Workforce Flexibility and Strategic Outcomes

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Context

• Between 1979 and 2013:
  – # institutions grew 51%
  – # students grew 78%
  – % tenured/tenure-line faculty shrank from 57% to 28%
  – % full-time faculty shrank from 70% to 48%

• Now, 65-75% of instruction is delivered via non-tenure line appointments, when grad-student instructors are included
Context (cont’d)

• Thus, the “contingent movement”:
  – full or part-time fixed-term contracts, without prospect of the protections of tenure

• Movement driven by:
  – political and financial pressures from governments
  – enrollment/financial pressures
  – strategic choices on curricula
Context (cont’d)

• Brewer and Tierney (2011):

“The point is not only that [traditional tenure-line appointments] can retard innovation, but also that the environmental and historical contexts in which institutions reside largely determine whether an institution’s actors embrace or reject innovation and change.”
• The “disruption” perspective (e.g., Christensen and Eyring, 2011) suggests that schools with a predominantly-tenured faculty workforce are:

  – forced to maintain outdated curricula poorly attuned to emerging market conditions

  – slowed by shared-governance norms

  – tied down by sizable salary and benefit commitments to entrenched senior faculty
• In non-educational settings, contingency can lead to lowered costs, possible improvements in profitability and market positioning

• In higher education, contingency seems to marginally reduce student learning, and contingent faculty express slightly lower satisfaction than others
Relevant Research (cont’d)

• But what about *other* effects in higher education institutions?
  
  – effects on shared governance (negative?)
  
  – effects on satisfaction, productivity of traditionally employed faculty (positive?)
  
  – *effects on core business health: are those effects really positive, as the disrupters argue?*
Research Goal

• Our particular interest: how does the move to contingency affect institutions’ core business health?

  – enrollment
  – applications
  – yield
  – student/faculty ratios
  – graduation rates
  – net revenue
Research Design

• Longitudinal institutional data over the years 2002 to 2013

• Analyses separately for six kinds of institutions
  – public baccalaureate* - private baccalaureate
  – public masters - private masters
  – public doctorate - private doctorate

* Insufficient n for full analysis
Research Design (cont’d)

• Longitudinal panel data analysis spanning years 2002 to 2013
• Data from IPEDS and Delta Cost Project
• Corrected for the “parent/child” issue
• Final sample: over 1200 4-year institutions
• Focal independent variable: % part and full-time non-tenure track faculty out of all employed faculty (excluding grad students), lagged by a year
Research Design (cont’d)

• Focal outcomes (indicators of health):
  – first-year enrollment
  – applications
  – yield
  – student/faculty ratios
  – graduation rates
  – net revenue
Research Design (cont’d)

• Fixed-effects regression modeling

• Control variables in models:
  – federal grants and contracts (logged)
  – state contracts and grants (logged)
  – FTE enrollment count (logged)
  – time
  – proportion of part-time students
  – percentage of African-American and Hispanic students
  – percentage of students receiving Pell Grants
  – state appropriations (logged) (analyses of public institutions only)
Findings

• Freshmen enrollments: no discernible associations with contingency

• Net revenues: no discernible associations with contingency
Findings (cont’d)

• Applications: negative regression effects in private baccalaureate and masters institutions

• Yield and graduation rates: negative regression effects in private doctoral institutions

• Student/teacher ratios: negative regression effects in all institutions
What Do The Results Mean?

• Question 1: why is contingency negatively associated with student choices and outcomes in private institutions?

• More cross-institution elasticity (i.e., larger student choice sets and thus more sensitivity to perceptions of quality in making college choices and persisting?)
What Do The Results Mean?

• Question 2: why is contingency so consistently associated with lower student-teacher ratios?

• The rosy view: class sizes are shrinking and the quality of education is improving

• The contrarian’s view: contract faculty are taking over core classes, allowing tenure-line faculty to focus on smaller seminars, research projects, etc.(i.e., offloading/substitution)
What Do The Results Mean?

• Question 3: why does contingency not seem related to financial outcomes?

• Longer lagtime, better indicators needed to show effects?

• Savings from contingency are passed on to tenured faculty via higher salaries?

• Other indicators of financial health more accurately reflect contingency’s influences?
What Do The Results Mean?

• Policeman: Is there any other point to which you would wish to draw my attention?

• Sherlock Holmes: To the curious incident of the dog in the night-time.

• Policeman: The dog did nothing in the night-time.

• Sherlock Holmes: That was the curious incident.

  • Arthur Conan Doyle, *Silver Blaze*
What Do The Results Mean?

• Ultimately, the results leave both the positive and negative arguments about contingency in play

• Needed (of course): comprehensive, integrated analyses of institutions’ marketplace success, financial operations and, especially, academic outcomes.
Thank you