Pricing Policies in Academic Libraries

DONALD W. KING

ECONOMIC PRESSURE ON LIBRARIES in the United States is approaching a critical stage.1 Academic libraries in particular are vulnerable to this pressure because of tightened budgets coupled with rapidly increasing costs. Academic institutions have been hurt economically by the need to increase tuition, while enrollment is decreasing due to lower birthrates in the 1950s and early 1960s, less interest from youth and reduced pressure to attend college. These trends should continue over the next ten years,2 so there is little relief in sight. In universities and colleges, some costs, such as those for facilities and tenured faculty, are relatively fixed compared to enrollment, necessitating budget cuts in other areas, such as libraries. Evidence suggests that academic library budgets are rising more slowly than the overall university budgets.3 For example, in 1973-76, most academic libraries' budgets increased at a rate of about 8-10 percent per year.4 Publishers of scientific and technical journals increased prices to libraries nearly 12 percent annually from 1975 to 1977.5 Even though the difference from year to year is not great, it must ultimately force some drastic changes in library operations.

As a result of these economic pressures, libraries have sought ways to reduce costs through such means as not subscribing to new periodicals, not renewing subscriptions, canceling duplicate subscriptions, reducing book purchases, automating cataloging, and participating in consortia and networks.6 Further reduction in periodical subscriptions is likely to result in increased interlibrary lending and photocopying, which shifts some of the cost burden from the borrowing library to the lending library. Obvi-

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ously, another possible solution is to charge for the use of materials and services. In this way, costs can be partially (or totally) recovered from users.

This article deals with economic considerations of user charges. Some economic principles are discussed, and the implications of charging for specific academic library materials and services are presented. Finally, for those academic libraries deciding to charge, alternative pricing policies and their implications are described. A numerical example is also given for interlibrary loans in order to illustrate the complexity and subtle effects of charging for such a service.

Two principal questions must be answered when considering charging for library materials or services. First, who should pay for these materials and services? This seems to depend, at least to some degree, on who benefits from them. Clearly, at one end of the spectrum is the possibility that direct users should pay because they are the principal beneficiaries. At the other extreme is the philosophy that society should pay for library services through taxes, since everyone shares in the benefits provided by libraries. There are many possible variations and options to consider when deciding who contributes to or pays for library materials or services. The second question is how much each contributor should pay. Economists have applied these questions to many kinds of goods and services. They begin by classifying goods and services into categories which help to clarify the economic issues involved.

The first category of goods is private goods. This includes goods such as food or cosmetics which primarily benefit the individual purchaser. There are two principal conditions of private goods. First, a person can be excluded from purchasing this type of good by either the price or the limited supply. Also, purchase (or use) of these goods must deplete their supply (i.e., there is one less apple in the barrel) and there is a cost associated with providing each unit purchased. Generally, it is felt that the user (and principal beneficiary) of private goods should pay for them. At the opposite extreme is public goods. In a purely economic sense, public goods benefit an entire community or society. Examples are the air people breathe, public parks, national defense, and scientific knowledge. Presumably, everyone benefits from these goods or services, use does not deplete their supply (i.e., one person using a park does not deplete its availability), the cost of each additional use is zero, and no one is excluded from their use or benefit. Everyone in society can benefit by scientific discovery in some areas; therefore, one can argue that the costs of pure science should be shared by everyone through taxation.
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Most library materials and services do not fall clearly into either of the above categories. A major reason is that most library materials and services involve scholarly knowledge. It is important to distinguish between knowledge itself and the various forms in which knowledge is found, e.g., in the mind and in print. Each form of information has a different set of economic conditions. Knowledge in the mind, although often funded by government, is not really a public good since it is exclusive (in the sense that a scientist can choose whether or not to reveal the knowledge) and it costs the scientist in terms of time required for communication. Yet knowledge in this form is nondepletive. When recorded in a manuscript, the information remains nondepletive; however, unless reproduced, exclusion still takes place due to lack of access to the information. Even though publishers incur substantial cost producing a master copy, the information lacks the nonexclusion condition for the same reason; however, the information comes closer to being a public good in this form. When the master copy is reproduced, the copies (not the information) become very much like a private good. Users can be excluded from purchasing copies of books or journals because of the purchase price or limited supply, each copy produced has a small (but nonzero) cost, and purchase of copies depletes the supply.

After the copies are distributed, an entirely different set of economic conditions holds. It can then be argued that materials found on the shelves of an open library are more like public goods, since they are nondepletive, each additional use has a cost close to zero, and the condition of nonexclusion is present. Exception to the last condition exists when a book is on loan, stolen, or when exclusion is caused by distance or hours of operation. If a photocopy (for personal use or interlibrary loan) is made of a journal article, it again becomes more like a private good: there is a cost associated with reproduction, and possible exclusion exists due to a charge or unequal access to photocopying equipment.

Another economic classification is merit goods. This includes private goods that are considered by some to be of such benefit that they should be supplied by the public. It is assumed that such goods would not be purchased if left to the ability or preference of potential purchasers. Examples include free lunches for schoolchildren, low-income housing for the poor, and free education for all children. The argument is that the advantages of a merit good are more apparent to the informed (i.e., an elitist, moral or pressure group with power) than to the uninformed general public, and therefore should be provided. Cooper argues that information is generally like education, and therefore should be considered
a merit good. However, he also points out that on-line search services do not fall into this category.

Another important economic consideration is the indirect effects of goods or services. Often persons other than the original purchaser or user are positively or negatively affected by a purchase decision. Such effects are called externalities. The construction of an elementary school can have positive externalities because the building and its land can be used for adult education, business and recreational purposes that extend beyond its primary purpose of housing children's education. Each of these uses in turn yields a benefit to the community or society. An example of negative externalities is the purchase of large automobiles whose size aggravates pollution, hinders traffic flow, requires more parking space and uses more gasoline. The externalities of library materials and services vary a great deal. Use of scientific information may yield substantial social benefits, such as the cure or prevention of diseases. On the other hand, information from a novel read for recreational purposes probably does not yield external benefits that are nearly as great. In all instances, the value of externalities is difficult, if not impossible, to measure.

There have been a number of papers dealing with pricing or user charges in public libraries, academic libraries or information systems in general. This article is concerned only with academic libraries, which differ from public libraries in several important ways. First, academic library patrons differ from public library patrons in that they are members of institutions which have well-defined goals. Thus, it is easier to determine who is served and for what purpose. Furthermore, students partially pay for the services provided by a library, and the faculty, research and administrative staff are usually funded under the same budget as the library. Public libraries serve a much broader spectrum of patrons, including the public, industry and the research community, as well as students and teachers. They use the library for purposes ranging from recreation, education and scientific research to business. Thus, the direct beneficiaries are widely dispersed and externalities are much more difficult to identify than for academic libraries.

The economic discussion that follows is limited to scholarly materials (e.g., books or journals) used by university or college students, faculty, researchers and administration. Consideration will be given to several library services including provision of these materials for reading, performance of on-line searches for either local patrons or outside users, photocopying by or for patrons, and interlibrary loans or photocopying for other libraries.
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In order to understand the implications of user charges, some discussion of costs is necessary. Library costs can be categorized into three general parts:

1. Most library materials or services have one-time, fixed costs associated with them. These costs are fixed because they are incurred whether or not any use takes place. Examples of fixed costs associated with periodicals include their price, as well as costs associated with acquisition, annual maintenance, storage and weeding.

2. Variable costs are related to each use of library materials or services. For periodicals, these costs include such things as replacement or photocopying.

3. Indirect costs are insensitive to amount of usage. These include rent, administration and other overhead items.

These three types of costs define the relationship between total cost and number of uses, as shown in Figure 1. As the number of uses increases, the total cost is raised by an amount equal to the unit cost per use. Generally, the average variable cost per unit of use remains nearly constant over a range of number of uses. However, when one adds either the fixed or the indirect costs associated with materials and services, the average unit cost per use decreases as the number of units used increases. This decrease may be substantial over a small number of uses, but it ultimately approaches the variable cost, as shown in Figure 2. The average

![Figure 1. Cost and Quantity Demanded Relationship](image-url)
cost per use begins to increase at some point because of large incremental increases in indirect or fixed costs. For example, as amount of use increases it may be necessary to rent additional space, thereby increasing average cost per use.

If a user is charged for library materials or services, the number of purchases will vary depending on the price. If the price is increased, the number of purchases will decrease, and vice versa. This relationship, known as the demand curve, is shown in Figure 3. However, there is a limit to the number of purchases that will be made even if materials or services are provided without charge. This is denoted as maximum quantity demanded ($D_M$). Also, there is some maximum price above which no one will make a purchase ($P_M$). It must be emphasized that such a demand curve is hypothetical and very difficult, if not impossible, to measure.

When the demand and average total cost curves are superimposed, as in Figure 4, there are two points at which the average cost equals the price. These two "break-even" points are designated as $P_{BE}$ and $P'_{BE}$. At prices above $P'_{BE}$, the cost curve is above the demand curve, i.e., a loss would be incurred by the producer. At all prices on the curve between the two points the demand exceeds the cost, so excess income, or profit, would result. At prices below $P_{BE}$, a loss is incurred because the cost curve again exceeds the demand curve. Thus, by charging for material and services,
the library will either break even, incur a loss or make a profit. It is very difficult to establish a price to achieve any of these outcomes purposely.

Another consideration when charging for use is the amount of benefit to be derived from ultimate use of the materials or services. There is little question of the positive externalities of scholarly materials. More use of these materials should yield increased benefit to society. Thus, if user charges are required for these materials or services, there will be less use and some benefit to society will therefore be lost. The suggestion arises of giving away all materials or services to achieve maximum use of them and thereby maximum benefit from them. The principal argument against this is that the materials and services may be subject to frivolous uses. For example, if there is no charge for on-line searches, some scientists (or libraries) might use the system unnecessarily. However, even without a direct charge for searches, the users will incur a cost in terms of their time, and so will not be as inclined to use searches as frivolously as some might think. Also, the maximum net benefit may not be at zero price (the net benefit is the total value achieved minus the total costs).
There are two extreme positions concerning user charges in academic libraries. One is that patrons must pay for each use, while the other is that the cost should be completely shared and paid as part of the university budget. Choosing between these alternatives depends on several factors, including the type of materials or services involved, their externalities, the cost of provision, and the cost of administering user charges. As mentioned previously, scholarly materials found in academic libraries have some conditions of a public good serving a common community, the university. Once on the shelves, there is little additional cost for increased use (except in terms of the user's time), the information is nondepletive, use is nonexclusive, and externalities seem to be highly positive. These are all strong economic arguments to provide scholarly materials without charge. Three other factors mitigate arguments for user charges for such materials: (1) it would be very difficult to allocate the fixed costs (i.e., price, acquisition, storage, maintenance and weeding) to individual uses because of the uncertainty of amount of use; (2) the cost of administering user charges would be very high; and (3) the question of frivolous use has little or no bearing here.

Local academic patrons are those who already pay indirectly for the library service (students), and those who are funded from the same source.
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as the library (faculty, researchers and administrators). Both these classes of patrons use the library to varying degrees. Thus, the question arises of how to allocate budgets to different departmental collections. This and similar questions involve issues not unlike those found in pricing, but they are not considered central to the pricing theme of this article.

A recent problem in academic libraries concerns charging for on-line services. Cooper gives an excellent discussion of user charges for on-line services provided by public libraries. He indicates that on-line services in this environment do not clearly fall into any of the economic categories of private goods, public goods or merit goods and points out that the type of user has some bearing on whether such charges should be made. He contends that professional users, such as doctors, lawyers, scientists or businessmen, should be able to pay for the service, and a charge would therefore not have much effect on the amount of their use of this system. It is not argued that the use of information is not beneficial to society, but rather that this segment of the population would probably use on-line searches with or without charge. He also argues that users who do not contribute to revenue through taxes, such as residents of another town, should pay for the on-line services.14

This last point holds for academic libraries as well. Since they derive their budget from the university, many believe they should charge for services to users not affiliated with the university to help defray the costs; however, in universities where much of the budget is derived from public funds, this logic may not hold. The cost of an on-line search is not trivial. Thus, a charge that recovers a major portion of the cost could minimize frivolous use. Finally, user charges would not be dominated by the cost of administering them.

The case for charging university patrons for on-line searches is weaker than that for charging outside users. Manual reference searches are provided without charge even though the costs are about the same as for on-line searches, although the costs of manual searches are not highly visible in the budget. Most on-line searches would be consistent with the mission and goals of the university, making externalities favorable and demonstrable. However, since system equipment and other costs appear as new items on the budget, the question of charging to recover costs is raised. Arguments for charging local patrons are: the costs of service are relatively high; the beneficiaries, i.e., the direct users, are easily identified; frivolous use is reduced; and the cost of administering charges is relatively low.
For situations in which it is decided to charge users for on-line searches, several alternative price policies may be employed (excluding that of making a profit). It may be desirable to recover all of the fixed, indirect and variable costs; this policy is called average cost pricing. This price would cover such fixed and indirect costs as terminals, furniture, rent and unused personnel time. Another policy is to charge only for the variable costs related to each use; this is referred to as marginal cost pricing. The variable costs include such factors as connect-time, direct personnel time and supplies.

Average cost prices would always be higher than marginal cost prices and, therefore, the number of uses of an on-line search facility would be fewer. Thus, some social benefit would be lost through use of average cost pricing. One other practical problem with average cost pricing is that it is very difficult to predict what the break-even point will be. This is particularly true with on-line search systems since their fixed and indirect costs are high. This pricing policy could lead to large losses or unwanted profits, though with lower fixed costs there is less risk. With marginal cost pricing the risk is not as great because the choice of prices can be made from a relatively small range of costs. To use this policy, a library must recognize that the fixed and indirect costs must be recovered in some other way. Economists have shown that when a user is charged for things like on-line searches, the net social benefit is greatest when marginal cost pricing is utilized.

Another pricing policy is merely to charge what is considered to be a fair market value. In other words, a price may be established in terms of the worth of the on-line searches and what others (i.e., search brokers) charge for them. The problem with this pricing policy is that without substantial experience in the marketplace, the unknowns and risks are very great. Thus, it becomes difficult for most libraries to budget for either excessive or inadequate demand that may occur at fair market value price. Price discrimination can also be used by libraries that charge some user groups differently than others, e.g., user groups are charged based on the sensitivity of amount of use to price (price elasticity). For example, professional users may be less sensitive to price than students; thus, they would be charged more. There are other purposes of price discrimination as well, such as to develop loyalty. Prices may also be established to accomplish an objective. For example, a price may be purposely set low to encourage use of an on-line system that might not otherwise be used.
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Another library service that can involve a user charge is photocopying. Again, this service has some characteristics of both private and public goods. It is like a public good in that the information found in the photocopied material is nondepletive. However, the photocopy itself is more like a private good in that the particular user is the principal beneficiary. The positive externalities could also be equally gained from the information through reading the article in the library or by taking notes from it. Thus, the externalities are the benefits of having a personal copy. Moreover, each use (photocopy) has a nonzero cost. Here, marginal cost pricing makes some sense, particularly since the potential for frivolous use is great. For this type of library service, frivolous use has more influence on the pricing assessment, perhaps, than for the other examples. Since the cost and price of photocopying are low, the relative cost of administering user charges could actually be more than the price. However, the existence of coin-operated machines in many academic libraries seems to be an adequate way of coping with this issue.

A related service for which a user fee may be considered is photocopying done for another library. Interlibrary loans also fall into this category. Information given in Table 1 illustrates some of the difficulties and subtleties involved in deciding whether to charge the user, which in this case is another library. In order to demonstrate the implications of such a decision, the example shows the effect on the borrowing library and the lending library, and the total cost to both, i.e., the cost to society. Data provided from several studies* yield the following typical costs to borrowing and lending libraries:

<p>| TABLE 1. COMPARATIVE COSTS OF INTERLIBRARY LOANS TO BORROWING AND LENDING LIBRARIES |
|----------------------------------------|----------------------------------------|</p>
<table>
<thead>
<tr>
<th><strong>Borrowing Library</strong></th>
<th><strong>Lending Library</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><em><em>Fixed cost</em> per journal</em>*</td>
<td><em><em>Variable cost</em> per use</em>*</td>
</tr>
<tr>
<td>Annual subscription price</td>
<td>Interlibrary loan $8.40</td>
</tr>
<tr>
<td>Acquisition (new journal only)</td>
<td>95.91</td>
</tr>
<tr>
<td>Annual maintenance (check-in, binding,</td>
<td>31.92</td>
</tr>
<tr>
<td>file maintenance, etc.)</td>
<td></td>
</tr>
<tr>
<td>Storage</td>
<td>6.00</td>
</tr>
<tr>
<td>Weeding</td>
<td>.90</td>
</tr>
<tr>
<td><em><em>Variable cost</em> per use</em>*</td>
<td></td>
</tr>
<tr>
<td>Internal use &amp; circulation</td>
<td>2.00</td>
</tr>
<tr>
<td>Interlibrary loan</td>
<td>11.60</td>
</tr>
</tbody>
</table>

* Costs include an allocation of indirect costs.
A library must periodically decide whether to renew a journal subscription or rely on interlibrary loan to fulfill patron needs. One can see that the total fixed cost of renewing the subscription is roughly estimated at $76.54. If there is only one use of that journal, the cost per use would be $78.54 (adding the internal use variable cost). This cost is much higher than the cost of borrowing a photocopy, which is $11.60. For two uses, the average cost per use of purchasing a subscription would be $40.27, which is still substantially greater than the average cost of borrowing the copies. Thus, the average cost per use to the borrowing library is less to borrow for up to nine uses, at which point it becomes less expensive to purchase. However, a cost burden is placed on the lending library, since the cost to them is $8.40 per loan. The cost for eight loans is $67.20.

What would be the effect if the lending library charged the borrowing library $8.40 for its loan? This is best answered by an illustration using data provided by a University of Pittsburgh study in which the number of uses of scientific journals in several university libraries was estimated. A composite of observations is given in Table 2 for 1645 journals found in physics, chemistry and life sciences libraries at Pittsburgh. From these data one can determine the number of journals that

<table>
<thead>
<tr>
<th>Number of Uses*</th>
<th>Number of Journals</th>
<th>Total Number of Uses</th>
<th>Total Cost</th>
<th>Cost Per Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>49</td>
<td>0</td>
<td>$ 3,750</td>
<td>—</td>
</tr>
<tr>
<td>1</td>
<td>86</td>
<td>86</td>
<td>6,754</td>
<td>$78.50</td>
</tr>
<tr>
<td>2</td>
<td>84</td>
<td>168</td>
<td>6,765</td>
<td>40.30</td>
</tr>
<tr>
<td>3</td>
<td>77</td>
<td>231</td>
<td>6,320</td>
<td>27.40</td>
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<tr>
<td>4†</td>
<td>67</td>
<td>268</td>
<td>5,664</td>
<td>21.10</td>
</tr>
<tr>
<td>5</td>
<td>63</td>
<td>315</td>
<td>5,452</td>
<td>17.30</td>
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<tr>
<td>6</td>
<td>58</td>
<td>348</td>
<td>5,135</td>
<td>14.80</td>
</tr>
<tr>
<td>7</td>
<td>53</td>
<td>371</td>
<td>4,799</td>
<td>12.90</td>
</tr>
<tr>
<td>8‡</td>
<td>48</td>
<td>384</td>
<td>4,442</td>
<td>11.60</td>
</tr>
<tr>
<td>9</td>
<td>44</td>
<td>396</td>
<td>4,160</td>
<td>10.50</td>
</tr>
<tr>
<td>10</td>
<td>41</td>
<td>410</td>
<td>3,958</td>
<td>9.60</td>
</tr>
<tr>
<td>10+</td>
<td>975</td>
<td>38,601</td>
<td>151,829</td>
<td>3.90</td>
</tr>
<tr>
<td>Total</td>
<td>1,645</td>
<td>41,578</td>
<td>$209,028</td>
<td>$ 5.00</td>
</tr>
</tbody>
</table>

* Uses here are defined as readings. There could be other uses as well.
† Break-even with charge    ‡ Break-even with no charge

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have one, two, three or more uses, as well as the total number of uses for these journals. Furthermore, based on the costs shown above, one can estimate the total costs for these journals at each level of use. Of the 1645 journals, it is estimated that 45 have had no use at all. These journals would cost about $3,750 to renew and maintain. An estimated 86 journals have one use each at a cost of $6,754 or $78.50 per use, 84 have two uses (168 total uses) at a cost $6,765 or $40.30 per use, and so on. There are an estimated 41,578 uses of the entire collection at a total cost of $209,028, or $5.00 per use.

It should be noted that the cost per use is $11.60 at eight uses, which is the same as the cost to the borrowing library of an interlibrary loan. Thus, for all of the journals with eight or fewer uses, it is less expensive to borrow copies than to purchase the journals. There are 585 journals with 8 or fewer uses, for a total of 2,171 uses. The cost of purchasing these 585 journals is estimated to be $49,897, compared to a cost of $25,184 for interlibrary loans. The borrowing library would therefore save about $24,713. On the other hand, the cost to the lending library is $18,236. Thus, if the borrowing library acquired all journals with eight or fewer uses through interlibrary loan, and purchased the rest, the total cost to both libraries is $203,367, which is $5661 less than if the borrowing library purchased the 585 journals. Thus, use of interlibrary loans yields considerable savings to the borrowing library at the expense of the lending library. Society also achieves modest savings. This analysis, of course, ignores the effect of inconvenience to users of delays caused by interlibrary loans. It also assumes that a library can reasonably estimate amount of use. Finally, there may be a quid pro quo arrangement among borrowing and lending libraries so that the cost burden of lending is shared.

However, consider the effect if the lending library charged for their variable costs of $8.40, making the total cost to the borrowing library $20 per use. Thus, the break-even point of borrowing versus purchasing for the borrowing library would now be between four and five uses. A total of 363 journals have 4 or fewer uses accounting for 753 uses. Thus, there would be a decrease of 1418 interlibrary loans due to the increased charge. The cost to the borrowing library (which now includes the charge by the lending library) is $15,060, and the net cost to the lending library is zero. The total cost of all journals to both libraries is reduced to $194,835, yielding a savings to society of $14,193.

One of the most intriguing outcomes of this analysis is that the optimum strategy for minimizing overall costs to both the borrowing and lending libraries is to set the break-even point with costs to both libraries.
included, whether or not a charge is actually made by the lending library. The problem is that the cost to the borrowing library increases from $125,131 to $188,470. If there is a *quid pro quo* arrangement among libraries so that each borrows and lends, however, it appears to be to their advantage to set the break-even point in terms of costs to both the borrowing and lending libraries.

The analysis above does not include the costs to both libraries of administering the charges. These costs could greatly change the picture. If these administrative costs were $4.00 per transaction, and if they were borne entirely by the borrowing library, the break-even point would drop to between three and four uses. The number of journals below that number is 296 and they have a total of 686 uses. The cost of borrowing (including charges of $12.40) is $16,464, so that the total cost of all journals would be $201,903 compared to $209,028 (if no borrowing took place), or $189,483 (if no charges were made and the borrowing library incurred $2.00 in administrative costs per transaction).

A further issue deals with the negative externalities of a system that encourages more borrowing and less purchasing. First, borrowing creates a delay in receipt of a needed article which could hinder research, teaching, writing or whatever purpose the article is to be used for. A possibly more serious negative externality is the effect on publishers. If interlibrary lending takes place without a charge, about one-third of journal subscriptions would be cancelled if all libraries followed the decision rule above. In order for publishers to recover their large fixed costs, the costs would either have to be reduced which would perhaps result in poorer quality, or journal prices would have to be increased. Royalties will not provide sufficient revenue to publishers since fair use and other eligibility conditions do not require royalty payment in many instances, and because the CONTU guidelines suggest that borrowing libraries need not pay royalties if fewer than six articles are made over a period of five years following publication. Over half of the interlibrary loans made without charge fall into this category. In situations where loans are made with charges, all of them are exempt from royalty payment under the CONTU guideline. Journals with a low number of subscriptions are likely to be hurt more than those with larger circulation, because their proportion of costs which are fixed is greater. Moreover, library subscriptions account for a larger portion of the revenue of small subscription journals, which have fewer nonsubscription sources of revenue such as advertising and sale of reprints.
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Pricing policies in academic libraries have been discussed from the standpoint of whether or not charges should be made, and if so, what those charges should be. It has been demonstrated that these questions depend on the type of materials or services involved, their externalities, the type of user, the cost of the materials or services, and the cost of administering user charges. In the case of scholarly materials used for reading, there is little doubt that they have some conditions of public goods in that they are nondepletive, the cost of use is near zero, and they are nonexclusive with some exceptions. Thus, the usual practice of not charging should continue. On-line search services are somewhat more difficult to assess. In many libraries, manual reference searches, as well as on-line searches, are considered a nonessential service to patrons; they do not fall easily into economic categories of private, public or merit goods. If the patrons are not part of the library’s institution, there may be some merit to charging them for the variable costs (i.e., marginal cost pricing). However, if the patron is part of the library’s institution, there is less reason to charge. In either case, there is unlikely to be frivolous use as the cost to a user is relatively high anyway. With an increase in interlibrary loans and a possible new National Periodicals System, search capabilities must be improved. Thus, the issue in academic libraries may not be one of pricing, but rather reallocation of budget from materials (or other services) to manual or on-line reference searches. Decision of whether or not to charge for these services should reflect this possibility.

An example was given concerning the effect of charging borrowing libraries for interlibrary loans. The practice of borrowing (or photocopying) articles shifts some cost burden from borrowing libraries to lending libraries. However, the total cost savings to society is modest at best. If lending libraries charge for the loans, the cost to the borrowing library is still less than purchasing journals with fewer than five uses. In this instance there is also a large cost savings to society as well. However, there are some negative externalities to users in the form of slower service, and to publishers in a substantial reduction in library subscriptions. If all libraries canceled periodicals which are less expensive to borrow than to purchase, the canceled subscriptions would require reduced journal quality, content or some other change to lower costs, or the price would have to increase. If prices are increased accordingly, libraries would end up paying nearly as much, on the average, as was necessary before borrowing took place. Thus, librarians must keep such externalities in mind when deciding whether or not to charge for materials or services.
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References


3. Fry and White, op. cit.

4. Ibid.

5. King, et al., op. cit.

6. Fry and White, op. cit.


10. Machlup, op. cit.


15. Baumol and Ordover, op. cit.


