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Politics and Funding Higher Education

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Abstract

One main funding source for higher education institutions is through state appropriations. Since state appropriations are agreed upon through the state legislature and the governor, the political party of these people can help illuminate how higher education funding is appropriated through political party priorities within the state. This research will analyze every state from 2000-2014 in the following areas: partisanship context for its legislature and gubernatorial powers, its economic health, and its higher education appropriations. This study hypothesizes that a state's partisanship context affects its higher education appropriations and that, in conjunction with a state's economic decline, Republican led legislatures will appropriate less funds to higher education because their partisan priorities lie in other areas of the state (like industry or jobs) and will have harsher cuts than Democratic led legislatures in periods of declining economic stability.

Keywords: Higher Education, Appropriations, Partisanship

1. Introduction

Higher education institutions like universities, colleges, and community colleges are funded in three ways: By tuition, by private donations, and by government funding. Focusing on the second way of funding higher education, there is significant variation in how a state's legislature allocates funding for higher education. There is variation in higher education funding when comparing states nationally; however, there is also funding variation in the yearly appropriations a state offers internally without any national comparisons.

Why do states vary in their appropriations for higher education? Before looking at potential hypotheses to explain this phenomenon, we have to fully understand the context of how higher education funding works. States' appropriate or allocate a part of their budget towards higher education spending. My research wants to focus on the relationship between state partisanship and higher education funding. Specifically, how political partisanship plays a role in how higher education funds are appropriated. Is there any significant difference in how much a state appropriates for higher education if there is a Republican majority or a Democratic majority in the state legislature?

This research will also take economic factors for each state into account because states cannot appropriate money they do not have. State economic health will be compared with majority state legislature party appropriations to see if the variation is related to a state's economy in context with a state's partisanship context. Understanding the complexities between politics and funding higher education matters because it shows the affects politics have on educational institutions, citizens, and student's tuition. These affects can harmful towards individual economic opportunity and availability to go to higher education institutions.

2. Literature Review

The literature shows three particular variations that affect higher education appropriations. These variations in higher education funding are: variations across states, variations across institutions, and variations across time. Variation across states looks at the differences in states' governing structures and how that affects appropriations for higher

education. Next will be research discussing how different institution types can affect higher education appropriations. Finally, variations across time will discuss how a state's changing fiscal health can generate change in the amount of funds appropriated to higher education.

2.1 Variation Across States

It is a state's right to govern and structure education any way they wish. This can lead to a large variety on how higher education is structured in a state. Delaney and Doyle in 2011 categorized states' higher education governance structures into two categories: regulatory or centralized governance structure[2]. One way allows a state's institutions to lobby independently, which makes it so institutions are competing against one another for funding. Because institutions must lobby against one another, higher education spending is less for the state's whole higher education system. The other main way states' govern higher education is to have a centralized board to speak on behalf of the higher education system, such as UNC General Administration that speaks on behalf of all North Carolina public universities. By having this unified higher education body; it is argued that higher education institutions will receive more funding because they are not competing with each other. While Delaney and Doyle (2011) found that there was no statistical significance to this argument, Ronca and Weerts found a statistically significant relationship. These mixed results show a need for more research in this area[3].

Just as states vary on their governing structure, they also vary in their state politics. The causal mechanism used to describe this variation is that Democrats and Republicans focus on and allocate funding for higher education differently based on their political party priorities. Ronca and Weerts tested this by looking what party was in majority during most of the increases in support for higher education[3]. They found that Republicans were in legislative control during most of the times that a state increased its amount of support for higher education. These two discussed that this could be because Republicans are willing to allocate more funds to higher education but to specific institution types in higher education, i.e. associate degree programs because they are job oriented, but did not test this theory[3].

Delaney and Doyle also looked at changing legislative control, on the party level as well as through a state's civic engagement by looking at voter participation in presidential elections[2]. If constituents had higher voter turnout, states would be more likely to elect people who would provide for higher education because their constituents want financial feasible higher education. Neither variable in Delaney and Doyle's research had any statistical significance on the variation of higher education spending.

2.2 Variation Across Institutions

Private higher education has constantly been discussed as a reason for variation in higher education spending. If there are more private institutions within a state, with more students enrolled in them, then states feel less obligated to allocate money to public higher education institutions because they are not serving the majority. The opposite as well has been theorized that if a larger student body is enrolled in public higher education institutions than private ones, a state will allocate more funding towards public higher education because it is serving the student majority. Curs, Bhandari, and Steiger found that this relationship between private and public institutions to be statistically significant[1]. This means that when states have a larger private higher education sector, it creates a negative relationship for public higher education spending. Delaney and Doyle also found a statistically significant relationship between increased private institution enrollment and decreased higher education funding[2].

While there is variety in public or private higher education institutions, there is also a further distinction in institution type which ranges between university or a four-year degree and community colleges or a two-year degree. Weerts and Ronca found that universities are more likely to have cuts or lower appropriations in percentage comparison with community colleges because universities, especially research universities, are more able to generate their own capital[3]. If a state is worried about their own fiscal health, states would choose to appropriate funds only to the universities who are not able to generate their own funding, like associate degree or community college programs. Delaney and Doyle instead, found that higher education appropriations decrease as a whole when there was a transition from public university enrollment to community college enrollment[3]. States will cut higher education funding when enrollment is high in two-year institution because it costs less to educate students in two-year community college institutions than four-year institutions.

2.3 Variations Across Time

States must run on a balanced budget, meaning they can only appropriate what they have to spend. This has led to discussions about variation in higher education appropriations based on a state's fiscal health. White and Musser argue that when a state is in poor fiscal health or a time of economic instability, state legislators will decrease funding to higher education institutions because it is the most flexible item on a state's list of budgeted expenditures[8]. They found this to be true, but emphasized that this change in spending was also related to the growth or decline in higher education enrollment.

Delaney and Doyle also center their research on higher education spending around state fiscal health, specifically testing Hovey's Balance Wheel theory[2]. This theory states that in periods of declining economy, states will decrease higher education appropriations at a higher percent than any other budgeted expenditure but that also, in periods of rising state economy, states will allocate a higher percentage increase to higher education spending than any other budgeted expenditure. Higher education spending would then 'balance' the budget wheel by creating a place to cut or give spending based on the state economy. They tested Hovey's idea nationally and longitudinally (1985-2004) and found his theory to be statistically significant.

2.4 Conceptual Framework

My analysis is focusing on state partisanship context, economic health factors, and their potential effects on higher education appropriations per student. With this scope, I have chosen to look specifically at university funding. This means that community colleges are not represented in my research. Furthermore, I did not test variation in governance structure for state higher education systems.

While these researchers focused on variations across states, institutions, and time in relation to higher education appropriations, they missed some key factors. Ronca and Weerts tested partisanship legislative control in relationship to higher education spending but did not go into more detail[3]. Are there party differences in higher education spending put into context with the state's economic health? Also, Ronca and Weerts findings were tested based on growth in total higher education spending rather than higher education appropriation per student. Just because there is growth in total higher education appropriation dollars being spent does not mean that individual students are being helped more. In other words, there could be growth in the total dollars appropriated and still have a smaller appropriation per student in that fiscal year. Having the distinction between total appropriation and appropriation per student helps clarify exactly what appropriations are doing in relationship to higher education enrollment within the state.

3. Hypotheses And Theory

The initial hypotheses examine partisanship context and state economic health factors separate relationships with higher education appropriation per student.

Hypothesis$_1$: Republican majority state legislatures with will allocate less higher education appropriation per student than Democratic majority state legislatures.

Hypothesis$_2$: States with higher positive GDP growth will allocate more higher education appropriation per student.

Hypothesis$_3$: States with higher median incomes will allocate more higher education appropriation per student.

Hypothesis$_4$: States with high rates of unemployment will allocate less higher education appropriation per student.

A secondary hypothesis will analyze partisanship context in conjunction with state's economic health factors.

Hypothesis$_5$: Republican majority state legislatures when accounting for state economic health (state GDP growth, median income, and unemployment rate) will allocate less higher education appropriation per student than Democratic majority state legislatures accounting for state economic health.

Since Republicans and Democrats have different party priorities, with Republican priorities specifically being categorized as more work oriented, smaller government, and fewer taxes; I believe they will allocate fewer appropriations on higher education and will allocate that revenue other places that better align with their party priorities. The Democratic Party is known to prioritize education and higher government spending for opportunity which means they are more likely when in legislative control to appropriate more funds towards these priorities.

For the economic health factors, I have the following theories. When state GDP has positive growth there is more money coming into a state via those taxes on production, business, and consumption. As the state receives more revenue from this growth in GDP, they will have more money to appropriate. Thus, as state GDP growth increases, this study hypothesizes that higher education appropriations per student will also increase. States with high median incomes have citizens with larger personal incomes and larger income taxes. These income taxes generate revenue for the state government that can be used for appropriations so this study hypothesizes that states with higher median incomes will have higher appropriations per student. Unemployment prevents people from spending more within their state and causes financial strain on both the individual and state level. States with higher rates of unemployment will want to use their revenues to promote employment opportunities or aid for those unemployed. Since rising

unemployment rates shift state government priorities, this study hypothesizes that rising unemployment rates will cause a decrease in higher education appropriations per student.

4. Data Collection

4.1 Partisan Context Measures

Total partisanship control means that either the Republican or Democratic political parties had majority control over the governorship, state house of representatives and state senate. Partisanship control gives absolute budgetary and funding powers to the majority party. This measure will test how and if there is a statistically significant relationship between partisanship context and higher education funding. To measure total partisanship context, I collected data about the political party affiliation of every state's governor, state house of representatives, and state senate in the United States from the years 2000 to 2014.

Legislative control means that either the Republican or Democratic political parties had majority control over the state house of representatives and the state senate but not the governorship. Since it is the legislative branch that creates a state's budget, I decided to use this measure to test if a state's legislative branch alone has a higher correlation with a state's higher education funding.

Divided government means that neither Republican nor Democratic political party had majority within the legislative branch (the state house of representatives and state senate). This could be because of a split legislature, where one branch (state house of representatives or state senate) has one political party majority and the other branch has the opposing political party majority. Or, this could mean that one part of the legislature had split government – meaning that the state house of representatives or the state senate itself had no political party majority. Finally, in the case of Nebraska that does not allow its state senate members to have a political party, this means that there is a non-partisan majority.

The distinction between total control and legislature control will be used in testing the bi-variate relationship between partisanship context and higher education appropriation per student. After testing on this level, I found the strongest relationship between partisanship majority without factoring in total or legislative control. Therefore, for the multi-variate testing I used simply partisanship majority to test with the state economic health variables.

4.2 Public Higher Education Support Measures

Public Higher Education support will be measured by adjusted appropriation per student in each state. This measure was chosen because it looked at per student appropriation rather than total dollars. Using just total dollars of state support would skew the results because some states, like California, have large higher education systems with high enrollment compared to other, smaller states. The distinction for appropriation per student will allow us to focus on partisanship context in relationship to these appropriations, rather than focusing on larger state higher education demographics. Appropriation per student is also adjusted for the cost of living within that particular state. Using this cost adjusted data makes it so the appropriations per student are not skewed of their actual impact because of a state's higher or lower cost of living.

These measures were collected by the State Higher Education Executive Officers Association (SHEEO), specifically in their State Higher Education Finance Report. I used their collected information for every state from fiscal year 2000 to fiscal year 2014.

4.2.1 adjusted education appropriation per student

Education appropriation per student is the allotted amount per student based on the amount appropriated by the state in correlation with the state's higher education enrollment. It is important to note that this variable has been adjusted for the cost of living, enrollment mix, and inflation (HECA) within each state – so it is not the gross appropriation per student but the adjusted appropriation per student. This variable will be tested with partisanship context to see if there is a statistically significant relationship between increases or decreases in higher education per student appropriation based on partisanship control.

SHEEO's State Higher Education Finance Report collects information in higher education enrollment within a state[4]. This measure will help contextualize how many individuals these funds are being dispersed over. It is important to note that these are not full-time equivalent students or FTE's, however; per student appropriations were adjusted to account for enrollment mix. Enrollment mix describes the student variety within a university system. It indicates students who are part-time or non-degree-seeking students. Both of these previously mentioned groups have a different need for higher education funding in comparison to full-time enrolled students. In short, while this measure may not indicate actual enrollment FTE, the appropriations are adjusted to account for enrollment diversity.

4.3 State Economic Health Measures

The state economic health measures are variables showing the economic well-being of these states throughout 2000-2014. States cannot spend money on higher education support that they do not have and in periods of recession and decreased funds, states may cut funding towards higher education out of necessity rather than partisanship context. These measures will help determine the state's economic factors that correlate with changing state's higher education funding support. I chose state GDP growth, median income, and unemployment rates as measures for state economic health because I believe these three factors capture changing state health because they look at state revenue growth and person income growth/decline.

State gross domestic product or GDP is the amount of product made or manufactured within a state. This helps measure the economic vitality within a state because it shows expansion or decline within a state's financial markets. If a state has a declining GDP, this can indicate a declining state economic health. State GDP information for each state was collected from the U.S. Department of Commerce's *Bureau of Economic Analysis*[5].

A state's median income can show the economic stability of the people within the state. If a state has a low median income, it can indicate that people are not financially stable and are living in an unhealthy economic state. When people do not have enough income to buy past their minimum needs, state economies cannot grow. State median income data was collected from U.S. Census measures[7].

If there is high unemployment within a state, this can indicate a decline in economic health because people have more limited means of generating income with which to put back into the state via sales or taxes. State unemployment rates are collected on a monthly basis and for consistency; I collected the same rate for the same month for each state in my tested time period (2000-2014). State unemployment rate data was collected from the U.S. Department of Labor's *Bureau of Labor Statistics*[6].

5. Summary Statistics

5.1 Higher Education Appropriation Per Student

On average, the education appropriation per student was $7,356, with the median being $7,236. This means that on average students enrolled in higher education institutions were given roughly $7,200 towards their education. The standard deviation is $2,248; which means enrolled students education appropriations varied from the mean outwards (both positively and negatively) $2,250. The average and median change in educational appropriations per one-year were (-131.17) and (-99), respectively. In just one year, state educational appropriations on average decreased from $99 to $131, with the standard deviation from this average being $649.

5.1.1 state economic factors

Table 5.1. Summary statistics – economic health factors

Summary Statistics - Economic Health Factors			
	GDP % Growth	Median Income	Unemployment Rate
Min.	4	$ 29,359	2
Max.	5.4	$ 76,165	13.7
Range	1	$ 46,806	11
Mean.	4.16	$ 48,085	5.85
Median	4	$ 47,202	5.4
St. Dev.	3.36	$ 8,561	2.08

Before any harsh judgments are made about the education appropriations in decline, we need to understand the state's economic health. If a state is not generating enough revenue for its enterprises and citizens, how can there be enough for education appropriations? The factors this research looked at to analyze state economy are: state gross domestic product (GDP), state median income, state unemployment rate, a state's total revenue, and a state's tax revenue. Table 5.1 shows all the state economic health variable summary statistics.

Starting with state GDP growth, which measures the growth/lack of growth in the amount of product or goods made in a state from year to year. This helps to demonstrate if a state is producing enough goods or products to generate revenue. On average, state GDP growth was 4.16%, with a median of 4% and a standard deviation of 3.36%. Compared nationally, a state's average and median income are $48,085 and $47,202, respectively. This means on average, individuals nationally make roughly $47,000 or $48,000 with a standard deviation from this average of $8,561.

It is important to understand that state unemployment rates only show the population percentage who are actively seeking work and not individuals who have given up seeking employment. That being said the average and median rates of state unemployment were 5.85% and 5.4%, respectively. The standard deviation from these averages was 2.08%, which means that unemployment rates on average rose and declined 2%.

These facts will be used to evaluate a state's economic health conditionally with partisanship context. If states do not bring in or have enough resources for their everyday governmental activities, then partisanship context will not matter in the decline of state appropriations. This measure of economic health will help centralize our question around how partisanship context plays a role on higher education appropriations in collaboration with a state's economic well-being.

5.2 State Partisanship Context

This research is trying to test whether a state's economic health and its partisan context have any effect on state higher educational support. After collecting all of the data, I have created a frequency table, Table 5.2, to show the number of occurrences for partisanship control in state's legislative and gubernatorial bodies.

For governorship, gubernatorial powers were held by Republicans 54% of the time, Democrats 45% of the time, and Non-Partisan individuals 1% of the time. State Houses were controlled by Democrats 50% of the time, Republican 49% of the time, and were split between the two parties 1% of the time. For state house, it is important to note that Nebraska was not included in these findings because Nebraska runs a unicameral system with just a Senate and a governor. Nebraska's Senate is also only run through non-partisan members; however, their governor is allowed a partisan identity. State Senates were controlled by Republicans 50% of the time, Democrats 46% of the time, Non-Partisans 2% of the time, and were split between both parties 2% of the time.

Table 5.2. Partisanship context frequency

Partisanship Context Frequency						
	Gov.	**% Gov**	**House***	**% House**	**Senate**	**% Senate**
Democratic	336	45%	366	50%	346	46%
Republican	404	54%	361	49%	374	50%
Non-Partisan	10	1%	0	0%	15	2%
Split	0	0%	8	1%	15	2%
Total	750	100%	735	100%	750	100%
* Nebraska runs a unicameral legislature and does not have a state house.						

5.2.1 partisanship context coding

To test whether or not partisanship control affects state higher education support, this study simplified partisanship context into five categories: Republican total control, Republican legislative control, democratic total control, democratic legislative control, and divided government. This will not only test the partisan relationship between total government control (governor included) and state higher education support but also the relationship between legislative controls and the state's higher education support. As shown in the Table 5.3, Republican total control had the most occurrences at 29% of total observations, followed by divided government and Democratic control at 23% and 22%, respectively. Republican legislative control along with Democratic legislative control only had 11% and 16% frequency.

For the multi-variate testing, this study simplified partisanship context to look at overall party majority within the state legislature. I switched to this method when testing partisanship context with state economic health factors because it had the strongest relationship to the dependent variable. This method allowed me to provide the strongest partisanship context variable within the multi-variate model in context with state economic health. Table 5.3 shows that Republican majority had the most occurrences at 39.60% of total observations, followed by Democratic majority and divided government control at 37.73% and 22.67%, respectively.

Table 5.3. Partisan context distributions and multi-variate partisanship context coding

Partisanship Context Distributions		
	Number of Occurrences	% of Total
Republican Total Control	215	28.7%
Republican Legislative Control	82	10.9%
Democratic Total Control	163	21.7%
Democratic Legislative Control	120	16.0%
Divided Government	170	22.7%
Total	750	100.0%
Multi-Variate Partisanship Context Coding		
Republican Majority	297	39.60%
Democratic Majority	283	37.73%
Divided Government	170	22.67%
Total	750	100.00%

6. Methodology

First, I will begin with the gross monetary differences between party spending on the bi-variate breakdown (total control, legislative control, and divided government) and the multi-variate breakdown between Republican majority, Democratic majority and divided government. As shown in Table 7, there are negative gross dollar differences between Republican appropriations per student and Democratic appropriations per student in each category. This means that on a gross dollar level, Republican legislature's appropriate less than Democratic legislatures in every partisan distinction.

These monetary differences were then tested for statistical significance within the two separate models. On the bi-variate level, I will look at the individual correlation between each independent variable (partisanship context, state GDP growth, median income, and unemployment rate) and the dependent variable (adjust appropriation per student). After finding the correlation coefficient, this study will test if these correlations are statistically significant to negate the null hypothesis. After analyzing from this method, I will move on the multi-variate test. For the multi-variate, this study will use R regression tables and ordinary lease squares to test each aspect of the model progresses to encompass all the independent variables and their combined effects on the dependent variable. The figures with t values great than two in Table 7, indicate findings that were statistically significant at the accepted 95% level of significance.

7. Findings

Table 7. Economic factors and partisanship context effects on appropriations per student bi-variate and multi-variate

	Bi-Variate Models				Multi-Variate Model
	Model 1	Model 2	Model 3	Model 4	Model 5
Intercept	8276.55 (t = 34.07)	7075.47 (t = 54.27)	8811.56 (t = 18.92)	7267.10 (t = 69.85)	9398.33 (t = 16.93)
Unemployment Rate	-160.68 (t = 4.11)				-148.50 (t = 3.62)
GDP Growth Rate		62.58 (t = 2.57)			28.42 (t = 1.11)
Median Income			-0.031 (t = -3.22)		-0.030 (t = 3.13)
Democratic Majority				182.4 (t = 1.08)	342.83 (t = 2.03)

7.1 bi-variate model

This study tested the independent variables and their relationship with higher education appropriation per student in two ways. Each independent variable was studied separately to determine its correlation with appropriations per student with the results found in Table 7. Each bi-variate model within Table 7 indicates a different independent variable tested with the dependent appropriations per student variable. These bi-variate models showed negative correlations between each economic factor unemployment rate and median income when tied with appropriations per student. State GDP growth had a positive relationship with appropriations per student.

The relationship between unemployment rate and appropriation per student showed that, if everything within the state stayed the same, a one unit increase in the unemployment rate constitutes a roughly $161 appropriation per student cut. For GDP growth rate, all things beside it remaining stagnant, each unit increase in GDP growth rate will constitute an increase of about $63 in appropriations per student. It is important to note that while this relationship and finding is significant in a bi-variate standing, it is not statistically significant when tested on the multi-variate level. This could be because there are other stronger relationships within the multi-variate study or that, when in context with all economic health variables, GDP growth rate is not statistically significant to higher education appropriations per student.

While it is expected that an increase in unemployment may have negative consequences on appropriations per student, the negative relationship between median income and appropriations per student was rather surprising. For each unit increase in median income, there is a 31 cent decrease in appropriation per student. While this does not seem like a lot, especially since state median income does not change by thousands of dollars each year, this finding tells a different story. Looking at this relationship in context to states with high median incomes, this finding tells a very distinct story that states with larger median incomes appropriate less per student than states with lower median incomes.

The partisanship context variable on the bi-variate level was statistically insignificant. This means that while Democratic majority in the state legislature does allocate appropriations per student than Republican majority state legislatures, it is not at high enough rates to reject the null hypothesis. I tested this variable looking at collective political party majority, legislative majority, and total control majority (meaning one political party controlled the state house, state senate, and governorship at once) to see if any of relationships would be significant when individually correlated with appropriations per student. None of these partisanship context variables were statistically significant. This goes against previous research in the field on the bi-variate level; however, the multi-variate study shows that partisanship context does matter when tested jointly with economic factors. In short, when looking at economic factors together with partisanship context in analyzing their effect on appropriations per student, there is a statistical significance in which political party is majority in the state legislature.

7.2 Multi-Variate Model

In the multi-variate testing, regression tests with ordinary lease squares were used to test all the economic independent variables and the political party independent variable simultaneously with the dependent variable – adjusted appropriations per student. These results show snapshots of state economic health with partisanship context and how they affect appropriations per student. When looking at multi-variate model, it is important to remember that only one variable can be changing at a time. This means that the analysis for a single piece within the model will be described by stating: "if all economic factors stayed consistent within this model, then x independent variable will affect appropriations per student in y fashion."

What I find in the multi-variate results is as follows: that state economic health (as categorized by these economic variables) matters with political party majority in how much is appropriated per student. By including economic factors with testing political party majority, there is statistically significant evidence that supports the thesis: if economic factors remain the same, then democratic majority state legislatures will appropriate almost $343 more per student than republican majority state legislatures or divided legislatures. Unemployment rate still has a negative relationship with appropriations per student – for each unemployment rate unit increase there is a $148.50 decrease in appropriation per student, all other factors remaining the same. Median income still has a 30 cent decrease per unit increase in the multi-variate but GDP growth rate no longer has a statistically significant change in this model.

Partisanship context in funding public higher education does matter – when put into context with a state's economic health. A single test between partisanship context and appropriations per student does not lead to any statistically significant relationship. This makes sense because legislative representatives and senators do not make their decisions in a vacuum. State figures usually make decisions on funding and budgets in relationship to economic health and their partisanship context. That is why when these factors are studied together there are statistically significant relationships between economic factors, partisanship context and their combined effects on appropriations per student.

8. Conclusion And Future Research

If politicians made their appropriation decisions in a bubble, then partisanship context would not matter in regards to higher education appropriations. Independently testing partisanship context with adjusted appropriations per student shows that there is not enough of a correlation between party majority in any aspect (total or legislative) to reject the null hypothesis. This goes against Ronca and Weerts' previous research in this area[3]. State economic health factors do matter independently in relation to appropriations per student. As state GDP grow increased by 1 unit, there was a positive change in appropriations per student (as shown in Table 7). Similarly unemployment had a negative change in appropriations per student with one unit increase in the unemployment rate. Median income, however, had opposite findings than expected: with each unit increase in median income there is a negative change in appropriations per student. While this change is small in size, this median income relationship really speaks to how states with high median incomes appropriate per student.

Hypothesis$_5$ looks at partisanship context and state economic health factors. The data shows that when all these independent variables are placed in the same model that partisanship context does matter while other state economic variables do not (state GDP change). This makes sense – politicians make decisions based on their party priorities in line with their state's economic health. What does this mean? It means that politics do matter in higher education. This knowledge can potentially help higher education institutions develop strategies to counteract political and state economic changes such as higher rainy day fund allotments or alternative savings plans for periods with lower higher education appropriations.

For future research, I would want to break down university type and analyze community colleges on the same standards as well as include more state economic health variables such as tax revenue. Looking at community colleges and their appropriations per student in relationship with university appropriations per student could determine if there is a difference in how partisanship context affects these different institutions. Revenue variable(s) could help in the analysis of gross dollars towards appropriations – specifically looking at how much money the state has at its disposal and what percentage of state went to higher education appropriations per student.

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