# THE PENNSYLVANIA STATE UNIVERSITY SCHREYER HONORS COLLEGE

#### DEPARTMENT OF POLITICAL SCIENCE

# BE TRUE TO YOUR SCHOOL, TYPE? LEGISLATIVE SUPPORT FOR HIGHER EDUCATION BASED ON LEGISLATORS' ALMA MATERS

#### SEAN GOHEEN Summer 2011

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## **ABSTRACT**

The study of factors affecting higher education funding has grown tremendously over the past decade. Scholars have found that there are many economic, institutional, and political factors that determine how much of the budget a state dedicates to higher education funding. This study presents a model of higher education funding that includes documented factors in the funding process that also begins the study of a fourth category of factors, which is the personal effects of policy makers, in an effort to answer the question, "What effects higher education funding?" and more specifically, "Does the type of university that a legislator went to have any affect?" High proportions of state legislators with at least one degree of bachelors or higher from a public university has a positive impact on higher education funding in a state. This finding has implications for universities and their attempts at increasing their funding, as well as for the type of information that is included in datasets of state legislators.

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## INTRODUCTION

State support for higher education has overnight become a contentious political issue in the Commonwealth of Pennsylvania. Newspapers, television reports and blogs have reported on the large cuts the new governor of Pennsylvania, Tom Corbett, proposed in his first draft of the state budget. If the governor's budget had passed as proposed, state support for higher education would have received a fifty percent cut from the previous year. Higher education spending was ultimately cut at a lesser rate of almost 20%. Why do some states fund higher education at different levels than other states? Why does higher education make up such a small proportion of the Pennsylvania budget, while it makes up a quarter of the Iowa state budget? What specific factors have an effect? Is it the nature of the chamber, or rather the individuals who make up the chamber, perhaps protecting their seats as well as their alma maters? In a wide selection of studies, a combination of economic, political, and institutional factors have been shown to have effects on the amount a state spends on higher education. I argue that a fourth category needs to be developed, which is the impact of personal factors of the political actors in the budget process, specifically relating to higher education appropriations.

This study looks at the socializing effect of graduating from public universities and how this experience plays a role in how legislators decide to fund higher education. I theorize there is a difference between graduates of public and private universities, specifically with their attitudes toward funding public higher education A primary attribute of interest groups and bureaucrats in the policy making process is their role in providing legislators with information, especially when policy issues are complex and not salient, but politicians are most effective on their own when issues are not complex (Eshbaugh-Soha and Meier 2008). Interest groups and bureaucrats affect policymakers' decisions, but it is not the only source of information. Legislators also draw upon

their own personal opinions and values, as well as from life experiences (Burden 2007). This logic can easily be applied to higher education appropriations. If a legislator attended a public university, they should be more generous to state universities by being less likely to draw funds away from it for other programs, with the opposite holding true for private university graduates who would not have developed an understanding of public higher education. Therefore, I hypothesize that as the proportion of legislators within a state with public university degrees increases, the state's support for higher education increases. This happens because graduates of public universities demonstrate their experiences at those institutions and how it affects their decision making ability by lessening the blow higher education takes in state budgets where there are greater proportions of legislators without a degree from public universities.

#### LITERATURE REVIEW

The literature on higher education funding began to develop in the late 1970s, but it was not until the 1990s and 2000s that it bloomed into a much larger field. Cutting across education, economics, and political science literature, the literature has taken many different approaches to examining the factors that, when combined, determine how much a state is appropriated to higher education in a given year. At the heart of all of the literature is the question of how do states determine the share of a state budget for any particular item, and going deeper, what explains the policy decisions of state legislators? Though the literature looks at a particular budgetary item of interest to a select group, the principles of budgetary tradeoffs and policy preferences of both legislators and citizens can be expanded to more areas, as well as offer examinations of the relationships between budget items. The various factors that influence budget items, in particular higher education funding, can be placed into three categories based upon the existing literature: economic, political, and institutional. These factors have been spread across publications over the past two plus decades, and here I attempt to draw all of the diverse factors into one literature review. I then posit there is a fourth category of personal factors to be included in the determinants of higher education funding.

## **Economic Factors**

A logical place to begin with the determinants of higher education funding by the states is the economic factors that contribute to this particular policy outcome. These economic factors are placed in this category if they are fiscal in nature but outside of the state's control (sources of revenue are an institutional factor and will be discussed later). The simplest but most telling outside factor affecting a state's ability and willingness to increase funding toward higher

education is the state of the economy. As would be expected, when the economy is in an upswing, higher education funding is expected to follow this pattern, while in an economic downturn, appropriations decrease. What is most interesting about this is that the cuts during downturns are greater than the increases in upswings (Humphreys 2000). This suggests that states are using each passing recession to make a slow but steady exit from the higher education business, when not prevented by state statute or constitutional provision.

There are a few explanations for the importance of the effect of recessions. First, during a recession, many forms of tax revenues decrease, which can decrease the overall size of the state budget. To counter this drop in revenue during a recession, states will often decrease higher education appropriations for two reasons, with the aim of placing the burden on other sources. First, state universities bring in revenue in the form of tuition, which is a far less politically painful way of increasing revenue than a general tax increase, since only the users (or their parents) will be paying for the service (Delaney and Doyle 2007). Consequently, when appropriations are cut and tuition is increased, the amount of federal loans, grants, and tax credits increases, shifting the cost of funding up the federal ladder (Kane, Orszag, and Gunter 2003). What makes higher education a unique budget item in the states is that it is a "balance wheel" (Delaney and Doyle, 2009; Hovey, 1999) in that it allows the state to balance its budget with one volatile issue (Delaney and Doyle 2009). The state can shift portions of the burden away from the state while maintaining the program (universities and colleges), in economic downturns makings higher education cuts is politically safe, while increasing the funding in economic upturns is similarly safe (Delaney and Doyle 2007), as educating the population is an investment in the state's future, as well as an effective way to use up a possible surplus instead of the grim accusations of stockpiling tax payer dollars and the ensuing demands for tax cuts.

A second major contributor to state higher education funding is the amount of funds that are dedicated to social welfare demands. Here, social welfare includes corrections, education, healthcare, transportation, and welfare. In short order, as this will be discussed more under institutional factors, there is a competition amongst these categories, and even within them, for state funds (Delaney and Doyle 2007, Nicholson-Crotty, Theobald, and Wood 2006). One of the more studied relationships is that between funding for higher education and Medicaid. States are more likely to put funds into Medicaid than into higher education because as enrollment grows federal transfers to the state increases, creating an incentive to maximize state dollars in this program by bringing in matching federal dollars (Kane, Orszag, and Gunter 2003). Medicaid and overall healthcare expenditures are another major factor in determining higher education funding, as education spending decreases as Medicaid spending increases (Kane, Orszag, and Gunter 2003, Nichlson-Crotty, Theobald, and Wood, 2006). Medicaid spending has increased drastically over the last two years, and as a higher percentage of the state's budget is devoted to Medicaid spending, there is less of the pie to be shared, and higher education is one of those targets (Tandberg 2010). Though states are required to meet demands presented by Medicaid requirements, this suggests a reactive mentality that promotes helping patients after they are ill rather than balancing that with preventative medicine and research from public universities.

Finally, two additional state level economic factors are important. Related to the first but independent of it, the overall unemployment level in a state is a factor in higher education. Kane et al. discovered that the lagged unemployment levels are directly related to higher education funding rates. As the unemployment level falls, higher education funding increases, and of greater consequence, as the rate increases, higher education funding drops (Kane, Orszag, and Gunter 2003). Additionally, Tandberg (2010) finds similar results, noting the ability of higher

education to raise tuition while other programs do not have similar variable sources of income. This is of particular importance because of a secondary effect of unemployment and poor economic conditions: enrollment at universities increases at a greater rate during recessions (Humphreys 2000), which as noted above, is when cuts to higher education happen, creating a greater strain on the resources of the public universities in a state.

This leads into the second state specific economic factor: private universities and public two-year colleges in the state. As private university enrollment increases, the appropriations to public universities decrease, but as more students attend two-year colleges appropriations go up (McLendon, Hearn, and Mokher 2009). These findings make very logical sense in the greater budgetary scheme: if more students are attending private universities, there is less of a demand on the state, and therefore legislators have less of an incentive to meet this reduced need and can redirect limited funds elsewhere. Additionally, the finding regarding two-year colleges is also of great importance, as funding students for two years has two effects: first, revenues are only spent for two years instead of four, a fifty-percent savings or more for the state and the tax payers, and second, that is two years sooner that these students are earning money and generating greater amounts of taxes for the state. Combined, however, these two factors could be shown empirically to reduce appropriations to public four-year universities and colleges as these alternatives direct funds away.

#### **Political Factors**

Though Delaney and Doyle (2007) found that increasing tuition at public colleges and universities is as safe a method of increasing revenue as exists in state, that is not to say that political factors in state do not have any effect. To the contrary, there are strong relationships

between several aspects of a state's political and demographic makeup and higher education funding. To take a step back and overlap with one of the key economic factors, the first political factor that shapes the political context of this funding process is Medicaid. As already noted, as Medicaid spending increases, higher education funding decreases (Kane, Orszag, and Gunter 2003). A part of Medicaid funding to keep in mind is the role of federalism. States with stronger histories of being pro-states' rights may invest the minimum amount of funding in Medicaid that is required by federal law and not seek anything more due to an ideological opposition to receiving federal funds.

Expanding outward into ideology, the more conservative a state is, the greater the opposition to higher education spending and overall government spending is. If legislators are responsive to their constituents, this should be and is reflected in the budgeting process with a positive effect on higher education funding. There has been mixed results about whether citizen ideology in a state actually impacts higher education: Tandberg (2010) found that it "significantly impacts state support of higher education," while McLendon, Hearn, and Mokher (2009) found that it had no measurable effect. This is one of the greater discrepancies between these two papers: even if the impact is not measurable, the ideology of a state does set general parameters of what is acceptable for legislators to spend money on and how much to spend, thus limiting or encouraging legislators to limit spending they might otherwise pursue.

Political parties also contribute to the process. More Republicans in a state legislature leads to less support for funding (McLendon, Hearn, and Mokher 2009), but a Democratic governor does not necessarily result in greater higher education spending, but merely greater spending overall, with possibly less spent on higher education so as to provide more money for more favored programs (Tandberg 2010). Of most notable interest is that when one party

controls both the legislature (all chambers) and the governorship, higher education spending is cut, regardless of the party (McLendon, Hearn, and Mokher 2009; Tandberg 2010). This suggests that even though Democrats are more associated with welfare programs, including education, that higher education is not a priority for either party if they are able to spend money on more preferred programs.

Finally, moving back to the electorate, the demographics of a state have an impact upon funding. As would be expected, the average age of a state and the proportion of certain age groups change the budgetary outcomes for a state. Contrary to what would be a primary assumption, a higher proportion of college age citizens (18-24 years of age) results in a lower higher education funding most likely due to the fact that college students are not earning much if any income that can be taxed (Tandberg 2009) and instead use up state resources, even though these will be paid back upon completion of a degree with a higher paying job than the individual would otherwise have. Additionally, a larger proportion of elderly citizens (65+) also negatively effects higher education funding (McLendon, Hearn, and Mokher, 2009), since this group uses state and federally provided healthcare programs and diverts state funds to there, and this is most likely to happen due to the fact that the elderly vote in greater numbers than the college age population.

#### **Institutional Factors**

The largest single category of factors is institutional factors, which are those factors based on the rules of the game, including state constitutions, statutes, and legislative structures. This section will first look at broader institutions, and then will focus on institutions that are directly related to or focused on the state budget. The first institution to examine is the only one

that is not directly a part of the legislative process. With few exceptions, most states use either a coordinating board or consolidated governing board (Nicholson-Crotty and Meier, 2003). The findings about this factor are mixed, however: some have found that the type of institution matters, but without a conclusion on what the direction of the relationship is, while others have found that they do not matter (Nicholson-Crotty and Meier, 2003; McLendon, Hearn, and Mokher 2009). Both of these studies used different methods, and that must be taken into account. If there is a relationship, it is most likely due to the power of the legislature and the governor over the university: if these institutions have more of a say in the running of the university, perhaps they would be more willing to provide stable or increased funding than they otherwise would.

Moving into the legislative arena, the next important factor in the funding process is legislative professionalism. There has been found to be a positive relationship between legislative professionalism and increased higher education spending (McLendon, Hearn, and Mokher 2009; Nicholson-Crotty and Meier 2003; Tandberg 2010). The reasoning for this is that a hallmark of professionalism is increased legislative and personal staff. With this increase in personnel resources, there is a greater capacity to conduct research, write legislation, and meet with lobbyists and other representatives of interested groups and citizens. These activities increase the information that flows into legislative offices. Additionally, session lengths in professionalized legislatures are longer, allowing for more time to debate and perfect legislation without rushing to complete all law making in a short period of time, allowing the staff more time to do their work, compounding the effect of the staff. All of this adds up to more time and energy spent on convincing wary legislators on why increased higher education spending is beneficial to the state. Finally, Tandberg (2010) argues that higher levels of professionalization

result in a group of more educated legislators compared to comparable non-professional legislatures, and these legislators are thus more sympathetic to education spending (Tandberg 2010). All of these factors could explain this key relationship.

Another general legislative factor that plays a role in the funding process is legislative term limits. Not much has been done in the literature on this factor. McLendon et al. argued that it should decrease higher education, as "advocates of legislative reform have viewed term limits as a way to impose greater fiscal discipline" (McLendon, Hearn, and Mokher 2009). In the first study to measure this effect, they actually found a positive relationship, with the argument that "less experienced lawmakers are more likely to become 'captured' by interest group" and thus become greater advocates for an issue such as higher education than they otherwise would (McLendon, Hearn, and Mokher 2009). Another possible explanation for this is that legislators facing term limits may become less responsible with the budget and advocate for interests they care about and throw caution to the winds and make policy decisions they would not otherwise make. This could be especially true if there is a public university campus is in his or her district.

Though governors can be overridden on vetoes, they still play an important role in the budgetary process and thus in higher education funding. McLendon et al. (2009), using Beyle's gubernatorial power index (see Independent Variables for an explanation) that there is a statistically significant but negative relationship between the institutional strength of the governor and higher education appropriations (McLendon, Hearn, and Mokher 2009).

Alternatively, Tandberg, using a variation on the Barrilleaux and Berkman index of gubernatorial influence on the budget, found no relationship (Tandberg 2010). There is a general logic to these findings. One measure is the overall power of the governor, which includes measure for veto and for budget. Based on a simplistic notion of higher education funding as a singular budget item, it

is easy for both the legislature and the governor to take funds from higher education and use them for other legislative priorities of the governor or legislature. One caveat that must be taken into consideration is that many of the statistically significant factors that help a governor achieve legislative success are not within his or her control (Ferguson 2003), suggesting that the most a governor is going to be concerned with higher education is how much money can be pulled from it for other gubernatorial priorities, or alternatively, no attention at all beyond it being another budgetary item.

A final institutional factor outside of budgetary rules that can impact higher education funding is the effect of interest groups. Like many of the institutional variables, this has only been studied by Tandberg (2009, 2010) and McLendon et. al (2009). The findings here are pretty straightforward and are not surprising. A higher density of higher education lobbyists and interest groups relative to all lobbyists and interests groups has a positive impact on higher education funding, and a lower density is accompanied by a negative impact (McLendon, Hearn, and Mokher 2009; Tandberg 2009; Tandberg 2010). The newest direction this literature could take is to look at the interests groups beyond their density and into the demographics of them, including membership, methods, single university lobbying and coalitions.

The second set of institutional factors that play an important role are the institutional rules governing the budgetary process. In order to win in a game, the players must play by the rules, and the rules affect the methods of playing and the outcome, and higher education is no different. Within the legislative arena, there are three policy developments that can, in different combinations, have a significant impact on higher education in the budget process. These three factors are products of the Tax Revolts of the 1970s and 1980s: Balanced budget rules, Tax and Expenditure Limits (TELs), and Supermajority Requirements (SMRs). Until the Tax Revolt,

which can be dated to Proposition 13 in California, state ideology was the strongest indicator of a state's propensity to fund higher education relative to others, with more liberal states spending greater amounts than conservative states (Archibald and Feldman 2006). After the Tax revolt, this declined in importance.

The types and combination of these institutional rules present in a legislature have differing effects on higher education funding. Balanced budget rules require that spending cannot exceed revenue, with some variations as to whether this means actual or projected revenue (Donovan, Smith, and Mooney 2011). According to the National Association of State Budget Officers, there are three types of balanced budget rules: (1) the governor must present a balanced budget (44 states), (2) the legislature must present a balanced budget (41 states), and (3) the governor must sign a balanced budget (37 states), with some being constitutional and others being statutory requirements (National Association of State Budget Officers 2008). Without distinguishing between types, Bails and Tieslau found that balanced budget requirements do not have a statistically significant impact on higher education funding, but when these rules are paired with the presence of expenditure limits, as well as when paired with supermajority requirements, balanced budget rules do have a negative impact on higher education appropriations (Bails and Tieslau 2000).

Tax and expenditure limits are "rules that limit how much a state legislature may increase revenues or spending in an annual budget" (Donovan, Smith, and Mooney 2011). Another product of the tax revolt, when TELs are present in a state legislatures budget making rules, higher education is going to be negatively impacted (Archibald and Feldman 2006; Bails and Tieslau 2000). All TELs have a negative effect on higher education appropriations, but with different types having varying degrees of negative impact (Archibald and Feldman 2006). TELs

have an even greater effect when coupled with balanced budget rules (Bails and Tieslau 2000). A partner product of the Tax Revolt also has an effect. Supermajority vote requirements (SMRs) are institutional constraints that require larger majorities than normal, ranging from sixty-percent to three-quarters to pass a state budget (Donovan, Smith, and Mooney, 2011) with the goal of having a more compromising budget between the two major parties that is not passed through on a close 50% + 1 vote. This factor also results in a negative relationship, with the two combining to explain "over half the decline" in state appropriations from 1961-2001 (Archibald and Feldman 2006). These budgetary requirements are doing what their proponents intended. As previously noted, higher education is an easy piece of the budgetary pie to draw from and with greater restrictions and reduced flexibility in the budget making process, it appears that these three factors, especially when combined, work to keep spending down and higher education suffers as legislators and governors are forced to be creative to fund other parts of the budget. In summation, the rules of the game dramatically factor into the way the game of funding higher education is played, with many of the rules directly contributing to the overall decrease seen in higher education appropriations over the past few decades.

#### **Personal Factors**

Across the literature on higher education appropriations, scholars originally focused on economic factors, with more attention being devoted to the political and institutional factors in the last decade. I argue that there is a fourth category of personal factors. Beyond the political factors of party, no study has ever focused on the personal attributes of state legislators (and by extension, governors) as potential factors in the higher education appropriations literature.

Accounted for in previous models is the governor's power and previously discussed in this

literature review is the governor's formal powers, including broad range powers and powers directly related to the budget process. While including the governor's party in a model can give an estimated guess, these models never include a formal standing on higher education as a legislative priority of the governor. The governor's viewpoints and experiences with education, as well as the scope of his or her priorities, should have an effect on the final budgetary outcome.

This same logic should apply to legislators. Understanding how and why legislators vote the way they do has long been a backbone of legislative research and political science more broadly. There are combinations of theories that attempt to explain this phenomenon. One of these major explanatory theories is that the personal characteristics and experiences of legislators have an impact upon how they vote. Burden (2007) offers interesting examples in his important study. Contrasting two seemingly similar Republican Senators from Pennsylvania (Santorum and Specter), Burden argues that their life experiences shape both their policy preferences as well as influencing the issues they are most attracted to fighting for or against, including healthcare and research for Specter who has had cancer scares, and abortion for Santorum, whose wife lost a premature baby rather than aborting the pregnancy (Burden 2007). Testing congressional vote choice on tobacco, school choice, and morality policy, Burden finds significant evidence that the legislators themselves, beyond party and constituency have an effect on the policy outcome (Burden 2007). This suggests that simply breaking legislators down by party is not a complete method of examining personal factors; innate beliefs and experiences must guide them toward a particular party that best represents the legislator's policy preferences, which are formed based on those beliefs.

Other research has examined whether other personal factors matter. One piece of research was published by Rocca, Sanchez, and Nikora in 2009. In their study, they look at personal

descriptive factors of African American members of Congress and analyze whether any of them have an effect on their voting behavior. Like both myself and Burden, they believe that "personal attributes mater to how MCs (members of Congress) vote. We believe representatives' descriptive characteristics are important determinants of their ideology" (Rocca et. al 2009). The study finds that, in general, personal attributes do have an effect on roll-call votes on a conservative-liberal scale. Aggregated down into specific factors, however, some had greater effects than others, and some were found not to have effects at all on the roll-call votes of the MCs. Rocca et al. found that military service and religious identification had an effect on the African American MCs roll-call votes, with veterans and Baptists voting more conservatively than non-veterans and non-Baptists, respectively (Rocca et. al 2009).

What is most surprising in this article is that they found that "African American' types and level of education do not matter to their voting record in Congress, fraternity/sorority membership does" (Rocca et al. 2009). It is important to note the differences in this research when compared to mine. Rocca et. al 2009) are measuring this against the entire spectrum of issues voted on by the *United State's Congress*, which while not responsible for public higher education funding, is responsible for a much larger array of issues than state legislatures. It is here that the aggregated forms of specific factors have their limits, since there is a distinct difference between state and federal legislators. Rocca et al. (2009) may not support the entirety of my hypothesis, but it is important to keep in mind that they do show that personal factors can and do have an effect on legislative behavior.

Based on this premise, I argue that there is a key component missing in the higher education literature examining appropriations. It has been demonstrated that more than just institutional rules, party influence and structure, and the desire for re-election or promotion to a

higher-ranking political office drives the voting choices of legislators. As demonstrated by former Senators Santorum and Specter, specific life experiences can shape policy preferences. Thus, I posture that the educational experiences of legislators are a factor in higher education funding as recession economic, budgetary constraints, and other proven factors previously noted. As Burden (2007) notes, Senator Specter's positive experience with public health research led him to have positive policy preferences for this area (Burden 2007), which is usually associated with Democrats rather than Republicans. Being a state legislator inherently reflects a certain level of "success" owing to the fact that so many state legislatures are not-professionalized and that running for and serving in these bodies requires financial stability. Transferring the logic of positive experiences to these individuals, I theorize that the educational experience of state legislators affects their policy preferences toward higher education, and thus the higher education appropriations in a state. If a state legislator graduated from a public university, he or she will be more sympathetic to public higher education funding within the state's budget, and if a legislator graduated from a private institution or did not seek post-secondary education, he or she will not have this same policy sympathy towards this area and will instead be neutral toward higher education or even use it as a place to draw funds from to put in other sections of the budgetary pie. Specifically, I hypothesize that the proportion of state legislators who are public university graduates is directly related to higher education funding, with a greater proportion of this group being present resulting in higher appropriations in a budget cycle relative to other states with lower proportions of state university graduates.

## **VARIABLES**

## Dependent Variable

For this study, the dependent variable is state funding of higher education institutions, which will be measured by the share of the state budget that higher education spending accounts for out of the total expenditures for the state budget, which comes from the National Association of State Budget Officers. This measure is used because it reflects the willingness of legislators to give to higher education or take away from it as the easiest source of funds for other expenditures, which is an operationalization of the balance wheel theory advocated by Hovey (1999) and Delaney and Doyle (2009). Additionally, like other measures, it is not based upon the type of revenue a state brings in, ruling that out as a confounding influence, which is quite possible if the amount spent per \$1000 of personal income measure is used. Based on the hypotheses of this study, there should be a positive relationship between the share of the state's overall budget devoted to higher education and the number of public university graduates in the state legislature. 2010 data is an estimate.

## **Independent Variables**

State Legislature Public Graduates (LegSchPub)

This is a measure of the percentage of legislators in a given state-year that received a degree of any type from a public university in the United States, testing to see if public institutions socialized state legislators into being supportive of them in state legislatures. This measure looks at the socialization by coding for any public institution. It prevents any confounding effects from occurring in the models if many legislators in a state received degrees from public institutions, but they were from universities in another state,

which would blind the effect being investigated. This method then accounts for the general effect of having graduated from a public institution, rather than the effects from particular institutions or from institutions within a particular state. Legislators were coded as a 1 if he or she received a bachelor's degree or any higher degree from a public institution, and if he or she received degrees only from private institutions or no degrees, it was coded as a 0. Whether a university is or was public was determined from the websites of the university (as there is no central database of this for the entire nation). Legislators were coded as merely "public" or not to show that support for public higher education is based on the type of institution, and not necessarily the specific institution attended, which could change the results if legislators attended college in another state, but still want to support colleges like their own, demonstrating the socializing effect of public institutions on political values and actions of their alumni in state legislatures. The data was then summed and divided by the total number of legislators for that state-year, yielding the final data in percentages. The institutions attended were determined from data retrieved from the Project Vote Smart databases of state legislator biographical data. The variables were lagged to reflect the nature of the data, which is collected as information on winning candidates. For example, a piece of data for PA-2002 would be registered for 2003 and 2004, and VA-2003 would be recorded for 2004 and 2005. One item to note is that there are some limitations to this Project Vote Smart data related to its completeness, which will be discussed in further detail in the Discussion - Limitations section

#### Medicaid

This variable is a measure of the percentage of the state budget that was spent on Medicaid in state for an individual year, coming from Annual State expenditure reports from the Association of State Budget Officers. 2010 data is an estimate.

#### Unemployment

This variable is a measure of the unemployment rate in a state for a particular year. Data comes from United States Census Bureau statistics.

#### Recession

This variable is a dummy variable that indicates whether a recession occurred in the United States during that year, where presence of a recession is coded as 1.

#### **Budgetary Restrictions (TELS)**

This is a dummy variable that indicates whether a state has any or all of Tax and Expenditure Limits, Balanced Budget Rules, or Supermajority Requirements in place, where presence of any or all factors is coded as 1.

#### Gubernatorial Power (GuvPower)

This is measured using Beyle's gubernatorial power scale averages, which ranks how much institutional power a governor has on a scale of 0-5, based on how what powers the governor is given. The data was recorded in the model as the most recent measure available for each year.

#### Legislative Professionalization (Prof)

Legislative professionalism was measured using the 2003 addendum to the Squire Index of Legislative Professionalism, which ranks how professional a state's legislature is,

relative to the United States Congress. Higher scores represent greater professionalization.

#### Legislative Term Limits (TermLimits)

This is a dummy variable that accounts for the presence of legislative term limits being in effect in a state during a particular year, with such a presence being coded as 1.

#### Party of Lower House (LowCont)

This is a dummy variable for control of the lower house in a state's legislature, taken form Klarner's dataset and updated to fill in the missing data for 2008, 2009, and 2010 from Census Bureau Data. Control by the Democratic Party is coded as a 1, split control and Nebraska are coded as .5, and Republican Party control is coded as 0.

#### Party of Upper House (UpCont)

This is a dummy variable for control of the upper house in a state's legislature, taken form Klarner's dataset and updated to fill in the missing data for 2008, 2009, and 2010 from Census Bureau Data. Control by the Democratic Party is coded as a 1, split control is coded as .5, and Republican Party control is coded as 0.

#### Party of the Governor (GuvParty)

This is a dummy variable for control of the governor's mansion, taken form Klarner's dataset and updated to fill in the missing data for 2008, 2009, and 2010 from the National Governor's Association. A Democratic governor is coded as a 1 and a Republican governor is coded as 0.

#### State Ideology (StateIdeol)

State ideology is a measure of a state's liberalism in a given year, taken from Berry et al.'s dataset. Higher numbers mean the state is more liberal. 2009 and 2010 data were as

yet uncollected and therefore 2008 data, being the most recent, was substituted into the model for these years.

Percent Population 65+ (Pop65Plus)

This is the proportion of the state that is 65 years or older, with data being taken from the United States Census Bureau.

#### ANALYSIS AND RESULTS

The model is based off of Tandberg's model (2010) using the higher education share as a percent of the budget as the dependent variable, but with the variables changed to reflect the nature of what has been shown to affect the funding outcomes and removing the non-significant variables. The unit of analysis for this study is state-year, with the model spanning fifty states over eight years, from 2003-2010. Data has been lagged where appropriate. Project Vote Smart collects legislative biographical data as "candidate data." The information on these legislators is applied to the next two years. For example, 2002 data is used for 2003 and 2004, to account for the years when these legislators would have been in office. I used the most recently available data for some variables. The last time gubernatorial power was assessed was in 2007, so this data is applied to 2007 through 2010. The same methodology was applied to term limits and TELS, with the most recently applicable data being used for a given year.

The data allow for an analysis of recent trends in the higher education funding process, since other studies cited in this work end their period of analysis at 2004. The data has been run through a multivariate regression in four general models. The first model is a raw data model that leaves missing values for legislative education data as "NA". In order to check for any effects from the missing data, I recoded any "NA" in the data as a 0 and re-ran the analysis.

I recorded the biographical information of every state legislator from the legislative directory for the following states and years: 2007/2008, Iowa, Michigan, Minnesota, Pennsylvania, West Virginia, and Wisconsin, as well as New Jersey for the years 2006 and 2007. I coded the data the same way that the data from Project Vote Smart was recorded (see Independent Variables above). The third and fourth general models reflect the change in data, as I substituted this data into the data for these states for this year in the data set and re-ran the

analyses. Table 1 highlights the figures gained from the Project Vote Smart data compared to the more complete data collected for those specific states. Some states are slightly different (Iowa, Michigan), but others are nearly identical (Minnesota, Pennsylvania) Model 3 is Model 1 with the new data, and Model 4 is Model 2 with the new data.

Table 1: Percentage of State Legislators In A State's Legislature With A Degree From A Public University, States with Alternate

Legislative Education Data

State	Year	Project Vote Smart (Percent Stage Legislators With Public Institution Graduates)	My Original Data (Percent Stage Legislators With Public Institution Graduates)		
Iowa	2007-2008	38.3	46		
Michigan	2007-2008	50	63.5		
Minnesota	2007-2008	54.2	54.4		
New Jersey	2006-2007	57.1	48.3		
Pennsylvania	2007-2008	36.	36.9		
West Virginia	2007-2008	64.3	63.4		
Wisconsin	2007-2008	65.9	63.6		

The summary statistics of the appropriations and the legislative educational data are presented in Table 2, with the information being taken from Models 2 and 4. Table 3 presents the regression results of Models 1, 2, 3, and 4.

Table 2: Means of State Appropriations, State Legislators with Public University Degrees, by Year

Year	Mean Appropriations	Mean Percent Public Grads	Mean Percent Public Grad			
	(Percent of State Budgets	(Percent of State Legislators	Alternate Data (Percent of			
	Spent on Higher Education	In United States)	State Legislators In United			
	Across United States)		States)			
Model 2	11.461	54.11925	X			
Model 4	11.461	X	54.19575			
2010	11.244	51.806	X			
2009	11.616	53.142	X			
2008	11.344	54.222	54.704			
2007	11.452	52.192	52.498			
2006	11.008	53.544	53.368			
2005	11.7	56.37	X			
2004	11.812	58.506	X			
2003	11.512	53.172	X			

There is a great deal of variance across the states in both spending and in publicly educated state legislatures. Some states devote a quarter out of every dollar to higher education, while some give amounts as low as three pennies on the dollar to higher education, and some states legislatures are overwhelmingly filled with public graduates with proportions above 80% and some with proportions as low as 18%. What is interesting in the data is that over this entire time period, the national average of state legislators with public degrees is over 50%. The states with the smallest proportions of public graduates are generally in the Northeast, with New York, New Jersey, and the New England states with the lowest proportions. This is logical given the tradition of private institutions in these states, with proportions dipping as low as legislatures with only 18% of members having a public university degree. The one exception to this is Iowa, which has less than 40% of its legislature owning degrees from public universities, yet it is consistently the state with the highest higher education budget share. There is no clear geographical pattern to the states with the highest proportions. Looking at the states with the

greatest shares of the budget devoted to higher education, they generally fall into the Midwest and Southern states, with Iowa, Nebraska, North Dakota, Kentucky, and South Carolina falling into the top group, with funding percentages between 18% and 26% of the state budgets. The states that fund higher education at the lowest level are generally in the New England and Mid-Atlantic region with the exception of Wyoming. States such Pennsylvania, New Hampshire, Vermont, and Delaware, consistently give 5% or less of their state budget to higher education.

Additionally, I ran analyses of each year, based on Models 1 and 2. For years 2006-2008, I ran the models four times, based on Models 1 through 4. Table 3 shows the results for analyses based on Models 1 and 3, with "NAs" where the data is missing, and Table 4 shows the results for analyses of each year based on Models 2 and 4, where "NAs" have been replaced with a "0." Full statistical results are in Appendix 2 and Appendix 3, respectively. The results of these analyses with NA data are presented in Table 4, and the results with a "0" replacing each NA are listed in Table 5. The reason I decided to run four models is based on the data. In the original data, there were seventeen cases of missing data for the key independent variable. I created the second model to see whether this altered the data at all. Additionally, I had begun collecting the data myself and had the data for the previously listed states/years. I decided to see if this data, being more complete than the Project Vote Smart data, would change any of the results, and thus I reran the first two models with my data substituted into the models. Most of the data does not change throughout the models, but there was enough of a difference in some of the cases that I felt it warranted running the four separate models. One element of consistency across the models is that the data is pooled to include fifty states for eight years, and therefore my cases are not independent in Models 1-4. Tables 4 and 5 record the results of Models 1-4, which were run for each year, with and without NA data, and with and without my data.

Table 3: Results from Multivariate Regression on Models 1-4

Factor	Model 1	Model 2	Model 3	Model 4
Intercept	.045863 *	3.55e-05 ***	0.055283.	4.28e-05 ***
	3.36197	2.96631	3.35976	2.96612
Medicaid	0.744106	0.30944	0.781452	0.32341
	0.04973	0.04879	0.04968	0.04877
Recession	0.049492 *	0.23741	.052613 .	0.2441
	0.56331	0.55838	0.56169	0.5578
Unemployment	0.9242	0.83293	0.926608	0.83257
	0.1326	0.13199	0.13238	0.13189
TELs	0.146002	0.10946	0.14858	0.10985
	0.5768	0.57092	0.57573	0.5704
GuvPower	.062269 .	.08169 .	.057892 .	0.07927.
	0.68702	0.68574	0.6861	0.68531
Prof	.024117 *	.01112 *	.023390 *	.01092 *
	2.61265	2.63513	2.60787	2.63304
StateIdeol	.000394 ***	1.95e-06 ***	.000404 ***	1.91e-06 ***
	0.02086	0.01987	0.02081	0.01985
UpCont	0.862171	0.49253	0.820084	0.4728
	0.74101	0.7354	0.7392	0.73508
LowCont	0.387893	0.25537	0.418838	0.26434
	0.73619	0.73456	0.73528	0.73392
GuvParty	0.196685	0.17029	0.193629	0.16851
	0.54797	0.54274	0.54704	0.54234
TermLimits	.057121 .	.08633 .	.049030 *	.07994 .
	0.63891	0.64019	0.63883	0.64047
Pop65Plus	0.387887	0.57274	0.386401	0.57385
	4.63841	4.6867	4.6306	4.68323
LegSchPub	1.21 e-06 ***	.00242 **	6.4e-07 ***	.00177 **
	2.007	1.50429	2.00644	1.50562
Res Std Error	5.153	5.218	5.145	5.214
Df	369	386	369	386
Omitted	17	0	17	0
MRSquared	0.1858	0.1545	0.1885	0.1557
ARSquared	0.1571	0.126	0.1599	0.1273
F-statistic	6.477	5.425	6.594	5.477
p-value	4.11E-11	4.97E-09	2.39E-11	3.89E-09
0 '***'	.0001 '**'	.001 '*'	.05 '.'	1''

Top number = Regression Result

Bottom Number = Standard Error

Res Std Error = Residual Standard Error

Df = Degrees of freedom

Omitted = number of cases omitted in that model

MRSquared = Multiple R Squared value

ARSquared = Adjusted R Squared value

0 '\*\*\*' .0001 '\*\*' .001 '\*' .05 '.' 1 ' ' = Levels of statistical significance.

Table 4: Multivariate Regression Results by Year, with NA Values

Factor	2003	2004	2005	2006	2006M	2007	2007M	2008	2008M	2009	2010
Intercept	0.2253	0.159	0.4247	0.988	0.983	0.5292	0.465	0.3685	0.3337	0.64804	0.6542
-	12.86575	13.26769	11.11343	12.82189	12.91412	13.74263	13.61238	13.41226	13.2344	12.6787	11.15115
Medicaid	0.3393	0.8594	0.7998	0.439	0.451	0.9206	0.7968	0.6561	0.5564	0.72164	0.5239
	0.17166	0.14885	0.15586	0.18659	0.1866	0.1877	0.18782	0.19184	0.19164	0.17164	0.16239
Recession	NA	NA									
	NA	NA									
Unemployment	0.5229	0.7045	0.8243	0.75	0.757	0.9431	0.9761	0.8889	0.8162	0.65911	0.3
	1.06494	1.07669	0.90816	0.97056	0.96947	1.15099	1.13962	0.89052	0.88229	0.57026	0.4792
TELs	0.8166	0.9363	0.6623	0.883	0.868	0.7798	0.7863	0.4596	0.4511	0.39223	0.3713
	1.87382	1.93324	1.70585	1.90447	1.90428	1.93338	1.90374	1.89684	1.87303	1.85495	1.97227
GuvPower	0.4331	0.8565	0.6265	0.579	0.56	0.2693	0.2562	0.1844	0.1817	0.22445	0.4499
	2.09195	2.23497	2.05829	2.21973	2.22522	2.41936	2.38498	2.42216	2.393	2.19166	2.27595
Prof	0.8484	0.874	0.3325	0.678	0.678	0.9908	0.9869	0.6207	0.6347	0.32093	0.3594
	8.85858	9.537	7.56367	8.51371	8.50311	9.1645	9.04865	8.52274	8.42337	8.57677	8.2147
StateIdeol	0.0461	0.1615	0.122	0.207	0.211	.0774 .	0.0776	0.2204	0.2131	0.19336	0.5397
	0.07447	0.07575	0.07817	0.08322	0.08308	0.09154	0.09022	0.07019	0.06915	0.06548	0.06189
UpCont	0.8128	0.3952	0.5916	0.81	0.813	0.3714	0.3123	0.5265	0.4522	0.25574	0.6364
	2.1987	2.35151	2.32185	2.59504	2.59072	2.67194	2.64303	2.47891	2.45377	2.84282	2.42125
LowCont	0.2577	0.5981	0.6001	0.59	0.588	0.986	0.9322	0.9005	0.9916	0.25311	0.5872
	1.97374	2.1525	2.37391	2.42965	2.42461	2.51119	2.48404	2.29765	2.27573	2.97921	2.88712
GuvParty	0.565	0.399	0.5381	0.231	0.234	0.561	0.5658	0.5338	0.5012	0.80343	0.81
	1.80423	1.8208	1.64832	1.89552	1.89184	2.08717	2.05411	1.87389	1.84816	1.71056	1.8927
TermLimits	0.3929	.0945 .	0.3761	0.5	0.488	0.4663	0.3917	0.4328	0.3586	0.87483	0.5321
	2.05658	2.24103	2.04586	2.37477	2.37817	2.40573	2.38706	2.07295	2.06471	2.02009	1.81858
Pop65Plus	0.2728	0.8115	0.8122	0.169	0.169	0.1646	0.1625	0.2814	0.2826	0.37979	0.8697
	58.89283	64.06413	6.94301	65.25545	65.14331	68.96853	68.02669	62.65634	61.87661	62.95777	9.44896
LegSchPub	0.9639	0.5142	.0916 .	0.369	0.347	.0624 .	.0364 *	.0236 *	.0142 *	.00468 **	.0212 *
	6.288	6.53794	6.49435	6.81881	6.7982	7.16644	7.19789	7.10934	7.12572	6.18323	6.05064
Res Std Error	5.303	5.9	5.269	5.661	5.654	5.863	5.786	5.573	5.506	5.265	5.399
Df	32	36	34	32	32	35	35	37	37	37	36
Omitted	5	1	3	5	5	2	2	0	0	0	1
MRSquared	0.2546	0.2426	0.3122	0.2146	0.2166	0.264	0.2831	0.2704	0.2879	0.4044	0.3167
ARSquared	-0.02491	-0.00986	0.06945	-0.07991	-0.07722	0.0117	0.03729	0.03382	0.057	0.2112	0.08893
F-statistic	0.9109	0.961	1.286	0.7287	0.7372	1.046	1.152	1.143	1.247	2.093	1.39
p-value	0.547	0.5016	0.271	0.7135	0.7057	0.4314	0.3534	0.3577	0.2901	0.04253	0.2153

<sup>&#</sup>x27;YearM' = Year with Alternate Data for Previously Specified States

Top number = Regression Result

Bottom Number = Standard Error

Res Std Error = Residual Standard Error

Df = Degrees of freedom

Omitted = number of cases omitted in that model

MRSquared = Multiple R Squared value

ARSquared = Adjusted R Squared value

0 '\*\*\*' .0001 '\*\*' .001 '\*' .05 '.' 1 ' ' = Levels of statistical significance.

Table 5: Multivariate Regression Results by Year, with NA Values Replaced With 0 Values

Factor	2003	2004	2005	2006	2006M	2007	2007M	2008	2008M	2009	2010
Intercept	0.1125	.0977 .	.0432 *	0.67	0.679	0.6927	0.639	0.3685	0.3337	0.64804	0.3239
	11.67728	13.4164	9.01571	10.98308	11.00442	12.87099	12.54968	13.41226	13.2344	12.6787	10.66793
Medicaid	0.1518	0.7035	0.565	0.438	0.445	0.9198	0.9839	0.6561	0.5564	0.72164	0.6622
	0.16161	0.15141	0.15226	0.17033	0.17039	0.180568	0.177496	0.19184	0.19164	0.17164	0.16358
Recession	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Unemployment	0.3726	0.8392	0.8006	0.616	0.617	0.9983	0.9724	0.8889	0.8162	0.65911	0.3561
	1.02474	1.09802	0.90085	0.84826	0.84792	1.140133	0.990398	0.89052	0.88229	0.57026	0.48592
TELs	0.7133	0.7892	0.6538	0.856	0.854	0.891	0.8839	0.4596	0.4511	0.39223	0.3159
	1.79174	1.96901	1.63799	1.74218	1.74083	1.888392	1.827467	1.89684	1.87303	1.85495	2.30417
GuvPower	0.4536	0.9207	0.7179	0.507	0.503	0.2818	0.2493	0.1844	0.1817	0.22445	0.5375
	2.04349	2.28875	1.99662	2.02478	2.02267	2.403478	2.323645	2.42216	2.393	2.19166	2.30417
Prof	0.5039	0.5752	0.2773	0.62	0.62	0.8967	0.8945	0.6207	0.6347	0.32093	0.3934
	8.45778	9.49775	7.5491	8.26062	8.25779	9.011605	8.815515	8.52274	8.42337	8.57677	8.34531
StateIdeol	0.0535	0.1248	.0163 *	0.11	0.109	.0698 .	.0369 *	0.2204	0.2131	0.19336	0.2348
	0.06959	0.07726	0.06919	0.06539	0.06537	0.090935	0.0818	0.07019	0.06915	0.06548	0.05883
UpCont	0.9277	0.5759	0.3916	0.908	0.915	0.3926	0.2833	0.5265	0.4522	0.25574	0.5354
	2.08742	2.37526	2.26099	2.43023	2.43139	2.652641	2.478228	2.47891	2.45377	2.84282	2.44777
LowCont	0.272	0.5233	0.4584	0.663	0.662	0.8679	0.9627	0.9005	0.9916	0.25311	0.6907
	1.96281	2.20055	2.29139	2.2735	2.27275	2.453342	2.303842	2.29765	2.27573	2.97921	2.92143
GuvParty	0.8465	0.5473	0.384	0.174	0.172	0.5885	0.5144	0.5338	0.5012	0.80343	0.6526
	1.70887	1.84842	1.63172	1.77552	1.77193	2.072342	1.902232	1.87389	1.84816	1.71056	1.90398
TermLimits	0.5915	0.1461	0.4824	0.536	0.528	0.5982	0.4927	0.4328	0.3586	0.87483	0.4903
	2.05409	2.28043	2.01962	2.28842	2.2935	2.284529	2.156885	2.07295	2.06471	2.02009	1.84614
Pop65Plus	0.3729	0.8264	0.8291	0.238	0.238	0.1808	0.1424	0.2814	0.2826	0.37979	0.9475
	57.53816	65.67557	6.70895	59.22718	59.20209	68.33835	64.26574	62.65634	61.87661	62.95777	9.58505
LegSchPub	0.5002	0.7852	0.4954	0.694	0.671	.0808 .	.0369 *	.0236 *	.0142 *	.00468 **	.0648 .
	3.70177	5.69065	4.36451	3.9491	3.95143	6.001729	5.14681	7.10934	7.12572	6.18323	5.43484
Res Std Error	5.379	6.048	5.271	5.5	5.498	5.831	5.704	5.573	5.506	5.265	5.488
Df	37	37	37	37	37	36	37	37	37	37	37
Omitted	0	0	0	0	0	0	0	0	0	0	0
MRSquared	0.2449	0.2175	0.279	0.1691	0.1697	0.2531	0.2659	0.2704	0.2879	0.4044	0.2811
ARSquared	-2.36E-05	-0.03633	0.0452	-0.1003	-0.09958	0.004081	0.02778	0.03382	0.057	0.2112	0.04794
F-statistic	0.9999	0.8568	1.193	0.6277	0.6302	1.016	1.117	1.143	1.247	2.093	1.206
p-value	0.468	0.5949	0.3236	0.805	0.8028	0.4549	0.3765	0.3577	0.2901	0.04253	0.3156

<sup>&#</sup>x27;Year'M = Year with Alternate Data for Previously Specified States

Top number = Regression Result

Bottom Number = Standard Error

Res Std Error = Residual Standard Error

Df = Degrees of freedom

Omitted = number of cases omitted in that model

MRSquared = Multiple R Squared value

ARSquared = Adjusted R Squared value

0 '\*\*\*' .0001 '\*\*' .001 '\*' .05 '.' 1 ' '= Levels of statistical significance.

#### DISCUSSION

#### Results

The results of this study are surprising. In previous studies, all of the independent variables, save for legislative education, were shown to have an effect on higher education funding. Here, many of the factors did not have an impact, including Medicaid Spending, the power of the Governor, Democratic control of the lower house of the legislature, the party of the governor, and the population above the age of 65. There are three possible explanations for this outcome of the expected results not fully occurring. The first explanation is that these factors are simply not as important as they were in the decades prior to the 2000s, or, it could be limitation of the design of the study and the differences from them. What is not surprising about the results is that the data provides strong evidence for the theory that the amount of legislators who have at least one degree, bachelors or higher, from a public institution has a positive effect on higher education funding in all four models. Thus, there is statistically significant substance to the argument that over time publically educated legislators are "loyal" to their universities they attended and promote their interests by funding them at a higher level than they would otherwise be if the legislators in that state did not have the same experiences as them.

In the year by year analysis, there is a trend across the table that suggests that the significance of the central independent variable has increased since 2003, since it was not significant in 2003 through 2006, but was positively significant in 2007-2010 in each analysis. Perhaps this is related to the general decrease in state appropriations over the past decade, and coupled with the economic downturn since 2007, increases the effect of legislators' educational background and their views as to what is important. This suggests that in the last few years, privately educated state legislators are becoming more opposed to public education and using it

more and more as a way to find funding for other projects and programs, reflecting a general anti-government and pro-privatization zeal. Coupled with the significance of state ideology as a factor, the last four years suggest a relationship between whether a state legislature is publicly educated and liberal or privately educated and conservative and how much money a state devotes to higher education. Therefore, the education of legislators is a factor in higher education funding, and this will be discussed in further detail in the suggestions and implications section.

#### Limitations

There are a few limitations to the analysis of this study, both of which can possibly explain the outcomes of the study being different than expected. The first is that the time period of the study is limited compared to other studies. 2003-2010 is narrow range compared to the models of Tandberg (2010) and McLendon et al. (2009), who have ranges from 1985-2004, and 1984-2004, respectively. The results of this study then can be seen as explanations of the past decade, but not comparable to the more general studies previously noted.

The second limitation is a bigger methodological problem that originates from the data. The educational data for the state legislators was taken from information gathered by Project Vote Smart. This dataset is far from perfect: PVS relies on state legislators to self-report this information, resulting in varying proportions of state legislatures being represented: some states saw only a handful of legislators report for a given year, with all legislators being public or private graduates, or sometimes no data for a year at all, which resulted in NAs in my dataset. In addition to the incompleteness of the data, there was also the issue of coding the data. I decided to code for whether the legislator received any degree from bachelors up from a public university, regardless of whether it was a JD, MA, or BS. Alternative coding strategies, such as

noting distinctions amongst degrees and the institutions that granted them, could possibly produce different results.

## Implications & Suggestions

If the results of this analysis are accurate, taking into account the incompleteness of the educational data, this suggests that where a legislator received his or her degree(s) from matters to higher education appropriations. This raises the question of what other personal factors influence policymakers involved in the process?) Do the ages, genders, ethnicities, occupations, incomes, marital status, or family size (children) matter at all? Does the highest level of degree attained (or not attained) matter? These are all questions for future studies of higher education funding researchers to answer, and this study shows that they are worth answering.

In addition to adding to the literature and opening doors for future areas of research, the results of this study have implications for public institutions of higher learning. If public universities want to increase their chances of receiving higher appropriations or preventing/reducing cuts, a good strategy would be to increase the number of their and other public university alumni that fill the halls of state legislatures. Though hardly reasonable to think of universities contributing to legislative campaigns financially, there are other methods. They could bring that candidate to their campus to give speeches and rally the base. Going even deeper, they could ensure that the political science programs are funded enough to instill interest in their students eventually running for office. Also, they could ensure that student engagement programs are funded at consistent levels, allowing students not enrolled in political science and other liberal arts majors the opportunity to be civically engaged and develop an interest in politics, with the hope that their alumni will eventually seek and attain state office. Finally,

public universities could ensure easy access to law school exam preparation classes and resources, in order to increase the likelihood that their alumni can help the university's cause in the future.

## **CONCLUSIONS**

The personal factors of policy makers have an impact on policy outcomes. In the specific example of higher education funding, the nature of the institutions of higher learning legislators' received degrees from creates a loyalty that results in public universities getting a different share of the budgetary pie than they would otherwise be allocated. Specifically, receiving at least one degree from a public university creates in the legislator a type of loyalty to public higher education, resulting in greater proportions of the budget for this category than it would otherwise get. This has implications for public universities and how they can go about seeking greater funding, by ensuring they get their alumni and public university alumni in general, in their state legislatures. Additionally, it has added to the literature by showing a previously unexplored explanatory factor in the higher education process, and has opened the door to a whole new category of factors in need of exploration. Universities can ultimately use this research to prevent the drastic cuts they are currently seeing and ensure a continuation of quality public higher education.

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