



Does Merit-Based Aid Improve College Affordability?:

Testing the Bennett hypothesis in the context of merit-based aid

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Jungmin Lee

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Background

- Tuition hikes and government financial aid increase
- Incentive to raise tuition in response to merit-based aid
- Does more aid mean more affordability?
- Few studies examine the Bennett hypothesis in response to merit-based aid (Calcagno & Alfonso, 2007; Long, 2005)



Bennett hypothesis

If anything, increases in financial aid in recent years have enabled colleges and universities blithely to raise their tuitions, confident that Federal loan subsidies would help cushion the increase.

Former U.S. Secretary of Education

William J. Bennett



Merit-Based Aid

- State-level broad-based financial aid
- Solely based on academic achievement (test scores & GPA)
- 3.0 high school GPA
- At least a half of tuition and fees at in-state public colleges

Literature

- Mixed results on the Bennett hypothesis
- Long (2005)
 - Room & board charge increases in public 4-year colleges
 - Tuition increases in private 4-year colleges
- Calcagno & Alfonso (2007)
 - No tuition increase, but institutional aid increases in community colleges



Research Question

- After a state implemented merit-based aid program, did four-year colleges significantly change tuition and fees, the amount of institutional grants awarded per student, and room and board charges compared to colleges in other states?



Data & Sample

- IPEDS (1989-2009); Census; Bureau of Labor Statistics Data
- **Sample: 4-year public and not-for-profit private colleges**
- 4-years before and after merit-based aid was implemented



Difference-in-Differences

- Compares the outcome before and after the merit-based aid policy in the treatment group to that of the control group
- Estimate separately by college type and state
- 13 states in the treatment group
AR, FL, GA, KY, LA, MA, MI, MS, NV, NM, SC, TN, WV
- Control group: 1) Neighboring states; 2) Rest of the U.S. states



Difference-in-Differences

$$Y_{ist} = B_0 + B_1(\textit{Merit}) + B_2(\textit{Post}) + B_3(\textit{Merit} * \textit{Post}) \\ + \delta X_{ist} + \phi Z_{st} + \varepsilon$$

X: Institutional covariates (state appropriation, revenue from private source, FTE, full-time faculty, and doctoral institution)

Z: State covariates (income per capita, unemployment rate, 20-24 years old population, % BA, and need-based aid per FTE)

Year and state fixed effects included

Clustered standard errors used

Descriptive Statistics (Public, 1990)

	Treatment	Control (Neighboring)	Control (All States)
In-State Tuition	1,715	1,514	1,812
Institutional Aid	2,587,178	2,803, 289	3,431,876
Room & Board	2,813	2,998	3,169
State Appropriation	50,900,000	54,400,000	64,800,000
Private Revenue	6,499,948	7,270,329	7,945,016
Sample Size	123	95	326



Descriptive Statistics (Private, 1990)

	Treatment	Control (Neighboring)	Control (All States)
Tuition	6,980	6,802	8,035
Institutional Aid	3,906,343	2,674,831	4,130,669
Room & Board	3,596	3,339	3,679
State Appropriation	1,656,466	1,487,976	1,599,309
Private Revenue	4,508,166	4,506,394	4,329,941
Sample Size	225	126	710



Results

		Public	Private
Tuition & Fees	Increase	2 (AK & MA)	5 (AR, GA, KY, NV, WV)
	Decrease	4 (FL, GA, MS, NM)	1 (NM)
Institutional Grants	Increase	4 (FL, FA, MA, MS)	5 (FL, GA, MI, NV, WV)
	Decrease	0	3 (AR, LA, SC)
Room & Board	Increase	4 (AR, GA, MA, WV)	2 (AR, SC)
	Decrease	3 (LA, SC, TN)	1 (GA)

Results (Public)

- Most states decreased or did not change tuition and fees
- All states increased institutional grants (FL, GA, MA, MI) or did not change it.
- Some states increased room and board charges (AR, GA, MA, WA).



Results (Private)

- Increased tuition and fees (AR, GA, KY, NV, WV)
- Offset the negative effects by increasing institutional grants (GA, NV, WV)
- Increased room and board charges (AR, SC)

Conclusion

- Findings: Little evidence to support the Bennett hypothesis
- Why?
 - 1) Other factors; 2) Government regulation; 3) Ceiling effect
- Implications: More affordable for recipients, no harm to non-recipients



Thank you!

- Questions? Comments?