UNINTENDED OUTCOMES OF PERFORMANCE FUNDING
INTRODUCTION

• Performance-Based Funding models typically rely on:
  • Principal-Agent Theory: States enter into agreement with public institutions to provide economic output
  • Resource-Dependency Theory: Level of incentive for action increases as the resources tied to successful output increase

In Theory:

Higher level of institutional dependence on the resources tied to performance ➞ Higher level of institutional performance
Concerns most commonly cited:

• Restricted Admissions
• Shift in institutional priority (from instruction to student support)
• Weakened Academic Standards

ADMISSIONS RESTRICTIONS

Does data indicate restricted admissions in performance funded institutions?

COST OF COMPLIANCE

Does data indicate a shift in spending for performance funded institutions that indicative of changing institutional priorities?
• Input Output model:

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input                  Institutional Effort                  output
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• Input (admissions decisions):
• Institutional Effort (instruction, academic support, student services)
• Output: progress and completion (exit standards)

Performance funding - institutions can be incentivized to increase output through institutional effort.

(Rothschild & White, 1995; Choi, 2015; Cantillon et al., 2011)
DATA & METHODS

• Institutional data from IPEDS for public 4-year institutions for academic years 2010-2015 (descriptive analysis):
  • Performance funded institutions compared to national averages for:
    • Restrictions in admissions:
      • Percent of applicants admitted
      • ACT Composite 25th and 75th percentile scores
      • First Time Full Time students awarded Pell
    • Cost of Compliance:
      • Institutional spending for academic support, instruction, and student services
FUNDING FORMULA COMPONENTS

OHIO
• Course completion - 30% of funding
• Degree completion - 30% of funding (includes Associates Degrees by 4-year institutions)
• Separate formulas in place for regional campuses through FY2015.
• 16 priority categories for at-risk students added in FY2015

TENNESSEE
• Progress – 24, 48, 72 SCH completed
• Degrees Awarded (including Associates)
• Student Transfer
• Degrees per 100 FT students
• Graduation rate (6-year)
• Premium for adult learners and low-income (Pell-eligible) students completing
• Weighted for institutional mission (Carnegie classification)
• 85% of funding based on outcomes
RESEARCH QUESTION #1

Does data indicate restricted admissions in performance funded institutions?

Possible indicators:

• Increase in general selectivity
• Increase in ACT scores for admitted students
• Decrease in incoming Pell eligible students
PERCENT OF APPLICANTS ADMITTED

OHIO

Percentage of Applicants Admitted (OH and National Average)

TENNESSEE

Percentage of Applicants Admitted (TN and National Average)
25th Percentile

2009: 19.7
2010: 20.1
2011: 20.0
2012: 20.0
2013: 21
2014: 21
2015: 21

Composite ACT - 25th Percentile TN and National Average (with average scores for state)

75th Percentile

2009: 24.6
2010: 24.9
2011: 25.3
2012: 25.8
2013: 25.8
2014: 26.4
2015: 26.6

Composite ACT - 75th Percentile TN and National Average

TN Mean ACT Composite 25th percentile
State Averages
National Mean 25th Percentile

TN Mean ACT Composite 75th percentile
National Mean 75th Percentile
PERCENT FIRST-TIME FULL-TIME PELL ELIGIBLE

OHIO

First Time Full Time Students Awarded Pell (OH and national average)

TENNESSEE

First Time Full Time Students Awarded Pell (TN and National Average)
RESEARCH QUESTION #2

Does data indicate a shift in spending for performance funded institutions that indicative of changing institutional priorities?

Possible Indicators:

• Institutional spending inconsistent with national averages for:
  • instruction
  • academic support
  • student services
Average Spending for Instruction (OH & TN Institutions compared to National Average)

- OH Avg Instruction
- TN Avg Instruction
- Nat. Avg Instruction

Yearly Spending:
- 2010: $86
- 2011: $95
- 2012: $135
- 2013: $166
- 2014: $128
- 2015: $115

MILLIONS
Average Spending for Academic Support (OH & TN compared to national average)
Average Spending for Student Services
(OH & TN compared to national average)
DISCUSSION

• Prioritizing institutional output could be associated with unintended outcomes (warrants further study)

• Input decisions:
  • Increases in selectivity – especially in TN
  • Increase in 25th percentile ACT scores for Tennessee, disproportionate to state and national average
  • Percentage of incoming Pell eligible students inconsistent with national average.

• Institutional Effort:
  • Spending for instruction and academic support decreased (TN) or increased at rates well below national average (OH)
  • Spending on student services increased faster than national average (OH) or was inconsistent with other spending cuts in the state (TN).
LIMITATIONS AND FURTHER RESEARCH

• Variations in institution type:
  • Comparison based on institutional size, region, or mission, and student demographics
• Students may be choosing alternative paths
  • Students attending two year, vocational, and certification programs might offset shifts in four-year data
• Not long enough
• Academic standards
  • Degree requirements (institutional level)
  • Emphasis on student experiences
REFERENCES


