TO: Executive Committee of the ACRL Board of Directors
FROM: John Lehner, Director at Large
RE: Return on Investment in Academic Libraries Research
DATE: April 4, 2009

Research on the return on investment (ROI) in academic libraries is quite limited. This memorandum briefly outlines the recent research on the return in investment in academic libraries and attempts to frame some of the possible directions for future research on this topic.

The concept of return on investment is borrowed from management accounting. It is defined as the average annual income from a project divided by the average annual investment in the project.\(^1\) In applying this concept to an academic library, the library would be characterized as a project in which the larger organization invests. Library budget data is readily available and the average annual investment can be easily identified. It is quite difficult, however, to identify and quantify the annual average income from investment in the library. A key research problem is how the outcomes from investing in the library can be expressed or characterized as income.

A somewhat different approach is to take a clearly identified and measured income stream and seek to establish its relationship to library expenditures. A recent research effort at the University of Illinois Libraries has attempted to link research grant income to the investment in the library.\(^2\) The study is predicated on the importance of library research materials being employed and cited in writing grant proposals. The study determined the amount of annual grant income generated using library materials and divides that number by the total library budget for the year. It concludes $4.38 are returned in the form of grant income for every dollar expended on the library. It should be noted that the methodology uses a survey of faculty about use of citations in grant applications. It does not entail an actual examination of grant applications. This study also attributes to library expenditures a stream of grant income that is at least debatably the result of other significant investments, well beyond just the library budget. The report includes a comment from Dr. Bruce Kingma of Syracuse University, an expert in the economics of information, that “it would be worthwhile to expand this study to include the complete system of inputs – library resources, faculty, staff and students – and to determine the influence of each on the system.” Clearly, including these other components of the system would greatly dilute the amount of grant income that the library could claim as the return on investment in the library. This study is currently being expanded and the same methodology is being tested at 8 additional institutions around the world.\(^3\)
The phrase *return on investment* denotes the ratio of average annual income from a project to the average annual investment in a project and may be an inappropriate or overly restrictive way to analyze the outcomes of an institution's investment in the library. Attempting to characterize many library outcomes as income and having a monetary value can be difficult at best. It may be helpful to explore the relationship between investment in the library and other measurable outcomes than income. Mezick examined the correlation between library expenditure and student retention in an article titled “Return on Investment: Libraries and Student Retention.” Her study correlated the relationship between library expenditures and IPEDS student retention data. She concluded that library expenditures have a significant positive effect on student retention. A British study examined the correlation between investment in the library and institution’s ranking in a qualitative assessment system used in the U.K. These approaches move away from a strict managerial accounting definition of return on investment and consider the return to be some measurable outcome other than actual income. They present a broader definition of return on investment and a potentially valuable approach.

There appears to be much more research on the return in investment and valuation methods for public libraries than for academic libraries. Many of these studies attempt to quantify the positive local and regional economic impacts of public libraries. A comprehensive review of valuation studies of public libraries was published by the Americans for Libraries Council. It provides an excellent overview of the state of library valuation. This publication provides a review of 17 public library valuation studies undertaken since 1998. These studies utilized various approaches in attempting to establish the economic value of libraries and library services. They include cost/benefit analysis, contingent valuation, and secondary impact analyses. Some of the more complex studies combined multiple methodologies such as direct cost/benefit analysis, contingent valuation, and analysis of secondary economic impacts, sometimes characterized as multiplier effects. The authors conclude that the cost/benefit analysis is probably the most effective and easily understood way to convey the value of investing public funds in public libraries. Direct cost-benefit analysis studies typically establish the cost for various services in the local market and then compare this measure of value to the library’s expenditures. The public library studies usually seem to find that there are $2 to $3 dollars of value for every $1 dollar of library expenditure.

The body of research on public library valuation should be examined and evaluated to determine which approaches and methods may be applicable in assessing the value or “return on investment” of academic libraries. The ACRL Board has discussed these issues in the context of advocacy for academic libraries. Some of the approaches used by public libraries, such as examining the economic impact of library salaries and expenditures on local and regional economies are probably not especially relevant for
academic library advocacy. Although universities frequently tout the positive impacts that the overall university has on local and regional economies, university administrators probably have limited interest in the effects of university libraries on local economies. Information that will support internal advocacy and arguments for funding will need to focus on economic benefits, or other measureable positive outcomes, that accrue to the institution, or to its faculty and students, as a result of library expenditures.

It would appear that initially there are two promising areas for further research for academic libraries. One is the application of cost-benefit analysis. The public library studies have established precedents for setting monetary values for a range of activities from reference transactions to patron computer use. To demonstrate that the services consumed by academic library users are valued in the open market at a far greater amount than the library expends in providing such services reflects well on the library. Just as the straight forward nature of cost-benefit analysis is especially effective in engaging public support for public libraries, it may be especially valuable in engaging student and faculty support for academic library funding.

The other approach that may be useful for academic library advocacy is extending and expanding the scope of studies such as Mezick’s and establishing the relationship between library expenditures and other positive outcomes in areas of institutional priority. Relating library expenditures to other student success measures beyond retention could be valuable for advocacy work. Other study prospects that might be considered are examining the relationship of library expenditure to faculty concerns, such as faculty satisfaction with library services, or even faculty retention. Such studies do require, however, standardized data sets drawn from large numbers of institutions, such as the IPEDS student retention data that Mezick employed.