nonchoice. Robust Standard Errors are used in all regressions.
(1) Includes time fixed effects and south dummy
(2) Includes time fixed effects and clustering by state
(3) Includes time fixed effects, south dummy, and clustering by state

Table 9: Indiana district level logit model explaining textbook waiver use.
T-statistics in parenthesis.

VARIABLE	MEAN (S.D.)	COEF (T-STAT)
FUNDAMENTALIST DUMMY	0.5017 (0.5009)	0.9366** (2.26)
GINI	0.4031 (0.0258)	-13.7255* (-1.84)
RURALITY_1 DUMMY	…	0.9540* (1.77)
RURALITY_2 DUMMY	…	0.5405 (0.96)
RURALITY_3 DUMMY	…	1.1611 (1.60)
DISTRICT SIZE	3,449.014 (4,381.217)	-0.00004 (-0.78)
BACHELOR'S	18.8084 (11.1516)	-0.0300 (-0.92)
REGIONAL_1 DUMMY	…	0.1007 (0.17)
REGIONAL_2 DUMMY	…	-0.5916 (-0.94)
REGIONAL_3 DUMMY	…	-1.3440* (-1.69)
REGIONAL_4 DUMMY	…	-0.1566 (-0.31)
REGIONAL_5 DUMMY	…	-1.2932 (-1.26)
PSEUDO R^2	…	0.08

N = 291. * = significant at 10% level, ***=significant at 5% level, *** = significant at 1% level. 2-tailed tests. Dependent variable is 0 if do not use a waiver, 1 if use a waiver. Robust standard errors are clustered at the county level.

7. Appendix

7. 1. Table

Table 10: Marginal effects: Average Partial Effects (APEs) and Partial Effects At The Average (PEAs) for Table 6 (ordered logit regression explaining state textbook policies), column 1.

T-statistics in parenthesis.

Outcome 0 = local choice states. Outcome 1 = recommended list states. Outcome 2 = mandatory state list.

VARIABLE	MEAN (S.D)	*OUTCOME 0*		*OUTCOME 1*		*OUTCOME 2*	
		APE	***PEA***	***APE***	***PEA***	***APE***	***PEA***
		COEFF (T-STAT)	DY/DX (T-STAT)	COEFF (T-STAT)	DY/DX (T-STAT)	COEFF (T-STAT)	DY/DX (T-STAT)
STATE REVENUE	49.7302 (11.9053)	-0.0073** (-2.16)	-0.0188** (-1.98)	0.0028* (1.76)	0.0173* (1.85)	0.0044** (2.23)	0.0014 (1.14)
HOMEOWNERSHIP	70.2714 (4.3080)	-0.0132 (-1.35)	-0.0340 (-1.33)	0.0051 (1.17)	0.0314 (1.29)	0.0080 (1.42)	0.0026 (0.94)
DISTRICT SIZE	4,897.953 (7,301.346)	-0.000015*** (-2.79)	-0.000039** (-2.38)	5.85e-06** (2.34)	0.000036** (2.17)	9.16e-06** (2.56)	2.97e-06 (1.20)
ADVANCED DEGREE	9.6204 (2.4346)	0.0549*** (2.89)	0.1418** (2.46)	-0.0214** (-2.16)	-0.1309** (-2.21)	-0.0335*** (-2.91)	-0.0108 (-1.25)
FUNDAMENTALIST DUMMY †	0.2857 (0.4564)	-0.3746** (-2.56)	-0.5849*** (-3.14)	0.1936*** (3.27)	0.4761*** (3.07)	0.1810 (1.61)	0.1088 (1.07)
STATE INCOME GINI	0.4458 (0.0192)	-5.2917 (-1.61)	-13.6700 (-1.49)	2.0625 (1.34)	12.6249 (1.44)	3.2292* (1.72)	1.0450 (1.03)
PSEUDO R^2	…	0.4951	0.4951	0.4951	0.4951	0.4951	0.4951

Number of Observations = 49. * = significant at 10% level, ***=significant at 5% level, *** = significant at 1% level. 2-tailed tests.

† dy/dx is for a discrete change of the dummy variable from 0 to 1.

Table 11: Marginal effects: Average Partial Effects (APEs) and Partial Effects at the Average (PEAs) for Table 6 (ordered logit regression explaining state textbook policies), column 2.

T-statistics in parenthesis.

Outcome 0 = Local choice states. Outcome 1 = Recommended list states. Outcome 2 = Long mandatory state list. Outcome 3 = Short mandatory state list.

VARIABLE	MEAN (S.D.)	*OUTCOME 0*		*OUTCOME 1*		*OUTCOME 2*		*OUTCOME 3*	
		APE	*PEA*	*APE*	*PEA*	*APE*	*PEA*	*APE*	*PEA*
		COEFF (T-STAT)	DY/DX (T-STAT)	COEFF (T-STAT)	DY/DX (T-STAT)	COEFF (T-STAT)	DY/DX (T-STAT)	COEFF (T-STAT)	DY/DX (T-STAT)
STATE REVENUE	49.7302 (11.9053)	-0.0059* (-1.72)	-0.0148* (-1.68)	0.0024 (1.42)	0.0136 (1.59)	0.00011 (0.22)	0.00077 (0.99)	0.0034* (1.74)	0.00045 (0.93)
HOMEOWNERSHIP	70.2714 (4.3080)	-0.0098 (-0.98)	-0.0247 (-1.01)	0.0040 (0.82)	0.0227 (0.98)	0.00019 (0.23)	0.0013 (0.80)	0.0056 (1.05)	0.00075 (0.80)
DISTRICT SIZE DUMMY †	4,897.953 (7,301.346)	-0.2965*** (-2.80)	-0.5211*** (-3.44)	0.1447*** (2.78)	0.4376*** (3.02)	0.0347 (1.40)	0.0515 (1.09)	0.1171* (1.94)	0.0320 (1.03)
ADVANCED DEGREE	9.6204 (2.4346)	0.0505** (2.43)	0.1275** (2.33)	-0.0205* (-1.71)	-0.1170** (-2.10)	-0.00097 (-0.22)	-0.0066 (-1.11)	-0.0290** (-2.52)	-0.0039 (-1.07)
FUNDAMENTALIST DUMMY †	0.2857 (0.4564)	-0.3537** (-2.34)	-0.5578*** (-2.84)	0.1802*** (2.95)	0.4552*** (2.79)	0.0534 (1.38)	0.0628 (1.00)	0.1201 (1.32)	0.0398 (0.92)
STATE INCOME GINI	0.4458 (0.0192)	-4.1051 (-1.27)	-10.3735 (-1.26)	1.6704 (1.05)	9.5189 (1.22)	0.0783 (0.22)	0.5406 (0.87)	2.3564 (1.36)	0.3140 (0.87)
PSEUDO R^2	…	0.4536	0.4536	0.4536	0.4536	0.4536	0.4536	0.4536	0.4536

Number of Observations = 49. * = significant at 10% level, ***=significant at 5% level, *** = significant at 1% level. 2-tailed tests.

† dy/dx is for a discrete change of the dummy variable from 0 to 1.

Table 12: Marginal effects: Average Partial Effects (APEs) and Partial Effects at the Average (PEAs) For Table 7 (ordered logit regression explaining state textbook policies including teachers' union), column 1.
T-statistics in parenthesis.
Outcome 0 = Local choice states. Outcome 1 = Recommended list states. Outcome 2 = Mandatory state list.

Variable	Mean (S.D.)	*Outcome 0*		*Outcome 1*		*Outcome 2*	
		APE	*PEA*	*APE*	*PEA*	*APE*	*PEA*
		Coeff (t-stat)	dy/dx (t-stat)	Coeff (t-stat)	dy/dx (t-stat)	Coeff (t-stat)	dy/dx (t-stat)
Bachelor's	26.7563 (4.7488)	0.0168* (1.89)	0.0438* (1.74)	-0.0054 (-1.30)	-0.0402 (-1.63)	-0.0114* (-1.88)	-0.0036 (-1.12)
District Size	4,831.359 (7,363.557)	-0.00001*** (-2.76)	-0.00003** (-2.30)	3.44e-06 (1.56)	0.00003** (2.12)	7.31e-06** (2.57)	2.31e-06 (1.13)
Gini of State Income	0.4483 (0.0194)	-3.7579 (-1.25)	-9.7849 (-1.18)	1.2026 (0.97)	8.9769 (1.14)	2.5553 (1.30)	0.8080 (0.93)
Homeownership	70.1917 (4.3169)	-0.0098 (-0.94)	-0.0255 (-0.95)	0.0031 (0.75)	0.0234 (0.94)	0.0067 (1.01)	0.0021 (0.78)
State Revenue	49.8532 (11.9998)	-0.0041 (-1.26)	-0.0105 (-1.22)	0.0013 (1.01)	0.0097 (1.18)	0.0028 (1.28)	0.0009 (0.94)
Teachers' Union	21.9264 (13.0259)	0.0068** (2.01)	0.0176* (1.79)	-0.0022** (-2.10)	-0.0162* (-1.68)	-0.0046 (-1.57)	-0.0015 (-1.11)
Fundamentalist	9.8667 (10.6749)	-0.0087* (-1.80)	-0.0227* (-1.69)	0.0028 (1.12)	0.0208 (1.61)	0.0059** (2.08)	0.0019 (1.04)
Pseudo R^2	…	0.4887	0.4887	0.4887	0.4887	0.4887	0.4887

Number of Observations = 48. * = significant at 10% level, ***=significant at 5% level, *** = significant at 1% level. 2-tailed tests.

Table 13: Marginal effects: Average Partial Effects (APEs) and Partial Effects at the Average (PEAs) for Table 7 (ordered logit regression explaining state textbook policies including teachers' union), column 2.

T-statistics in parenthesis.

Outcome 0 = Local choice states. Outcome 1 = Recommended list states. Outcome 2 = Long mandatory state list. Outcome 3 = Short mandatory state list.

VARIABLE	**Mean (Standard Deviation)**	***Outcome 0***		***Outcome 1***		***Outcome 2***		***Outcome 3***	
		APE	***PEA***	***APE***	***PEA***	***APE***	***PEA***	***APE***	***PEA***
		Coeff (t-stat)	**dy/dx (t-stat)**	**Coeff (t-stat)**	**dy/dx (t-stat)**	**Coeff (t-stat)**	**dy/dx (t-stat)**	**Coeff (t-stat)**	**dy/dx (t-stat)**
BACHELOR'S	26.7563 (4.7488)	0.0194** (2.23)	0.0501** (2.06)	-0.0059 (-1.36)	-0.0450* (-1.88)	-0.0022 (-1.16)	-0.0032 (-1.15)	-0.0113** (-2.21)	-0.0019 (-1.11)
DISTRICT SIZE	4,831.359 (7,363.557)	-0.00001*** (-2.72)	-0.00003** (-2.37)	3.40e-06* (1.69)	0.00003** (2.17)	1.25e-06 (1.00)	1.84e-06 (1.10)	6.51e06*** (2.62)	1.08e-06 (1.08)
GINI OF STATE INCOME	0.4483 (0.0194)	-3.1307 (-1.04)	-8.0819 (-1.00)	0.9533 (0.86)	7.2650 (0.98)	0.3503 (0.83)	0.5153 (0.80)	1.8271 (1.06)	0.3016 (0.82)
HOMEOWNERSHIP	70.1917 (4.3169)	-0.0081 (-0.82)	-0.0209 (-0.83)	0.0025 (0.71)	0.0188 (0.83)	0.0009 (0.69)	0.0013 (0.68)	0.0047 (0.85)	0.0008 (0.69)
STATE REVENUE	49.8532 (11.9998)	-0.0053* (-1.65)	-0.0137 (-1.57)	0.0016 (1.19)	0.0123 (1.49)	0.0006 (1.03)	0.0008 (1.03)	0.0031* (1.66)	0.0005 (1.01)
TEACHERS' UNION	21.9264 (13.0259)	0.0040 (1.08)	0.0103 (1.03)	-0.0012 (-1.22)	-0.0092 (-1.01)	-0.0004 (-0.70)	-0.0007 (-0.86)	-0.0023 (-0.99)	-0.0004 (-0.81)
FUNDAMENTALIST DUMMY †	…	-0.3570** (-2.11)	-0.5677*** (-2.68)	0.1632*** (2.68)	0.4402*** (2.87)	0.0628 (1.29)	0.0770 (0.94)	0.1310 (1.25)	0.0505 (0.87)
PSEUDO R^2	…	0.4449	0.4449	0.4449	0.4449	0.4449	0.4449	0.4449	0.4449

Number of Observations = 48. * = significant at 10% level, ***=significant at 5% level, *** = significant at 1% level. 2-tailed tests.

† dy/dx is for a discrete change of the dummy variable from 0 to 1.

Table 14: Marginal effects: Average Partial Effects (APEs) and Partial Effects at the Average (PEAs) for Table 8 (panel data regression explaining state textbook policies)

VARIABLE	MEAN (S.D.)	*SPECIFICATION 1*		*SPECIFICATION 2*		*SPECIFICATION 3*	
		APE	*PEA*	*APE*	*PEA*	*APE*	*PEA*
		COEFF (T-STAT)	DY/DX (T-STAT)	COEFF (T-STAT)	DY/DX (T-STAT)	COEFF (T-STAT)	DY/DX (T-STAT)
BACHELOR'S	17.4767 (5.9272)	-0.0184* (-1.90)	-0.0347* (-1.82)	-0.0172 (-1.13)	-0.0320 (-1.07)	-0.0184 (-1.25)	-0.0347 (-1.17)
DISTRICT SIZE	4745.5220 (6411.5430)	6.21e-06 (1.48)	0.00001 (1.58)	9.12e-06* (1.65)	0.00002* (1.72)	6.21e-06 (0.90)	0.00001 (0.95)
GINI OF STATE INCOME	0.3820 (0.0325)	0.9097 (0.56)	1.7115 (0.66)	1.1902 (0.70)	2.2068 (0.69)	0.9097 (0.54)	1.7115 (0.54)
HOMEOWNERSHIP	66.6827 (4.9488)	0.0008 (0.13)	0.0015 (0.13)	0.0022 (0.27)	0.0040 (0.27)	0.0008 (0.10)	0.0015 (0.10)
STATE REVENUE	46.1500 (13.5360)	0.0059*** (2.85)	0.0110*** (2.73)	0.0064** (2.06)	0.0119** (2.07)	0.0059* (1.81)	0.0110* (1.85)
FUNDAMENTALIST	11.5788 (11.6312)	0.0107** (2.22)	0.0202** (2.33)	0.0141*** (2.63)	0.0262** (1.97)	0.0107** (1.56)	0.0202 (1.41)
PSEUDO R^2	…	0.3999	0.3999	0.3952	0.3952	0.3999	0.3999

Number of Observations = 196. * = significant at 10% level, ***=significant at 5% level, *** = significant at 1% level. 2-tailed tests.

Table 15: Marginal effects: Average Partial Effects (APEs) and Partial Effects at the Average (PEAs) for Table 9 (Indiana district level logit model explaining textbook waiver use).
T-statistics in parenthesis. Dependent variable is 0 if do not use a waiver, 1 if use a waiver.

VARIABLE	**MEAN (STANDARD DEVIATION)**	***APE***	***PEA***
		COEFF (T-STAT)	**DY/DX (T-STAT)**
FUNDAMENTALIST DUMMY[†]	…	0.0902* (1.72)	0.0816** (2.20)
GINI	0.4031 (0.0258)	-1.3315* (-1.82)	-1.1771* (-1.81)
RURALITY_1 DUMMY	…	0.1103 (1.42)	0.1020 (1.53)
RURALITY_2 DUMMY	…	0.0575 (0.83)	0.0518 (0.88)
RURALITY_3 DUMMY	…	0.1390 (1.20)	0.1273 (1.27)
DISTRICT SIZE	3,449.014 (4,381.217)	-4.27e-06 (-0.78)	-3.77e-06 (-0.79)
BACHELOR'S	18.8084 (11.1516)	-0.0029 (-0.93)	-0.0026 (-0.95)
REGION_1 DUMMY	…	0.0100 (0.16)	0.0088 (0.16)
REGION_2 DUMMY	…	-0.0499 (-1.22)	-0.0435 (-1.14)
REGION_3 DUMMY	…	-0.0950*** (-3.50)	-0.0797*** (-2.65)
REGION_4 DUMMY	…	-0.0146 (-0.33)	-0.0128 (-0.33)
REGION_5 DUMMY	…	-0.0890** (-2.57)	-0.0753** (-2.04)

Number of Observations = 291. * = significant at 10% level, ***=significant at 5% level, *** = significant at 1% level. 2-tailed tests.
[†] dy/dx is for a discrete change of the dummy variable from 0 to 1.

7.2. Fundamentalist Churches

The "fundamentalist churches" category encompasses all the congregations that the "morality politics" literature defines as "taking the bible literally", following Johnson (1976). In the 1980's these were:

- All Baptist bodies, except American Baptist Convention
- Church of God
- Church of God in Christ
- Church of the Nazarene
- Evangelical United Brethren Church
- Pentecostal Churches
- Presbyterian Church in the USA
- African Methodist Episcopal Church
- African Methodist Episcopal Zion Church

Several congregations changed names over the years (e.g., American Baptist Convention is now American Baptist Churches in the USA). In order to keep the list up to date, the internet was used to study the recent changes in the congregations from the 1980's list. Several churches changed names, and a few merged for ideological reasons. In the case of church mergers, the websites of the new churches were accessed to see whether the merge affected their ideology.

The list of "fundamentalist" churches with their corresponding Glenmary Research Center code is presented below.

Table 16: Fundamentalist Churches

CODE	CONGREGATION
17	The American Baptist Association
53	Assemblies of God
57	Baptist General Conference
59	Baptist Missionary Association of America
89	The Christian Missionary Alliance
121	Church of God General Conference
123	Church of God (Anderson, Indiana)
127	Church of God (Cleveland, Tennessee)
143	Church of God in Christ, Mennonite
145	Church of God Prophecy
165	Church of the Nazarene
171	Churches of God, General Conference
179	Conservative Baptist Association of America
181	Conservative Congregational Christian Conference
189	Duck River and Kindred Baptists Associations
191	Enterprise Baptists Association
216	Evan Presbyterian Church
223	National Association of Free Will Baptists
263	International Church of the Foursquare Gospel
264	International Churches of Christ
265	International Pentecostal Church of Christ
266	Interstate and Foreign Landmark Missionary Baptists Association
304	National Primitive Baptist Convention, USA
306	New Testament Association of Independent Baptist Churches and other Fundamental Baptist Associations/Fellowships
313	North American Baptist Conference
320	"Old" Missionary Baptists Associations
349	International Pentecostal Holiness Church
360	Primitive Baptist Churches – Old Line
365	Progressive Primitive Baptists
373	Reformed Church in the United States
388	General Association of Regular Baptist Churches
418	Southwide Baptist Fellowship
419	Southern Baptist Convention
469	Wisconsin Evangelical Lutheran Synod

7. 3. Regional classification of counties as defined by the Indiana Department of Education.

Northwest: Benton, Carroll, Cass, Fulton, Jasper, La Porte, Lake, Marshall, Newton, Porter, Pulaski, St. Joseph, Starke, and White counties.

Northeast: Adams, Allen, Blackford, De Kalb, Elkhart, Grant, Huntington, Jay, Kosciusko, Lagrange, Miami, Steuben, Wabash, Wells, and Whitley counties.

East Central: Decatur, Delaware, Fayette, Franklin, Hamilton, Hancock, Henry, Howard, Johnson, Madison, Marion, Randolph, Rush, Shelby, Tipton, Union, and Wayne counties.

West Central: Boone, Clay, Clinton, Fountain, Hendricks, Montgomery, Morgan, Owen, Parke, Putnam, Tippecanoe, Vermillion, Vigo, and Warren counties.

Southwest: Crawford, Daviess, Dubois, Gibson, Greene, Knox, Lawrence, Martin, Monroe, Orange, Perry, Pike Posey, Spencer, Sullivan, Vanderburgh, and Warrick counties.

Southeast: Bartholomew, Brown, Clark, Dearborn, Floyd, Harrison, Jackson, Jefferson, Jennings, Ohio, Ripley, Scott, Switzerland, and Washington counties.