

# I. Abstract

We estimated real total cost functions for private baccalaureate colleges for the academic years of 2006-2007, 2009-2010, 2013-2014, and 2014-2015. Using data for 242 colleges, collected from IPEDS, our results reveal that the growth rate of colleges' costs decreased during the recession years of 2009-2010 relative to their pre- and post-recession levels. These results indicate that the Great Recession had a depressing effect on colleges' cost growth in the short-term, but not the long-term.

## II. Empirical Model and Variables

$$\text{COST}_i = f(\text{FTEUG}_i, \text{GRAD}_i, \text{ADMIT}_i, \text{CITY}_i, \text{ME}_i, \text{GL}_i, \text{PL}_i, \text{SE}_i, \text{FW}_i, \text{RMSW}_i)$$

- $\text{COST}_i$  is the sum of academic support, public service, operations & maintenance, research, student services, and instruction.
- $\text{FTEUG}_i$  is the Full Time Equivalent Undergraduate Enrollment
- $\text{GRAD}_i$  equals 1 if college has graduate program; 0 if not
- $\text{ADMIT}_i$  is the percentage of applicants admitted
- $\text{GL}_i$  equals 1 if college is located in the Great Lakes Region; 0 if not
- $\text{PL}_i$  equals 1 if college is located in the Plains Region; 0 if not
- $\text{SE}_i$  equals 1 if college is located in the South East; 0 if not
- $\text{FW}_i$  equals 1 if college is located in the Far West; 0 if not
- $\text{RMSW}_i$  equals 1 if college is located in the Rocky Mountain or South West Region; 0 if not

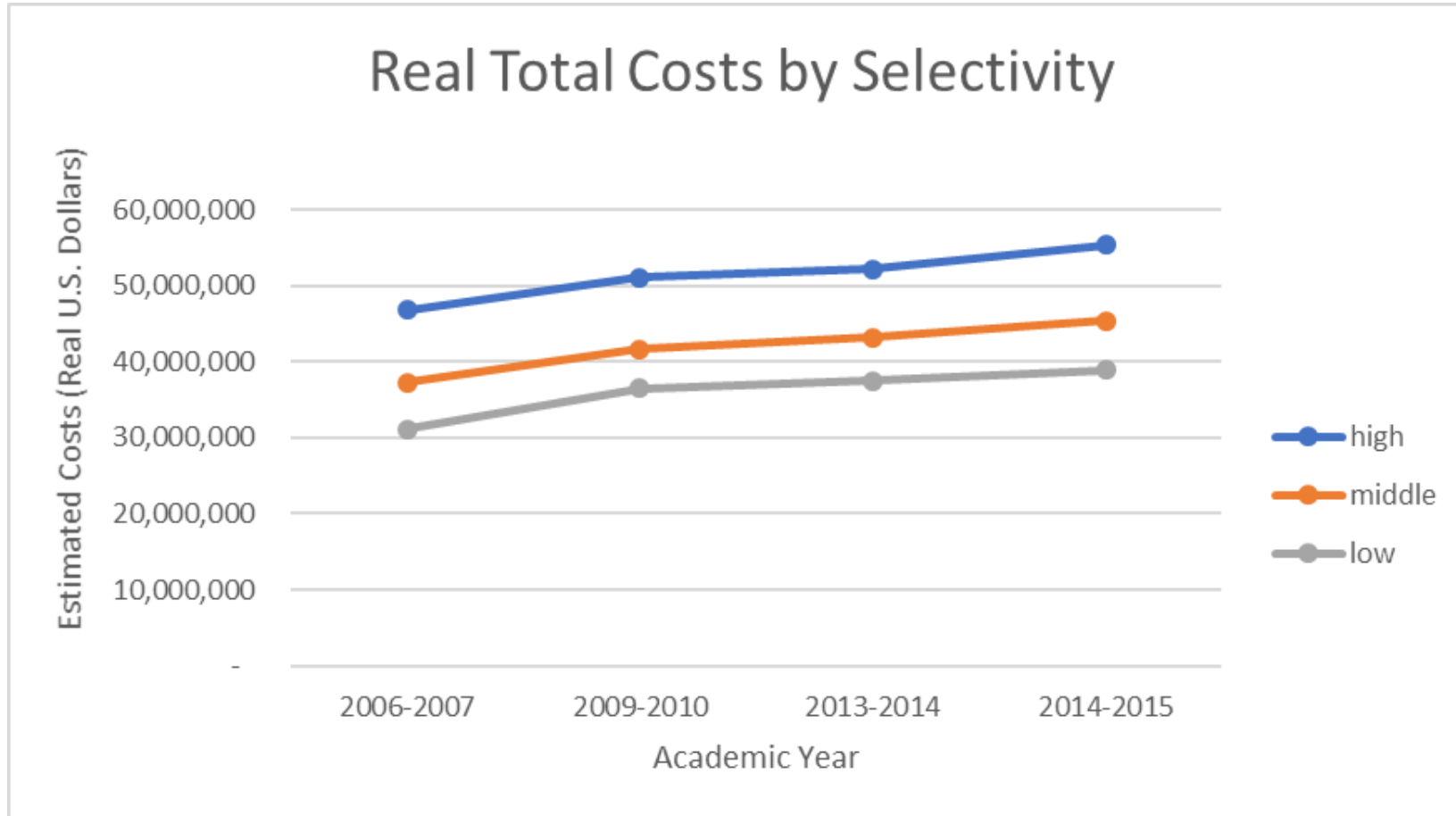
# III. Theory and Hypothesis

- $FTEUG_i$  is hypothesized to have a positive relationship with  $COST_i$  because greater student enrollment causes an increase in the quantity of services a college must provide.
- $GRAD_i$  is hypothesized to have a positive relationship with  $COST_i$  because colleges offering graduate programs incur additional costs than those without.
- $ADMIT_i$  is hypothesized to have a negative relationship with  $COST_i$  as colleges with a lower  $ADMIT$  typically provide more services and have higher costs.
- $CITY_i$  is hypothesized to have a positive relationship with  $COST_i$  because costs in urban areas tend to be higher than rural areas.
- $ME_i$ ,  $GL_i$ ,  $PL_i$ ,  $SE_i$ ,  $FW_i$ ,  $RMSW_i$  are hypothesized to have a negative relationship with  $COST$  because we expect them to be cheaper regions than the New England Region.

## IV. Data

- Cross sectional data for:
  - 2006-2007      Pre-recession year      Sample Size: 207
  - 2009-2010      Great Recession year      Sample Size: 208
  - 2013-2014      Post-recession year      Sample Size: 212
  - 2014-2015      Post-recession year      Sample Size: 211
- Data collected on IPEDS (The Integrated Postsecondary Education Data System)

# V. Empirical Results



Selectivity and ADMIT are inversely related, as ADMIT increases, selectivity decreases.

# VI. Conclusion

- We marshal evidence that the Great Recession impacted the growth of colleges' costs temporarily, but not permanently. College cost growth decelerated during the recession, compared to the pre- and post-recession years.

Academic Year	Cost Growth Rate by Selectivity		
	High	Middle	Low
2006-2007	3.10%	3.90%	5.79%
2009-2010	0.54%	0.90%	0.66%
2013-2014	6.06%	5.14%	3.84%

Selectivity and ADMIT are inversely related, as ADMIT increases, selectivity decreases.