

Do Performance-Based Funding Policies Affect Underrepresented Student Enrollment?

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Presented at the SHEEO State Agency Workshop
Minneapolis, MN

August 8, 2017

- Performance/outcomes-based funding has grown out of frustration with college completion rates and traditional state funding methods
- Early systems (through mid-2000s) incentivized graduation rates and/or degree completions
- Generally small amount of money at stake
- PBF systems were often unstable and generally had no effects on student outcomes
- Another concern: Encouraging colleges to become more selective

- Many newer systems have two main characteristics that differ from previous systems:
 - ① More funds at stake (often 5% or more)
 - ② Bonuses in place to encourage colleges to serve at-risk students (usually adult, low-income, and/or minority)
- Indiana (a frequently-cited example) provides \$1,500 for a certificate, \$3,000 for an associate degree, and \$6,000 for a bachelor's degree completed by an at-risk student
- As a comparison, bonus for on-time bachelor's degree completion is \$20,000

Who has PBF? (as of 2015-16)

- Four-year sector
 - 28 states had PBF policies in place
 - 16 states had at-risk provisions
- Two-year sector
 - 29 states had PBF policies in place
 - 17 states had at-risk provisions
- Yet no research has examined whether these at-risk provisions are effective in encouraging colleges to serve more at-risk students

Research questions

- 1 Is there a relationship between a state having any PBF policy and the number of at-risk students enrolled at 4-year and 2-year public colleges?
- 2 Is there a relationship between a state having a PBF policy with an at-risk bonus and the number of at-risk students enrolled at 4-year and 2-year public colleges?
- 3 Among four-year colleges, do these relationships vary by institutional selectivity?

- Compare four different groups of colleges:
 - 1 Any PBF vs. no PBF (typical comparison used in research)
 - 2 At-risk PBF vs. no PBF
 - 3 At-risk PBF vs. “other” PBF (without at-risk bonus)
 - 4 Other PBF vs. no PBF
- Use data from 2004-05 through 2014-15 academic years in my analyses

Samples and data types

- Sample: 526 public 4-year and 987 public 2-year colleges (excluding Nebraska)
- Outcomes of interest: Number of Pell, racial/ethnic minority, and adult (age 25+) students
 - Also look at under \$30,000 and \$30,000-\$75,000 family incomes for first-time, full-time students at 4-year colleges
- Other comparisons: Number of non-Pell, white/Asian, and younger students
- Control variables: State/local funding, state grant aid, tuition and fee-setting authority, state economic conditions, partisan political control
- Four-year colleges: Use Barron's competitiveness index as a selectivity proxy

- Generalized difference-in-difference panel regressions with the control variables mentioned above
- Reflects the difference across colleges in both the treatment and comparison conditions and across time
- Comparisons of the same college or state across time (“interrupted time series”) are problematic due to other factors affecting all colleges
- Need the comparison colleges in order to draw causal inference

Limitations

- Too early to look at completions, particularly among four-year colleges (also, not all groups have separate outcomes data)
- Separate at-risk indicator is an improvement over the literature, but doesn't get at magnitude of incentives
- Cannot look at first-generation students or those in developmental education
- Pell receipt metric underestimates low-income students (have to file the FAFSA)

Key results: Four-year colleges

- Typical PBF/no PBF comparison: No significant findings
- Other comparison groups (all colleges): Few significant findings
- More interesting findings dividing colleges by selectivity
 - Fewer Pell/low-income students at more selective colleges in any vs. no PBF and other vs. no PBF comparisons
 - Fewer non-Pell students at more-selective colleges in at-risk vs. no PBF and at less-selective colleges in at-risk vs. other PBF comparisons
 - Fewer traditional-age students at less-selective colleges and more at more-selective colleges in at-risk vs. other PBF comparison

Key results: Two-year colleges

- Typical PBF/no PBF comparison: No significant findings
- Marginally significant increase in Pell recipients in at-risk vs. no PBF comparison
- Fewer Pell recipients in at-risk vs. other PBF comparison (but could be pre-treatment trends?)
- In general: Few significant results

Discussion and future work

- PBF policies (as typically measured) generally do little to affect at-risk student enrollment
- But at-risk provisions do appear to be helpful at selective four-year colleges
- Programs are still fairly young and colleges are still adapting
- Need better data on outcomes and characteristics of PBF programs over time
- Big question: How large do incentives need to be to affect colleges' behavior?