

that sentiment, saying publishers are in danger of killing their markets by overexploitation. "The general feeling is that libraries will pay anything," says Lucker of MIT, which was hit last year with a 15% increase in journal expenses. Shirley Echelman of the Association of Research Libraries says publishers assume libraries are an "inelastic" market, but the fact is, "there are going to be massive cancellations."

One problem, as Brown University provost Maurice Glicksman points out, is that "market forces are not at work," inasmuch as journals are not comparable—"quality determines the need to purchase." And Hamaker observes that a company like Elsevier, which publishes 590 journals, has a monopoly in many fields. "A very small group of publishers is responsible for 75% of our problem," says Dougherty of Michigan.

Another problem is the rapid proliferation of journals, particularly in the more active areas of science, such as computers and molecular biology. This results in hyperspecialization, otherwise known as "twigging." Michael Keller of Yale University can name seven computer journals off the bat, five of which have made their appearances within the past few years. There are "far too many journals being chased by far too few dollars," says Michael Bowen, the ACS director of books and journals.

This has resulted in a vicious cycle that began some years ago but which has been exacerbated by the currency situation: as the numbers of subscribers to journals diminish, prices are raised to keep income stable; this in turn drives away more subscribers. This phenomenon promises to lead to further damaging price increases next year. Indeed, Joseph Boisse of the University of California, Santa Barbara (which this year exceeded its journal budget by 25%), says he has received notices from two foreign publishers that further price rises will be necessary because of anticipated subscription cuts.

Among the trends that have conspired to create the present situation, according to Hamaker, is that over the past 10 years increasing numbers of scientific organizations have turned printing and distribution of their publications over to commercial publishers. Publications by nonprofit organizations tend to be cheaper, in part because they have larger distributions and more individual memberships. Page charges in some cases also keep prices down.

Also adding to general information costs has been the Reagan Administration's "privatization" policy, which has resulted in commercial publishers taking over the production of government documents that had previously been sold at cost. Another trend has been the purchase by foreigners of

American journals and information services, which has been accelerated by the favorable position of European currencies vis-à-vis the dollar.

Although research libraries have made some attempts to negotiate with publishers about the worsening dilemma, no solutions have yet appeared on the horizon. Bowen of the ACS says the shrinkage of the subscription base, which has been going down between 0.5 and 1% a year, is a factor in price increases. But the main factor, he says, is that "our journals are growing in size." The *Journal of Physical Chemistry*, for example, has gone from about 5000 pages in 1982 to 7000 in 1986. *Organic Metallic Chemistry* has grown from 1800 to 2600 pages. He says that if libraries want to keep costs down, they "should not continue buying journals that are outrageously priced."

Nonetheless, he says "I have a lot of sympathy with the library community. If I were in their shoes I'd be saying the same things."

Not so sympathetic is A. F. Spilhaus, Jr., of the American Geophysical Union. Spilhaus says price increases of AGU journals have been necessitated by increased paper and postage costs (paper went up sharply a half dozen years ago), as well as increased pages. For example, the *Journal of Geophysical Research* "has more than doubled in price but it has doubled in size." Spilhaus thinks some foreign journal publishers are indeed price-gouging. He also says domestic commercial publishers are charging at rates up to ten times that charged by nonprofit societies.

Says Spilhaus: "Libraries have caused the problem by buying stuff that is unreasonably expensive . . . libraries have to learn better how to evaluate the value of journals. As long as they are relying on dollars per title they are not being economically realistic. I have told them hundreds of times that *they're* the problem."

Commercial publishers are also unapologetic. David Swanson of Academic Press, a major U.S. journal publisher, says that comparing journal prices to inflation as measured by the Consumer Price Index is irrelevant, because the price index does not take into account rising costs of such factors as paper, typesetting, and postage. He acknowledges that "falling unit sales clearly has had an effect" on prices.

Robert Miranda of Pergamon Journals Inc., the U.S. arm of the British company, says that labor costs have been the largest factor (aside from the decline of the dollar) in pushing up prices. He also says editors are getting more submissions, which raises the costs of processing manuscripts. Librarians have accused Pergamon of making fantastic profits—Keller says their profit margin went

from 25% to 40% between 1980 and 1986—but Miranda says that is for the whole enterprise, not the journals. He also says that, contrary to accusations, Pergamon's American price is 20% lower than its overseas price.

There is no consensus on how the problem of escalating journal prices will be resolved. In the long run, electronic publishing looms. The next few years will probably see a number of partial solutions. Resource sharing and arrangements for the development of complementary collections among libraries will undoubtedly increase, although this means some can no longer aspire to having "comprehensive" collections. Some librarians suggest that instead of subscribing to certain journals they may subscribe to services that provide copies of single articles. Dougherty believes that technology has advanced to the point where it will be feasible for some private societies to reassume the publication of journals that have been turned over to commercial publishers. More pressure will be put on publishers to stabilize prices. Publishers, for their part, may decide that twigging has gotten out of hand and move toward consolidating some journals. There is a widespread belief that many small-circulation journals will go out of business.

The situation is now in flux. Says Boisse: "nobody has been able to see where this is going to end." ■ CONSTANCE HOLDEN

Briefing:

AAU Renounces Pork

In a rare mail ballot, the heads of 55 of the nation's leading research universities have voted 43 to 10, with two abstentions, to observe a moratorium on seeking pork barrel funds from Congress to build facilities. The vote, by members of the Association of American Universities (AAU), followed a lengthy and at times heated debate at the AAU meeting last month over how the association should react to the growing practice of universities seeking special appropriations for individual facilities. AAU president Robert Rosenzweig notes in a letter to the association's members that the AAU will not force compliance with the moratorium, but he suggests that breaking the moratorium would undermine the AAU itself. "Seventy-eight percent of [the] members have voted in favor of a difficult, but they believe necessary course of action. Those who voted on the other side will, I am confident, give serious consideration to what that means." ■ C.N.