

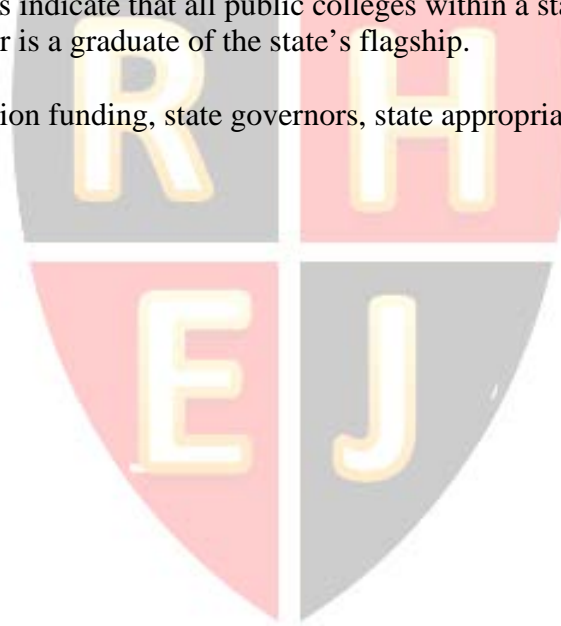
Flagship First: Political officeholders and state funding of universities

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ABSTRACT

Much research has investigated the determinants of higher education funding across the United States. Some established variables are statewide conditions while other variables relate to the political machine in the capital city. Politicians' personal characteristics, such as party affiliation and gender, influence higher education funding. This paper investigates whether the one state flagship university receives preferential funding. An original hand-collected dataset on governors' degree attainment is used to examine the role of the governor's own education in the funding outcomes. Results indicate that all public colleges within a state's system receive higher funding when the governor is a graduate of the state's flagship.

Keywords: Higher education funding, state governors, state appropriations



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INTRODUCTION

What is the value of being the flagship? Surely there are bragging rights. This study investigates whether flagship schools receive a larger share of funding than do other state schools, and whether a flagship's share of funding is influenced by the educational backgrounds of the state governor. The flagship is considered the state university founded first, though other schools may have larger enrollment. For example, the University of North Carolina at Chapel Hill, founded in 1795, is considered the flagship though it has fewer students than North Carolina State University in Raleigh, founded in 1887.

State appropriations per FTE are important as the variable is positively related to graduation rates (Zhang, 2009). Prior research has highlighted factors that determine state funding. Economic conditions matter, as state wealth, GDP growth and employment tend to increase higher education funding while higher unemployment rates decrease funding (Kane et al 2005; Lowry, 2001; Koshal & Koshal, 2000). Political affiliation of both legislative and gubernatorial leadership matters, with Democrats funding more than Republicans. Polarization affects funding, but economic conditions moderate (Dar & Lee, 2014; McLendon, Hearn & Mokher, 2009; Archibald & Feldman, 2006; Rizzo, 2004). State officials may be following their neighbors, with policy carrying across state lines (Lacy & Tandberg, 2014; Archibald & Feldman, 2006; Doyle, 2006; McLendon et al. 2005). Balanced budget requirements do not seem connected to higher education funding but lobbyist access is relevant (Serna & Harris, 2014; Tandberg, 2010; McLendon, Hearn & Mokher, 2009).

While the overall level of funding is important, this research focuses on the division across campuses. Total enrollment is positively correlated with a university's funding and research universities, with higher proportions of graduate students, tend to receive more funding (McLendon, et al, 2009).

Personal experiences and preferences influence voting decisions by legislators (Levitt, 1996). Chatterji, Kim & McDevitt (2018) found a positive, statistically significant connection between state funding and the percentage of state legislators with degrees from the state's public universities. The largest effect comes from legislators who represent districts close to or housing their alma maters. A university's funding increases when it is located in the capital city and with the number of alumni on the state's legislative appropriations committee. However, whether the governor graduated from the institution may not be a significant factor, and gubernatorial budget power diminishes school funding. (McLendon, Mokher & Doyle, 2009). This research utilizes a different multi-year data set to investigate funding of flagship universities in particular, and whether having alumni in the governor's office matters.

MATERIALS AND METHODS

This data covers the years 2006 to 2017, providing trends before, during and after the Great Recession. It is also a time period during which state budget cuts for higher education were in the news. The 2008/9 recession may give insight into the effects of covid-related budget changes.

Institutional Data

Data was collected from the Integrated Postsecondary Education Data System (IPEDS) for each public college for each year, including special focus institutions (such as medical schools) and community colleges. Funding included state operating grants, contracts and appropriations. The scope is wider than used by some other authors, as the goal is to investigate the allocation of state funding for all public higher education. The percentage of the yearly state total for each school was calculate, then divided by full-time equivalent (FTE) enrollment to determine state spending per student. Dollars were adjusted for inflation using the Federal Reserve's Personal Consumption Expenditures Price Index (PCEPI). The final dataset included forty-one states. Several were excluded due to methods of reporting in IPEDS. For example, some did not report financial data for individual campuses but reported a system total.

Flagships tend to be larger than other schools, with a mean FTE of 26,648 compared to 6,142. Not only is average enrollment higher, but avoided decline during the Great Recession. The national trend toward reduced funding is shown in this dataset. The inflation-adjusted peak was in 2008, before the Great Recession impacted state budgets. Flagship universities garner a significantly higher percentage of state spending than do other colleges, both in total and per FTE. A flagship's average share of the state pie was 27.1%, far above the 2.1% average share received by other schools (see Figure 1 in Appendix). States supported each flagship with an average FTE funding of \$11,422 and each non-flagship with \$6,967.

Political Data

A novel dataset on state governors was created through extensive online searches. For each year, each governor's political party, gender, degree(s) earned and type of degree-granting institution was recorded. The degree-granting institutions were coded as private, public non-flagship or public flagship. The summary statistics on governors were weighted by number of years served. Approximately 46% of the governor-years were filled by Democrats and 54% by Republicans. Ninety percent were male and 10% were female.

Overall, the governors were well-educated. Terminal degrees, such as a J.D., were held by 59.7%. Master's degrees were the stopping point for 12.6% while 26.6% stopped with a bachelor's degree. These degrees were from a mix of private and public universities. For 28% of the sample, the bachelor's degree was earned from the flagship of the state being governed. For 20.4% of the sample, the graduate degree was earned from the own state flagship. Some individuals crossed state lines, with 8.3% holding a bachelor's degree from another state flagship and 3.2% holding a graduate degree.

Analysis

The panel data set was analyzed using a mixed model regression. A fixed effects variable was included for each year and for each state.

$$Y_{i,t} = \alpha + \beta_1\gamma + \beta_2\delta + \beta_3\zeta + \beta_4\eta + \beta_5\theta + \beta_6\kappa + \beta_7\lambda + \beta_8\mu + \beta_9\nu + \zeta_t + \tau_t + \varepsilon_{i,t}$$

where $Y_{i,t}$ = inflation adjusted state appropriations per FTE for institution i in year t ; α = constant term; γ = binary variable indicating the state flagship (0=no; 1=yes); δ = binary variable indicating the land-grant leader (0=no; 1=yes); ζ = interaction variable equal to flagship * governor alum; η = binary variable indicating governor gender (0=male; 1=female); θ = binary

variable indicating governor political party (0=Republican; 1=Democrat); κ = binary variable indicating whether the governor holds a bachelor's degree from the own state's flagship; λ = binary variable indicating whether the governor holds a graduate degree from the own state's flagship; μ = binary variable indicating whether the governor holds a bachelor's degree from another state's flagship; ν = binary variable indicating whether the governor holds a graduate degree from another state's flagship; ζ = state effects; τ = year effects; ε = error term.

RESULTS

Regression results indicate benefits from being a flagship institution, with significantly higher funding per student (see Table 1, Model 1 in the Appendix). Female governors and Democratic governors are associated with higher funding. The higher the level of the governor's final degree, the lower the overall funding. All of a state's colleges and universities receive more funding when the governor is a graduate of that state's own flagship (Model 2). However, this is a system-wide boost rather than a specific boost to the flagship (Model 3).

An alternative explanation is that the funding boost attributed to flagship status is simply from being a well-known school. Many states have a flagship and a second institution (often the land-grant university) with an established brand. For example, the University of South Carolina is that state's flagship with Clemson University as the land-grant university. Overall, the second school lacks a statistically significant boost in appropriations received per FTE (Model 4).

DISCUSSION

This study adds a new angle to the discussion of higher education funding. Flagship universities receive higher state appropriations per FTE than even their well-known land-grant counterparts. Flagship funding appears less susceptible to recession shocks. Flagships may benefit other institutions, as governors who are graduates of their own state's flagship oversee higher levels of funding across the board. A governor who has a degree from another state's flagship does not boost funding for the present state schools.

The higher the level of the governor's final degree, the less state funding there is across all schools. More governors in this sample received a terminal degree from a private institution than from their flagship. Perhaps this affects the group identity and affinity (Akerlof & Kranton, 2000). Further research could investigate capital outlays separately from operational grants. The different processes (Delaney & Doyle, 2014; Ness & Tandberg, 2013) may change the governor's impact. Further research could investigate whether the educational background of lieutenant governors are associated with different funding patterns. This study's results are consistent with Chatterji, et al (2018), and indicate that school spirit influences funding.

APPENDIX

Figure 1

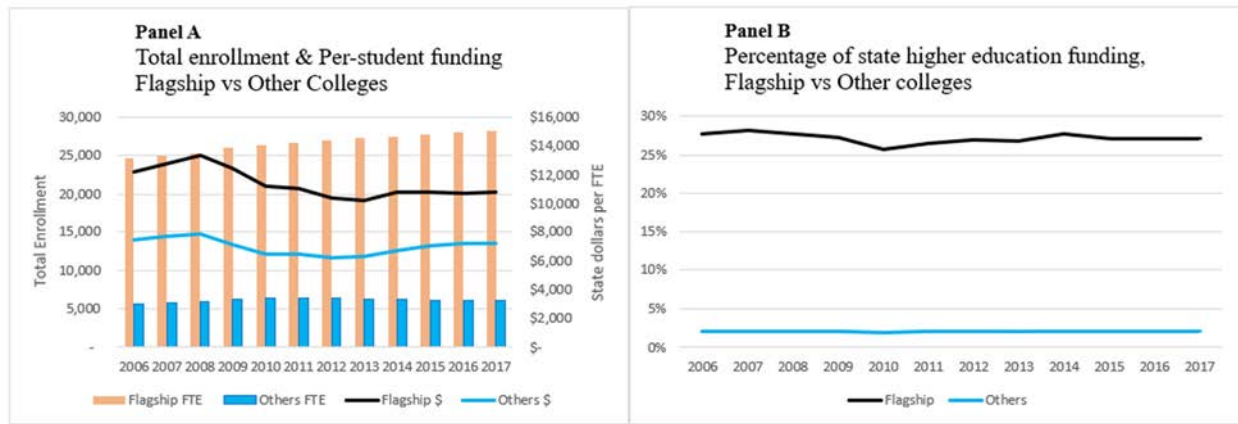


Table 1

Independent Variable: Total State Appropriations per FTE

	Model 1		Model 2		Model 3		Model 4	
	B	SE	B	SE	B	SE	B	SE
Characteristics of Institution								
Flagship institution	4728.01 ***	1538.06	4728.43 ***	1538.02	4988.63 ***	1544.74	4835.16 ***	1537.02
Flagship institution with alum as governor					-700.35	385.48		
Land-grant institution							3937.53	2038.22
Characteristics of Governor								
Gender	305.48 ***	112.12	432.08 ***	136.31	305.31 ***	112.11	305.48 ***	112.12
Political party	-175.48 **	70.19	-173.29 **	73.21	-174.63 **	70.18	-175.48 **	70.19
Level of final degree	-150.75 ***	16.27	-141.44 ***	17.94	-150.31 ***	16.27	-150.75 ***	16.27
Bachelor's degree from own state flagship	401.26 ***	94.70	350.11 ***	98.70	413.19 ***	94.92	401.27 ***	94.70
Graduate degree from own state flagship	501.73 ***	114.36	514.95 ***	115.10	515.16 ***	114.58	501.69 ***	114.36
Bachelor's degree from another state flagship			-214.39	145.96				
Graduate degree from another state flagship			-172.06	239.76				
Constant	9159.42 ***	1521.33	9114.65 ***	1523.08	9147.09 ***	1521.36	9058.28 ***	1520.24

Note: N=41 flagships and 1401 other schools. *** Significant at the 1% level.

REFERENCES

- Akerlof, G. A., & Kranton, R. E. (2000). Economics and identity. *The Quarterly Journal of Economics*, 115(3), 715-753.
- Chatterji, A. K., Kim, J., & McDevitt, R. C. (2018). School spirit: Legislator school ties and state funding for higher education. *Journal of Public Economics*, 164, 254-269.
- Dar, L., & Lee, D. W. (2014). Partisanship, political polarization, and state higher education budget outcomes. *The Journal of Higher Education*, 85(4), 469-498.
- Delaney, J. A., & Doyle, W. R. (2014). State spending on higher education capital outlays. *Research in Higher Education*, 55(5), 433-466.
- Kane, T. J., Orszag, P. R., Apostolov, E., Inman, R. P., & Reschovsky, A. (2005). Higher education appropriations and public universities: Role of Medicaid and the business cycle [with comments]. *Brookings-Wharton papers on urban affairs*, 99-146.
- Koshal, R. K., & Koshal, M. (2000). State appropriation and higher education tuition: What is the relationship?. *Education Economics*, 8(1), 81-89.
- Lacy, T. A., & Tandberg, D. A. (2014). Rethinking policy diffusion: The interstate spread of "finance innovations". *Research in Higher Education*, 55(7), 627-649.
- Levitt, S. D. (1996). How do senators vote? Disentangling the role of voter preferences, party affiliation, and senator ideology. *The American Economic Review*, 425-441.
- Lowry, R. C. (2001). The effects of state political interests and campus outputs on public university revenues. *Economics of Education Review*, 20(2), 105-119.
- McLendon, M. K., Hearn, J. C., & Mokher, C. G. (2009). Partisans, professionals, and power: The role of political factors in state higher education funding. *The Journal of Higher Education*, 80(6), 686-713.
- McLendon, M. K., Mokher, C. G., & Doyle, W. (2009). 'Privileging' public research universities: An empirical analysis of the distribution of state appropriations across research and non-research universities. *Journal of Education Finance*, 34(4) 372-401.
- Ness, E. C., & Tandberg, D. A. (2013). The determinants of state spending on higher education: How capital project funding differs from general fund appropriations. *The Journal of Higher Education*, 84(3), 329-362.
- Rizzo, M. J. (2004). A (less than) zero sum game? State funding for public education: How public higher education institutions have lost. [Unpublished dissertation, Cornell University].

Serna, G. R., & Harris, G. (2014). Higher education expenditures and state balanced budget requirements: Is there a relationship?. *Journal of Education Finance*, 175-202.

Tandberg, D. A. (2010). Politics, interest groups and state funding of public higher education. *Research in Higher Education*, 51(5), 416-450.

Zhang, L. (2009). Does state funding affect graduation rates at public four-year colleges and universities?. *Educational Policy*, 23(5), 714-731.

