

AIS Articles In Top-Ranked Accounting Journals, 1993-1997

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Abstract

The extent to which articles with accounting information systems (AIS) content appear in top-ranked academic accounting journals is both a measure of the likelihood of AIS faculty publishing in those journals and the degree of which AIS has been accepted as a legitimate area of investigation. An examination of five top-ranked accounting journals for the period 1993-1997, revealed only seven of 622 articles with AIS content. It may be unrealistic to expect that many AIS professors would publish in the journals reviewed. Instead, they should: aim to place their research in good second or third-tier accounting journals; develop a list of journal rankings suitable to AIS; and support new journals that have an AIS focus. AIS professors also should take advantage of every opportunity to educate their peers of the importance of AIS. One may argue that practitioners have moved much more rapidly in embracing AIS as a vital aspect of accounting than many educators.

Introduction

There are at least two reasons to inquire about the extent of accounting information systems (AIS) articles in top-ranked accounting journals. First, junior faculty members, including those who toil in the area of AIS, strive to publish in top-ranked journals to bolster their case for tenure and promotion. The extent to which AIS systems items appear in top-ranked journals is an indication of one's chances of publishing in these journals. Second, the degree to which AIS articles appear in top-ranked accounting journals is a surrogate measure of the extent to which AIS has gained stature as a legitimate area of inquiry within the accounting profession, especially among academics.

This study reports on the results of reviewing five top-ranked accounting journals for

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AIS content. The journal review process is examined, including: the criteria used to identify AIS articles in the journals; the basis for selecting the five top-ranked accounting journals; and the resources used in reviewing the journals. A presentation of the results of the journal reviews follows. Finally, the matters of AIS professors publishing in these journals and the status of AIS within the profession are discussed in view of the review results.

Journal Review Process

The task of reviewing journals for AIS content articles involved the identification of AIS subject matter; selection of the five top-ranked accounting journals; selection of review resources; and selection of AIS articles. These activities are discussed in turn.

Two sources were used to establish a set of topical knowledge areas used to identify AIS articles in the journals. One source was the content included in a set of textbooks used for the basic AIS course (Hall, 1998; Gelinis, 1996; Romney, 1997; Wilkinson, 1997). The other source was a set of statements from the AICPA, IIA, and IMA, outlining the AIS knowledge required of entry-level accountants into each of the areas of practice represented by the three professional groups (AICPA, 1988; IMA, 1988; Gilhooley, 1991).

Essential AIS knowledge areas proposed by the three professional groups are summarized in Table 1.

Combining the above knowledge areas

with the topical areas from table of contents of the set of AIS texts, resulted in the following topical areas used to examine journal articles as to whether they were AIS items. These topical areas are enumerated in Table 2.

In view of the above, articles dealing with how useful accounting information may be to various users were deemed not to be AIS items. While the content and usefulness of accounting information is certainly of central importance, it seems that AIS is primarily directed to producing that information. The ultimate use or usefulness of that information appears to be a matter left to financial accounting, managerial accounting or auditing. Similarly, the use of accounting information to control the accounting entity is not treated as a matter of AIS. Traditionally, this topic is extensively treated in the areas of cost and/or managerial accounting.

Table 1
Essential Entry-Level Professional AIS Knowledge Areas

AICPA Categories	IIA Building Blocks	IMA Aspects
Date Base and File Processing Concepts	Information Systems Organization and Administration	Systems Analysis and Design
Internal Control	Information Systems Security	Data Base Management
Systems Technology	Systems Development	Software Applications
Applications	Systems Maintenance and Change Control	Technological Literacy
Systems Analysis, Design and Implementation	Information Systems Problem Management	Systems Evaluation
EDP Auditing	Information Systems Contingency Planning	
	Information Processing Operations	
	Application Systems	
	Systems Software/Environmental Control Programs	
	Data Management	
	Data Base Management/Data Dictionary	
	Telecommunication Networks	
	Intelligence/Expert Systems/Image Processing	

Table 2
Topical Areas of AIS

Systems Documentation
Data Modeling/ Database Systems
Systems Technology/Hardware and Software
End-User Computing
Telecommunications/Networks
Systems Analysis, Design and Implementation
Control of Information Systems
Crime and Computers
EDP Auditing
Transaction Processing Cycles/Applications
Information Technology Management
Information Systems Security
Intelligent Systems

Selection of Five Top-Ranked Journals

The five top-ranked accounting journals selected for review were *The Accounting Review*, *Journal of Accounting Research*, *Journal of Accounting and Economics*, *Contemporary Accounting Research*, and *Accounting, Organizations & Society*.

This ranking was provided by Brown and Huefner (1994) in their paper, "The Familiarity with and Perceived Quality of Accounting Journals: Views of Senior Accounting Faculty in Leading U.S. MBA Programs". The inclusion of *The Accounting Review*, *Journal of Accounting Research* and *Journal of Accounting and Economics* in the top five, is supported by an earlier study by Hull and Wright (1990). However, in their survey, Hull and Wright replace *Contemporary Accounting Research* and *Accounting, Organizations and Society* with *Journal of Finance* and *Journal of Finance and Quantitative Analysis*. Since AIS articles would appear to be less likely to be included in journals having a finance focus, the Brown and Huefner ranking was deemed to be more appropriate for this review of journal content.

Selection of Review Resources

Initially, ABI/Inform, an electronic database of business and management periodicals from 1971 to the present, was used to assemble listings of article titles appearing in the issues of the five journals under review. The article listing for each of the journals was refined using Carl Uncover, another electronic database, covering articles in a large number of multidisciplinary journals since 1988. In addition to a listing of article titles Carl Uncover can be used to generate article summaries or tables of contents. The ABI/Inform listings do not distinguish between major articles, short articles and book reviews. ABI/Inform also does not identify special theme issues, produced in conjunction with conferences or symposia. Some duplication of items was also found in the ABI/Inform listings. Carl Uncover helped to resolve many of these issues.

Where questions remained, copies of the actual table of contents for issues of the journals were obtained and examined. In most cases the table of contents enabled one to resolve questions of major articles versus other items as well as collections of articles, appearing as a theme or topic issue. Any final questions were resolved by examining the issue of the journal under review.

As an aside, the author's experience in using the electronic databases in this study proved to be very rewarding. The availability of databases like ABI/Inform and Carl Uncover provide the AIS researcher with powerful new tools to facilitate the research effort.

Identification of AIS Articles

Initially the titles of articles were examined. In most cases it was easy to classify an article as to whether it involved AIS subject matter. In those relatively few cases where a determination was not possible, based on the title alone, an abstract of the article was retrieved

using ABI/Inform and examined. This resulted in the classification of virtually all items. In a few cases, the entire article was retrieved and examined in order to make an appropriate judgement. In all 23 articles were identified as potential AIS articles. Ultimately, 7 articles proved to be dealing with AIS subject matter.

Journal Review Results

The results of the journal review are summarized in table 3. Six hundred twenty-two articles appeared in the five journals over the five-year period. Twenty-three were articles potentially dealing with AIS subject matter as indicated by the title of the article. On closer examination only 7 of the 23 articles proved to be AIS items. The citations of the seven are as follows:

Article 1. Glover, J., and K. Sivaramakrishnan. The Interaction between decision and control problems and the value of information. *The Accounting Review*. 72 (October). 561-574, 1997.

Article 2. Beasley, M. An empirical analysis of the relation between the board of director composition and financial statement fraud. *The Accounting Review*. 71(October). 443-465, 1996.

Article 3. Zimbelman, M. F. and V. B. Hoffman. The effects of SAS No. 82 on auditor’s attention to fraud risk factors and audit planning decisions. *Journal of Accounting Research*. 35. 75-104, 1997.

Article 4. Hansen, S. C. Designing internal controls: the interaction between efficiency wages and monitoring. *Contemporary Accounting Research*. 14 (Spring). 129-163, 1997.

Article 5. Kida, T. and J. F. Smith. The encoding and retrieval of numerical data for decision making in accounting contexts: model development. *Accounting, Organizations and Society*. 20(Oct/Nov). 585-610, 1995.

Article 6. Humphrey, C. Reflecting on attempts to develop a financial management information system for the probation service in England and Wales: Some observations on the relationship between the claims of accounting and its practice. *Accounting, Organizations and Society*. 19(February). 147-179, 1994.

Article 7. Johnson, P. E., Graziolo, Stefano, Jamal and Karim. Fraud detection: Intentionality and deception in cognition. *Accounting, Organizations and Society*. 18(July) 467-488, 1993.

Three of the seven articles dealt with some aspect of fraud, a topic that has been receiving increasing attention in both the AIS and the auditing literature. Two articles deal with an aspect of control, also a topic that receives attention in both AIS and auditing literature. The remaining topics deal with matters of systems design, a topic that is usually treated exclusively in the AIS literature. In addition to the articles that were identified, the following observations were noted in the review of the journals:

Table 3
AIS Articles in Five Top-Ranked Accounting Journals

Journal	Total Articles	Potential AIS Items	Actual AIS Items
The Accounting Review	153	8	2
Journal of Accounting Research	91	2	1
Journal of Accounting and Economics	79	2	0
Contemporary Accounting Research	115	2	1
Accounting, Organizations & Society	184	9	3
Totals	622	23	7

The Accounting Review: Both major and shorter articles were included in the article count. Collections of articles included as special-topic forums were not included. During this period, forums on the effects of violating debt covenants; cost drivers; accounting for not-for-profit organizations; and financial reporting appeared.

Journal of Accounting Research: During this period, one conference and four special- studies issues appeared. Articles included in four of these special issues were not included in the article count. Topics covered were international accounting; accounting, financial disclosures, and the law; managerial accounting; and recognition, measurement, and disclosure issues in accounting. The articles in the fifth special issue, experts and the application of expertise in accounting, auditing and tax were included in the article count, and one of the articles was judged to encompass an AIS subject matter. In fact, this special issue article was the only AIS article included in JAR during the study period.

Journal of Accounting and Economics: During this period, two conferences and two symposia issues were rendered. Topics included: managerial incentives and corporate performance; organizations, incentives, and innovation; contemporary financial reporting issues; and properties of accounting earnings. Articles included in these special issues were not included in the article count.

Contemporary Accounting Research: Discussions of articles, appearing with the article were not included in the article count. Duplicates of articles in French were also excluded to avoid double counting.

Accounting, Organization and Society: All articles were included in the article count.

Implications for AIS Faculty

If one may use past frequencies to as-

certain probabilities, the assistant professor, whose area of teaching and research is AIS, faces a formidable hurdle in publishing in a top-five ranked academic accounting journal. For the period of study only seven AIS items appeared among the six hundred and twenty-two articles published. This translates to a probability of .011 or approximately one chance in a hundred. While the odds are much better than winning the typical state lottery, one must conclude that the AIS accounting professor is likely to get better results by not pursuing a goal of publishing in the top-five or, as some would suggest, "top-tier" academic accounting journals.

The five journals included in this study received over-all scores of less than two in the Brown and Huefner study, where a lower number corresponds to a higher rank. Accordingly, one could argue that the five comprise the top-tier of accounting journals in which to publish if one is attempting to impress one's peers with a publication record. In the same study, fifteen journals received a score of between two and three. One could suggest that this group of journals comprise the second tier of journals in terms of publishing desirability. While this group contains some journals that would be more likely to publish AIS articles, i.e. *Accounting Horizons*, *Issues in Accounting Education*, and *Journal of Accountancy*, there is an absence of journals that have an AIS focus. One must proceed to a third group of journals, having a score of between three and four, in order to find journals having a specific AIS focus. Included in this group are *Journal of Information Systems*, *Journal of Systems Management*, *Internal Auditor*, and *EDP Auditor*. Of the forty-four journals included in the Brown and Huefner study, JIS was ranked twenty-sixth; JSM, twenty-eighth; IA, forty-third; and *EDP Auditor*, forty-fourth. It is interesting to note that both the Brown and Huefner and Hull and Wright studies include discipline-specific rankings of the journals by respondents who focus their teaching and research in either financial accounting, managerial ac-

counting, auditing or tax. No separate ranking is included for AIS respondents in either study.

Publishing in leading accounting journals is not only important to junior faculty seeking promotion, but it is also important to senior faculty attempting to gain recognition for their contributions in order to gain appropriate merit increases and consideration for other academic rewards such as named professorships and chairs. Given the apparent difficulty of publishing AIS items in the top-ranked journals reviewed, what strategy or strategies should those who teach and research in AIS pursue to gain such recognition? A response, in part, includes: aiming for the highest journals possible; providing a ranking appropriate for AIS publications; and supporting new journals that focus on AIS.

Of course, one should seek to publish in the highest-ranked journal possible. But one must realistically proceed in view of the probabilities. The top-ranked journals examined herein primarily publish articles having a financial accounting or auditing theme. Three of the seven articles identified as AIS items also have a strong auditing appeal. Fewer, but some articles appear in the areas of taxation and managerial accounting. It would appear that one should aim for journals in the second or third-tier of the Brown and Huefner study. Another possibility is to seek to publish in top-ranked journals in the management information systems (MIS) area. The top four include *MIS Quarterly*; *Information Systems Research*; *Management Science*; and *Communications of the ACM*. The difficulty of publishing in these journals, however, is that one must compete with professionals who generally have a much broader and deeper technical preparation in the systems area. Most who teach and research in AIS are accountants, first, and systems people, secondly. Their systems preparation cannot be as broad and deep as those who typically publish in MIS journals. An academic MIS journal that does publish AIS articles is the *Journal of Computer Information Systems*, the official journal of the International Association

for Computer Information Systems. The journal is currently edited by Professor Jeretta Horn Nord at Oklahoma State University. Unfortunately, the journal is not included in any of the available rankings of journals by accounting professors.

Another strategy for those who teach in the AIS area is to develop and publicize a ranking of accounting and MIS journals, prepared by those who teach and research in the area. In the Brown and Huefner article, the ranking rendered by those who teach taxation is different from the over-all rankings or the rankings rendered by those in financial, auditing or managerial accounting. One would expect that a ranking rendered by AIS professors, if included, would be even more different. If they are to gain appropriate recognition for their research contributions in accounting journals, AIS professors are going to have to educate and convince their accounting colleagues that a different ranking of journals must be used to evaluate the research contributions of those in AIS.

A final strategy is for AIS professors to support new journals having an AIS focus. One response to the increased emphasis on publishing in recent years has been the launching of a number of new journals. The AAA section journal, *Journal of Information Systems* and *Review of Accounting Information Systems*, edited by Professor Ronald C. Clute at Metropolitan State College of Denver and published by the Western Academic Press, are good examples of outlets for AIS faculty. Unfortunately, another promising journal, *The Accounting Systems Journal*, published at the then, Memphis State University, failed to attract the necessary financial support to sustain publication. AIS faculty need to support these new journals as well as to advocate for their recognition as high-level outlets for AIS articles.

This study also provides a surrogate measure of the extent to which AIS has gained stature as a legitimate area of inquiry within the

accounting profession, especially among academics. Just as the measure of the probability of publishing in the top-five journals examined in this study yields a very low probability, any measure of the extent to which AIS has gained stature, as revealed in this study, must also be judged to be rather low. AIS seems to be in the same position that managerial accounting was several years ago. Just as it took managerial accounting a long period of time to gain academic legitimacy, it appears that recognition of AIS will take a similarly long time.

One may argue that practitioners have been moved more rapidly by the reality and necessity of embracing AIS as a vital component of accounting. AIS professors will have to take advantage of every opportunity to educate their peers of the importance of AIS. One measure of progress will be the appearance of a ranking of journals, with an area-specific category for AIS. Another will be the appearance of more AIS articles in the five top-ranked journals reviewed in this study. 📖

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