Measuring University Contributions to Regional Economies: A Discussion of Guidelines for Enhancing Credibility

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Experience-Based Perspectives

This is intended as a supplementary guide to assist public university economic impact practitioners to ...

- plan, structure, evaluate, and disseminate higher education economic information,
- promulgate reliable and defensible information for use in policy development, general planning, and overall university relations, and
- promote uniformity in impact measurement procedures and reporting across institutions

What am I reacting to?

In 2007, Siegfried, Sanderson and McHenry compiled a comprehensive review of university impact studies: The economic impact of colleges and universities, *The Economic Impact of Colleges and Universities*, **Economics of Education Review**

This article severely chastened (some) in the broader university community and forced a self-evaluation

For example, the APLU, with whom I am currently cooperating, has been working diligently since to ...

- Educate member schools about the problems identified in the Siegfried article
- Assist them in understanding whether they align with best impact evaluation practices or not
- Provide educational material and guidance to produce standard impact study templates with an eye towards developing "best practices" protocols.

What Do University Impact Studies Claim?

The Conventional

- Basic university research and education
- All manner of other university-based activities (sports, workshops, concerts, conferences, etc.)
- Student spending and other student tangible contributions
- Occasionally there are noteworthy capital developments worth analyzing, especially if they are federally or donor funded

What Else Do University Impact Studies Claim?

The Unconventional (but commonly done)

- A return on investment or implied "leverage"
- Related, attempts to shoehorn findings into a benefitcost analysis structure
- University spinoffs, to include knowledge transfers, business start-ups, faculty and staff entrepreneurship, even the value of student volunteer activities
- Avoided social costs (crime, dependency, etc.)
- Hedonic plusses of living in a "university community"
- And so much more....

When Measuring University Economic Contributions and Impacts ...

1. Using Modeling Systems or Tables of Multipliers

Any study of university economic contributions to a regional or a statewide economy must employ proper and up-to-date modeling systems.

- Are the analysts using a current input output (IO) modeling system like IMPLAN or its structural equivalent, or a current table of RIMS II multipliers, and
- Have the models or the multiplier tables been specified for the appropriate region of analysis?

2. The Estimation Process and Reliable Reporting

The ability of the analyst is of primary importance in conducting university economic impact reports as the quality of the research will directly reflect on the higher education institution at large:

- Do the analysts demonstrate a solid and thorough understanding of IO methods and procedures, and
- Can the analysts adequately explain and defend findings to the public, policy makers, or the media with the kind of confidence and authority that universities expect from all of their scholars?

3. Describing Total Economic Contributions and Estimated Economic Impacts

A clear understanding of regional economic accounts, for example, to include the ability to differentiate between economic activity that is intrinsic to a state or regional economy versus that which would be considered net new regional or statewide productivity, is essential to producing credible studies of overall university economic contributions and economic impacts.

- Are the analysts able to clearly describe and distinguish economic activity that has occurred in the state or region "but-for" the presence of the university from the activity that would have occurred nonetheless by virtue of expected state service delivery, and
- Have the analysts carefully segregated their evaluation so that it is clear to readers which components of regional or statewide economic contribution and impact are attributable to university activities and which are attributable to the activities of students and visitors?

4. Identifying and Measuring Extra-University Economic Activity

Extra-university spending can constitute a sizable component of the direct and indirect contribution universities make to regional economies.

- Have the researchers employed procedures that distinguish between student on-campus and off-campus spending,
- Have researchers controlled for student spending in a manner that does not double-count student spending with all university spending, and
- Have researchers used defensible and statistically reliable methods to estimate the economic value of non-student visitorship to the region?

5. Allocating Spending and Personnel Across Different University Functions

When measuring a university's activities, it is useful to differentiate among its core educational activities, research and public service, its revenue-generating enterprises, and its health care or veterinary services (if appropriate) in order to properly allocate regional economic contributions and labor-related outcomes to specific university functions.

- Have researchers adequately described university expenditures in manners that suggest an awareness of the range of activities universities are engaged in, and
- Have researchers allocated university faculty and staff across those many functions to describe where the job and incomerelated outcomes of university spending are located?

When Reporting Economic Contribution Outcomes ...

1. Standardizing the Reporting of Results

Clear and concise reporting of IO modeling or other estimation procedures is critical to conveying an accurate understanding of the economic contribution of universities to regional or state accounts.

- Are the findings presented in a manner that allows a reader to distinguish among the components of economic activity attributable to the university, and
- Do the results and the resulting implicit or declared multipliers make sense in general?

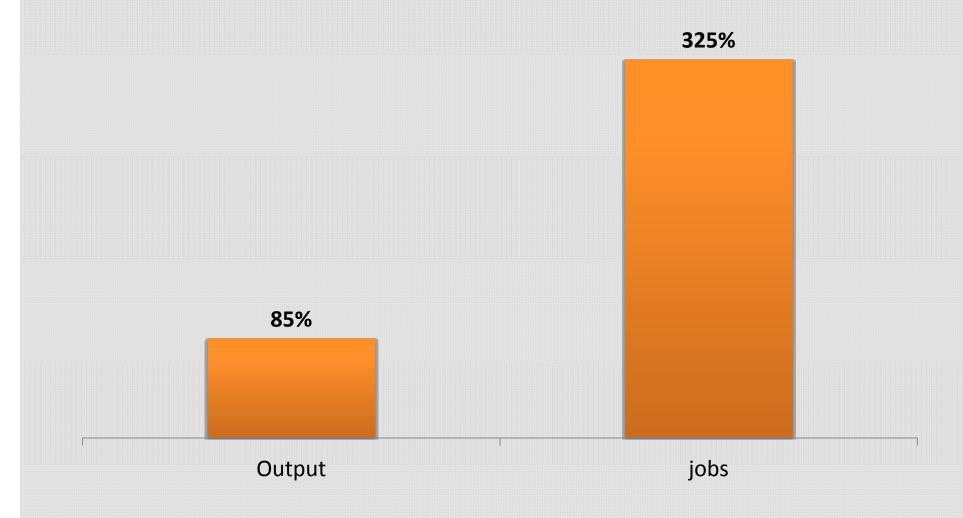
In a 2010 study of The University of Iowa using American Council on Education (ACE) Multipliers for Iowa, the consultants, Tripp-Umbach, said ...

Employment Impact

The research reported here, measures the direct employment impact of the University. In addition, the research quantifies the indirect employment generated at in-state businesses by expenditures emanating from the university. An employment multiplier of 2.5 was generated by Tripp Umbach for the University of Iowa project. While employment multipliers at the state level are as low as 1.4, the multiplier for the UI is comparatively higher due to the large amount of out-of state visitors and research grants and the impact of out-of-state students and their visitors.

ACE Multiplier for education output: ISU-derived multipliers higher education output:	2.30	1.71
ACE Multiplier for education jobs: ISU – derived multipliers for higher education jobs:	2.50	1.35

Here is the magnitude of distortion on the secondary effects



2. Appropriate and Inappropriate Characterizations of the Findings

Economic contribution analysis should use standard and straightforward language to describe the findings, and should forgo the use of private investment jargon when describing university values.

- Do the consultants lapse into discussing the return on investment or the leveraging value of state spending,
- Do the results improperly claim that state taxpayers, in essence, have been made whole in that university relative economic impacts generate more than enough tax revenues to cover state support, or
- Are annual economic outcomes described in a manner as to inappropriately imply net-beneficial gains to social welfare?

3. Properly Conveying Spillovers and Other Beneficial Transfers

There are knowledge and other intangible spillovers emanating <u>from all universities</u>. Universities may create the conditions for entrepreneurship and enhanced regional productivity; however, measuring those regional gains or the lifetime worth of university attendance is difficult and highly imprecise as is apportioning such measurements to particular institutions.

- Has the study attempted to impute "downstream" economic activity with the assumption that there is clear and convincing causality between university activities and spillover regional growth, or
- Have university researchers attempted via measures of lifetime earnings and other measures to differentiate themselves from some alternative?

4. Measuring Clearly University-Linked Entrepreneurship

University-linked incubators and business development centers are private ventures that tap into university services, talent, or knowledge spillovers. Similarly, university staff entrepreneurship produces a wide array of products, services, and contributions to regional economies.

- Have universities attempted to fold private economic gains into their declarations of regional economic worth, or
- Have universities attempted to appropriate the value of staff entrepreneurship as a tangible output of the university?

In Conclusion

The paper was motivated by and organized considering this over-riding premise:

when measuring public universities and their contributions to regional or statewide economies and society at-large, do it right or don't do it at all.

Universities are houses of high standards, and those high standards should apply to all university products.

Economic impact summaries must not be an exception to that rule.