

## GUEST EDITORIAL

### NO JOURNAL IS AN ISLAND

BY E. W. FREES

Readers of this editorial essay undoubtedly appreciate the importance of the role that the *British Actuarial Journal* plays in shaping discussion of actuarial issues of the day. Having served as Editor of the *North American Actuarial Journal* (the main scientific journal of the North American Society of Actuaries) for three and a half years, I, too, appreciate the importance of a professional and scientific journal in shaping the discussion of current issues. Thus, when asked to write a guest editorial for the *British Actuarial Journal*, it seemed natural that I focus on policy and strategic issues that concern the role of a journal.

Why do we have journals? Actuarial organisations sponsor a journal for many reasons; actuarial journals facilitate continued improvement in financial security systems by providing a thoughtful forum for the communication and discussion of relevant policy issues, innovative concepts, as well as original research and demonstration. Most professional organisations sponsor journals, just as many individuals maintain a journal or daily diary. Now, a person's journal is a private thing that is meant to encourage reflection. In contrast, a profession's journal is a public document; it is the lens cap through which many view the organisation. Throughout this essay, I emphasise these dual themes, the journal as an archive and the journal as a public relations' tool.

#### TYPES OF JOURNALS

In our professional lives, most of us receive many different print and on-line publications that address a broad spectrum of public and private policy, regulatory and scientific issues. Thinking about the publications that a typical actuary receives, I wish to distinguish journals from professional newsletters and magazines. Newsletters and magazines are always timely, and address practical or immediately relevant issues. The intended audience may be either inward (membership oriented) or outward (members and others interested in professional topics). The writing style and development of ideas are designed to have a broad appeal.

Like a newsletter and a magazine, a journal is meant to provide a medium to promote dialogue concerning professional issues of the day. In contrast to newsletters and magazines, journals may focus more deeply on

issues, and thus generally have a narrower appeal. Perhaps most importantly, a journal provides an archive upon which a profession's intellectual foundation rests.

To discuss the role of journals in actuarial science further, let me classify a journal as either 'professional' or 'scientific'. Each has its own role; this is meant to provide a classification, not a hierarchy.

First, for a professional journal, there is a clear emphasis on practical issues, including regulatory concerns. The intended audience is generally the members of the profession. On a daily basis, a practising actuary finds a professional journal to be relevant. Academics think that theory and practice are two sides of the same coin, but practitioners know differently: "In theory, there is no difference between theory and practice. In practice, there is." (Attributed to Yogi Berra.)

Second, for a scientific journal, timeliness is less of an issue; scientific journals are meant to provide an archive of knowledge to build the foundations for the future. Just as with professional journals, scientific journals may focus deeply on issues, and thus have a narrower appeal than a popular outlet. However, a scientific journal addresses, not only members of the profession, but all who are interested in professional topics.

#### THE WIDE WORLD OF ACTUARIAL JOURNALS

Scientific journals generally focus on 'original' and 'innovative' research. Now, a procedure that is novel and innovative in one community may be commonplace in a neighbouring community. To judge whether ideas are original and innovative, actuarial scientific journals need to operate within the broader scope of the scientific publication community. Good ideas do not recognise boundaries imposed by national governments or professional associations. Thus, a scientific journal seeks to serve international scientific, academic, business, and governmental communities. To maintain a leadership role, a journal cannot be viewed as an 'island', and work in isolation of other communities. Through improving telecommunications, the world is getting smaller. In the same fashion, access to professional and scientific journals is becoming easier, and the competition more fierce. Journals need to coexist peacefully, and no journal is an island.

How does access to a broader scientific community impact the development of ideas? It is customary for manuscript authors to defend the originality of their ideas by citing the scientific literature. Through citations of the relevant literature, authors summarise the current state of knowledge relevant to the questions which they are considering. By summarising the current state of knowledge, authors make the case that they are pushing forward the frontiers of science and making valuable contributions to the literature. Conversely, reviewers judge an article based on their view of the

Table 1. Actuarial peer reviewed journals and their web addresses

Journal title	Web address
<i>ASTIN Bulletin: Journal of the International Actuarial Association</i>	<a href="http://www.casact.org/library/astin/">www.casact.org/library/astin/</a>
<i>British Actuarial Journal</i>	<a href="http://www.actuaries.org.uk">www.actuaries.org.uk</a>
<i>Casualty Actuarial Society Proceedings</i>	<a href="http://www.casact.org">www.casact.org</a>
<i>Journal of Actuarial Practice</i>	<a href="http://www.absalompress.com">www.absalompress.com</a>
<i>Insurance: Mathematics and Economics</i>	<a href="http://www.elsevier.com">www.elsevier.com</a>
<i>North American Actuarial Journal</i>	<a href="http://www.soa.org">www.soa.org</a>
<i>Scandinavian Actuarial Journal</i>	<a href="http://www.ingenta.com/journals/browse/tandf/sact">www.ingenta.com/journals/browse/tandf/sact</a>
<i>South African Actuarial Journal</i>	<a href="http://www.assa.org.za">www.assa.org.za</a>
<i>Australian Actuarial Journal</i>	<a href="http://www.actuaries.asn.au">www.actuaries.asn.au</a>

increment of the contribution, because journals wish to publish pieces that contribute substantially to our knowledge base. So where is this literature to be found?

Scientific publications rely heavily on findings that appear in peer reviewed outlets. The philosophy is that, through the process of peer review, scientific ‘facts’ are established, and provide a solid foundation for extending our knowledge base. Table 1 lists a collection of journals that focus on actuarial science. For readers who would like to find out more about these outlets, Table 1 also provides their web addresses.

#### THE WIDE WORLD OF SCIENTIFIC JOURNALS

However, there is much more to the scientific literature that underpins research in actuarial science than the journals appearing in Table 1. Actuarial science is founded on tools based in probability modelling, statistics, economics, financial economics and demography; these foundation areas are used in actuarial science to study financial security systems. Further, the definition of ‘financial security systems’ is broad, and may encompass many financial arrangements that serve to protect individuals or organisations in the event of unforeseen events. Some of the lead examples include private arrangements, such as annuities, life insurance, health insurance, property and casualty insurance (such as automobile and homeowners’ insurance) and pension plans, as well as public arrangements such as social security and Medicare. Because the core topic, actuarial science, is so broad, there are many links to other literatures. To illustrate, Table 2 provides a small sample of peer reviewed journals organised around topics that, in many cases, support the investigation of actuarial science.

Particularly for interdisciplinary fields such as actuarial science, the

Table 2. Other selected peer reviewed journals and their web addresses

Topic area	Journal titles	Web address
Demography	<i>Demography</i>	www.popassoc.org/publications.html
Economics	<i>American Economic Review</i>	www.aeaweb.org/aer/
Employee benefits	<i>Industrial &amp; Labor Relations Review</i>	www.ilr.cornell.edu/depts/ilrrev/
Financial reporting	<i>The Accounting Review</i>	accounting.rutgers.edu/raw/aaa/pubs/acctrev.htm
Finance	<i>Management Accounting</i>	www.mamag.com/
	<i>The Journal of Finance</i>	www.jstor.org/journals/00221082.html
	<i>Journal of Financial Economics</i>	www.ssb.rochester.edu/fac/jfe/jfeold.htm
	<i>Journal of Financial and Quantitative Analysis</i>	www.jstor.org/journals/00221090.html
Health	<i>Review of Financial Economics</i>	www.library.adelaide.edu.au/erc/R/1387547.html
	<i>Academic Medicine</i>	www.academicmedicine.org
	<i>Inquiry — Blue Cross and Blue Shield Association</i>	www.inquiryjournal.org/
	<i>Journal of Health Economics</i>	www.elsevier.com/homepage/sae/econbase/jhe/
Marketing	<i>Medical Decision Making</i>	www.sagepub.co.uk/journals/details/j0357.html
	<i>Journal of Marketing</i>	www.ama.org/pubs/jm/index.asp
Risk and insurance	<i>Journal of Marketing Research</i>	www.ama.org/pubs/jmr/
	<i>Journal of Risk and Insurance</i>	www.aria.org/journals.htm
Statistics	<i>Journal of the American Statistical Association</i>	www.amstat.org

related scientific literature is vast. Fortunately, one advantage of the modern electronic era is that databases of journals, and journal articles, exist; these databases allow researchers to search efficiently for topic areas of interest. To give an idea of the sense of magnitude, I note that the *Institute for Scientific Information* (www.isnet.com) maintains a database of over 16,000 international journals, books and proceedings in the sciences, social sciences and humanities. This organisation publishes, among other things, methods for tracking citations in the sciences and social sciences.

As another example, *ABI/INFORM* abstracts articles from more than 1,000 scholarly and trade business periodicals, including *Forbes*, *Fortune* and *Business Week*. Over 600 of its journals also provide online web-based publications. For yet another example, MathSciNet, produced by the American Mathematical Society, indexes and abstracts 1,800 journals and more than 7,500 books, conference proceedings, theses, technical reports from *Mathematical Review* and *Current Mathematical Publications*.

## SUPPORTING THE INFRASTRUCTURE

A long-standing rule for researchers is that access to good research tools has never been cheap. Certainly, this is true for individuals who wish to access the above listed databases. They are maintained by private firms that operate on a for-profit basis. A possible exception to this rule is the *SSRN Electronic Library*, founded by Social Science Electronic Publishing (<http://www.ssrn.com/>). This organisation maintains a free (at least at this printing) database of thousands of journals that are categorised by different networks, including accounting, financial economics, and so on.

Allowing that a journal provides an archive of information useful to the public, it is natural to ask: "Who are the sponsors of scientific journals?" The answer is three-fold, sponsors include professional organisations, universities and for-profit publishing houses. We have already discussed the motivations as to why a professional organisation would want to sponsor a journal. The motivations for universities are even simpler; a university is organised to foster knowledge creation and dissemination. Thus, sponsoring a journal falls directly within the mandates of a university.

The motivations of for-profit publishing houses are also very clear; they want to make money. It is interesting to note that sponsorship of journals by for-profit publishing houses has taken on a greater role in recent years. In actuarial science, an excellent example is the prestigious journal *Insurance: Mathematics and Economics*, that is published by Elsevier.

That for-profit publishing houses can make money by publishing scientific research is the result of a bizarre economic situation, and here is how it works. Academics and other researchers are funded to do public research by governments and foundations. To get their work recognised, they wish to publish it. After appropriate negotiations, a journal agrees to publish the research. However, the journal does not pay the authors of an article; it receives the copyright on the article for free, as a condition of publishing the work. The journal then sells subscriptions to pay for the publishing costs. Not surprisingly, the main customers are research developers, essentially the universities, who must then pay the subscription fee to access the research that they worked so hard to develop!

This bizarre economic situation arose because, in times past, for-profit publishing houses would publish journals at low costs in order to gain the prestige associated with publishing top tier journals. This was acceptable to professional organisations and universities, because it saved them from the bother of organising a journal. In today's cost conscious economic environment, journals are becoming extremely expensive, and university libraries are balking at paying expensive subscription fees.

Ours is an electronic information age. Sponsorship, and thus control, of a journal is an important function of a professional organisation. As evidenced by the existence of sponsorship by for-profit publishing houses, journals can

be organised so that they require minimal financial support from an organisation's membership.

#### NO JOURNAL IS AN ISLAND

Each journal is not an island, but rather is a member of the community of science. For our published works to be recognised as original and innovative, authors and reviewers must be cognisant of the larger scientific literature. An actuarial journal's readership consists of those interested in actuarial science. These include, not only professional actuaries who practice actuarial science every day of their lives, but also professionals and researchers who work in areas related to actuarial science, including employee benefits, health care, investment and corporate finance, and so on. We need flagship actuarial publications, sponsored by professional organisations, to be strong players in the community of scientific publications, for the actuarial profession to make an impact on the way in which the world thinks about actuarial topics.

Edward W. (Jed) Frees is the Fortis Health Insurance Professor of Actuarial Science at the University of Wisconsin – Madison. He is a Fellow of the Society of Actuaries and of the American Statistical Association, and served as Editor of the *North American Actuarial Journal* from 2000 to 2004.