

# Measuring Benefits of Higher Education Spending

What we know and what we need to know?

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# FSU Economic Impact<sup>1</sup>

- Report for 2014-15 school year, released April 2016
- \$10 Billion in total economic activity
- Gain in earnings for Public College graduates versus Public High School graduates.
  - Present value of 30 years of estimated earnings gain.
  - \$7.9 billion from FSU
- So \$2.1 billion contribution based on expenditures.
  - Standard economic impact analysis
  - No visitor spending or technology licensing.
  - \$50,400 per student

# Other Florida Universities

- UF: \$22.9 Billion, \$10.2 Billion from graduates, \$4.6 Billion from UF Health, \$8.1 Billion from other expenditures, \$160,400 per student.
- USF: \$11.1 Billion, \$8 Billion from graduates, \$3.1 Billion from expenditures, \$63,800 per student.
- UCF: \$11.9 Billion, \$9.6 Billion from graduates, \$2.3 Billion from expenditures, \$37,800 per student.
- NCF: \$135 Million, \$84 Million from graduates, \$51 Million from expenditures, \$63,750 per student.

# Florida College System

- \$26.6 Billion, \$25.2 Billion from CHE (Credit-Hour-Equivalents), \$1.4 Billion from spending, \$1,650 per student.
- This analysis is not very comparable:
  - Tries to calculate added value of Florida College System compared to alternative spending
  - Added earnings reduced 62.5% to account for possible substitution effects.
- Undoing those, \$67.2 Billion from CHE and \$11.5 Billion gross effect of spending, \$13,500 per student.

# Economic Impacts

- Of 49 university impact studies reviewed, the lowest impact per student, \$10,500 came from University of Wyoming, that similar to the Florida College System, calculated only the effect of spending that would not otherwise have occurred, coming from out-of-state.
- The highest economic impact, \$560,000 per student, came from University of Pennsylvania. They claimed only \$7 Million came from their health system, which seems unrealistic.

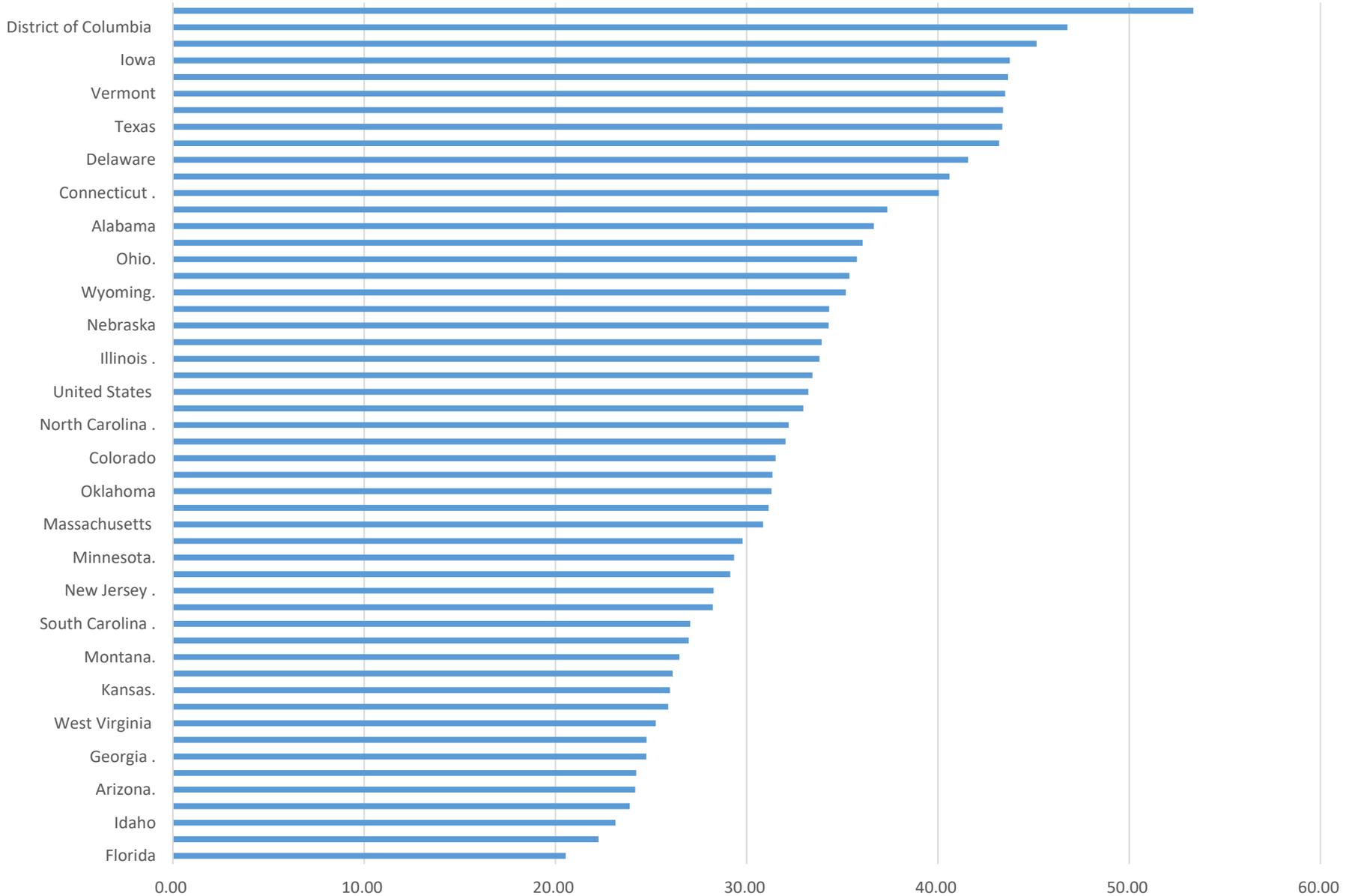
# Bottom Line

- Very hard to compare different Universities because of diverse methodologies.
- Some studies don't include any impact of alumni; these impacts tend to be very large. For comparison, I excluded those impacts when I could.
- Each study includes and excludes different considerations, some do not include a multiplier effect of spending.
- Standard deviation of impact per student is \$100,000 across studies.

# Return on Investment

- A second way to look at things:
- Attempts to evaluate the societal return to each dollar given to higher education.
- The value can be somewhat complicated as above: individual gains, revenue gains, and non-monetary benefits.

# Public University Funding by State per FTE student



# Return on Investment: Enrollment

- Different studies tend to find similar effects in trying to estimate impact of changes in spending on enrollment.
- About 3-5% increase in enrollment for each \$1,000 in per student funding.
- As discussed in the economic impact research, a large part of University impacts come through graduates.

# Return on Investment: Research

- A 2014 study by an FSU Faculty member found that shocks in funding for Research Universities had a statistically significant impact on local area economic activity, especially in areas where the local industries had research relationships with Universities.

# Return on Investment: Faculty?

- Florida Public Universities also have the highest student/faculty ratio in the nation with 21.3 FTE students per FTE faculty member
- Not much data on actual impacts of student/faculty ratios.
- But high student/faculty ratios and low resources make it difficult to attract and retain good faculty which may contribute in many ways.

# Economic Impact vs. Return on Investment

- Economic impact studies are very common.
- But they do not really tell us much about how much we get from higher education spending.
- Return on investment studies attempt to estimate return on revenue increases.
- However, they focus on increasing enrollment, which is an incomplete way to assess return on investment.